



Hebron Pool Study

STUDY & REPORT

JEO CONSULTING GROUP, INC.

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**STUDY AND REPORT
FOR
HEBRON POOL**

SECTION 1

1 General

1.1 Introduction

The following report provides an evaluation of the community pool regarding its existing condition and viability for the future. This report includes an inventory of existing pool systems and reviews the ability of the pool to serve both the current and known future needs of the community compared to their historical performance. Finally, this report provides recommendations for improvements, opinions of probable construction cost(s), and opinions of added operation and maintenance (O&M) costs (if significantly different than the current O&M expenses), for the improvements to assist the city in planning and budgeting.

1.2 Geographical Location

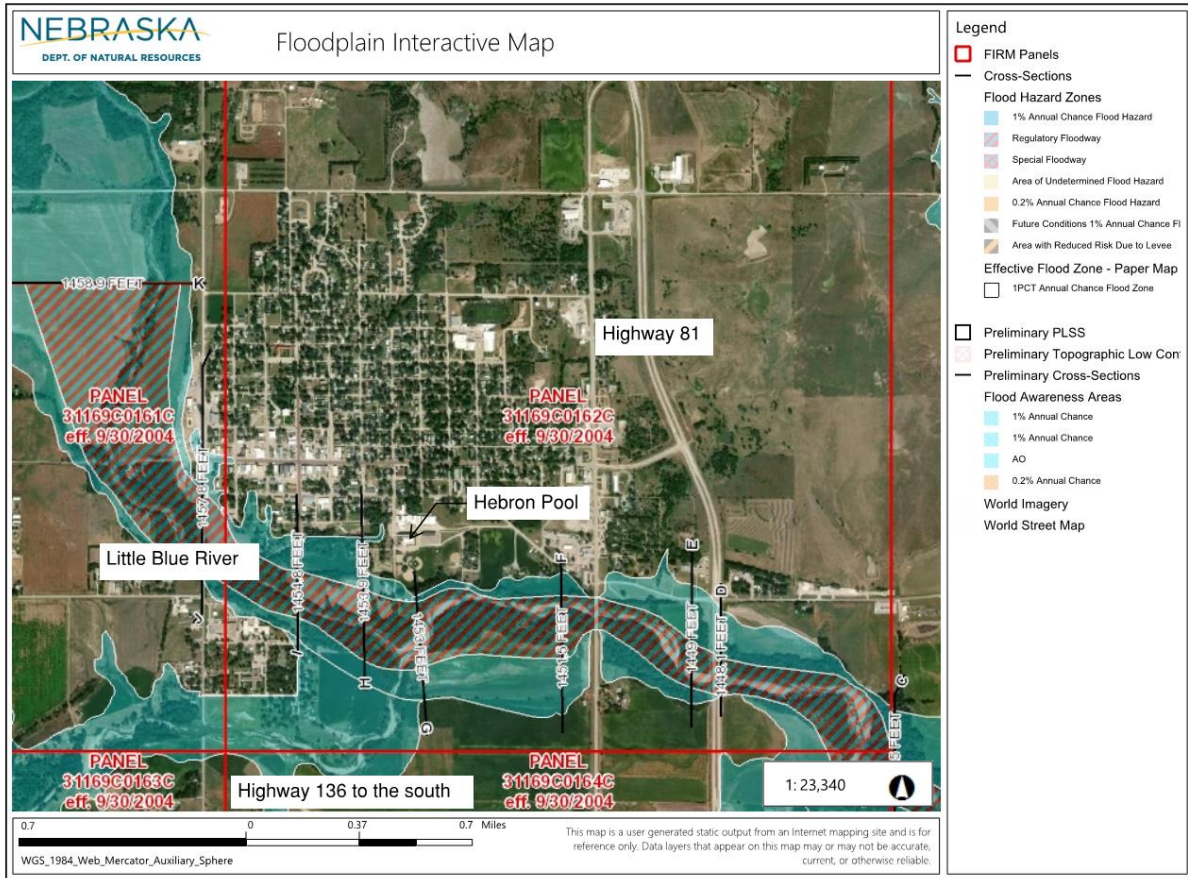
The City of Hebron is in the center of Thayer County which is in the southern part of Nebraska and borders Kansas. The city has primary access to State Highway 81 and Highway 136. **Figure 1-2: Aerial Photograph of Hebron** is also provided for visual reference of the area.

Figure 1-1: Aerial Photograph of Hebron



Groundwater may also be an issue for the pool. There have never been any sightings of groundwater in the pool after draining however the pool is located approximately 800' north of the Little Blue River and is located near a floodplain as can be seen in **Figure 1-2: Floodplain of Hebron Area.**

Figure 1-2: Floodplain of Hebron Area



1.3 Population Trends

1.3.1 Historical City Population

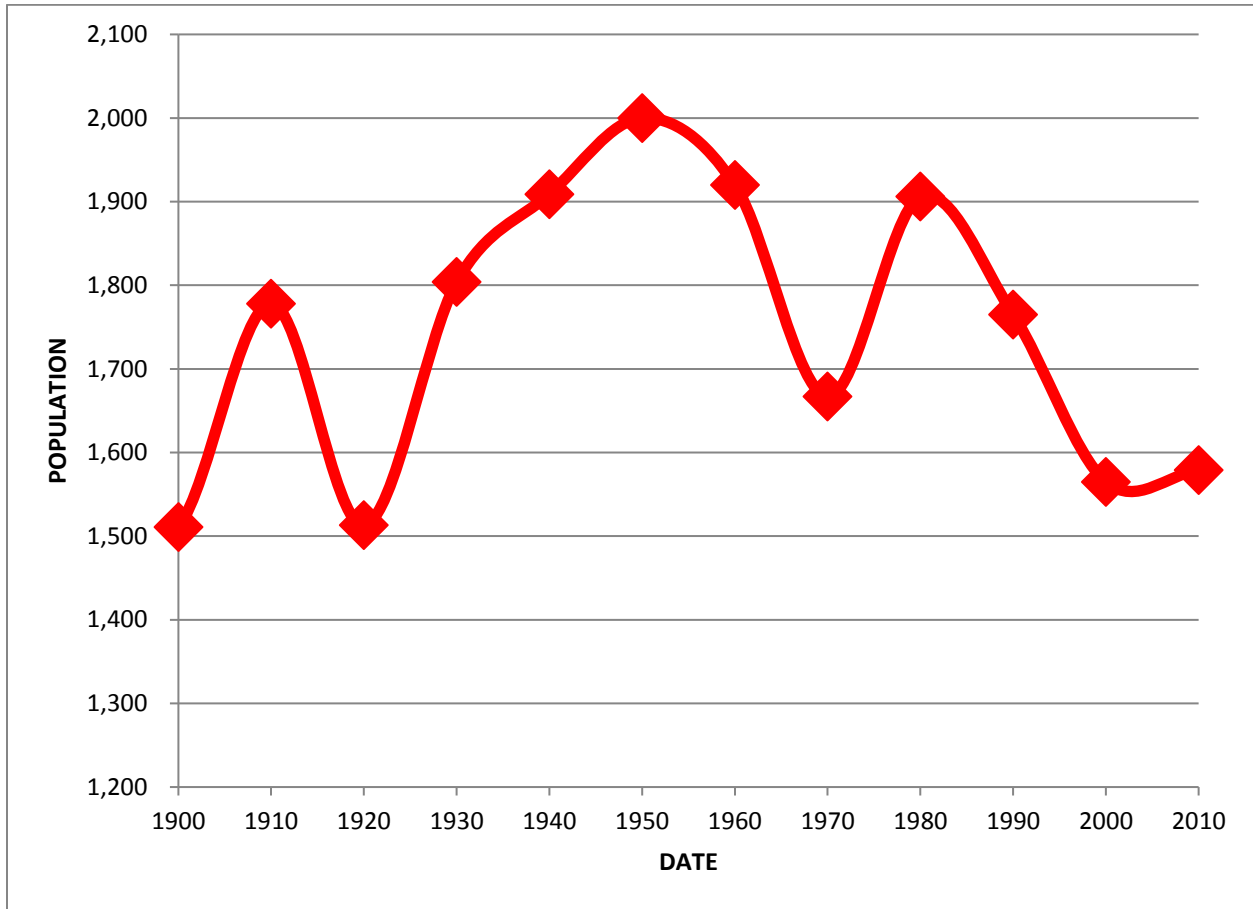
Reviewing historical populations for a community is completed to identify population trends and help aid in projecting future growth. For this report, projected populations are also used to estimate future aquatic facility demands, which will then help to determine whether the city will be prepared to serve their users with the appropriate aquatic facility.

The historical populations for the city are shown in **Table 1-1** and **Figure 1-3** below by the decade.

Table 1-1: City of Hebron and Thayer County Population History (1880-2010)

Year	City of Hebron			Thayer County		
	Population	Increase or Decrease	Percent Growth/Decline	Population	Increase or Decrease	Percent Growth/Decline
1880	466			6,113		
1890	1,502	1,036	222.32%	12,738	6,625	108.38%
1900	1,511	9	0.60%	14,325	1,587	12.46%
1910	1,778	267	17.67%	14,775	450	3.14%
1920	1,513	-265	-14.90%	13,976	-799	-5.41%
1930	1,804	291	19.23%	13,684	-292	-2.09%
1940	1,909	105	5.82%	12,262	-1,422	-10.39%
1950	2,000	91	4.77%	10,563	-1,699	-13.86%
1960	1,920	-80	-4.00%	9,118	-1,445	-13.68%
1970	1,667	-253	-13.18%	7,779	-1,339	-14.69%
1980	1,906	239	14.34%	7,582	-197	-2.53%
1990	1,765	-141	-7.40%	6,635	-947	-12.49%
2000	1,565	-200	-11.33%	6,055	-580	-8.74%
2010	1,579	14	0.89%	5,228	-827	-13.66%

Figure 1-3: City of Hebron Population History



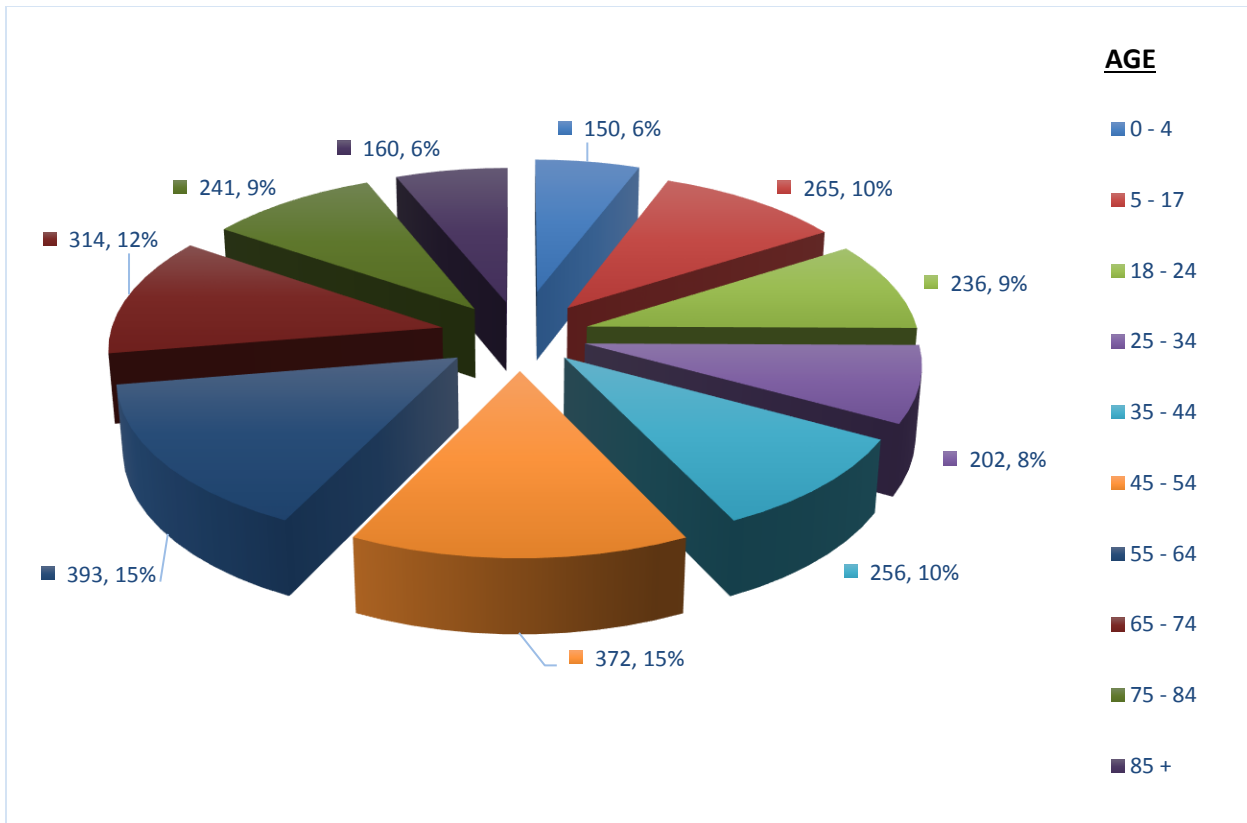
Reviewing the historical populations indicates that the population has experienced variations over the years with a recent decline. The city's population for the year 2010 was determined to be 1,579. For the purposes of the study, the official 2010 census populations will be used for this report.

The 10-mile radius population of Hebron, minus the nearby town of Deshler, is 2,589 persons. Deshler is not included because they have their own pool and it is assumed many of their pool patrons would remain in Deshler. The number of households in the same range is 1,333. Therefore, the average household size for the area is 1.94 person per household. **Table 1-2 and Figure 1-4** contain the current population estimates for the City of Hebron and surrounding area. The data shows that approximately 50% of the population is below 50 years of age. This is the target population for the pool that includes families most likely to buy memberships.

Table 1-2: Population 10-Mile Radius

Population 10-Mile Radius (Excluding Deshler)		
Age	Population	% of Whole
0 - 4	150	6%
5 - 17	265	10%
18 - 24	236	9%
25 - 34	202	8%
35 - 44	256	10%
45 - 54	372	14%
55 - 64	393	15%
65 - 74	314	12%
75 - 84	241	9%
85 +	160	6%
Total	2589	100%

Figure 1-4: Population 10-Mile Radius



1.3.1 Projected Population

Accurately projecting the future population of a community can be fairly difficult; however, using the basis of past population data, the future population can be projected. Typically, when projecting future populations for a community of this size, which has the potential for growth, a negative growth rate will not be used. Many times, a flat growth rate, or no growth, will be estimated if the city feels like the population will remain relatively stable. For the purpose of this report, it will be estimated that the population for the City of Hebron will remain relatively stable into the future.

1.4 Service Area Estimation

From investigations of existing facilities of similar scope, JEO estimates that approximately 1 in every 3 households within the City that contains the aquatic facility will become patrons of the facility. Given that the City of Hebron contains 814 households, this results in approximately 271 family memberships. JEO estimates for households outside the City of Hebron and within the 10-mile radius, that approximately 1 in every 30 households will become patrons of the facility. Provided that the 10-mile radius (excluding the City itself) contains 520 households, this results in approximately 17 memberships. Therefore, for a future aquatic center, one could estimate to maintain a membership of approximately 288 patrons. In an effort to translate this value to anticipated revenue of a new aquatic facility, the revenue generation will be estimated from information provided by other similar fully built out facilities. Assuming that a full outdoor aquatic facility would be constructed, and if 100% of memberships will be of the family type (i.e. \$100 per membership), the estimated annual revenue generator from memberships would be approximately \$28,800.

1.5 Past 3 Years Pool Financials

The City's pool operating revenues and expenses for the last five (5) fiscal years are presented below.

Table 1-3: Hebron Pool Income & Expenses

	2014	2015	2016	2017	2018
Pool Daily Admissions	\$ 4,139.50	\$ 5,010.50	\$ 3,938.50	\$ 4,261.50	\$ 3,798.50
Pool Season Passes	\$ 6,970.00	\$ 6,597.00	\$ 7,915.00	\$ 7,820.00	\$ 6,610.00
Pool Swimming Lessons	\$ 1,965.00	\$ 1,934.00	\$ 1,995.00	\$ 1,465.00	\$ 2,150.00
Pool Concessions	\$ 2,876.38	\$ 3,160.49	\$ 3,754.79	\$ 3,041.53	\$ 2,978.13
Misc Income	\$ 288.00	\$ 346.02	\$ 590.42	\$ 5,204.43	\$ 559.91
Transfers Inter Dept	NOT INCLUDED				
Total Income	\$ 16,238.88	\$ 17,048.01	\$ 18,193.71	\$ 21,792.46	\$ 16,096.54
Salaries	\$ 34,710.89	\$ 35,524.41	\$ 40,543.90	\$ 36,208.85	\$ 32,782.17
Social Security	\$ 2,655.44	\$ 2,710.70	\$ 3,101.62	\$ 2,770.01	\$ 2,507.90
Operation Supplies	\$ 3,548.40	\$ 3,788.19	\$ 7,450.51	\$ 10,084.54	\$ 5,968.10
Insurance	\$ 6,661.80	\$ 5,872.12	\$ 6,370.71	\$ 4,572.87	\$ 3,123.69
Utilities	\$ 2,317.74	\$ 3,988.05	\$ 4,564.94	\$ 3,881.72	\$ 5,850.62
Telephone	\$ 455.94	\$ 474.49	\$ 1,232.04	\$ 878.00	\$ 1,106.51
Publications	\$ 65.25	\$ 95.25	\$ 97.42	\$ 85.25	\$ 155.00
Travel & Meetings	\$ 486.88	\$ 338.50	\$ 267.90	\$ 340.34	\$ 60.00
Misc Expenses	\$ 240.00	\$ 240.00	\$ 152.25	\$ 322.82	\$ 230.07
Spraying/Mowing	\$ -	\$ -	\$ -	\$ -	\$ 1,425.00
Red Cross	\$ 280.00	\$ -	\$ -	\$ -	\$ -
Paint & Repairs	\$ 2,381.11	\$ 811.61	\$ 979.16	\$ 1,406.40	\$ 65.84
Concessions	\$ 1,658.24	\$ 1,925.56	\$ 2,323.83	\$ 1,915.23	\$ 1,841.46
Sales Tax	\$ 1,017.75	\$ 982.45	\$ 1,111.48	\$ 1,953.74	\$ 557.77
General Supplies	\$ 957.63	\$ 889.24	\$ 902.16	\$ 540.11	\$ 966.65
Capital Improvements	\$ 1,236.10	\$ 4,065.00	\$ -	\$ -	\$ 399.55
Total Expense	\$ 57,437.07	\$ 57,640.57	\$ 69,097.92	\$ 64,959.88	\$ 56,640.78
Net Loss	\$ (41,198.19)	\$ (40,592.56)	\$ (50,904.21)	\$ (43,167.42)	\$ (40,544.24)

The pool averaged a net financial loss of approximately \$43,281 per year over the years 2014-2018 with average expenses totaling approximately \$61,154 per year. Currently, the City transfers money from other department(s) to cover the gap.

**STUDY AND REPORT
FOR
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SECTION 2

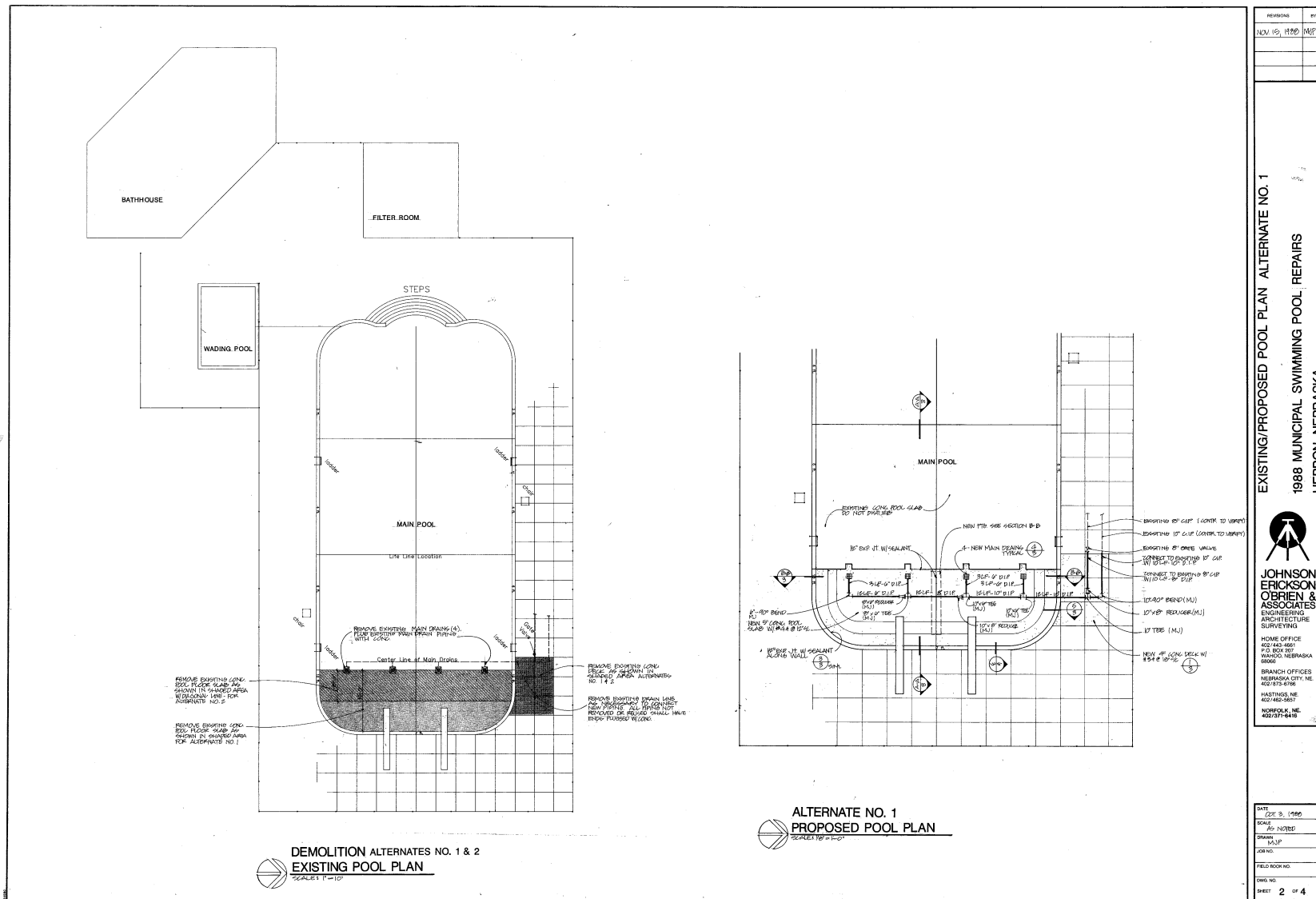
2 Existing Facilities and Conditions

The City of Hebron owns and operates the pool facility. The existing facility consists of swimming pool, separate wading pool, bathhouse, and separate mechanical building. The following provides a timeline of improvements over the life of the pool.

- Pool was built in 1930s
- The wading pool was added in the 1960s
- Bathhouse was added in the 1976. Pool piping and concrete deck was also replaced in 1976.
- Pool was renovated in 1988. The deep end of the pool basin was renovated. New drains and piping were installed and a new floor slab.
- Slide was installed in 1990s.

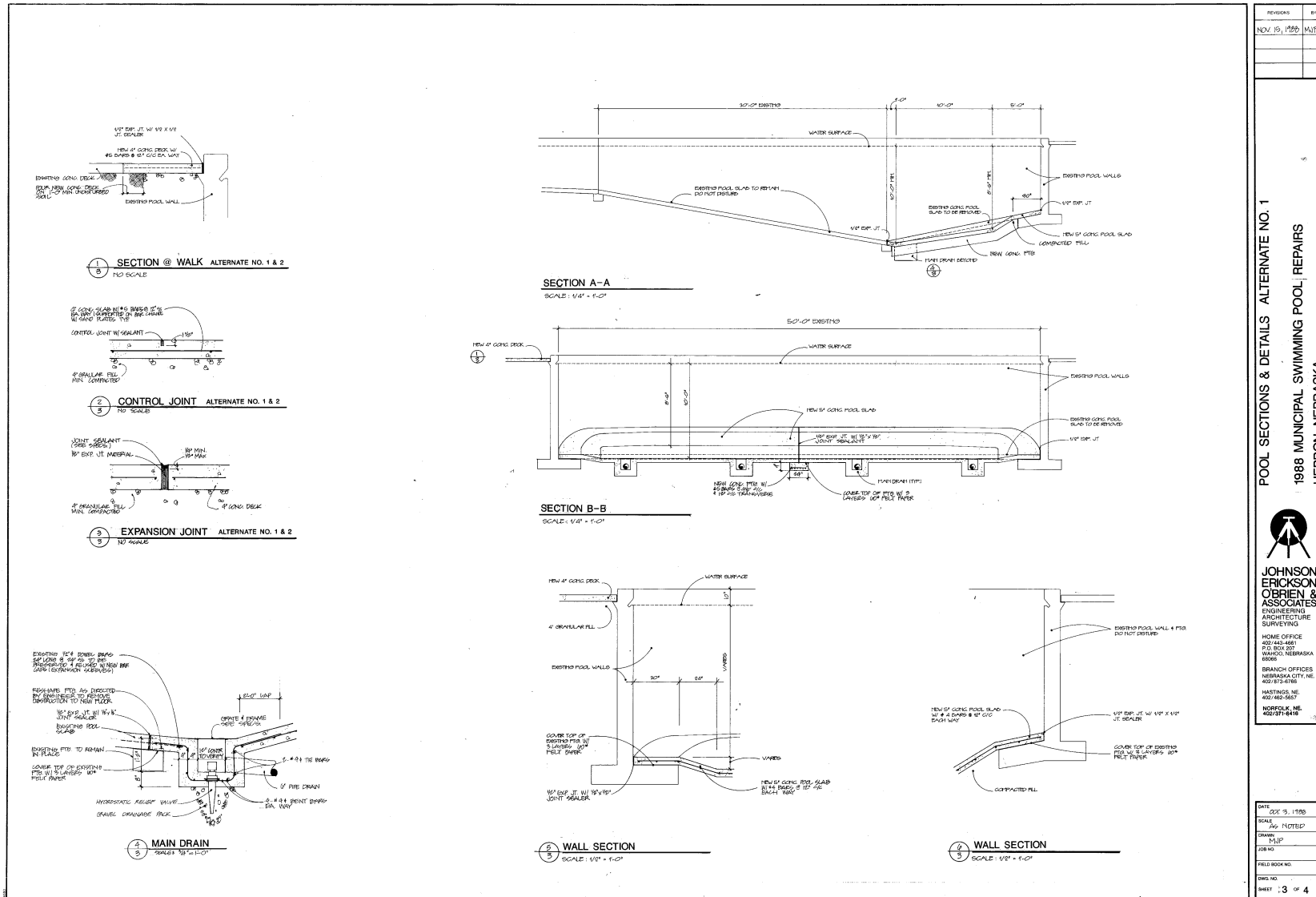
The Renovation in 1988 can be seen in **Figure 2-1: Pool Renovation Plan** and **Figure 2-2: Pool Renovation Profile**.

Figure 2-1: Pool Renovation Plan



335PK1-2

Figure 2-2: Pool Renovation Profile



REVISION	BY
NOV 15, 1988	MAJ
POOL SECTIONS & DETAILS ALTERNATE NO. 1 1988 MUNICIPAL SWIMMING POOL REPAIRS HEBRON, NEBRASKA	
JOHNSON ERICKSON O'BRIEN & ASSOCIATES ENGINEERING ARCHITECTURE SURVEYING	
HOME OFFICE 402-482-8881 P.O. BOX 307 HEBRON, NEBRASKA 68606	
BRANCH OFFICES NEBRASKA CITY, NE 402-873-8766 HASTINGS, NE 402-482-2657 NORFOLK, NE 402-381-8818	
DATE	OCT 9, 1988
SCALE	AS NOTED
DRAWN	J.S.P.
CHECKED	
FIELD BOOK NO.	
DWG NO.	
SHEET	3 OF 4

335PK1-3

2.1 Swimming Pool

The Hebron pool is a concrete swimming pool built in the 1930s. It is approximately 50' wide and approximately 110' long, and it holds approximately 250,000 gallons of water. The pool has 2 single pedestal diving boards, a 15' tall slide, 4 pool ladders, 2 stationary 2-meter lifeguard towers, and 1 staircase into the pool. The posted depth of the pool ranges from 2' to 10'.

The pool has a concrete gutter with equally spaced drains throughout the length of the pool. The gutter drains to the surge pit in the mechanical building where the water is filtered and sent back to the pool through equally spaced inlets that run under ground and through the pool walls. It was noted that some of the gutter drains and supply inlets were plugged. City staff thought these were likely plugged during the renovations in 1976 when they replaced the pool piping, and for whatever reason some lines were abandoned.

The pool is not ADA compliant. ADA standards require at least 2 accessible entrances. The stairway into the pool counts as one if there is a railing, however, the pool does not have a railing on their stairway. Generally, the other accessible entrances are chairlifts or zero depth entries with railings. The Hebron pool does not have any railings on the pool stairway and there is no chairlift.

The 5' depth line for the pool is currently at 4'4" and the pool rope is at 7'. Both the rope and the 5' depth line do not meet standards, as they should be at 5'. Some of the depth markers for the pool are placed too far apart and do not meet design standards. There is no heating system for the main or wading pool and patrons complain of the cold water. One pool wall is bowing slightly, and this can be seen in **Figure 2-4: Bowing Wall**. The facility has some exterior lighting, but they do not use them because the lights are too close to the deck and draw too many insects. The facility is surrounded by a 6' chain link fence which is in fairly good condition. However, the fence does not provide any gate for egress in the event of an emergency. Lastly, the concrete pool deck appears to be in good shape.

The pool leaks enough that the city runs a garden hose continuously during the pool season to maintain water level. City staff indicated that if water was not added to the pool, the water level in the pool would drop approximately 3" per day. The pool has been leaking like this for the last 10 years or more.

Figure 2-3: Hebron Pool



Figure 2-4: Bowing Wall



2.2 Wading Pool

The wading pool does not appear to have any major structural issues; however, it is not ADA compliant since there are no accessible entrances into the wading pool with a railing. The Virginia Graham Baker Act (VGBA) requires that all public pools and spas that have a single drain other than an unblockable drain must employ one or more additional options. In other words, there must be more than one drain in all pools to prevent entrapment underwater. The wading pool only has one drain.

Figure 2-5: Wading Pool



2.3 Bathhouse

The pool's bathhouse is a concrete block building with a wood rafter ceiling, and a typical shingle roof. see **Figure 2-8: Bathhouse**. It is made up of a men's and women's locker room and an administration area with an electrical closet. Each locker room is accessible with a door on each side of the administrative area. There is open air ventilation in both locker rooms, see **Figure 2-6: Locker Room Ventilation**. The locker room doors each have an electronic keypad lock system. Inside the electrical closet is an electrical breaker box, a water heater, and some miscellaneous cleaning supplies. There is some minor cracking in the lower parts of some walls seen in **Figure 2-9: Cracking in The Bathhouse Wall**. There is no adequate turn around space to meet ADA requirements in the bathhouse locker rooms.

The entrance into the building and the entrance from the building into the pool are both metal roll up doors, walking through either of these doors from the outside will bring you to the administration area of the bathhouse. Customers pay at the front, then go into the locker room and come out on the other side to the pool. On that side is a small concession stand. The administrative area is also a breakroom/office for the pool staff to sit in, see **Figure 2-7: Bathhouse Administrative Area**

City staff indicated the plumbing and toilets need to be redone. The bathhouse does not drain properly and there have been several times over the years when after start-up a new leak has appeared and needed fixed.

The Bathhouse has been broken into before and because of this, a video camera linked directly to the police station was installed to watch over the administration area. The building also has a phone line and internet access.

Figure 2-6: Locker Room Ventilation



Figure 2-7: Bathhouse Administrative Area



Figure 2-8: Bathhouse



Figure 2-9: Cracking in The Bathhouse Wall

2.4 Mechanical Building

The mechanical building houses the surge pit, filters, pump, chemical feed system, and electrical. The building is in decent shape but did not have ventilation until 2018. As a result, everything that's made of metal including all of the electrical system is heavily corroded from the chemical system.

2.4.1 Surge Tank and Filtration

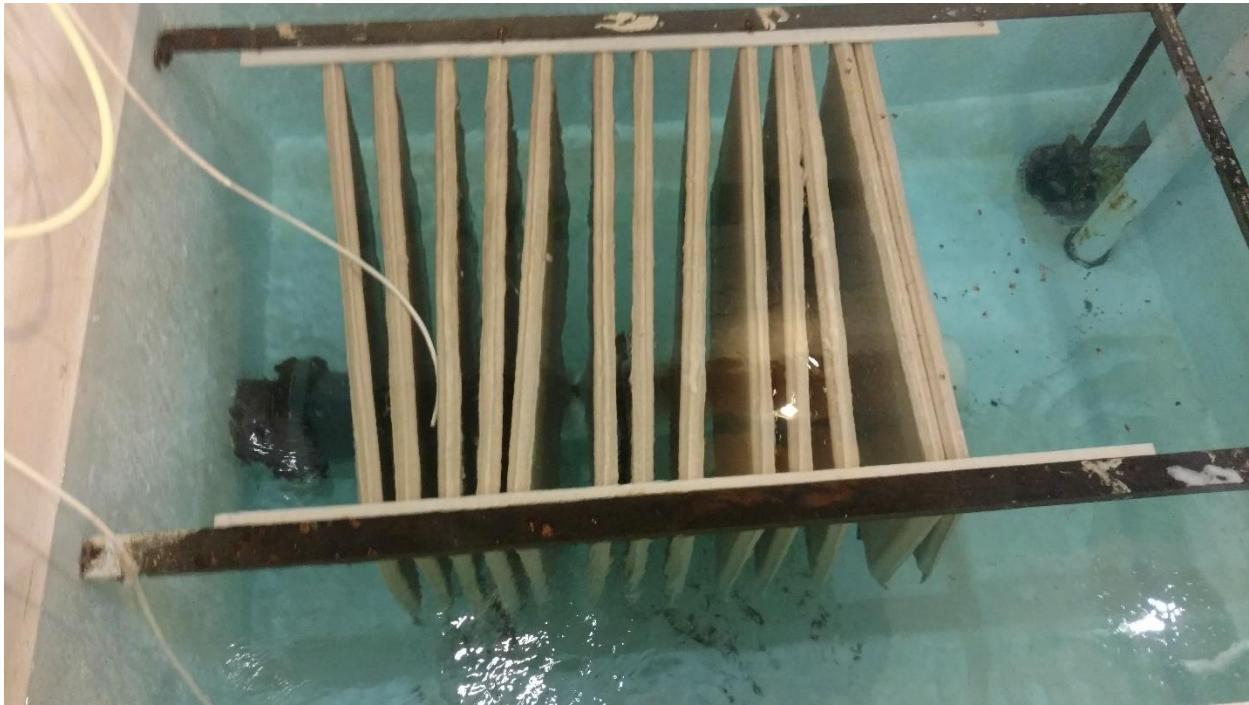
At the start of the season, the surge tank is filled from a nearby water tap. This water is sent through multiple gravity diatomaceous earth filters where it is then pumped back into the pool through

multiple inlets. During everyday use, water is recycled from the pool to the surge tank from the gutters on the north and south walls of the pool, and a garden hose is running continuously to maintain the pool water level which drops due to leaks. This garden hose and the valve for the gutter drain and main drain to can be seen in **Figure 2-10: Surge Pit**.

The filters are hollow rectangular plastic boards with a cover full of diatomaceous earth material over them. Water is pulled through the diatomaceous earth material and into the boards. There are multiple small holes at the bottom and the water is sent through to a large collection pipe attached to the recirculation pump. The layout of the filter system can be seen in **Figure 2-11: Filter System**. When it comes time to clean the filters the City has to drain the tank, take the filters out, and hoses them down the drain. The filters are replaced every 2 years.

Figure 2-10: Surge Pit



Figure 2-11: Filter System

2.4.2 Electrical

The electrical service to the facility is 240-volt 3 phase. The electrical control system for the pool and mechanical building is located in the main room of the mechanical building. It is heavily corroded due to the building also housing the chemical feed system and not having ventilation until 2018. It is the opinion of this report that none of the electrical system is salvageable. **Figure 2-13: Electrical System Condition** shows the condition of the fuse box in the mechanical building.

The pump is in the bottom of the dry half of the surge pit. It is run on a 10 hp motor. At the time of the site visit the flow meter was not functioning and the flow rate could not be verified. See **Figure 2-12: Pump**.

Figure 2-12: Pump



Figure 2-13: Electrical System Condition



2.4.3 Chemical Feed System

The chemicals are added to the pool through the two chemical pumps seen in **Figure 2-14: Chemical System**. Essentially, they work by putting multiple chemical tablets in the top of the pump. The pump then pumps a little water out from the surge pit and runs it over the tablets. This water flow erodes the tablets and creates chlorinated water that is then put back into the surge pit to go through the filters and into the pool. The tablets have stabilizer in them so there is no need for acid to be added to the pool to maintain pH balance. Up until 2018 there was no ventilation in the mechanical building and the chemical feed system was causing a lot of other equipment in the mechanical building to rust and corrode.

Figure 2-14: Chemical System



2.5 ADA

May 15, 2012, the 2010 ADA guidelines that were adopted by the United States Department of Justice went into effect. These may potentially have an effect on the pool facility in the City of Hebron. More specifically, the new law requires municipalities to provide access, under the new guidelines, to all their "Programs" (i.e. swimming lessons, aerobics classes, and swim meets). The City of Hebron can learn more about the new requirements at this website: <https://www.ada.gov/>.

With 310 linear feet of perimeter, the pool facility is required to have two (2) means of primary (stairs and/or a lift) handicap access. There is currently no means of handicap access into the existing main pool. Any proposed improvements to the pool would likely require the facility to follow current ADA regulations.

Concrete decks can have a maximum 2% cross slope. A review of the existing pool facility showed the decks currently meet this requirement.

Wading pools require an access ramp to the deepest portion of the pool. However, if there are no programs in this wading pool; the City may be justified in foregoing this access requirement for the time being. If this is the desire of the City, then personnel should assemble a policy stating no programs will be held in this wading pool. If programs are held, then an access ramp should be provided immediately. Access ramps to wading pools do not require hand rails.

The bathhouse does not meet the current ADA guidelines including, but not limited to, accessible toilet and shower stalls in each of the men's and women's rooms, and drinking fountain(s) heights. A review of the pool facility showed the door way widths, parking, and overall site access are acceptable.

The Department of Justice allows public entities to undergo a self-evaluation and put into place a written transition plan for bringing access to their programs up to ADA compliance. The City should take some time to find all access shortfalls and assemble a document describing when each will be corrected. Cost and administrative burden can be a legitimate consideration for completing the compliance requirements. If a complaint or lawsuit were to arise, the City may reduce their liability if the plan is reasonable and being followed rather than if nothing had been completed.

2.6 Leak Detection Study

Leak Investigators performed an onsite inspection on August 15, 2018 with the pool full of water. They performed a Mic and Dye test on the main pool, baby pool, and surge tank. The investigators said the Mic test in the main pool was 'loud'. Although the main pool was leaking, the leak could not be pinpointed to a single location. The investigation noted that expansion joints have failed in the walls and floor in multiple places.

Leak Investigators performed a second onsite inspection on September 18, 2018 with the pool empty. The pool piping was pressure tested and was found to hold pressure. A visual inspection of the joints confirmed the expansion joint have failed and were likely leaking. The main drain grates were removed and it was found that all four sumps were cracked or failed, and the hydrostatic relief valves were all bad.

The leak investigation recommended removing the existing expansion joint material and re-sealing the construction joints. It also recommended new main drain sumps, hydrostatic relief valves, and VGB compliant covers.

Figure 2-15: Pool Joint Failure



Figure 2-16: Pool Main Drain Failure



STUDY AND REPORT FOR HEBRON POOL

SECTION 3

3 Summary of Existing Deficiencies and Deferred Maintenance

Many unknowns must always be dealt with when making facility improvements including future population growth, treatment requirements, technology changes, and various changes to regulations and codes. However, many times improvements need to be made simply due the age of the equipment in the facility.

The following recommendations have been developed based on the evaluations of past operational performances, discussions with the city staff, and on-site facility investigations. For planning purposes, the existing deficiencies and deferred maintenance have been ranked into three categories as follows:

- A Priority 1 item needs immediate consideration. These improvements are considered solutions to problems of high concern and could greatly affect the community's residents if not taken care of.
- A Priority 2 item is something the community should look at planning and budgeting for in the next 1-2 years. These improvements are based on existing facilities that may need repair or upgraded to meet current design standards. An improvement that will improve the overall system, but is not required, will be found in this category.
- A Priority 3 item is something the community should begin planning and budgeting for in the next 3 - 5 years. These improvements will tend to improve the existing but are not considered a requirement at this time. Improvements such as replacing an existing, working system with one that is more efficient or easier to maintain will be found in this category.

3.1 Priority 1 (Immediate)

1. The boundary line between the shallow and deep areas (5' depth) must be clearly marked by a line painted on the floor and walls of the pool and by a safety rope and floats. The boundary rope and paint line are at different locations and neither are located at the 5' depth. The painted line measured a depth of 4'-4" and the rope barrier measured a depth of 7'-0".
2. Water depth must be marked on the vertical pool wall and on the edge of the deck and spaced no more than 25' apart. There were a couple locations where the spacing was greater than 25 feet.
3. The existing flow meter does not work. Flow meters must have a measurement capacity of at least 1.5 times the recirculation rate and must be accurate within 10% of actual flow.
4. Replace plumbing and toilets in existing bathhouse.
5. The capacity of the pool is currently listed as 290 patrons. Current design standards indicate the max patron Load should be 200 based on bathroom fixtures in the bathhouse. The limiting factor is the toilets in the women's restroom.

Figure 3-1: Fixture Schedule

Total Patron Load	Fixtures Required Male				Fixtures Required Female		
	Toilets	Urinals	Sinks	Showers	Toilets	Sinks	Showers
0-50	1	1	1	1	2	1	1
51-100	1	1	1	1	2	1	1
101-150	1	2	1	2	3	1	2
151-200	1 2	2 2	1 2	2 3	3 3	1 2	2 3
201-250	2	2	1	3	4	2	3
251-300	2	3	2	4	5	2	4
301-400	2	3	2	5	5	2	5
401-500	3	3	2	6	6	2	6
501-1000	3	4	2	7	7	2	7
1001-1500	4	5	2	10	9	2	10
1501-2000	5	6	2	15	11	2	15
2001 or more	6	7	3	20	13	3	20

Red = Current Fixtures

3.2 Priority 2 (Short Term)

6. It is good practice to have chemicals separated from equipment such as pumps, filters, and electrical. The City of Hebron does not have a separate chemical room or provide proper ventilation. This has caused the equipment to rust and strong chlorine fumes to be present in the Mechanical Building. Part of this priority would also be to upgrade to liquid chlorine which can be better contained.
7. The electrical system is original to the facility and in need of replacement. It has been severely corroded by the exposure to the chlorine over the years. The priority would be to separate the electrical from the chemical feed and/or move one of them outside.
8. The pool leaks and the City must run water continuously to keep the pool level full. The City hired a leak investigator to help find the location of the leak. It appears the water is leaking from construction joints in the pool wall.
9. The existing diving boards do not meet current design standards for the existing diving hopper. The diving hopper dimensions determine the board should be 10' in length and 26" over the water.
10. Current design standards require two means of handicap access to a pool and currently there is no ADA access to the pool. There is no handicap access to the wading pool.
11. The existing perimeter fence does not contain an appropriate quantity of emergency egress gates. Fence gates should have a concrete path outside the gate to a public way, and should also have panic hardware, be self-closing, and be self-latching.
12. The showers and toilet in the existing bathhouse are not wide enough to meet current ADA standards for turnaround radius.
13. Current design standards indicate the slide plunge pool should extend 4' outside the flume and 20' beyond the flume and provide a ladder for egress.
14. Backwash water is currently discharged to the creek. The City of Hebron should send backwash water to the sewer system for proper treatment as it has pollutants such as chlorine and TSS.
15. Wading pool drain is not VGB compliant. Two grates should be installed with openings greater than half inch.

3.3 Priority 3 (Long Term)

16. There is currently no pool heating at the facility. After cool weather, patrons have complained about the cold temperatures. City staff indicated they receive complaints about the cold water during swimming lessons. Adding water to the pool everyday also contributes to the cooler water.
17. The existing pool has lighting installed for nighttime swimming. However, it is installed too low and attracts bugs to the pool surface and it is not able to be used. New lighting could be installed for security and nighttime swimming.
18. The recirculation capacity for the existing pool should be approximately 800 gpm given current design turnover rates. The capacity of the existing pump is unknown. The existing pump has to be valved down as the existing DE gravity filters do not let enough water through them to meet capacity.
19. Replace existing filter system with new Pressure Sand Filter system. City staff indicated it takes about 1-1/2 hours approximately every 3rd day to backwash the existing filter system. A pressure sand filter takes about 15 minutes to backwash.

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SECTION 4

4 Similar Facility Financial Summary

As part of this report, the anticipated financials from the proposed improvements are to be determined. In order to determine this, historical expense financials from similar facilities are first evaluated. Five (5) previously constructed facilities are portrayed below, including descriptions on what is included on each facility:

- Facility “A”:
 - The new outdoor facility in a rural community was completed in 2012 and contains a zero-depth entry, six (6) lane 25-meter lap pool, diving well for 1-meter and 3-meter diving, 42” diameter open-flume 100 linear foot long waterslide, water walk, multi-level water play structure, ground geysers, fabric shade shelters, and concessions area. The new bathhouse contains an admission and management area, lifeguard break room, first aid room, individual women’s showers, storage rooms, vending area, chemical, electrical and mechanical rooms, and a new parking lot with circular drop-off.
- Facility “B”:
 - The new outdoor facility in a rural community was completed in 2006 and contains a zero-depth entry, six (6) lane 25-meter lap pool, diving well for 1-meter and 3-meter diving, medium sized waterslide, water walk, multi-level water play structure, fabric shade shelters and concessions area. The new bathhouse contains an admission and management area/vending area, family dressing room, chemical, and a gravel parking lot.
- Facility “C”:
 - The new outdoor facility in a rural community was completed in 2012 and contains a zero-depth entry, four (4) lane 25-meter lap pool, diving well for 1-meter diving, smaller sized waterslide, water play features in the zero depth, fabric shade shelters, and concessions area. The new bathhouse contains an admission and management area/vending area, family dressing room, chemical, and a concrete parking lot. Many existing park elements were relocated with this project including a 40’x60’ shade shelter and a large dry-playground.
- Facility “D”:
 - The new outdoor facility in a rural community was completed in 2014 and contains a zero-depth entry, six (6) lane 25-meter lap pool, 1-meter and 3-meter diving boards, one (1) open-flume waterslide and one (1) speed slide, water walk, water play structure, ground geysers, fabric shade shelters, and concessions area. The new bathhouse contains an admission and management area, lifeguard break room, first aid room, individual women’s showers, storage rooms, vending area, chemical, electrical, and mechanical rooms, and a parking lot with a circular drop-off.
- Facility “E”:
 - The new outdoor facility in central Nebraska was completed in 2012 and contains a zero-depth entry, four (4) lane 25-meter lap pool, diving well for 1-meter diving, some

smaller water play features, and fabric shade shelters. The bathhouse contains an admission and management area/vending area, chemical area, and a gravel parking lot.

The following table provides a tabular summary of each facility's features and financials, along with analysis of the expenses/income versus each of the specific features. The income is directly from pool fees.

Table 4-1 - Similar Facility Expenses Financial Summary

Facility:	A	B	C	D	E	A-E Average
Community Population:	3,491	4,512	730	4,465	1,000	2,840
Year Constructed:	2012	2006	2012	2014	2012	2011
Total Flow Rate (gpm):	2,850	2,118	995	3,350	705	2,004
Total Volume (gallons):	263,000	250,000	131,000	274,000	105,000	204,600
Water Surface Area (sq. ft.):	7,983	7,994	4,180	8,308	3,132	6,319
Patron Loading (max):	500	500	200	500	200	380
Expenses Breakdown:						
Total	\$101,742	\$92,968	\$31,013	\$168,880	\$30,950	\$85,111
Annual Total Expenses / Total Flow Rate:	\$35.70	\$43.89	\$31.17	\$50.41	\$43.90	\$41.01
Annual Total Expenses / Total Volume:	\$0.39	\$0.37	\$0.24	\$0.62	\$0.29	\$0.38
Annual Total Expenses / Water Surface Area:	\$12.74	\$11.63	\$7.42	\$20.33	\$9.88	\$12.40
Income Breakdown:						
Total	\$32,660	\$60,279	\$13,923	\$71,943	\$13,650	\$38,491
Annual Total Income / Population:	\$9.36	\$13.36	\$19.07	\$16.11	\$13.65	\$14.31
Annual Total Income / Total Flow Rate:	\$11.46	\$28.46	\$13.99	\$21.48	\$19.36	\$18.95

The average net loss for the above pool facilities is approximately \$56,000. The above values will be utilized in later sections of this report when determining the anticipated operations and maintenance cost of the proposed facilities.

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SECTION 5

5 Improvement Alternative Considered

The previous review identified many areas where capital improvements to the municipal swimming pool are recommended for the community. Major improvement alternatives are outlined in the following section as means to address the current system deficiencies and meet the future needs of the City.

Alternative No. 1: Rehab Existing Pool Facility

This alternative will consider keeping the existing pool and bathhouse in service. Repairs will be made to the existing pool to minimize leaking. The mechanical system will be updated to provide proper recirculation rates, filtration, and chemical storage. Heating will also be added to the pool.

Alternative No. 2: New Outdoor Facility on Existing Site.

This alternative would include a new outdoor pool with zero entry, four 25-yard lap lanes, water spray/play features, 1 and 3-meter diving boards, and large slide. The bathhouse structure is proposed to remain, however new fixtures, toilets, and partitions would be included to comply with ADA. The mechanical system would be updated with the new pool and located adjacent to the facility. The existing mechanical building could remain for storage.

Alternative No. 3: New Outdoor Facility at Different Site

This alternative would include a new outdoor pool with zero entry, four 25-yard lap lanes, water spray/play features, 1 and 3-meter diving boards, large slide, concessions, and new bathhouse.

Alternative No. 4: New Splash Pad

This alternative includes installing a new flow through splash pad system.

The following sections of the report will define the alternatives presented above and provide opinions of probable costs for construction and installation. In general, the preliminary opinion of probable construction costs presented below include the cost for materials, installation, plus contractor's labor, overhead, and profit. Cost information is developed from equipment suppliers quotes and past experience on similar projects. A 10% allowance has been included for contingencies at this conceptual stage of the project.

5.1 Alternative No. 1: Rehab Existing Pool Facility

As listed previously, there are several deficiencies that the City of Hebron could address to repair their existing pool and bring it up to current design standards. This alternative will provide costs to rehab the existing facility. Although these improvements will improve the overall function of the facility, they do not provide any additional 'fun factor' that would encourage more patrons to use the pool.

The leak investigation found the construction joints were leaking and need repaired. The existing expansion joints will be clean out, primed, and sealed with caulk. This includes the horizontal

expansion joints in the floor and the vertical joints in the wall. The alternative also proposed to sand blast and paint the existing pool, including striping and water depth lines.

The leak investigation found the pool supply pressure pipe and the gutter return pipe to be in good condition. However, it does appear that the main drains are leaking. The sup has cracked and the hydrostatic relief valves have failed. This alternative proposes to replace the entire deck inside the existing fenced area. This alternative also includes installing new fence and gates around the pool perimeter and wading pool.

An updated mechanical system will be installed that meets current design standards for flow and filtration rates. It would include new pressure sand filter, recirculation pump, surge tank, backwash tank, and associated piping. It is proposed that the new mechanical area be installed to the north of the existing mechanical building. It would be enclosed with slatted fenced and covered by a fabric shade shelter. A new chemical feed system would also be installed and include proper storage and ventilation.

The electrical equipment in the existing mechanical room is original to the facility and in poor condition due to its continued exposure to chlorine. The electrical in the mechanical bulding is proposed to be replaced with new electrical equipment designed for the new mechanical improvements. The nighttime lighting system will be replaced to meet current standards and to provide a viable option to the community if they want to use the pool after hours.

The bathhouse toilets and showers will be remodeled to be handicap accessible. The pool will also include improvements to provide handicap accessibility to the pool including the addition of railing on the stairs and a new chair lift. The estimated capital cost for this option is following:

Table 5-1: Alt No. 1 Capital Costs

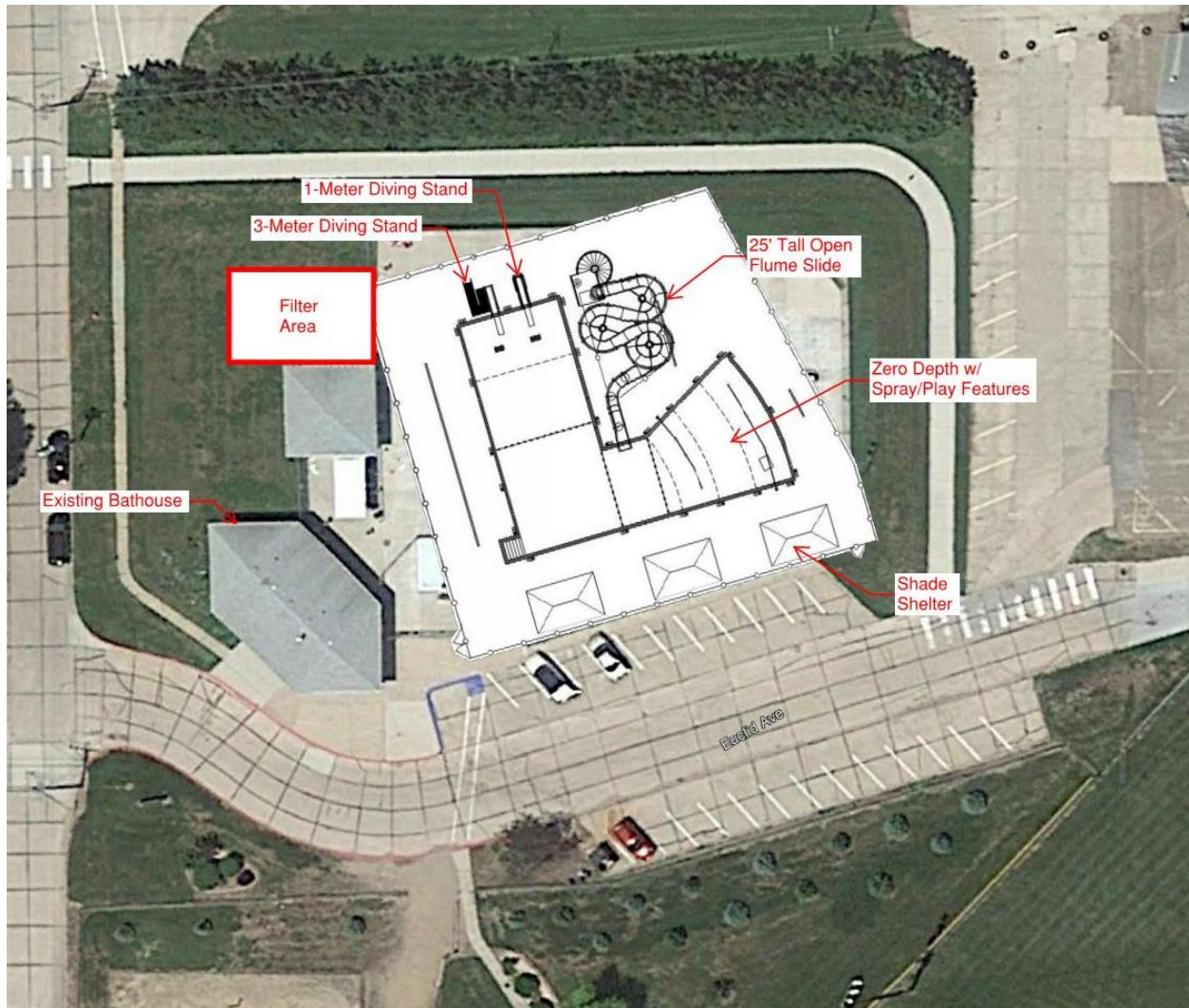
Alternative No. 1 - Rehab Existing Pool Facility					
Item #	Description	Unit	Qty	Unit Price	Amount
1.	Mobilization, Bonding, & Insurance	LS	1	\$30,000	\$30,000
2.	Site Demolition	LS	1	\$10,000	\$10,000
3.	Sewer Utility Improvements	LS	1	\$10,000	\$10,000
4.	Main Drains	EA	4	\$6,000	\$24,000
5.	Vinyl Coating Chain link Fence & Gates	LF	540	\$35	\$18,900
6.	5" Concrete Deck	SY	1200	\$55	\$66,000
7.	Sandblast & Coat Swimming & Wading Pool	SF	8000	\$4	\$32,000
8.	Caulk Main Pool Joints	LF	600	\$30	\$18,000
9.	Pool Mechanical Improvements (Filter, Pump, Surge Tank, Backwash Tank)	LS	1	\$140,000	\$140,000
10.	6" Concrete Filter Slab	SY	200	\$60	\$12,000
11.	Filter Slab Fabric Shelter	EA	1	\$7,500	\$7,500
12.	Chemical Feed System	LS	1	\$25,000	\$25,000
13.	ADA Pool Lift & Stair Railing	LS	1	\$5,000	\$5,000
14.	Bathhouse Renovations	LS	1	\$50,000	\$50,000
15.	Electrical Improvements	LS	1	\$50,000	\$50,000
16.	Exterior Lighting, PA/Sound System, and Security System	LS	1	\$110,000	\$110,000
Total Construction:					\$608,400
Contingency (20%):					\$121,680
Estimated Geotech:					\$7,500
DHHS Submittal Fee:					\$4,000
Engineering & Construction Oversight (12%):					\$73,008
Direct Construction Costs Subtotal:					\$820,000

The repairs above are recommended to prevent the pool from continually leaking and losing water. This will reduce the water loss and the chemical usage. However, for this study, this alternative will consider the future O&M to be similar to what the City currently experiences.

5.2 Alternative No. 2: New Outdoor Facility on Existing Site

The new outdoor pool for Option No. 2 includes a zero-depth entry, four (4) 25-Yard lap lanes, water spray/play features, 1 and 3-meter diving boards, and a large slide. The new recirculation equipment for the proposed pool is tentatively planned to be located adjacent to the existing mechanical building, below a shade shelter, and surrounded by a slatted fence. An example layout that contains these features is provided in the following figure.

Figure 5-1 – Alt No. 2 Schematic



5.2.1 Pool Amenities

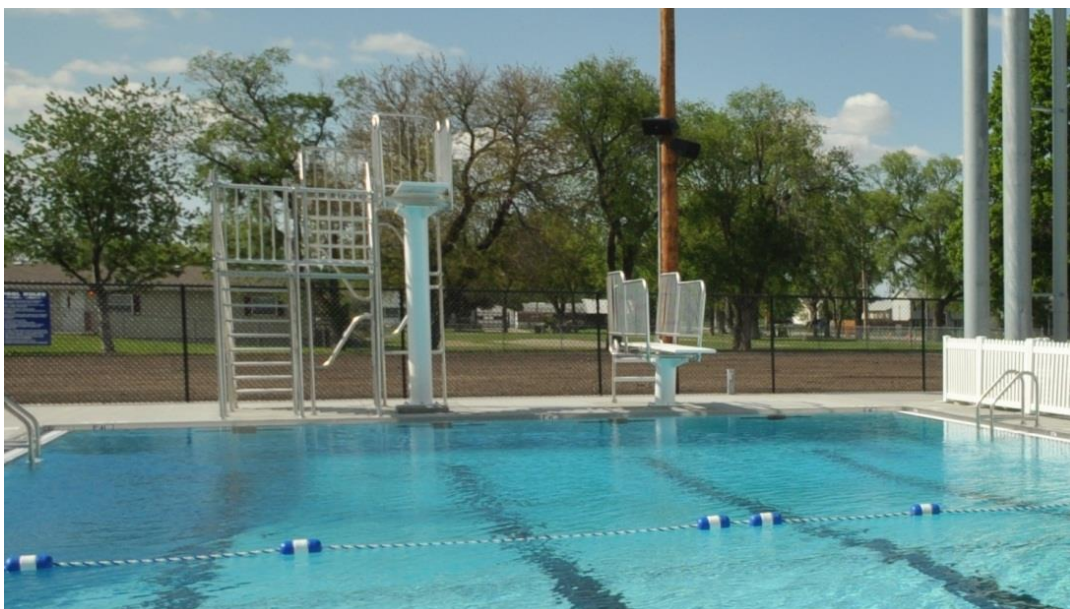
Water Spray Features in Zero Depth: The zero depth allow patrons to enter a pool without the use of ladders, as if it were a beach that gradually slopes down, increasing in water depth. This area of the aquatic facility is extremely popular with the very young and elderly for a variety of reasons. For a facility of this size, adding water spray features in portions of the zero-depth area is a very popular trend and rates highly with patrons. Water spray features come in every imaginable shape and size, though generally speaking, the features are constructed of metal or plastic and are either flush with the floor (such as a ground spray) or extend up anywhere from 0'-6" to 24'-0". The features have varying flow rates and pressures to accommodate different user groups. For facilities of the similar size to this, it would be anticipated that several individual spray features be considered. These groups of features typically operate on between 100 and 250 gpm and require approximately 200 to 400 square feet of shallow zero depth area.

Figure 5-2: Water Spray Features in Zero Depth

Waterslide: A large waterslide is recommended for a facility of this size. The slide should be incorporated into the original design, but the actual implementation of the slide could be accomplished in the future or as an alternate bid item. The main reason to provision for the slide at the beginning is to ensure adequate recirculation for the slide plunge location as well as for providing means of egress, adequate space for pumping equipment, and space for the slide itself. For a project of this scope, it would be recommended to design around a tower structure that would be approximately 25 feet tall, providing for a 150-linear foot ride. The slide tower would be designed to handle a single flume that would terminate into a designated plunge area of the pool.

Figure 5-3: Waterslide

Diving Well with 1-Meter & 3-Meter Diving Stands: A diving well is a term used to describe the area of a pool that has been designed and constructed for pool patrons to dive from a diving stand into the pool. The diving well is typically 10'-0" to 12'-6" deep. The current recommendation is to provide one (1) 3-meter diving stand and one (1) one-meter diving stand. Therefore, the deep end would be 12'-6" deep. After the diving well, the floor would rise at a 1 to 3 slope until reaching the 5'-0" depth.

Figure 5-4: Diving Well with Diving Stands

Concrete Deck and Shaded Deck Area(s): All new swimming pools should be provided with plenty of “deck” space around the swimming pool for both walking and lounging. Deck space should be of a solid surface that prevents tripping hazards and yet is slip resistant. For a facility such as the described, it would be recommended to provide approximately 15 feet of deck (minimum) around the entirety of the pool. This area is recommended to contain fabric style shade shelters for a good portion of the deck area. The fabric provides UV protection for patrons sitting below, but still allows for light to penetrate. When considering the quantity of deck space, it is important to consider the number of patrons whom enjoy the atmosphere of the aquatic center and not just the patrons entering the pool itself. Many parents and guardians prefer to lounge and read books, monitor children etc. from the sidelines.

Figure 5-5: Shade Shelter



For the previous layout, it is estimated that the new facility would have approximately 2,000 gpm of total pumping flowrate (950 gpm for recirculation, 800 gpm for the slide and 250 gpm for the zero depth play features), approximately 4,200 square feet of water surface, a total estimated volume of approximately 162,000 gallons. The estimated capital cost for this option is following:

Table 5-2 – Alt No. 2 Capital Costs

Alternative No. 2 - New Outdoor Facility at Existing Site					
Item #	Description	Unit	Qty	Unit Price	Amount
1.	Mobilization, Bonding, & Insurance	LS	1	\$120,000	\$120,000
2.	Site Demolition	LS	1	\$10,000	\$10,000
3.	Sewer Utility Improvements	LS	1	\$10,000	\$10,000
4.	Flume Slide, 25' Tall	LS	1	\$225,000	\$225,000
5.	New Outdoor Pool W/ Zero Depth Entry	LS	1	\$1,750,000	\$1,750,000
6.	Bathhouse Renovations	LS	1	\$50,000	\$50,000
7.	Splash/Play Features in Zero Depth	LS	1	\$80,000	\$80,000
8.	Exterior Lighting, PA/Sound System, and Security System	LS	1	\$110,000	\$110,000
Total Construction:					\$2,355,000
Contingency (10%)					\$235,500
Estimated Geotech:					\$15,000
DHHS Submittal Fee:					\$7,600
Engineering & Construction Oversight (12%)					\$282,600
Direct Construction Costs Subtotal:					\$2,900,000

The estimated operational and maintenance (O&M) cost for this option is also included. The three (3) different 'expense' factors were taken from the analysis of the five (5) other facility averages and applied toward the estimated design parameters of this alternative that were described previously. The results provide a spectrum of the potential O&M costs that such a facility would have.

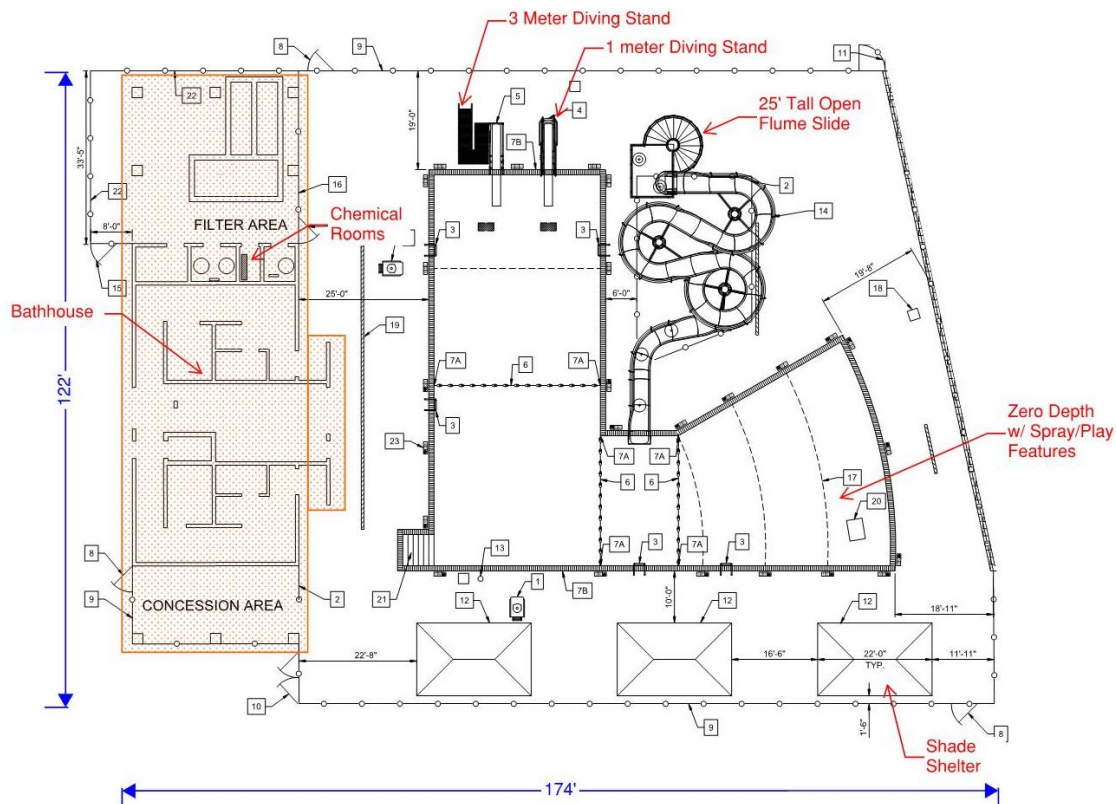
Table 5-3 – Alt No. 2 O&M Costs

	ESTIMATED	O&M 'EXPENSE' FACTOR	RESULTING ESTIMATED ANNUAL O&M COST
Total Pumping Rate (gpm):	2,000	\$41.01	\$82,020
Volume (gallons):	162,000	\$0.38	\$61,560
Water Surface Area (sq. ft.):	4,200	\$12.40	\$52,080
AVERAGE OF RESULTS (ROUNDED):			\$65,220
	ESTIMATED	O&M 'INCOME' FACTOR	RESULTING ESTIMATED ANNUAL INCOME
Population:	1,579	\$14.31	\$22,595
Total Pumping Rate (gpm):	2,000	\$18.95	\$37,900
AVERAGE OF RESULTS (ROUNDED):			\$30,248
TOTAL DEFICIT			\$34,972

5.3 Alternative No. 3: New Outdoor Facility at Different Site

The new outdoor pool for Option No. 3 includes a zero-depth entry, four (4) 25-Yard lap lanes, water spray/play features, a large slide, 1 and 3-meter diving boards, concessions, and a new bathhouse. An example layout that contains these features is provided in the following figure.

Figure 5-6 – Alt No. 3 Schematic



Similar to Alternate No 2, it is estimated that the new facility would have approximately 2,000 gpm of total pumping flowrate (950 gpm for recirculation, 800 gpm for the slide and 250 gpm for the zero depth play features), approximately 4,200 square feet of water surface, and a total estimated volume of approximately 162,000 gallons. However, this alternative would include a new 2,000 SF bathhouse. For this alternative, the roof is proposed to extend north over the filter area and south over the concession area. The estimated capital cost for this option is following:

Table 5-4 – Alt No. 3 Capital Costs

Alternative No. 3 - New Outdoor Facility at Different Site					
Item #	Description	Unit	Qty	Unit Price	Amount
1.	Mobilization, Bonding, & Insurance	LS	1	\$180,000	\$180,000
2.	Site Demolition	LS	1	\$15,000	\$15,000
3.	Utilities	LS	1	\$50,000	\$50,000
4.	New Outdoor Pool W/ Zero Depth Entry	LS	1	\$1,750,000	\$1,750,000
5.	Bathhouse, Complete	LS	1	\$800,000	\$800,000
6.	Parking Lot Improvements (New Site)	SY	1500	\$75	\$112,500
7.	Flume Slide, 25' Tall	LS	1	\$225,000	\$225,000
8.	Splash/Play Features in Zero Depth	LS	1	\$80,000	\$80,000
9.	Exterior Lighting, PA/Sound System, and Security System	LS	1	\$110,000	\$110,000
Total Construction:					\$3,322,500
Contingency (10%):					\$332,250
Estimated Geotech:					\$20,000
DHHS Submittal Fee:					\$7,600
Engineering & Construction Oversight (12%):					\$398,700
Direct Construction Costs Subtotal:					\$4,100,000

The estimated operational and maintenance (O&M) cost for this option is also included. The three (3) different 'expense' factors were taken from the analysis of the five (5) other facility averages and applied toward the estimated design parameters of this alternative that were described previously. The results provide a spectrum of the potential O&M costs that such a facility would have.

Table 5-5 – Alt No. 3 O&M Costs

	ESTIMATED	O&M 'EXPENSE' FACTOR	RESULTING ESTIMATED ANNUAL O&M COST
Total Pumping Rate (gpm):	2,000	\$41.01	\$82,020
Volume (gallons):	162,000	\$0.38	\$61,560
Water Surface Area (sq. ft.):	4,200	\$12.40	\$52,080
AVERAGE OF RESULTS (ROUNDED):			\$65,220
	ESTIMATED	O&M 'INCOME' FACTOR	RESULTING ESTIMATED ANNUAL INCOME
Population:	1,579	\$14.31	\$22,595
Total Pumping Rate (gpm):	2,000	\$18.95	\$37,900
AVERAGE OF RESULTS (ROUNDED):			\$30,248
TOTAL DEFICIT			\$34,972

5.4 Alternative No. 4: New Splash Pad

The splash pad proposed for this option includes several different water spray/play features including, various ground geysers, above grade spray features, interactive spray features, and a large dumping bucket. An example layout that contains these features is provided in the following figure.

Figure 5-7: Alt No. 4 Schematic



There are many options available for splashpads and/or splashpad themes. The City could further review and pick options during pre-design. Typically, splashpads are activated by a push button and set to run for a 6-12 minutes sequence. The proposed splashpad works off water system pressure and is a flow through system which does not require treatment. It is estimated that the proposed splashpad facility would use approximately 200 gpm when activated. The estimated capital cost for this option is following:

Table 5-6: Alt No. 4 Capital Costs

Alternative No. 4 - New Splashpad					
Item #	Description	Unit	Qty	Unit Price	Amount
1.	Mobilization, Bonding, & Insurance	LS	1	\$15,000	\$15,000
2.	Utilities	LS	1	\$30,000	\$30,000
3.	Splashpad, Complete	LS	1	\$300,000	\$300,000
Total Construction:					\$345,000
Contingency (10%)					\$34,500
Estimated Geotech:					\$5,000
DHHS Submittal Fee:					\$0
Engineering & Construction Oversight (15%)					\$51,750
Direct Construction Costs Subtotal:					\$440,000

The estimated operational and maintenance (O&M) cost for this option is also included. For this study, it is assumed that the splashpad would be open to the public and free of charge. The splashpad uses 120-volt power to power a control panels and operate solenoid valves on/off. There would be time spent by the operator to start-up and winterize the splashpad each season, otherwise the maintenance is typically low unless a component of the splashpad needs fixed/repaired. JEO would recommend the City budget \$5,000/year towards splashpad O&M expenses. This does not include the cost of water.

5.5 Summary of Engineer's Opinion of Costs and O&M Costs for Alternatives

Table 5-7 below provides a side by side comparison of the estimated opinion of probable cost for each of the alternatives.

Table 5-7: Summary of Engineer's Opinion of Cost and O&M Costs for Alternatives

Alternative	Description	Opinion of Project Cost	O&M Cost
1	Rehab Existing Pool Facility	\$820,000	\$43,000
2	New Outdoor Facility on Existing Site	\$2,900,000	\$35,000
3	New Outdoor Facility at Different Site	\$4,100,000	\$35,000
4	New Splashpad	\$440,000	\$5,000

5.6 Possible Project Schedule

The implementation of the recommended improvements can take a substantial length of time for the funding, design, review, and construction of the project(s). It is recommended that the city begin the project(s) process immediately so that the deficiencies can be corrected as soon as possible.

If the city decides to pursue the construction of a new aquatic facility (Alt 2 & Alt 3), **Table 5-7** lists the typical steps and anticipated duration of each step to implement the project.

Table 5-8: Potential Implementation Schedule for New Aquatic Facility

Projected Steps	Elapsed Time
Public Engagement, Project Vision, Funding Plan	Current
Referendum Vote	Nov 2019
Retain Services of Professional Engineer	Dec 2019
Design of Aquatic Facility	April 2020
DHHS Review	May 2020
Advertise for Bids	June 2020
Award Bid	July 2020
Start Construction	Aug 2020
Aquatic Facility Grand Opening	June 2021
Warranty Ends	June 2023

**STUDY AND REPORT
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SECTION 6

6 Funding Sources

Municipal pool projects have many funding source options for their aquatic project and the following may or may not be applicable to each community's wants, needs or options:

6.1 General Obligation Bonds

General Obligation (GO) bonds are backed by property taxes and are issued by the City for a wide array of community betterment projects. Second Class Cities: See Section 18-501 of the Nebraska Revised Statutes

6.2 Local Option Sales Tax

Any Nebraska county or incorporated municipality may impose a local sales and use tax upon approval by a majority of their voters in a regular election. The local tax applies to the identical transactions subject to the state sales and use tax, with the exception of direct-to-home satellite programming. Local option taxes of 0.5¢, 1¢, and 1.5¢ may be approved by city or county voters. The tax is collected and remitted to the state and is then allocated back to the municipalities after deducting the amount of refunds made and a three percent administrative fee.

Effective July 19, 2012 and pursuant to LB357, municipalities may, with voter approval, have a sales and use tax equal to 1.75¢ to 2.0¢. The proceeds from the rate in excess of 1.5¢ shall be used for public infrastructure projects or voter-approved infrastructure related to an economic development program as defined in section 18-2705. Public infrastructure project means and includes, but is not limited to, any of the following projects, or any combination thereof: Public highways and bridges and municipal roads, streets, bridges, and sidewalks; solid waste management facilities; wastewater, storm water, and water treatment works and systems, water distribution facilities, and water resources projects, including, but not limited to, pumping stations, transmission lines, and mains and their appurtenances; hazardous waste disposal systems; resource recovery systems; airports; port facilities; buildings and capital equipment used in the operation of municipal government; convention and tourism facilities; redevelopment projects as defined in section 18-2103; mass transit and other transportation systems, including parking facilities; and equipment necessary for the provision of municipal services.

No municipal sales and use tax shall be imposed at a rate greater than one and one-half percent or increased to a rate greater than one and one-half percent unless the municipality is a party to an interlocal agreement pursuant to the Interlocal Cooperation Act or a joint public agency agreement pursuant to the Joint Public Agency Act with a political subdivision within the municipality or the county in which the municipality is located creating a separate legal or administrative entity relating to a public infrastructure project.

Currently the City of Hebron has a 1 cent sales tax. 1/3 is designated for economic development and 2/3 is designated for community improvement.

6.3 Land and Water Conservation Fund

The Land and Water Conservation Fund (LWCF) Act of 1965 seeks to provide outdoor recreation opportunities for all Americans. Funding is made available through royalty revenues from offshore leasing contracts with mineral extracting companies. Nebraska appropriates 60% of the fund for local subdivision recreation projects and retains 40% of the fund for statewide projects within the State Park System. As required by Congress, proposed recreation projects must be in accordance with the State Comprehensive Outdoor Recreation Plan (SCORP). The reimbursable program provides grants for up to 50% of project costs. Local governments/political subdivisions must assure the Nebraska Game and Parks Commission that they have the financial resources to complete and maintain projects in desired operations and settings.

All improvements made with Land and Water Conservation Funds, whole or in part, must be kept in perpetuity by the owner.

Examples of eligible projects include playgrounds, ball fields, soccer fields, picnicking facilities, camping facilities, golf courses, tennis courts, shelters, acquisition and development, and related support facilities.

Maximum grant award:	None specified
Matching requirement:	50%

6.4 Community Development Assistance Act

The Community Development Assistance Act (CDAA) was created in 1985 by the Nebraska Legislature to encourage financial support by businesses to community betterment organizations in their efforts to implement community service and development projects in chronic economically distressed areas. CDAA empowers the Department of Economic Development to distribute a 40 percent state tax credit to businesses, corporations, insurance firms or financial institutions or individuals that make eligible contributions of cash, services or materials to approved community betterment projects.

Five types of projects may qualify through the program. Eligible projects include, employment training, human and medical services, physical facility and neighborhood development services, recreational and educational activities and crime prevention.

Maximum Assistance: Up to \$25,000 per year, per project (generate \$62,500 in private donations)
 Matching requirement: Not applicable.

6.5 Local Capital Campaign

A capital campaign is a time-limited effort by a community or non-profit organization to raise significant dollars for a specific project. Often the money raised is to fund the acquisition, construction, or renovation of a building. Sometimes, capital campaigns are used to build an endowment for the future. In other cases, capital campaigns fund an extraordinary expenditure such as an expensive piece of equipment. Whatever the case, capital campaigns have a beginning and an end, but often span several years. They employ all the usual means of raising funds such as direct mail and direct solicitation, and require extraordinary preparation and skillful execution.

These capital campaigns must be viewed as large-giver campaigns. The same rule of thumb applies: one-third of the fundraising goal will be given by 10 to 15 donors, a second third from an additional 75 to 100 donors, and the final third from the rest.

Because they rely heavily on large gifts to raise a substantial amount of money, capital campaigns draw their volunteer leadership and solicitors from the upper end of a community's business and civic leadership. The high visibility of a capital campaign ups the ante considerably. Few situations are more damaging to the image of an organization than announcing the planned construction of a new facility and then failing to raise the money to build.

6.6 Civic and Community Center Financing Fund

The Civic and Community Center Financing Fund helps finance the construction of new civic centers and recreation centers or renovate or expand existing civic centers or recreation centers, to assist in the conservation, rehabilitation or reuse of historic buildings, to upgrade community centers, and for assistance for engineering and technical studies directly related to the above projects.

The fund may be used for site and infrastructure improvements directly related to the construction, renovation, or expansion of a center. It also may be used for the purchase and installation of fixed seating, lighting, carpeting, and other fixtures at a center, but not for temporary and/or portable furniture or equipment.

Evaluations of grant applications are based on a project's potential for long-term positive impacts on the local and regional economies, attraction impact, readiness, and financial support. The municipality must own and operate the center for which grant assistance is sought.

All municipalities in the state of Nebraska are eligible to apply for assistance, except Omaha. Any municipality receiving a grant will not be awarded more than one grant in any five-year period.

Application due date: Preapplications due in January. Application in February.

Maximum grant amount:

Grant Maximum Schedule A <i>Until the balance of the Fund reaches \$2,500,000</i>		Grant Maximum Schedule B <i>After the balance of the Fund reaches \$2,500,000 and until it falls below \$1,000,000</i>	
Population of Municipality	Maximum Grant Amount	Population of Municipality	Maximum Grant Amount
100,000 to 299,999 persons	\$2,250,000	100,000 to 299,999 persons	\$3,375,000
40,000 to 99,999	\$1,125,000	40,000 to 99,999	\$1,687,000
20,000 to 39,999	\$750,000	20,000 to 39,999	\$1,125,000
10,000 to 19,999	\$600,000	10,000 to 19,999	\$900,000
less than 10,000	\$375,000	less than 10,000	\$562,000

Minimum grant amount: \$3,000 - \$15,000 for studies
Local match required: 50%, 50% of which must be cash match.

6.7 Joint Public Agency Act

The Joint Public Agency Act allows local governmental units to make the most efficient use of their taxing authority and other powers by enabling them to cooperate with other governmental units on a basis of mutual advantage and thereby to provide services and facilities in a manner and pursuant to forms of governmental organization that will accord best with geographic, economic, population, and other factors influencing the needs and development of local communities.

Any two or more public agencies may enter into agreements with one another for joint or cooperative action pursuant to the Joint Public Agency Act. Any combination of two or more public agencies may create one or more joint public agencies to exercise the powers and authority prescribed by the Joint Public Agency Act.

Notwithstanding any restrictions contained in a city charter, any power, privilege, or authority exercised or capable of exercise by a public agency of this state may be exercised and enjoyed jointly with any other public agency of this state and jointly with any public agency of any other state or of the United States.

A joint public agency shall have only those powers of taxation as one or more of the participating public agencies has and only as specifically provided in the agreement proposing creation of the joint public agency, except that a joint public agency shall not levy a local option sales tax. Participating public agencies may agree to allow the joint public agency to levy a property tax rate not to exceed a limit as provided in the agreement if the agreement also limits the levy authority of the overlapping participating public agencies collectively to the same amount. The levy authority of a joint public agency shall be allocated by the city or county as provided in section [77-3443](#), and the agreement may require allocation of levy authority by the city or county.

Any joint public agency may issue such types of bonds as its board may determine subject only to any agreement with the holders of outstanding bonds, including revenue or general obligation bonds. Except as provided in section [72-2304](#), bonds issued for purposes of the Public Facilities Construction and Finance Act may be issued with no requirement for a vote.

The Joint Public Agency Act is necessary for the welfare of the state and its inhabitants and shall be construed liberally to affect its purposes.

6.8 Lease Purchase Agreement

The mayor and council of any city of the first or second class and the chairman and board of trustees of any village, in addition to other powers granted by law, may enter into contracts for lease of real or personal property for any purpose for which the city or village is authorized by law to purchase property or construct improvements.

In order to utilize a Lease Purchase Agreement for most projects, the municipality must first create a "Facilities Corporation" which is a 501(c)(3) non-profit organization. The Facilities Corporation is a

separate “agency” of the community, governed by a Board of Directors appointed by the chief elected. The Board is comprised of three, five or seven members, and cannot be the governing body itself.

A lease purchase agreement allows the municipality to purchase and use an item while making payments. These items include pieces of equipment, such as fire trucks, or real estate, such as land or buildings. The Facilities Corporation purchases the item and then leases it back to the community. The Facilities Corporation issues bonds for the cost of the item. The municipality then levies a tax (property or sales tax) which is used to repay the Lease Purchase Agreement, pursuant to the contract terms. The Lease payments match the corporation’s bond payments.

Capital expenditures (land and buildings) are subject to the municipal levy lid (LB1114) but not the spending lid (LB989). In contract, equipment purchases are subject to both lids.

Such agreements shall not be restricted to a single year and may provide for the purchase of the property in installment payments.

6.9 Private Foundation

Private/charitable foundations are legal entities set up by an individual, a family or a group of individuals or corporations, for a purpose such as philanthropy. The Hebron Community Foundation is an example of such a foundation.

**THIS CONCLUDES THE
STUDY AND REPORT
FOR THE
HEBRON POOL**