YANKTON BOARD OF CITY COMMISSIONERS

Monday, June 20, 2016 at 6:00 pm
416 Walnut Street, 2nd floor
City Hall Meeting Room B

1. **Roll Call**

2. **Old Business:**

   Public hearing for sale of alcoholic beverages
   Consideration of Memorandum #16-143 regarding the request for a Special Events (on-sale) Liquor License for 1 day, June 21, 2016, from Drotzmann & Portillo, LLC (Steve Drotzmann, Partner), d/b/a Rounding 3rd Bar and Casino, Kiwanis 4-H Ice Center, Yankton, S.D.

   Attachment II-1

   Public hearing for sale of alcoholic beverages
   Consideration of Memorandum #16-144 regarding the request for a Special Events RETAIL (on-sale) Malt Beverage and a Special RETAIL (on-sale) Wine dealers License for 1 day, June 25, 2016, from Mount Marty College, Inc., Mount Marty College Campus, 1105 W. 8th Street, Yankton, S.D.

   Attachment II-2

3. **Water**
   Consideration of Memorandum #16-148 regarding Water Plant #3

   Attachment III-1

4. **Adjourn the Work Session of June 20, 2016**

Memorandum #16-143

To: *City Manager*
From: *Finance Department*
Date: *June 15, 2016*
Subject: *Special Events Liquor License-Rounding 3rd Bar & Casino*

We have received an application for a Special Malt Beverage (on sale) Liquor License for 1 day, June 21, 2016, from Drotzmann & Portillo, LLC (Steve Drotzmann, Partner), d/b/a Rounding 3rd Bar & Casino, Kiwanis 4-H Ice Center, Yankton, S.D.

The above applicant is in compliance with the City Code of Ordinances, as checked by the Department of Finance. A police check on the applicant revealed no felony convictions or wants. The applicant is in compliance with all building and fire codes.

Al Viereck
Finance Officer

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Memorandum #16-144

To: *City Manager*
From: *Finance Department*
Date: *June 15, 2015*
Subject: *Special Events Malt Beverage/Wine License-Mt. Marty College*

We have received an application for a Special Malt Beverage (on-sale) Retailers License and a Special (on-sale) Wine Retailers License for 1 day, June 25, 2016, from Mount Marty College, Inc., All of Mount Marty College Campus, 1105 W. 8th Street, Yankton, S.D.

The above applicant is in compliance with the City Code of Ordinances, as checked by the Department of Finance. A police check on the applicant revealed no felony convictions or wants. The applicant is in compliance with all building and fire codes.

Al Viereck
Finance Officer

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Memorandum #16-148

To: Amy Nelson, City Manager
From: Kyle Goodmanson, Director of Environmental Services
Subject: Water Treatment Plant #3
Date: June 16, 2016

Over the past 9 months staff has worked with HDR to determine the next course of action to be taken to address Water Treatment System Improvements.

The timeline below provides an overview and history of the project and a forecast of the steps necessary to take to complete construction.

Water Treatment Plant Master Plan	2006
Nebraska Well installed	2010
Flooding damages to intake	2011
Water Plant Facilities Plan	2013
Plant 2 upgrades	2013
Rate Increase	2014
Design Committee Meetings and Engineering	2015
Consideration of Value Engineering	2015
Collector Well Raw Water Line completed	spring 2016
Water Treatment Plant Membrane Procurement	June, 2016
Water Treatment Plant listed on State Water Plan	June, 2016
Water Treatment Plant Design completed	June, 2016
Collector Well Completion	fall/winter 2016
Rate Resolution	October 2016
1st Rate Adjustment	November, 2016
SRF Application Resolution	December 12, 2016
SRF Application deadline	January 1, 2017
Bid Advertisement Water Treatment Plant #3	January, 2017
Bid Opening Water Treatment Plant #3	March, 2017
SRF Funding Award	March, 2017
Water Treatment Plant #3 Bid Award	April, 2017
2nd Rate Adjustment	November, 2017
3rd Rate Adjustment	November, 2018
Plant Construction Complete Estimate	2020

Current Water Treatment infrastructure will no longer meet our water demand as desired. This is due to increases in usage and aging infrastructure.

- The current infrastructure includes 1929 treatment plant with a 3 million gallon per day capacity.
- The 1972 treatment plant has a 5 million gallon per day capacity for a total of 8 million gallons per day.

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- The Nebraska Well Field has two wells capable of producing 4.2 million gallons per day.
- The river intake is capable of producing 5.5 million gallons per day but has become unreliable due to changes in the river.
- Our current demand ranges from 2.0 million gallons per day to 7.5 million gallons per day on a peak day. The predicted peak demand is 9.1 mgd by 2025, and 10.0 mgd by 2035. We design for peak usage so we can meet the demand of the customers at all times. This also gives us the redundancy and reliability needed to meet the critical demand during scheduled and unscheduled repairs and maintenance. The critical demand is the water needed for necessary uses for residential, commercial and industrial use.

Damage to the intake and continual changes to the river is another issue the City faces. The intake was damaged in the 2011 flood due largely to a sandbar built up underneath the structure. The channel of the river changed with the flood, making it difficult to intake the same amount of water as we were able to prior to the flood. Drought conditions and low release rates from the US Corps of Engineers also negatively impact our ability to intake water.

Regulatory issues are another reason improvements are being considered. We had several years of quarterly violations with Trihalomethanes (by-products from chlorine disinfection reacting with organic materials that are abundant in our river). According to the EPA and South Dakota Department of Environment and Natural Resources, improvements are necessary to avoid ongoing violations.

We also need to take into consideration the fact that our peaking plant was built in 1929 and our base load plant was built in 1972. Because of the aging infrastructure, major upgrades are needed to continue to meet demand and regulatory issues. Both plants have obsolete technology with parts and equipment which are very difficult to replace when repair is needed.

The City of Yankton is also concerned about redundancy within our system. The 1929 plant has a treatment capacity of 3 million gallons per day (3 mgd). The 1972 plant has a 5 mgd treatment capacity. We have peak days in the summer over 7 mgd. The concern is the critical water usage during the summer months. We believe that water which is critical for drinking, hygiene, industrial, commercial, emergency care, and fire protection has exceeded 3 mgd. Therefore, if equipment failure at Plant 2 shuts down the facility we would only have 3 mgd available. This could result in water restrictions that could be very expensive for industrial and commercial users and at best inconvenient for personal users. Our goal is to have a peaking plant capable of supplying enough water to at least meet our critical usage.

The Collector Well at Paddle Wheel point was determined to be the most reliable and long term cost effective source of supply. The Collector Well has higher capacity than the Nebraska Wells. The Collector Well will not be influenced by the changing river levels or zebra mussels. The Collector Well is comprised of a vertical reinforced concrete

shaft (caisson) with horizontal lateral well screens projected out into the aquifer to collect and filter the groundwater. Collector Wells are the preferred method for developing moderate to very high capacity riverbank filtration (RBF) supplies. RBF Collector Wells can be installed adjacent to surface water sources with their lateral well screens projected beneath the riverbed to optimize induced infiltration supplies or they can be installed with designated setback distances to increase the degree of filtration achieved.

Currently the Collector Well project is scheduled to be completed this fall with an estimated final cost of $9,240,000.00. Staff is working with the contractor to finish up punch list items on the Collector Well Raw water line with an estimated final cost of $2,230,000.00. Two bids were received for the membrane procurements and is schedule to be considered at the June 27 City Commission meeting. If approved, some cost would be incurred as part of the membrane procurement process prior to bidding the project. This would include cost for the manufacturer to design the membrane skids to be available for HDR to include in the final plans for bidding. The remaining costs associated with procurement would be incurred when membranes are manufactured. HDR is currently reviewing the bids.

The new plant will be located on the east side and adjacent to the 1972 plant. The new plant will take advantage of existing clearwells and underground reservoirs located between the current plants. The new treatment plant will also be able to take advantage of the distribution system already in place at the current location.

HDR has now completed the new Plant design. Currently the base bid includes office space for the superintendent, supervisor, and break room. The base bid also includes a two stall garage, year around access public restroom, and improvements made as part of the design committee. Future investment would be needed to maintain office space, garage space, and high service pumping equipment at the 1929 facility. Provisions are designed into the new plant that these operations could be moved to a different location in the future if so desired.

The Bid Alternate includes additional office space and work space for the Distribution/Collection Department. Additional high service pumping would also be added allowing the City to completely vacate the 1929 facility.

Staff has also been working with District III and the South Dakota Department of Environment and Natural Resources (DENR) on potential funding options. DENR has received the application to be placed on the State Water Plan with an updated opinion of cost. Attached is a Memorandum dated May 13, 2016 from Steve Quail, of HDR with an updated opinion of cost. Staff has been advised by DENR that funds would be available within the SRF Program to fund the entire project. DENR also informed the City that no principle forgiveness would be available for any projects being funded for the remainder of the current calendar year. The potential for principal forgiveness may be available up to 10% for projects applying for funding in the first round of 2017. The percentage would be dependent on the number of projects throughout the State requesting funding. The funding application deadline is January 1, 2017 with funding being awarded in

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March. To apply, the City is required to have a Resolution setting rates to qualify for the needed funding. Attached is a Spreadsheet from Al Viereck outlining the possible rate structures needed for SRF funding.

Advertisement for bidding out the plant, could begin in January of 2017. The final approval of funding from DENR would be in March of 2017. Bids would be scheduled to be considered at an April City Commission meeting. Contractor documents and Notice to Proceed would be estimated to be completed by June 1, 2017. The project is expected to take two full years to complete.

Respectfully Submitted,

Kyle Goodmanson
Director of Environmental Services

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Memo

Date: Friday, May 13, 2016

Project: Yankton Water Purification Facility Expansion

To: Amy Nelson, City Manager

From: Steven Quail, Project Manager

Subject: WTP Opinion of Construction Costs

Based on the design of the Yankton Water Treatment Plant at 100 percent completion, HDR prepared our Opinion of Construction Costs. Since the 30 percent design, additional factors impacted the overall project construction cost. The purpose of this memo is to provide an update of project costs and comparison between the 30 percent design costs and the 100 percent design costs.

As background, at the 30 percent design phase we indicated that the following items resulted in construction costs that are higher than the Facility Plan Costs (Reference Memo dated September 4, 2015):

- Building expansion will now be constructed as a joined building to the existing water treatment plant, resulting in the need for an earth retention system.
- Higher iron, manganese, and total dissolved solids than originally estimated, requiring larger facilities to achieve 5.0 MGD design capacity.
- The City requested several upgrades to the water treatment plant building that were not included in the original project budget. These improvements included:
  - Expand the building to include offices and meeting room for all water department staff and a maintenance garage, allowing the 1929 plant to be repurposed for other uses.
  - Improve Douglas Street and Levee Street to improve the appearance at the entrance to Riverside Park and improve public safety into and out of the park
  - Improve water treatment plant entrance to be focal point feature to enhance the aesthetics of the park
  - Enhance the exterior of the water treatment plant to complement the features of the park setting and Meridian Bridge
  - Existing plant building improvements such as a new roofing system which is due for replacement within the next 5± years, exterior to match new building, and screen walls for exterior equipment.
  - Include year around access public restrooms.
  - Relocate and modify the sanitary sewer lift station to allow better access from future park facilities, as well as meeting the existing requirements.

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(605) 977-7740

Following the initial 30 percent design phase, the decision was made to prepare the construction documents with a base bid and an alternate bid. The base bid includes a smaller two level maintenance garage/office area approximately 38 feet x 65 feet on the south side of the water facility expansion. The alternate bid includes the construction of a larger two level maintenance garage approximately 36 feet x 238 feet. The alternate bid also includes upgrades to the existing high service pump station in the existing water plant building (Plant #2).

Table 1 below summarizes the estimated costs for the base bid project and Table 2 summarizes the estimated costs for the alternate bid project at the 100 percent design level. On the low end of the range the estimated costs are approximately 13 percent higher than what was estimated at the 30 percent design phase. On the high end of the range the estimated costs are approximately 4 percent higher than what was estimated at the 30 percent design phase. The estimated costs for the base bid and alternate bid at the 30 percent design phase are shown in Table 3 and 4. Reasons for the higher costs between 30 percent and 100 percent include the following:

- At the 30 percent design level, we anticipated that the earth retention system to support the existing building, while the expansion is being construction, would consist of vertical driven sheet piling with no tie-backs. During the final design, our Geotechnical Engineers further evaluated the existing soil conditions and determined that a more robust earth retention system is needed. The updated costs include seacant pile walls with tie-backs for the earth retention system.
- Construction of a redundant 20-inch finished water line from the high service pump station to the distribution system was added to the project.
- Painting the walls and ceilings in the plant process area was included in this current estimate.
- Bike racks, water bottle filling station, bike repair station, benches, brick pavers and specialty pavement, light bollards, and irrigation system were added to the project.
- Modifications to the high service pump station including replacing the existing three pumps and adding a fourth pump was added to the Alternate Bid only.

Table 1 Opinion of Construction Costs - Base Bid Costs at 100% Design			
Item	**Opinion of Cost**	**Contingency (10%)**	**Range of Probable Construction Costs**
Base Water Treatment Plant	$22,838,000	$2,284,000	$22,838,000 - $25,122,000
Offices and Maintenance Garage	$1,500,000	$150,000	$1,500,000 - $1,650,000
Douglas Street Improvements	$272,000	$27,000	$272,000 - $299,000
Entrance Improvements	$180,000	$18,000	$180,000 - $198,000
Landscaping and Eastside Plant Access Improvements	$764,000	$76,000	$764,000 - $840,000
Existing Plant Improvements	$507,000	$51,000	$507,000 - $558,000
Public Restrooms	$112,000	$11,000	$112,000 - $123,000
Sewer Lift Station Modification	$289,000	$29,000	$289,000 - $318,000
Opinion of Construction Cost	$26,462,000	$2,646,000	$26,462,000 – 29,108,000
Opinion of Procurement Cost	$2,500,000	$250,000	$2,500,000 - $2,750,000
Construction Administration	$2,420,000	$242,000	$2,420,000 - $2,662,000
Total Project	$31,382,000	$3,138,000	$31,382,000 - $34,520,000

Table 2 Opinion of Construction Costs - Alternate Bid Costs at 100% Design			
Item	**Opinion of Cost**	**Contingency (10%)**	**Range of Probable Construction Costs**
Base Water Treatment Plant	$22,838,000	$2,284,000	$22,838,000 - $25,122,000
Offices and Maintenance Garage	$3,400,000	$340,000	$3,400,000 - $3,740,000
Douglas Street Improvements	$272,000	$27,000	$272,000 - $299,000
Entrance Improvements	$180,000	$18,000	$180,000 - $198,000
Landscaping and Eastside Plant Access Improvements	$764,000	$76,000	$764,000 - $840,000
Existing Plant Improvements	$507,000	$51,000	$507,000 - $558,000
Public Restrooms	$112,000	$11,000	$112,000 - $123,000
Sewer Lift Station Modification	$289,000	$29,000	$289,000 - $318,000
High Service Pump Station Modifications	$532,000	$53,000	$532,000 - $585,000
Opinion of Construction Cost	**$28,894,000**	**$2,889,000**	**$28,894,000 - $31,783,000**
Opinion of Procurement Cost	**$2,500,000**	**$250,000**	**$2,500,000 - $2,750,000**
Construction Administration	$2,420,000	$242,000	$2,420,000 - $2,662,000
Total Project	**$33,814,000**	**$3,381,000**	**$33,814,000 - $37,195,000**

Table 3 Opinion of Construction Base Bid Costs at 30 % Design			
Item	**Opinion of Cost**	**Contingency (20%)**	**Range of Probable Construction Costs**
Base Water Treatment Plant	$22,066,000	$4,413,000	$22,066,000 to $26,479,000
Offices and Maintenance Garage	$1,000,000	$200,000	$1,000,000 to $1,200,000
Douglas Street Improvements	$272,000	$54,000	$272,000 to $326,000
Entrance Improvements	$156,000	$31,000	$156,000 to $187,000
Landscaping and Eastside Plant Access Improvements	$694,000	$139,000	$694,000 to $833,000
Existing Plant Improvements	$461,000	$92,000	$461,000 to $553,000
Public Restrooms	$101,000	$20,000	$101,000 to $121,000
Sewer Lift Station Modification	$273,000	$55,000	$273,000 to $328,000
Opinion of Construction Cost	**$25,023,000**	**$5,004,000**	**$25,023,000 to $30,027,000**
Additional Engineering Design	$489,000		$489,000
Construction Administration	$2,200,000	$434,000	$2,200,000 to $2,634,000
Total Project	**$27,712,000**	**$5,438,000**	**$27,712,000 to $33,150,000**

Table 4 Opinion of Construction Alternate Bid Costs at 30 % Design			
Item	**Opinion of Cost**	**Contingency (20%)**	**Range of Probable Construction Costs**
Base Water Treatment Plant	$22,066,000	$4,413,000	$22,066,000 to $26,479,000
2-Stall Garage	$3,091,000	$618,000	$3,091,000 to $3,709,000
Douglas Street Improvements	$272,000	$54,000	$272,000 to $326,000
Entrance Improvements	$156,000	$31,000	$156,000 to $187,000
Landscaping and Eastside Plant Access Improvements	$694,000	$139,000	$694,000 to $833,000
Existing Plant Improvements	$461,000	$92,000	$461,000 to $553,000
Public Restrooms	$101,000	$20,000	$101,000 to $121,000
Sewer Lift Station Modification	$273,000	$55,000	$273,000 to $328,000
Opinion of Construction Cost	**$27,114,000**	**$5,422,000**	**$27,144,000 to $32,536,000**
Additional Engineering Design	$489,000		$489,000
Construction Administration	$2,200,000	$434,000	$2,200,000 to $2,634,000
Total Project	**$29,803,000**	**$5,856,000**	**$29,803,000 to $35,659,000**

Current and Future Surcharge Revenues

	Acct. Number	607.3812	3% incr.		Current Plan Low Range	Current Plan High Range
	2014	**2015**	**2016**	**2016 actuals**	1.5969	1.7287
Jan	$105,172	$108,808	$115,938	6.55%	$185,141	$200,422
Feb	$105,031	$108,809	$115,708	6.34%	$184,774	$200,024
Mar	$105,217	$108,674	$115,689	6.46%	$184,744	$199,992
Apr	$105,160	$109,710	$116,293	6.00%	$185,708	$201,036
May	$111,182	$118,515	$120,404	1.59%	$192,273	$208,142
Jun	$115,520	$122,176	$125,842	Est. 3%	$200,957	$217,542
Jul	$115,692	$123,555	$127,262	Est. 3%	$203,225	$219,998
Aug	$116,431	$123,461	$127,165	Est. 3%	$203,069	$219,829
Sep	$116,341	$123,527	$127,232	Est. 3%	$203,178	$219,947
Oct	$113,438	$123,689	$127,400	Est. 3%	$203,445	$220,236
Nov	$112,564	$119,495	$123,080	Est. 3%	$196,546	$212,768
Dec	$120,583	$125,539	$129,305	Est. 3%	$206,487	$223,530
	$1,342,330	$1,415,958	$1,471,317	3.91%	$2,349,547	$2,543,467
			-$716,225	**$12.85m**	$878,229	$1,072,149
		Estimated Excess	$755,092	$13.547m	$15.757m	$19.236m
					Ck.Fig. 15.75656855	Ck.Fig. 19.23573715

	Debt Service per / million $	**Collector Well**
	$1,000,000	$12,850,000
Annual	$50,670	$651,114
110% SRF	$55,737	$716,225
Rate Incr.	3.788%	
	$0.60267	
	per / million $	

Opinion of Construction Costs		Range From	Range To	Difference
Base Water Treatment Plant		$22,838,000	$25,122,000	$2,284,000
Offices and Maintenance Garage		$1,500,000	$1,650,000	$150,000
Douglas Street Improvements		$272,000	$299,000	$27,000
Entrance Improvements		$180,000	$198,000	$18,000
Landscaping and Eastside Plant Access Improvements		$764,000	$840,000	$76,000
Existing Plant Improvements		$507,000	$558,000	$51,000
Public Restrooms		$112,000	$123,000	$11,000
Sewer Lift Station Modification		$289,000	$318,000	$29,000
	Sub-Total	$26,462,000	$29,108,000	$2,646,000
Opinion of Procurement Costs		$2,500,000	$2,750,000	$250,000
Construction Administration		$2,420,000	$2,662,000	$242,000
Additional Engineering Design		$489,000	$489,000	
	Sub-Total	$31,871,000	$35,009,000	$3,138,000
		-$13,547,410	-$13,547,410	Excess debt service in place.
		-$5,000,000	-$5,000,000	Cash on hand.
		$13,323,590	$16,461,590	Additional Debt needed.
		$742,621.63	$917,525.44	Annual Debt Service
		$8.03	$9.92	$ increase in Surcharge
Add Alt. 1	**High Service Pump Station Mod.**	$532,000	$585,000	
	Office and Maint. Garage	$1,900,000	$2,190,000	
		$2,432,000	$2,775,000	Additional Debt needed.
For Alt. only		$135,553.24	$154,671.15	Addit. Annual Debt Serv.
		$1.47	$1.67	$ increase in Surcharge
Total w/Alt.		$15,755,590	$19,236,590	Additional Debt needed.
		$878,175	**$1,072,197**	Annual Debt Service
		$9.50	$11.59	$ increase in Surcharge

		Low Range	**High Range**
Surcharge	Current $15.91	$25.41	$27.50

If the additional annual debt service was taken out of the "506" Second Penny fund, these are the %'s for the total Second Penny 2016 estimated revenues.

Second Penny Revenue		**Low Range**	**High Range**
2016 estimate	**$3,783,143**	**23.21%**	**28.34%**