

WATER BOARD OF TRUSTEES
Regular Meeting
January 14, 2019
4:00 PM
Location: 1208 South 7th St.

Agenda

1. Oath of Office for newly appointed Board of Trustee member Nicholas Jones.
2. Approve Agenda.
3. Approve minutes of the December 10, 2018 regular meeting and the January 3, 2019 special meeting.
4. Approve invoices and Financial Statements.
5. Customer Forum.
6. Consideration and discussion of billing for 1019 South 18th Street.
7. Consideration and discussion for plans, specifications and form of contract regarding A Avenue West, Hwy 432, and North L Street water main replacement project.
8. Consideration and discussion of cash flow statements as prepared by Public Financial Management.
9. Public Hearing for FY18-19 budget amendment
10. Consideration and discussion of budget amendment for the FY18-19 budget.
11. Public Hearing for FY19-20 proposed budget.
12. Consideration and discussion of proposed budget for FY19-20.
13. Introduction of Resolution #1903, Resolution setting a Public Hearing before the Oskaloosa Water Board on the Matter of Proposed Rate Increases.
14. Consideration and discussion of pay application #7 from Dave Schmitt

Construction Company, Inc. for South D water main replacement.

15. Discussion of wastewater operations.
16. General Manager's Update.
17. Updates from member of the Board of Trustees.
18. Adjourn.

INFORMATION CONCERNING AGENDA ITEMS:

Agenda Item #1

Nicholas Jones has been appointed to fill out the remaining term left open by the departure of Dan Nance. Nicholas will need to read and sign the Oath of Office. The original will go back to City Hall and a copy will be included with the minutes.

Agenda Item #5

Chair – Please read this statement to the audience.

“This is the item reserved to receive comments from the community, our customers, for concerns whether or not they are included in the current agenda. The community is encouraged to come and speak before the Water Board of Trustees and asked to keep statements brief. Any questions are to be asked of the Water Department staff and Board of Trustee members prior to speaking to the full Board of Trustees so concerns may be properly researched and answered away from the meeting. Comments are to be directed to the Board of Trustees only. Time may be limited to 3 minutes.”

Agenda Item #6

Irvin Slagter, 833 7th Avenue East, would like to discuss the billing for 1019 South 18th Street. In January of 2017 Mr. Slagter had a leak at 1019 South 18th for which the Water Department was called. At that time Mr. Slagter had asked to us to shut off the water at the curb stop as there were frozen and broken lines that needed fixed. It was the understanding of staff that repairs would be made and there would be usage again. There has not been usage at this location since that time. There was no work order generated to deactivate the account so staff kept billing for minimums. Mr. Slagter was called in December about the lack of usage. That prompted a conversation in which he has asked for a refund of all billings since February of 2017. Staff informed Mr. Slagter that there was no work order generated, and therefore no request, to shut off water permanently, and that we would not be issuing a refund. Mr. Slagter has requested that he be allowed to address the Board with his concerns. The amount paid for minimums during this time was \$702.16. Hard copies of the billing register and notes will be available during the meeting. It is staff recommendation that no refund be issued.

Agenda Item #7

Jack Pope will be in attendance to provide information on the upcoming capital replacement project. As previously discussed, we will be contracting for the replacement of old 4” water main that has outlived its usefulness. The project area includes North L Street from High Avenue West to D Avenue West, A Avenue West from North L Street out to Gateway Drive (the Wal-Mart entrance) and Highway 432 from A Avenue West to D Avenue West. The proposal is to advertise for bids and hold the bid opening on March 7th at 11:00 AM with the bid award at the March 11th Board meeting. I am currently working to secure easements for the project area. I will try attaching project documents to the email, but should they be too large I will send them separately. The project cost was recently discussed during the budget planning meeting. The budget has been adjusted accordingly and we should have contingency built in. The Board will need to approve the plans, specifications and form of contract as well as the dates for bid opening and bid award. Should bids

come in above what is budgeted by a significant margin the Board has options, one of which is to not award the bid. It is staff recommendation to approve the plans, specifications and form of contract.

Agenda Item #8

Susanne Gerlach with Public Financial Management will be in attendance to review different cash flow scenarios. Based on input from the meeting on the 3rd, Susanne has developed a couple different exhibits. Those exhibits will be attached to the agenda packets. Please review the exhibits and have your questions ready.

Agenda Item #9

This is the Public Hearing for the budget amendment for fiscal year 2018-2019. We will need a motion to open the Public Hearing, listen to any comments and then a motion to close the Public Hearing.

Agenda Item #10

This is the budget that was discussed during the meeting on the 3rd with the changes made as requested. It will be attached to the agenda packets for your review before the meeting. The greatest need for amending the budget is the delayed capital spending that has occurred over the last 12 months. Between the timelines of painting the water towers and the South D street replacement project, monies identified for expenditure in FY17-18 were not spent until FY18-19. The other issue that arose was an increase in the amount of the probable cost for the upcoming capital project versus what had been previously budgeted. The amended budget shows expenses of \$5,128,938.00 and proposed revenue of \$4,018,425.00. There was \$530,321.00 in increased CIP spending from what had been budgeted for this year, again due to a delay in how projects were completed.

Agenda Item #11

This is the Public Hearing for the proposed budget for fiscal year 2019-2020. We will need a motion to open the Public Hearing, listen to any comments and then a motion to close the Public Hearing.

Agenda Item #12

This is the proposed budget for fiscal year 2019-2020. Again, with the requests made for changes from the meeting held on January 3rd, there are multiple versions of the budget. They will all be attached to the agenda packets for your review before the meeting. The interest rate for the SRF loan has been revised and the drop in consumption is also included. The proposed budget shows revenue ranging from \$4,029,363.00 to \$4,216,989.00 and expenses of \$4,416,525.00. Necessary rate increases will be considered during the February Board meeting.

Agenda Item #13

Resolution #1903 will set the date for a Public Hearing for any rate increases that may be needed. The resolution will need to be read to introduce it, then motion for approving with a second and then a vote. This will set the date of the Public Hearing for the next Board meeting, February 11th, 2019.

Agenda Item #14

Pay application #7 from Dave Schmitt Construction is included in your packets. Similarly to the last couple of months, we are paying down the retainage. The Water Department is Division 2 for this project. The information as provided to the City Council is as follows;

Summary of Pay Requests*:

	Public Works (A)	Water Dept. (B)	Total Payment (A+B)	Approved
Application #1	\$159,743.30	\$144,596.50	\$304,339.80	07/02/18
Application #2	\$382,703.53	\$29,369.08	\$412,072.61	08/06/18
Application #3	\$500,693.13	\$144,452.87	\$645,146.00	09/04/18
Application #4	\$325,408.96	\$16,208.13	\$341,617.09	10/01/18
Application #5	\$576,113.65	\$15,806.24	\$591,919.89	11/05/18
Application #6	\$298,587.21	\$522.11	\$299,109.32	12/03/18
Application #7*	\$89,783.58	\$134.46	\$89,918.04	12/17/18*
Total	\$2,333,033.36	\$351,089.39	\$2,684,122.75	
Retainage	\$26,075.93	\$3,924.07	\$30,000.00	
Remaining	\$137,992.66	\$11,636.54	\$149,629.20	

	Div. 1 Part.	Div. 1 Non-Part.	Div. 2 Non-Part.	Div. 3 Non-Part.	Total
Total Completed to Date =	\$2,258,130.05	\$7,606.75	\$355,013.45	\$93,372.50	\$2,714,122.75
Amount Retained (@3%, \$30,000 Max.) =	\$24,959.78	\$84.08	\$3,924.07	\$1,032.07	\$30,000.00
Total Completed Less Retainage =	\$2,233,170.27	\$7,522.67	\$351,089.38	\$92,340.43	\$2,684,122.75
Less Previous Payments to Contractor =	\$2,189,319.20	\$7,519.80	\$350,954.92	\$46,410.79	\$2,594,204.71
Amount Due Contractor this Application =	\$43,851.07	\$2.87	\$134.46	\$45,929.64	\$89,918.04

Agenda Item #15

Collection System Operations;

The replacement jetter/vacuum truck purchase was approved by the City Council and the order has been placed. Staff assisted with a water main break, televising for a contractor for Phase 2 work as well as determining whether laterals were active or inactive for Phase 2, installed replacement heater at the World Foods lift station and repaired a section of collapsed line outside a manhole on South D Street and 8th Avenue West. They investigated a complaint on South 9th and 6th Avenue East and determined that this area was a private lateral, set up lift stations for rain storms that were forecast to move through, and replaced electrical relays at the Armory lift station. They also found a manhole at the City snow dump that was buried under four feet of material and worked with Garden staff on upcoming Phase 3 work. There were also a few different meetings to review plans for the different divisions of Phase 3 work that were attended so that staff could assist with planning.

Plant Operations;

Staff continue to remove bio-solids from the EQ basin at the south plant and work with a contractor to land apply those solids. They are now done for the year on this project. The remaining bio-solids are not thick enough to be cost-effective for removal. Staff then started working on drawing down the upper EQ basin and removing water from that basin so that we can fix a valve that has failed. This valve will be replaced when the basin has been lowered enough to safely complete the work. Staff cleaned out the grit wagons at both plants and had to rebuild the holding area at the south plant as the old trailer literally rusted in half. There has been quite a bit of maintenance work that has been accomplished at both plants. From cleaning out rag bins and grit systems to cleaning clarifiers and scum beaches, and cleaning the finals. Different pumps had tops replaced or were loaded up for repair quotes or had other maintenance performed. We had a controls contractor in to work on replacing the variable frequency drives at the north plant for the raw and final pumps. This was done a part of a CIP project. With that work we found a conduit that was faulting out and will need to either have new wires pulled through it or have a new conduit installed. Staff are working with a local electrician to help determine how to proceed. The boiler has had a couple different actuators installed for damper controls to keep it running effectively. The bar rake at the north plant had a link removed from the drive chain due to stretching to keep it operating properly. Some of the mowers were also serviced to prepare them for spring. Staff also hauled sludge from the north plant and Okaloosa Foods to the south plant for processing. There is a pre-bid meeting Friday January 18th for the short term project with engineers from Fox Engineering and interested contractors to allow them to look at the areas of concern for the upcoming bids. This particular project is set to go to bid on February 8th with a proposed bid award at the March 4th City Council meeting.

Storm Water Operations;

Staff looked at the storm sewer at High Avenue East and North Market to follow up on a concern over potential failure. It was noted that the pipe is nicked but there do not appear to be any cracks in the pipe.

Agenda Item #16

Distribution System Operations;

There were 3 breaks this last month.

6" shear break on North 11th and A Avenue East

8" hole on Edmundson Drive south of 15th Avenue West – this area is becoming one we need to watch, there are quite a few breaks that have happened here in the last few years.

6" shear break on North Market just south of K Avenue East. This had been leaking for quite a while but it didn't come up close to our main and we could never find chlorine in the water.

When it turned colder and we were able to see some flow through the ice we decided to perform an exploratory dig and make sure that it wasn't ours – turns out it was. I have not hired back to replace the vacancy left by Rocky Stevens yet. Still collecting resumes at this time.

Plant Operations;

The control valve for one of our high service pumps has been taken down and staff have verified the issue that needs repaired. Repair parts will be ordered in the coming days. The pipe that needed replaced off of filter #2 has been worked on so that staff can get it replaced. The new

pipe has arrived and we are working on straightening vane placement so that we can get it installed. We need to look at flows from the wells and determine which wells will need to have rehab work done on them. We have ordered replacement chain and flights for the north and middle settling basins. We replaced the south basin last spring and the other basins are showing similar signs of wear. We have CIP money for the plant this year that will be used for this purpose.

Office Operations;

There were quite a few shut-offs this month. When Crystal first ran the report we had 144 that were to be shut off. The morning of shut-offs we were down to 109 by the time staff went out the door, that is a big swing from what we had last month. Cindy Scholtus decided to end her time at the utility earlier than she had previously indicated. Friday January 4th was her last day of work. Tammy Vos has been working side-by-side with Cindy for the last couple of months to learn the job. She has done great so far and we are glad to have her here. Obviously the budgeting process has taken center stage for the last few weeks as we were preparing for this meeting. Looking at towards next month we will have the public hearing for a rate increase and I will also be reviewing meter rental rates to ensure that we where we should be for those charges. There was an issue with a large amount of coins being used to pay for a payment agreement and I wanted to gather some input and ideas from the group about whether or not to implement a policy, and if so, what that should look like.

Agenda Item #17

This is an item for members of the Board to provide updates or request future agenda items.



Oskaloosa Municipal Water Department

City of Oskaloosa, Iowa

Water Cash Flow Update & 2019 Rate Increase Scenarios

January 14, 2019

PFM Financial Advisors LLC

801 Grand Avenue

Suite 3300

Des Moines, IA 50309

Susanne Gerlach

Director

(515) 724-5734

E-mail: gerlachs@pfm.com



Scenario 1: Recommended 2019 Rate Increase

OSKALOOSA MUNICIPAL WATER DEPARTMENT

Water Enterprise Fund

EXHIBIT 1

Assumes Cash Funded CIP

Growth Assumptions	
Water Usage	(2.00%)
Number of Customers	0.00%
Operating Expenses	5.00%
Interest Rate	0.50%

WATER REVENUE ADJUSTMENTS					
3/1/2014	10.00%	3/1/2018	5.00%	3/1/2022	5.00%
3/1/2015	10.00%	3/1/2019	12.00%	3/1/2023	5.00%
3/1/2016	25.00%	3/1/2020	5.00%	3/1/2024	5.00%
3/1/2017	5.00%	3/1/2021	5.00%	3/1/2025	5.00%

	Audited Financial Statements			Budget	Budget	Projected	Projected	Projected	Projected	Projected	Projected
	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
COST PER UNIT	Mar 2015	Mar 2016	Mar 2017	Mar 2018							
Rate per 100 Cubic Feet (Inside) 1	\$5.13	\$6.41	\$6.73	\$7.07	\$7.92	\$8.31	\$8.73	\$9.17	\$9.63	\$10.11	\$10.61
Rate per 100 Cubic Feet (Outside) 2	\$10.26	\$12.83	\$13.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Min. Monthly Bill (200 CF) Inside 3	\$10.26	\$12.82	\$13.46	\$14.14	\$15.84	\$16.63	\$17.46	\$18.33	\$19.25	\$20.21	\$21.22
Min. Monthly Bill (200 CF) Outside 4	\$20.52	\$25.64	\$26.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9.56%	29.68%	(0.19%)	5.00%	12.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Average Revenue/CCF Inside 5	\$4.01	\$5.20	\$5.19	\$5.45	\$6.10	\$6.41	\$6.73	\$7.07	\$7.42	\$7.79	\$8.18
WATER (CCF) 6	2.28%	(5.89%)	0.06%	(8.00%)	(5.00%)	(2.00%)	(2.00%)	(2.00%)	(2.00%)	(2.00%)	(2.00%)
Total Water Usage 7	417,038	392,457	392,682	361,267	343,204	336,340	329,613	323,021	316,561	310,229	304,025
Number of Customers Inside 8	4,638	4,652	4,559	4,519	4,519	4,519	4,519	4,519	4,519	4,519	4,519
Number of Customers Outside 9	260	257	255	255	255	255	255	255	255	255	255
OPERATING REVENUES 10	11.41%	23.04%	0.67%	(2.72%)	8.03%	3.53%	3.54%	3.55%	3.56%	3.57%	3.58%
Metered Water Sales 11	\$1,671,026	\$2,042,685	\$2,037,817	\$1,968,727	\$2,094,725	\$2,155,472	\$2,217,981	\$2,282,303	\$2,348,489	\$2,416,596	\$2,486,677
Min Monthly Billings - Inside 12	571,031	715,664	736,370	766,826	858,845	901,788	946,877	994,221	1,043,932	1,096,129	1,150,935
Min Monthly Billings - Outside 13	64,022	79,074	82,375	43,271	48,463	50,886	53,431	56,102	58,907	61,853	64,945
Penalties and Inspection Fees 14	51,145	71,562	77,123	38,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Labor Charges 15	6,012	11,490	10,657	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
Sales Tax 16	160,293	202,901	207,280	194,518	210,142	217,570	225,280	233,284	241,593	250,220	259,179
Rental Fees 17	0	0	0	0	0	0	0	0	0	0	0
City Wastewater 18	206,944	370,179	410,922	446,833	493,271	516,990	542,839	569,981	598,480	628,404	659,824
Miscellaneous Revenues 19	13,748	12,435	16,758	32,000	34,500	34,500	34,500	34,500	34,500	34,500	34,500
Total Operating Revenues 20	\$2,744,221	\$3,505,989	\$3,579,302	\$3,493,675	\$3,793,448	\$3,930,706	\$4,074,408	\$4,223,891	\$4,379,402	\$4,541,201	\$4,709,561
OPERATING EXPENSES 21	(0.72%)	6.67%	10.35%	20.48%	0.47%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Administration 22	\$626,157	\$681,077	\$702,136	\$945,814	\$924,510	\$970,736	\$1,019,272	\$1,070,236	\$1,123,748	\$1,179,935	\$1,238,932
Plant O&M 23	488,063	509,992	622,157	638,557	648,671	681,105	715,160	750,918	788,464	827,887	869,281
Distribution O&M 24	325,302	344,428	370,130	457,147	477,973	501,872	526,965	553,313	580,979	610,028	640,530
WW Operations 25	206,944	370,172	410,921	445,933	492,371	516,990	542,839	569,981	598,480	628,404	659,824
Sales Tax 26	157,636	203,418	205,965	194,518	210,142	217,570	225,280	233,284	241,593	250,220	259,179
Other Misc Expenses 27	0	0	0	0	0	0	0	0	0	0	0
Total Operating Expense 28	\$1,804,102	\$2,109,087	\$2,311,309	\$2,681,969	\$2,753,667	\$2,888,272	\$3,029,517	\$3,177,732	\$3,333,264	\$3,496,474	\$3,667,746
NET OPERATING REV 29	\$940,119	\$1,396,902	\$1,267,993	\$811,706	\$1,039,780	\$1,042,435	\$1,044,892	\$1,046,159	\$1,046,138	\$1,044,727	\$1,041,815
Interest on Reserves 30	6,971	9,712	12,682	10,339	4,611	3,596	4,874	5,264	4,701	4,467	4,821
Other Non-operating Income 31	56,752	65,680	68,687	34,185	34,185	34,185	34,185	34,185	34,185	34,185	34,185
Revenue for Debt Service 32	\$1,003,842	\$1,472,294	\$1,349,362	\$856,230	\$1,078,576	\$1,080,216	\$1,083,951	\$1,085,608	\$1,085,024	\$1,083,379	\$1,080,821

OSKALOOSA MUNICIPAL WATER DEPARTMENT

Water Enterprise Fund

EXHIBIT 1

Assumes Cash Funded CIP

Growth Assumptions	
Water Usage	(2.00%)
Number of Customers	0.00%
Operating Expenses	5.00%
Interest Rate	0.50%

WATER REVENUE ADJUSTMENTS					
3/1/2014	10.00%	3/1/2018	5.00%	3/1/2022	5.00%
3/1/2015	10.00%	3/1/2019	12.00%	3/1/2023	5.00%
3/1/2016	25.00%	3/1/2020	5.00%	3/1/2024	5.00%
3/1/2017	5.00%	3/1/2021	5.00%	3/1/2025	5.00%

	Audited Financial Statements			Budget	Budget	Projected	Projected	Projected	Projected	Projected	Projected
	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Revenue for Debt Service 33	\$1,003,842	\$1,472,294	\$1,349,362	\$856,230	\$1,078,576	\$1,080,216	\$1,083,951	\$1,085,608	\$1,085,024	\$1,083,379	\$1,080,821
Water Debt Service											
2009 SRF Loan 34	\$418,738	\$419,320	\$419,610	\$419,608	\$371,500	\$374,600	\$378,520	\$383,240	\$386,740	\$391,040	\$395,120
Reserved 35	0	0	0	0	0	0	0	0	0	0	0
Total Revenue Debt 36	\$418,738	\$419,320	\$419,610	\$419,608	\$371,500	\$374,600	\$378,520	\$383,240	\$386,740	\$391,040	\$395,120
Debt Service Coverage											
Net Revenues/ Revenue Debt 37	2.40	3.51	3.22	2.04	2.90	2.88	2.86	2.83	2.81	2.77	2.74
<i>Must at least be a 1.10x Coverage for SRF Bonds</i>											
CASHFLOW AFTER DEBT 38	\$585,104	\$1,052,974	\$929,752	\$436,623	\$707,076	\$705,616	\$705,431	\$702,368	\$698,284	\$692,339	\$685,701
Capital Outlays 39	(\$476,900)	(\$567,288)	(\$168,591)	(\$1,362,321)	(\$690,000)	(\$230,000)	(\$407,500)	(\$595,000)	(\$695,000)	(\$571,607)	(\$480,000)
Other cash sources/(uses) 40	0	(1)	2	0	50	0	0	0	0	0	0
Bond Proceeds 41	0	0	0	0	0	0	0	0	0	0	0
Transfers (to)/from Other Funds 42	0	0	0	0	0	0	0	0	0	0	0
Transfers to Meter Replcmt Fund 43	(102,000)	(102,000)	(102,000)	(220,000)	(220,000)	(220,000)	(220,000)	(220,000)	(50,000)	(50,000)	(50,000)
Transfers to Sinking Fund 44	(48)	(24)	0	0	0	0	0	0	0	0	0
Annual Surplus/ (Deficit) 45	\$6,156	\$383,661	\$659,163	(\$1,145,698)	(\$202,874)	\$255,616	\$77,931	(\$112,632)	(\$46,716)	\$70,732	\$155,701
Beginning Cash Balance 46	\$1,018,841	\$1,024,997	\$1,408,658	\$2,067,821	\$922,123	\$719,248	\$974,865	\$1,052,796	\$940,163	\$893,447	\$964,180
Ending Cash Balance 47	\$1,024,997	\$1,408,658	\$2,067,821	\$922,123	\$719,248	\$974,865	\$1,052,796	\$940,163	\$893,447	\$964,180	\$1,119,880
Cash % of O&M (net of depr) 48	57%	67%	89%	34%	26%	34%	35%	30%	27%	28%	31%
Restricted & Designated											
Improvement Fund 49	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sinking Fund 50	\$34,943	\$34,967	\$34,965	\$34,965	\$34,965	\$34,965	\$34,965	\$34,965	\$34,965	\$34,965	\$34,965
Meter Replacement Fund 51	\$51,419	\$54,068	\$56,068	\$56,068	\$56,068	\$56,068	\$56,068	\$56,068	\$56,068	\$56,068	\$56,068
Debt Service Reserve Fund 52	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL WATER DEPT CASH 53	\$1,111,359	\$1,497,693	\$2,158,854	\$1,013,156	\$810,281	\$1,065,898	\$1,143,829	\$1,031,196	\$984,480	\$1,055,212	\$1,210,913
Meter Replacement Expenditures	\$93,732	\$99,351	\$100,000	\$220,000	\$220,000	\$220,000	\$220,000	\$220,000	\$50,000	\$50,000	\$50,000

OSKALOOSA MUNICIPAL WATER DEPARTMENT

Water Enterprise Fund

EXHIBIT 1

Assumes Cash Funded CIP

Growth Assumptions	
Water Usage	(2.00%)
Number of Customers	0.00%
Operating Expenses	5.00%
Interest Rate	0.50%

WATER REVENUE ADJUSTMENTS					
3/1/2014	10.00%	3/1/2018	5.00%	3/1/2022	5.00%
3/1/2015	10.00%	3/1/2019	12.00%	3/1/2023	5.00%
3/1/2016	25.00%	3/1/2020	5.00%	3/1/2024	5.00%
3/1/2017	5.00%	3/1/2021	5.00%	3/1/2025	5.00%

Audited Financial Statements			Budget	Budget	Projected	Projected	Projected	Projected	Projected	Projected
FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26

WATER DEPARTMENT CAPITAL OUTLAYS

	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Split fund Mini Excavator with WW	\$0	\$0	\$0	\$32,500	\$0	\$0	\$0	\$0
Backhoe & Vacuum	0	0	40,000	50,000	0	0	0	45,000
Computers & Phone Equip.	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Water Plant Equipment Upgrades	40,000	0	40,000	0	40,000	0	40,000	0
Turbidity Sensors & Lab Equipment	0	0	0	25,000	0	0	0	25,000
Vehicles	0	130,000	0	35,000	0	35,000	0	35,000
Equipment	0	0	15,000	0	50,000	0	0	0
Paint North Tower, South Tower	497,641	0	0	0	0	0	0	0
South D (A Ave to 6th)	364,680	0	0	0	0	0	0	0
North L & A Ave W	420,000	330,000	0	0	0	0	0	0
Hwy 23 East	0	0	0	0	0	35,000	476,607	0
20" from plant to 210th Street	0	0	0	0	0	0	50,000	350,000
C Avenue West Water main	0	0	0	40,000	500,000	0	0	0
20" 230th to Trueblood	0	0	0	0	0	500,000	0	0
South H and 11th Ave. West	35,000	210,000	0	0	0	0	0	0
South 5th Street Replacement	0	0	30,000	220,000	0	0	0	0
New Well @ plant	0	0	0	0	0	120,000	0	0
Tractor @ plant	0	0	80,000	0	0	0	0	0
Plant Computer and Operating System	0	0	20,000	0	0	0	0	20,000
Preliminary Engineering Report - Distribution	0	15,000	0	0	0	0	0	0
Other Capital Outlays	0	0	0	0	0	0	0	0
TOTAL WATER DEPARTMENT CAPITAL OUTLAYS	\$1,362,321	\$690,000	\$230,000	\$407,500	\$595,000	\$695,000	\$571,607	\$480,000



Scenario 2: Financial Impact of 5% 2019 Rate Increase

OSKALOOSA MUNICIPAL WATER DEPARTMENT

Water Enterprise Fund

EXHIBIT 2

Assumes Cash Funded CIP

Growth Assumptions	
Water Usage	(2.00%)
Number of Customers	0.00%
Operating Expenses	5.00%
Interest Rate	0.50%

WATER REVENUE ADJUSTMENTS					
3/1/2014	10.00%	3/1/2018	5.00%	3/1/2022	5.00%
3/1/2015	10.00%	3/1/2019	5.00%	3/1/2023	5.00%
3/1/2016	25.00%	3/1/2020	5.00%	3/1/2024	5.00%
3/1/2017	5.00%	3/1/2021	5.00%	3/1/2025	5.00%

	Audited Financial Statements			Budget	Budget	Projected	Projected	Projected	Projected	Projected	Projected
	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
COST PER UNIT	Mar 2015	Mar 2016	Mar 2017	Mar 2018							
Rate per 100 Cubic Feet (Inside) 1	\$5.13	\$6.41	\$6.73	\$7.07	\$7.42	\$7.80	\$8.18	\$8.59	\$9.02	\$9.47	\$9.95
Rate per 100 Cubic Feet (Outside) 2	\$10.26	\$12.83	\$13.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Min. Monthly Bill (200 CF) Inside 3	\$10.26	\$12.82	\$13.46	\$14.14	\$14.85	\$15.59	\$16.37	\$17.19	\$18.05	\$18.95	\$19.90
Min. Monthly Bill (200 CF) Outside 4	\$20.52	\$25.64	\$26.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9.56%	29.68%	(0.19%)	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Average Revenue/CCF Inside 5	\$4.01	\$5.20	\$5.19	\$5.45	\$5.72	\$6.01	\$6.31	\$6.62	\$6.96	\$7.30	\$7.67
WATER (CCF) 6	2.28%	(5.89%)	0.06%	(8.00%)	(5.00%)	(2.00%)	(2.00%)	(2.00%)	(2.00%)	(2.00%)	(2.00%)
Total Water Usage 7	417,038	392,457	392,682	361,267	343,204	336,340	329,613	323,021	316,561	310,229	304,025
Number of Customers Inside 8	4,638	4,652	4,559	4,519	4,519	4,519	4,519	4,519	4,519	4,519	4,519
Number of Customers Outside 9	260	257	255	255	255	255	255	255	255	255	255
OPERATING REVENUES 10	11.41%	23.04%	0.67%	(2.72%)	1.28%	3.53%	3.54%	3.55%	3.56%	3.57%	3.58%
Metered Water Sales 11	\$1,671,026	\$2,042,685	\$2,037,817	\$1,968,727	\$1,963,805	\$2,020,755	\$2,079,357	\$2,139,659	\$2,201,709	\$2,265,558	\$2,331,260
Min Monthly Billings - Inside 12	571,031	715,664	736,370	766,826	805,168	845,426	887,697	932,082	978,686	1,027,621	1,079,002
Min Monthly Billings - Outside 13	64,022	79,074	82,375	43,271	45,434	47,706	50,091	52,596	55,226	57,987	60,886
Penalties and Inspection Fees 14	51,145	71,562	77,123	38,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Labor Charges 15	6,012	11,490	10,657	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
Sales Tax 16	160,293	202,901	207,280	194,518	197,008	203,972	211,200	218,704	226,493	234,582	242,980
Rental Fees 17	0	0	0	0	0	0	0	0	0	0	0
City Wastewater 18	206,944	370,179	410,922	446,833	493,271	516,990	542,839	569,981	598,480	628,404	659,824
Miscellaneous Revenues 19	13,748	12,435	16,758	32,000	34,500	34,500	34,500	34,500	34,500	34,500	34,500
Total Operating Revenues 20	\$2,744,221	\$3,505,989	\$3,579,302	\$3,493,675	\$3,592,686	\$3,722,849	\$3,859,185	\$4,001,021	\$4,148,594	\$4,302,152	\$4,461,952
OPERATING EXPENSES 21	(0.72%)	6.67%	10.35%	20.48%	0.47%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Administration 22	\$626,157	\$681,077	\$702,136	\$945,814	\$924,510	\$970,736	\$1,019,272	\$1,070,236	\$1,123,748	\$1,179,935	\$1,238,932
Plant O&M 23	488,063	509,992	622,157	638,557	648,671	681,105	715,160	750,918	788,464	827,887	869,281
Distribution O&M 24	325,302	344,428	370,130	457,147	477,973	501,872	526,965	553,313	580,979	610,028	640,530
WW Operations 25	206,944	370,172	410,921	445,933	492,371	516,990	542,839	569,981	598,480	628,404	659,824
Sales Tax 26	157,636	203,418	205,965	194,518	197,008	203,972	211,200	218,704	226,493	234,582	242,980
Other Misc Expenses 27	0	0	0	0	0	0	0	0	0	0	0
Total Operating Expense 28	\$1,804,102	\$2,109,087	\$2,311,309	\$2,681,969	\$2,740,533	\$2,874,673	\$3,015,437	\$3,163,152	\$3,318,164	\$3,480,836	\$3,651,547
NET OPERATING REV 29	\$940,119	\$1,396,902	\$1,267,993	\$811,706	\$852,153	\$848,176	\$843,749	\$837,870	\$830,430	\$821,316	\$810,405
Interest on Reserves 30	6,971	9,712	12,682	10,339	4,611	2,658	2,960	2,335	715	(617)	(1,406)
Other Non-operating Income 31	56,752	65,680	68,687	34,185	34,185	34,185	34,185	34,185	34,185	34,185	34,185
Revenue for Debt Service 32	\$1,003,842	\$1,472,294	\$1,349,362	\$856,230	\$890,949	\$885,019	\$880,894	\$874,389	\$865,331	\$854,884	\$843,184

OSKALOOSA MUNICIPAL WATER DEPARTMENT

Water Enterprise Fund

EXHIBIT 2

Assumes Cash Funded CIP

Growth Assumptions	
Water Usage	(2.00%)
Number of Customers	0.00%
Operating Expenses	5.00%
Interest Rate	0.50%

WATER REVENUE ADJUSTMENTS					
3/1/2014	10.00%	3/1/2018	5.00%	3/1/2022	5.00%
3/1/2015	10.00%	3/1/2019	5.00%	3/1/2023	5.00%
3/1/2016	25.00%	3/1/2020	5.00%	3/1/2024	5.00%
3/1/2017	5.00%	3/1/2021	5.00%	3/1/2025	5.00%

	Audited Financial Statements			Budget	Budget	Projected	Projected	Projected	Projected	Projected	Projected
	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Revenue for Debt Service 33	\$1,003,842	\$1,472,294	\$1,349,362	\$856,230	\$890,949	\$885,019	\$880,894	\$874,389	\$865,331	\$854,884	\$843,184
Water Debt Service											
2009 SRF Loan 34	\$418,738	\$419,320	\$419,610	\$419,608	\$371,500	\$374,600	\$378,520	\$383,240	\$386,740	\$391,040	\$395,120
Reserved 35	0	0	0	0	0	0	0	0	0	0	0
Total Revenue Debt 36	\$418,738	\$419,320	\$419,610	\$419,608	\$371,500	\$374,600	\$378,520	\$383,240	\$386,740	\$391,040	\$395,120
Debt Service Coverage											
Net Revenues/ Revenue Debt 37	2.40	3.51	3.22	2.04	2.40	2.36	2.33	2.28	2.24	2.19	2.13
<i>Must at least be a 1.10x Coverage for SRF Bonds</i>											
CASHFLOW AFTER DEBT 38	\$585,104	\$1,052,974	\$929,752	\$436,623	\$519,449	\$510,419	\$502,374	\$491,149	\$478,591	\$463,844	\$448,064
Capital Outlays 39	(\$476,900)	(\$567,288)	(\$168,591)	(\$1,362,321)	(\$690,000)	(\$230,000)	(\$407,500)	(\$595,000)	(\$695,000)	(\$571,607)	(\$480,000)
Other cash sources/(uses) 40	0	(1)	2	0	50	0	0	0	0	0	0
Bond Proceeds 41	0	0	0	0	0	0	0	0	0	0	0
Transfers (to)/from Other Funds 42	0	0	0	0	0	0	0	0	0	0	0
Transfers to Meter Replcmt Fund 43	(102,000)	(102,000)	(102,000)	(220,000)	(220,000)	(220,000)	(220,000)	(220,000)	(50,000)	(50,000)	(50,000)
Transfers to Sinking Fund 44	(48)	(24)	0	0	0	0	0	0	0	0	0
Annual Surplus/ (Deficit) 45	\$6,156	\$383,661	\$659,163	(\$1,145,698)	(\$390,501)	\$60,419	(\$125,126)	(\$323,851)	(\$266,409)	(\$157,763)	(\$81,936)
Beginning Cash Balance 46	\$1,018,841	\$1,024,997	\$1,408,658	\$2,067,821	\$922,123	\$531,621	\$592,040	\$466,914	\$143,063	(\$123,346)	(\$281,109)
Ending Cash Balance 47	\$1,024,997	\$1,408,658	\$2,067,821	\$922,123	\$531,621	\$592,040	\$466,914	\$143,063	(\$123,346)	(\$281,109)	(\$363,045)
Cash % of O&M (net of depr) 48	57%	67%	89%	34%	19%	21%	15%	5%	(4%)	(8%)	(10%)
Restricted & Designated											
Improvement Fund 49	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sinking Fund 50	\$34,943	\$34,967	\$34,965	\$34,965	\$34,965	\$34,965	\$34,965	\$34,965	\$34,965	\$34,965	\$34,965
Meter Replacement Fund 51	\$51,419	\$54,068	\$56,068	\$56,068	\$56,068	\$56,068	\$56,068	\$56,068	\$56,068	\$56,068	\$56,068
Debt Service Reserve Fund 52	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL WATER DEPT CASH 53	\$1,111,359	\$1,497,693	\$2,158,854	\$1,013,156	\$622,654	\$683,073	\$557,947	\$234,096	(\$32,313)	(\$190,076)	(\$272,012)
Meter Replacement Expenditures	\$93,732	\$99,351	\$100,000	\$220,000	\$220,000	\$220,000	\$220,000	\$220,000	\$50,000	\$50,000	\$50,000

OSKALOOSA MUNICIPAL WATER DEPARTMENT

Water Enterprise Fund

EXHIBIT 2

Assumes Cash Funded CIP

Growth Assumptions	
Water Usage	(2.00%)
Number of Customers	0.00%
Operating Expenses	5.00%
Interest Rate	0.50%

WATER REVENUE ADJUSTMENTS					
3/1/2014	10.00%	3/1/2018	5.00%	3/1/2022	5.00%
3/1/2015	10.00%	3/1/2019	5.00%	3/1/2023	5.00%
3/1/2016	25.00%	3/1/2020	5.00%	3/1/2024	5.00%
3/1/2017	5.00%	3/1/2021	5.00%	3/1/2025	5.00%

Audited Financial Statements			Budget	Budget	Projected	Projected	Projected	Projected	Projected	Projected
FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26

WATER DEPARTMENT CAPITAL OUTLAYS									
	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	
Split fund Mini Excavator with WW	\$0	\$0	\$0	\$32,500	\$0	\$0	\$0	\$0	\$0
Backhoe & Vacuum	0	0	40,000	50,000	0	0	0	45,000	
Computers & Phone Equip.	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Water Plant Equipment Upgrades	40,000	0	40,000	0	40,000	0	40,000	0	
Turbidity Sensors & Lab Equipment	0	0	0	25,000	0	0	0	25,000	
Vehicles	0	130,000	0	35,000	0	35,000	0	35,000	
Equipment	0	0	15,000	0	50,000	0	0	0	
Paint North Tower, South Tower	497,641	0	0	0	0	0	0	0	
South D (A Ave to 6th)	364,680	0	0	0	0	0	0	0	
North L & A Ave W	420,000	330,000	0	0	0	0	0	0	
Hwy 23 East	0	0	0	0	0	35,000	476,607	0	
20" from plant to 210th Street	0	0	0	0	0	0	50,000	350,000	
C Avenue West Water main	0	0	0	40,000	500,000	0	0	0	
20" 230th to Trueblood	0	0	0	0	0	500,000	0	0	
South H and 11th Ave. West	35,000	210,000	0	0	0	0	0	0	
South 5th Street Replacement	0	0	30,000	220,000	0	0	0	0	
New Well @ plant	0	0	0	0	0	120,000	0	0	
Tractor @ plant	0	0	80,000	0	0	0	0	0	
Plant Computer and Operating System	0	0	20,000	0	0	0	0	20,000	
Preliminary Engineering Report - Distribution	0	15,000	0	0	0	0	0	0	
Other Capital Outlays	0	0	0	0	0	0	0	0	
TOTAL WATER DEPARTMENT CAPITAL OUTLAYS	\$1,362,321	\$690,000	\$230,000	\$407,500	\$595,000	\$695,000	\$571,607	\$480,000	

2018-2019 BUDGET

Exhibit 1 - 1/11/2019 11:51 am

Acct. #

Original
2018-2019

Changes

Proposed
2018-2019

12% Rate Increase

8% Usage Reduction

ACCOUNTS:

INCOME

Material Sales	600-8001-1-4521	2,500	7,500	10,000
Labor Charges	600-8001-1-4522	3,500	500	4,000
Late Fees	600-8001-1-4531	38,000	27,500	65,500
Metered Sales	600-8001-1-4555	2,995,270	(216,446)	2,778,824
Other Income	600-8001-1-4761	4,500	-	4,500
Reimbursements - City for W.W.	600-8001-2-4710	446,833	-	446,833
House Rental	600-8001-4-4312	360	-	360
Meter Rental	600-8001-4-4317	24,200	-	24,200
Sprinkler & Hydrant Rental	600-8001-4-4318	5,125	-	5,125
Misc . Income	600-8001-4-4518	29,500	-	29,500
Water Fund Income		3,549,788	(180,946)	3,368,842
Interest	600-8001-4-4300	5,600	4,400	10,000
Transfer In - Sinking Fund	603-8001-4-4830600	419,583	-	419,583
Transfer In - Meter Fund	604-8001-4-4830600	220,000	-	220,000
Total Revenues		4,194,971	(176,546)	4,018,425

OPERATING EXPENSES

Labor - Distribution	8001	6010	226,578	-	226,578
Salaries - General Manager	8006	6011	58,980	-	58,980
Salaries - Office	8006	6012	209,737	-	209,737
Salaries - Service Tech	8006	6013	65,599	-	65,599
Labor - Plant	8000	6014	106,502	-	106,502
Contract Labor	8006	6015	-	-	-
Salaries - Trustees	8006	6020	5,670	-	5,670
Salaries - Waste Water Treatment	8009	6014	136,092	-	136,092
Salaries - Waste Water Collections	8010	6014	161,108	-	161,108
Salaries - Waste Water Storm Water	8011	6014	2,419	-	2,419
Health Ins. Wages	8000	6050	-	-	-
Health Ins. Wages	8001	6050	-	-	-
Health Ins. Wages	8006	6050	2,088	-	2,088
Health Ins. Wages	8010	6050	2,088	-	2,088
Emp. Share - Soc. Sec.	8000	6110	6,603	-	6,603
Emp. Share - Soc. Sec.	8001	6110	14,048	-	14,048
Emp. Share - Soc. Sec.	8006	6110	21,079	-	21,079
Emp. Share - Soc. Sec.	8009	6110	8,438	-	8,438
Emp. Share - Soc. Sec.	8010	6110	10,443	-	10,443
Emp. Share - Soc. Sec.	8011	6110	150	-	150
Emp. Share -Medicare	8000	6120	1,544	-	1,544
Emp. Share -Medicare	8001	6120	3,285	-	3,285
Emp. Share -Medicare	8006	6120	4,930	-	4,930
Emp. Share -Medicare	8009	6120	1,973	-	1,973
Emp. Share -Medicare	8010	6120	2,442	-	2,442
Emp. Share -Medicare	8011	6120	35	-	35
Emp. Share - Ipers	8000	6130	10,054	-	10,054
Emp. Share - Ipers	8001	6130	21,389	-	21,389
Emp. Share - Ipers	8006	6130	31,559	-	31,559
Emp. Share - Ipers	8009	6130	12,848	-	12,848
Emp. Share - Ipers	8010	6130	15,913	-	15,913
Emp. Share - Ipers	8011	6130	216	-	216
Health/Life Ins.	8006	6150	232,288	37,230	269,518
Health/Life Ins.	8009	6150	35,973	-	35,973
Health/Life Ins.	8010	6150	50,595	-	50,595
Uniforms	8001	6181	2,500	-	2,500
Uniforms	8009	6181	450	-	450
Uniforms	8010	6181	750	-	750
Self Insurance Expense	8006	6183	6,500	-	6,500
Self Insurance Expense	8009	6183	1,500	-	1,500
Self Insurance Expense	8010	6183	2,500	-	2,500
Dues & Subscription	8006	6220	7,316	-	7,316

Education/Seminars	8000	6240	2,252	-	2,252
Education/Seminars	8001	6240	5,665	-	5,665
Education/Seminars	8006	6240	7,833	-	7,833
Main. - Buildings	8000	6310	15,450	-	15,450
Main. - Buildings	8001	6310	1,160	1,500	2,660
Main. - Buildings	8006	6310	10,562	-	10,562
Main. - Wells	8000	6311	87,418	-	87,418
Main. - Water Supply	8001	6312	114,737	-	114,737
Main. - Meters	8001	6313	5,464	-	5,464
Main. - Grounds	8000	6320	22,511	-	22,511
Main. - Grounds	8001	6320	1,126	-	1,126
Gasoline	8001	6331	22,511	-	22,511
Truck Expense	8001	6332	10,300	-	10,300
Main. - Machinery	8000	6350	42,436	-	42,436
Main. - Machinery	8001	6350	6,753	-	6,753
Electric/Gas	8000	6371	90,041	-	90,041
Electric/Gas	8001	6371	7,750	-	7,750
Telephone	8006	6373	8,442	-	8,442
Cell Phone Reimb	8009	6373	240	-	240
Cell Phone Reimb	8010	6373	660	-	660
Audit Expense	8006	6401	10,300	1,000	11,300
Publications	8006	6402	3,637	-	3,637
Insurance	8006	6408	65,827	-	65,827
Janitorial Expense	8006	6409	2,552	-	2,552
Legal Fees	8006	6411	10,927	-	10,927
Computer Expense	8006	6419	27,319	-	27,319
Lab Expense	8000	6450	19,096	-	19,096
Meter Reading Service	8006	6492	45,000	-	45,000
Chemicals	8000	6501	230,730	-	230,730
Small Tools	8000	6504	1,126	-	1,126
Small Tools	8001	6504	3,376	-	3,376
Office Supplies	8006	6506	12,057	-	12,057
Misc. Expense	8000	6507	1,444	-	1,444
Misc. Expense	8001	6507	5,065	-	5,065
Misc. Expense	8006	6507	9,548	-	9,548
Postage	8006	6508	30,183	-	30,183
Safety Supplies	8000	6510	562	-	562
Safety Supplies	8001	6510	2,252	-	2,252
Credit Card Fees	8006	6520	15,625	-	15,625
Misc. Supplies	8000	6599	788	-	788
Misc. Supplies	8001	6599	1,688	-	1,688
Misc. Supplies	8006	6599	1,126	-	1,126
Total Operating Expenses			2,447,721	39,730	2,487,451
Net Operating Revenue			1,102,067	(220,676)	881,391
Transfer Out - Sinking Fund	8001	6910603	419,583	-	419,583
Transfer Out - Meter Fund	8001	6910604	220,000	-	220,000
Total Transfer Out			639,583	-	639,583
Net Gain (Loss)			1,107,667	(216,276)	891,391
Office Sign / Shop Doors	8001	6750	-	-	-
Turbidity Sensors & Lab Equip	8000	6723	40,000	-	40,000
Vehicles	8001	6710	-	-	-
Dist Proj/Valves, South D & Towers	8001	6780	787,000	530,321	1,317,321
Office / Computer Equipment	8006	6725	5,000	-	5,000
Principal Fund 603	8001	6801	286,750	-	286,750
Interest Fund 603	8001	6851	122,615	-	122,615
Bond Servicing Fee Fund 603	8001	6899	10,218	-	10,218
New/Replace Meters Fund 604	8001	6724	220,000	-	220,000
Total CIP			1,471,583	530,321	2,001,904
Total Expenses			\$ 4,558,887	570,051	\$ 5,128,938
Net Gain (Loss)			\$ (363,916)	(746,597)	\$ (1,110,513)

01/11/2019 15:11

Budget Amendments 18-19 - 12% rate increase & 8% usage reduction

2018-2019 budget

Receipts

Operating Revenue

Water Sales	2,778,824
City - Waste Water	446,833
Other	143,185
	<u>3,368,842</u>

Capital Sources

Interest Income	10,000
	<u>10,000</u>

Total Receipts

3,378,842

Disbursements

Operating Expense

Water - Personnel Costs	790,057
Waste Water - Personnel Costs	354,177
Utilities	106,233
Outside Services	92,290
Small Equip & Materials	313,581
Chemicals, Treatment & Monitoring	249,826
Transportation	32,811
Office Supplies	88,821
Property Insurance	65,827
Water - Health Insurance	278,106
Waste Water - Health Insurance	92,656
Staff Development	23,066
	<u>2,487,451</u>

Total Operating Expenses

2,487,451

Capital Outlays

Shop Doors	-
Turbidity Sensors & Lab Equip	40,000
Vehicles	-
Dist projects	1,317,321
Computer Equipment	5,000
New/Replace Meters	220,000
Equipment	
Principal & Interest SRF	419,583
	<u>2,001,904</u>

Total Capital Outlays

2,001,904

Total Expenses

4,489,355

Fund Excess (Deficiency)

(1,110,513)

Net Operating Income

881,391

Fiscal Year 2017-2018 estimated principal, interest
and servicing fee total \$418,737.50 + 10% =
\$460,677.25

Loan Parity \$420,713.75

City Waste Water Accounts	
Reimbursements	446,833
Budgeted Cost	446,833
Difference	-

2019-2020 BUDGET

Exhibit 1 - 1/11/2019 11:51 am

ACCOUNTS:

INCOME

	Acct. #
Material Sales	600-8001-1-4521
Labor Charges	600-8001-1-4522
Late Fees	600-8001-1-4531
Metered Sales	600-8001-1-4555
Other Income	600-8001-1-4761
Reimbursements - City for W.W.	600-8001-2-4710
House Rental	600-8001-4-4312
Meter Rental	600-8001-4-4317
Sprinkler & Hydrant Rental	600-8001-4-4318
Misc . Income	600-8001-4-4518
Water Fund Income	
Interest	600-8001-4-4300
Transfer In - Sinking Fund	603-8001-4-4830600
Transfer In - Meter Fund	604-8001-4-4830600
Total Revenues	

Original
2018-2019
12% Rate Increase
8% Usage Reduction

Changes

Proposed
2019-2020
5% Rate Increase
5% Usage Reduction

Original 2018-2019	Changes	Proposed 2019-2020
10,000	(5,000)	5,000
4,000	(500)	3,500
65,500	(15,500)	50,000
2,778,824	223,209	3,002,033
4,500	-	4,500
446,833	46,438	493,271
360	-	360
24,200	-	24,200
5,125	-	5,125
29,500	-	29,500
3,368,842	248,647	3,617,489
10,000	(2,000)	8,000
419,583	(48,083)	371,500
220,000	-	220,000
4,018,425	198,564	4,216,989

OPERATING EXPENSES

Labor - Distribution	8001	6010
Salaries - General Manager	8006	6011
Salaries - Office	8006	6012
Salaries - Service Tech	8006	6013
Labor - Plant	8000	6014
Contract Labor	8006	6015
Salaries - Trustees	8006	6020
Salaries - Waste Water Treatment	8009	6014
Salaries - Waste Water Collections	8010	6014
Salaries - Waste Water Storm Water	8011	6014
Health Ins. Wages	8000	6050
Health Ins. Wages	8001	6050
Health Ins. Wages	8006	6050
Health Ins. Wages	8010	6050
Emp. Share - Soc. Sec.	8000	6110
Emp. Share - Soc. Sec.	8001	6110
Emp. Share - Soc. Sec.	8006	6110
Emp. Share - Soc. Sec.	8009	6110
Emp. Share - Soc. Sec.	8010	6110
Emp. Share - Soc. Sec.	8011	6110
Emp. Share -Medicare	8000	6120
Emp. Share -Medicare	8001	6120
Emp. Share -Medicare	8006	6120
Emp. Share -Medicare	8009	6120
Emp. Share -Medicare	8010	6120
Emp. Share -Medicare	8011	6120
Emp. Share - Ipers	8000	6130
Emp. Share - Ipers	8001	6130
Emp. Share - Ipers	8006	6130
Emp. Share - Ipers	8009	6130
Emp. Share - Ipers	8010	6130
Emp. Share - Ipers	8011	6130
Health/Life Ins.	8006	6150
Health/Life Ins.	8009	6150
Health/Life Ins.	8010	6150
Uniforms	8001	6181
Uniforms	8009	6181
Uniforms	8010	6181
Self Insurance Expense	8006	6183
Self Insurance Expense	8009	6183
Self Insurance Expense	8010	6183
Dues & Subscription	8006	6220

226,578	13,002	239,580
58,980	1,769	60,749
209,737	(50,229)	159,508
65,599	(2,789)	62,810
106,502	(4,529)	101,973
-	-	-
5,670	-	5,670
136,092	4,090	140,182
161,108	22,983	184,091
2,419	(97)	2,322
-	-	-
-	-	-
2,088	-	2,088
2,088	-	2,088
6,603	(281)	6,322
14,048	806	14,854
21,079	(3,177)	17,902
8,438	253	8,691
10,443	532	10,975
150	(6)	144
1,544	(65)	1,479
3,285	189	3,474
4,930	(743)	4,187
1,973	60	2,033
2,442	125	2,567
35	(1)	34
10,054	(428)	9,626
21,389	1,227	22,616
31,559	(4,837)	26,722
12,848	385	13,233
15,913	797	16,710
216	3	219
269,518	37,555	307,073
35,973	7,195	43,168
50,595	10,119	60,714
2,500	-	2,500
450	-	450
750	-	750
6,500	-	6,500
1,500	-	1,500
2,500	-	2,500
7,316	219	7,535

Education/Seminars	8000	6240	2,252	68	2,320
Education/Seminars	8001	6240	5,665	170	5,835
Education/Seminars	8006	6240	7,833	235	8,068
Main. - Buildings	8000	6310	15,450	464	15,914
Main. - Buildings	8001	6310	2,660	-	2,660
Main. - Buildings	8006	6310	10,562	(9,983)	579
Main. - Wells	8000	6311	87,418	2,623	90,041
Main. - Water Supply	8001	6312	114,737	3,442	118,179
Main. - Meters	8001	6313	5,464	164	5,628
Main. - Grounds	8000	6320	22,511	675	23,186
Main. - Grounds	8001	6320	1,126	34	1,160
Gasoline	8001	6331	22,511	675	23,186
Truck Expense	8001	6332	10,300	309	10,609
Main. - Machinery	8000	6350	42,436	1,273	43,709
Main. - Machinery	8001	6350	6,753	203	6,956
Electric/Gas	8000	6371	90,041	2,701	92,742
Electric/Gas	8001	6371	7,750	233	7,983
Telephone	8006	6373	8,442	253	8,695
Cell Phone Reimb	8009	6373	240	-	240
Cell Phone Reimb	8010	6373	660	-	660
Audit Expense	8006	6401	11,300	450	11,750
Publications	8006	6402	3,637	109	3,746
Insurance	8006	6408	65,827	6,583	72,410
Janitorial Expense	8006	6409	2,552	77	2,629
Legal Fees	8006	6411	10,927	328	11,255
Computer Expense	8006	6419	27,319	820	28,139
Lab Expense	8000	6450	19,096	573	19,669
Meter Reading Service	8006	6492	45,000	-	45,000
Chemicals	8000	6501	230,730	6,922	237,652
Small Tools	8000	6504	1,126	34	1,160
Small Tools	8001	6504	3,376	101	3,477
Office Supplies	8006	6506	12,057	362	12,419
Misc. Expense	8000	6507	1,444	43	1,487
Misc. Expense	8001	6507	5,065	152	5,217
Misc. Expense	8006	6507	9,548	286	9,834
Postage	8006	6508	30,183	905	31,088
Safety Supplies	8000	6510	562	17	579
Safety Supplies	8001	6510	2,252	68	2,320
Credit Card Fees	8006	6520	15,625	469	16,094
Misc. Supplies	8000	6599	788	24	812
Misc. Supplies	8001	6599	1,688	51	1,739
Misc. Supplies	8006	6599	1,126	34	1,160
Total Operating Expenses			2,487,451	56,074	2,543,525
Net Operating Revenue			881,391	192,573	1,073,964
				-	
Transfer Out - Sinking Fund	8001	6910603	419,583	(48,083)	371,500
Transfer Out - Meter Fund	8001	6910604	220,000	-	220,000
Total Transfer Out			639,583	(48,083)	591,500
				-	
Net Gain (Loss)			891,391	190,573	1,081,964
				-	
Office Sign / Shop Doors	8001	6750	-	-	-
Plant Equip Upgrades	8000	6723	40,000	(40,000)	-
Vehicles	8001	6710	-	130,000	130,000
Dist Proj/No L & A Ave, So H & 11th&Prelim Report	8001	6780	1,317,321	(762,321)	555,000
Office / Computer Equipment	8006	6725	5,000	-	5,000
Principal Fund 603	8001	6801	286,750	9,000	295,750
Interest Fund 603	8001	6851	122,615	(56,366)	66,249
Bond Servicing Fee Fund 603	8001	6899	10,218	(717)	9,501
New/Replace Meters Fund 604	8001	6724	220,000	-	220,000
Total CIP			2,001,904	(720,404)	1,281,500
Total Expenses			\$ 5,128,938	(712,413)	\$ 4,416,525
				-	
Net Gain (Loss)			\$ (1,110,513)	910,977	\$ (199,536)

01/11/2019 16:00

2019-2020 budget

Receipts

Operating Revenue

Water Sales	3,002,033
City - Waste Water	493,271
Other	<u>122,185</u>
	3,617,489

Capital Sources

Interest Income	<u>8,000</u>
	8,000

Total Receipts

3,625,489

Disbursements

Operating Expense

Water - Personnel Costs	739,972
Waste Water - Personnel Costs	383,301
Utilities	109,420
Outside Services	93,820
Small Equip & Materials	312,611
Chemicals, Treatment & Monitoring	257,321
Transportation	33,795
Office Supplies	91,486
Property Insurance	72,410
Water - Health Insurance	315,661
Waste Water - Health Insurance	109,970
Staff Development	<u>23,758</u>

Total Operating Expenses

2,543,525

Capital Outlays

Shop Doors	-
Turbidity Sensors & Lab Equip	-
Vehicles	130,000
Dist projects	555,000
Computer Equipment	5,000
New/Replace Meters	220,000
Equipment	
Principal & Interest SRF	<u>371,500</u>

Total Capital Outlays

1,281,500

Total Expenses

3,825,025

Fund Excess (Deficiency)

(199,536)

Net Operating Income

1,073,964

Fiscal Year 2018-2019 estimated principal, interest
and servicing fee total \$419,583 + 10% =
\$461,190.40

Loan Parity \$612,773.13

City Waste Water Accounts

Reimbursements	493,271
Budgeted Cost	493,271
Difference	-

2019-2020 BUDGET

Exhibit 2 - 1/11/2019 11:49 am

ACCOUNTS:

INCOME

	Acct. #
Material Sales	600-8001-1-4521
Labor Charges	600-8001-1-4522
Late Fees	600-8001-1-4531
Metered Sales	600-8001-1-4555
Other Income	600-8001-1-4761
Reimbursements - City for W.W.	600-8001-2-4710
House Rental	600-8001-4-4312
Meter Rental	600-8001-4-4317
Sprinkler & Hydrant Rental	600-8001-4-4318
Misc . Income	600-8001-4-4518
Water Fund Income	
Interest	600-8001-4-4300
Transfer In - Sinking Fund	603-8001-4-4830600
Transfer In - Meter Fund	604-8001-4-4830600
Total Revenues	

Original
2018-2019

Changes

Proposed
2019-2020

5% Rate Increase

8% Usage Reduction

5% Rate Increase

5% Usage Reduction

10,000	(5,000)	5,000
4,000	(500)	3,500
65,500	(15,500)	50,000
2,778,824	35,583	2,814,407
4,500	-	4,500
446,833	46,438	493,271
360	-	360
24,200	-	24,200
5,125	-	5,125
29,500	-	29,500
3,368,842	61,021	3,429,863
10,000	(2,000)	8,000
419,583	(48,083)	371,500
220,000	-	220,000
4,018,425	10,938	4,029,363

OPERATING EXPENSES

Labor - Distribution	8001	6010
Salaries - General Manager	8006	6011
Salaries - Office	8006	6012
Salaries - Service Tech	8006	6013
Labor - Plant	8000	6014
Contract Labor	8006	6015
Salaries - Trustees	8006	6020
Salaries - Waste Water Treatment	8009	6014
Salaries - Waste Water Collections	8010	6014
Salaries - Waste Water Storm Water	8011	6014
Health Ins. Wages	8000	6050
Health Ins. Wages	8001	6050
Health Ins. Wages	8006	6050
Health Ins. Wages	8010	6050
Emp. Share - Soc. Sec.	8000	6110
Emp. Share - Soc. Sec.	8001	6110
Emp. Share - Soc. Sec.	8006	6110
Emp. Share - Soc. Sec.	8009	6110
Emp. Share - Soc. Sec.	8010	6110
Emp. Share - Soc. Sec.	8011	6110
Emp. Share -Medicare	8000	6120
Emp. Share -Medicare	8001	6120
Emp. Share -Medicare	8006	6120
Emp. Share -Medicare	8009	6120
Emp. Share -Medicare	8010	6120
Emp. Share -Medicare	8011	6120
Emp. Share - Ipers	8000	6130
Emp. Share - Ipers	8001	6130
Emp. Share - Ipers	8006	6130
Emp. Share - Ipers	8009	6130
Emp. Share - Ipers	8010	6130
Emp. Share - Ipers	8011	6130
Health/Life Ins.	8006	6150
Health/Life Ins.	8009	6150
Health/Life Ins.	8010	6150
Uniforms	8001	6181
Uniforms	8009	6181
Uniforms	8010	6181
Self Insurance Expense	8006	6183
Self Insurance Expense	8009	6183
Self Insurance Expense	8010	6183
Dues & Subscription	8006	6220

226,578	13,002	239,580
58,980	1,769	60,749
209,737	(50,229)	159,508
65,599	(2,789)	62,810
106,502	(4,529)	101,973
-	-	-
5,670	-	5,670
136,092	4,090	140,182
161,108	22,983	184,091
2,419	(97)	2,322
-	-	-
-	-	-
2,088	-	2,088
2,088	-	2,088
6,603	(281)	6,322
14,048	806	14,854
21,079	(3,177)	17,902
8,438	253	8,691
10,443	532	10,975
150	(6)	144
1,544	(65)	1,479
3,285	189	3,474
4,930	(743)	4,187
1,973	60	2,033
2,442	125	2,567
35	(1)	34
10,054	(428)	9,626
21,389	1,227	22,616
31,559	(4,837)	26,722
12,848	385	13,233
15,913	797	16,710
216	3	219
269,518	37,555	307,073
35,973	7,195	43,168
50,595	10,119	60,714
2,500	-	2,500
450	-	450
750	-	750
6,500	-	6,500
1,500	-	1,500
2,500	-	2,500
7,316	219	7,535

Education/Seminars	8000	6240	2,252	68	2,320
Education/Seminars	8001	6240	5,665	170	5,835
Education/Seminars	8006	6240	7,833	235	8,068
Main. - Buildings	8000	6310	15,450	464	15,914
Main. - Buildings	8001	6310	2,660	-	2,660
Main. - Buildings	8006	6310	10,562	(9,983)	579
Main. - Wells	8000	6311	87,418	2,623	90,041
Main. - Water Supply	8001	6312	114,737	3,442	118,179
Main. - Meters	8001	6313	5,464	164	5,628
Main. - Grounds	8000	6320	22,511	675	23,186
Main. - Grounds	8001	6320	1,126	34	1,160
Gasoline	8001	6331	22,511	675	23,186
Truck Expense	8001	6332	10,300	309	10,609
Main. - Machinery	8000	6350	42,436	1,273	43,709
Main. - Machinery	8001	6350	6,753	203	6,956
Electric/Gas	8000	6371	90,041	2,701	92,742
Electric/Gas	8001	6371	7,750	233	7,983
Telephone	8006	6373	8,442	253	8,695
Cell Phone Reimb	8009	6373	240	-	240
Cell Phone Reimb	8010	6373	660	-	660
Audit Expense	8006	6401	11,300	450	11,750
Publications	8006	6402	3,637	109	3,746
Insurance	8006	6408	65,827	6,583	72,410
Janitorial Expense	8006	6409	2,552	77	2,629
Legal Fees	8006	6411	10,927	328	11,255
Computer Expense	8006	6419	27,319	820	28,139
Lab Expense	8000	6450	19,096	573	19,669
Meter Reading Service	8006	6492	45,000	-	45,000
Chemicals	8000	6501	230,730	6,922	237,652
Small Tools	8000	6504	1,126	34	1,160
Small Tools	8001	6504	3,376	101	3,477
Office Supplies	8006	6506	12,057	362	12,419
Misc. Expense	8000	6507	1,444	43	1,487
Misc. Expense	8001	6507	5,065	152	5,217
Misc. Expense	8006	6507	9,548	286	9,834
Postage	8006	6508	30,183	905	31,088
Safety Supplies	8000	6510	562	17	579
Safety Supplies	8001	6510	2,252	68	2,320
Credit Card Fees	8006	6520	15,625	469	16,094
Misc. Supplies	8000	6599	788	24	812
Misc. Supplies	8001	6599	1,688	51	1,739
Misc. Supplies	8006	6599	1,126	34	1,160
Total Operating Expenses			2,487,451	56,074	2,543,525
Net Operating Revenue			881,391	4,947	886,338
				-	
Transfer Out - Sinking Fund	8001	6910603	419,583	(48,083)	371,500
Transfer Out - Meter Fund	8001	6910604	220,000	-	220,000
Total Transfer Out			639,583	(48,083)	591,500
				-	
Net Gain (Loss)			891,391	2,947	894,338
				-	
Office Sign / Shop Doors	8001	6750	-	-	-
Plant Equip Upgrades	8000	6723	40,000	(40,000)	-
Vehicles	8001	6710	-	130,000	130,000
Dist Proj/No L & A Ave, So H & 11th&Prelim Report	8001	6780	1,317,321	(762,321)	555,000
Office / Computer Equipment	8006	6725	5,000	-	5,000
Principal Fund 603	8001	6801	286,750	9,000	295,750
Interest Fund 603	8001	6851	122,615	(56,366)	66,249
Bond Servicing Fee Fund 603	8001	6899	10,218	(717)	9,501
New/Replace Meters Fund 604	8001	6724	220,000	-	220,000
Total CIP			2,001,904	(720,404)	1,281,500
Total Expenses			\$ 5,128,938	(712,413)	\$ 4,416,525
				-	
Net Gain (Loss)			\$ (1,110,513)	723,351	\$ (387,162)

01/11/2019 15:54

2019-2020 budget

Receipts

Operating Revenue

Water Sales	2,814,407
City - Waste Water	493,271
Other	122,185
	<u>3,429,863</u>

Capital Sources

Interest Income	8,000
	<u>8,000</u>

Total Receipts

3,437,863

Disbursements

Operating Expense

Water - Personnel Costs	739,972
Waste Water - Personnel Costs	383,301
Utilities	109,420
Outside Services	93,820
Small Equip & Materials	312,611
Chemicals, Treatment & Monitoring	257,321
Transportation	33,795
Office Supplies	91,486
Property Insurance	72,410
Water - Health Insurance	315,661
Waste Water - Health Insurance	109,970
Staff Development	23,758
	<u>2,543,525</u>

Total Operating Expenses

2,543,525

Capital Outlays

Shop Doors	-
Turbidity Sensors & Lab Equip	-
Vehicles	130,000
Dist projects	555,000
Computer Equipment	5,000
New/Replace Meters	220,000
Equipment	
Principal & Interest SRF	371,500
	<u>1,281,500</u>

Total Capital Outlays

1,281,500

Total Expenses

3,825,025

Fund Excess (Deficiency)

(387,162)

Net Operating Income

886,338

Fiscal Year 2018-2019 estimated principal, interest
and servicing fee total \$419,583 + 10% =
\$461,190.40

Loan Parity \$425,147.13

City Waste Water Accounts

Reimbursements	493,271
Budgeted Cost	493,271
Difference	-

ITEM TITLE

A. Consideration and action on setting a public hearing on _____.

Information:

The Oskaloosa Water Board intends to hold a public hearing on the matter of _____.

_____ A
Resolution should be entered setting the time and date for a public hearing thereon.

Financial Impact: none.

Recommended Action:

Approve a resolution setting a public hearing on the matter of _____ at a time and date to be fixed by the Board.

RESOLUTION NO.1903

RESOLUTION SETTING A PUBLIC HEARING BEFORE THE OSKALOOSA WATER BOARD ON THE MATTER OF THE PROPOSED RATE INCREASES.

WHEREAS the Oskaloosa Water Board desires to hold a public hearing before the Board on the matter of proposed rate increases to become effective March 1, 2019;

AND WHEREAS it is necessary to pass a resolution fixing the time and date for the said hearing;

IT IS THEREFORE RESOLVED that a public hearing before the Oskaloosa Water Board be held on the matter of proposed rate increases at Four o'clock PM. on the 11th day of February 2019, at which time any interested party may offer written or oral comments for the Board.

PASSED AND APPROVED this _____ day of _____ 2019.

Chairman

Attest: _____

RESOLUTION NO. _____

RESOLUTION LIMITING THE AMOUNT OF WATER BILL CHARGES WHICH MAY BE PAID BY CREDIT CARD BY WATER BOARD CUSTOMERS

WHEREAS the Oskaloosa Water Board has determined to establish limits to the amount of water bill charges which can be paid by Oskaloosa Water Board customers;

NOW THEREFORE, BE IT RESOLVED by the Oskaloosa Water Board that an Oskaloosa Water Board customer may pay water bill charges to the Water Board with credit card transactions, but only in a total amount not in excess of \$_____.

PASSED AND APPROVED this _____ day of _____ 2012.

Chad Coon, Director

ATTEST: _____
Clerk

APPLICATION FOR PARTIAL PAYMENT NO. 7

Project: D Street Reconstruction: PCC Pavement - Grade & Replace
Owner: City Of Oskaloosa
Contractor: Dave Schmitt Construction Co., Inc.
Address: 250 50th Avenue S.W.
Cedar Rapids, Iowa 52404
Date: December 5, 2018

IDOT Project No: STP-U-5780(615)--70-62

Payment Period: November 16, 2018 to December 5, 2018

1. Contract Summary

Original Contract Price:	\$2,920,902.14
Net Change by Change Order:	<u>-\$57,150.19</u>
Contract Amount to Date:	\$2,863,751.95

Contract Working Day Report

Notice to Proceed: May 7, 2018

Original Contract Time:	135
Added by Change Order:	1.5

2. Work Summary

Total Work Performed to Date:	\$2,714,122.75
Retainage: 3% (maximum \$30,000)	\$30,000.00
Total Less Retainage:	\$2,684,122.75
Total Previous Payments:	<u>\$2,594,204.71</u>
TOTAL AMOUNT DUE THIS APPLICATION:	\$89,918.04


Contract time to Date:	<u>136.5</u>
Working Days to Date:	<u>99</u>
Working Days Remaining:	37.5

3. Contractor's Certification

The undersigned CONTRACTOR certifies that:

All previous progress payments received from Owner on account of Work under the Contract referred to above have been applied to discharge in full all obligations of CONTRACTOR incurred in connection with the Work covered by prior Applications for title to all material and equipment incorporated in said Work or otherwise listed in or covered by this application for Payment are free and clear of all liens, claims, security interests and encumbrances.

Dave Schmitt Construction Co., Inc.

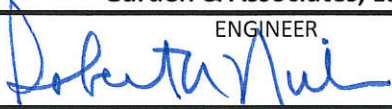
By:  CONTRACTOR

Date: 12.07.18

4. Engineers Approval

Payment of the above AMOUNT DUE THIS APPLICATION is recommended:

Garden & Associates, Ltd.

By:  ENGINEER

Date: 12/7/18

5. Owner's Approval

City of Oskaloosa, Iowa

Owner

By: _____

Date: _____

Application No.: 7
Contractor: Dave Schmitt Construction Co., Inc.
Cedar Rapids, Iowa
Date of Application: December 5, 2018

Project: D Street Reconstruction: PCC Pavement - Grade & Replace
Project No.: STP-U-5780(615)--70-62
Contract ID: 62-5780-615
County: Mahaska City Oskaloosa

Table with columns: Line No., Item Code, Item Description, Unit, Div. 1 Part., Div. 1 Non-Part., Div. 2 Non-Part., Div. 3 Non-Part., Total, Unit Price, Bid Amount, Project Quantities (Div. 1 Part., Div. 1 Non-Part., Div. 2 Non-Part., Div. 3 Non-Part., Total), Project Amounts (Div. 1 Part., Div. 1 Non-Part., Div. 2 Non-Part., Div. 3 Non-Part., Total), Percent Complete.

Application for Payment

Application No.: 7
 Contractor: Dave Schmitt Construction Co., Inc.
 Cedar Rapids, Iowa
 Date of Application: December 5, 2018

Project: D Street Reconstruction: PCC Pavement - Grade & Replace
 Project No.: STP-U-5780(615)--70-62
 Contract ID: 62-5780-615
 County: Mahaska City Oskaloosa

Line No.	Item Code	Item Description	Unit	Plan Quantity					Contract Amounts		
				Div. 1 Part.	Div. 1 Non-Part.	Div. 2 Non-Part.	Div. 3 Non-Part.	Total	Unit Price	Bid Amount	
0880	2599-9999010	VIBRATION MONITORING	LS	1					1	\$17,999.57	\$17,999.57
0890	2599-9999020	TEMPORARY GRANULAR SURFACING	TON	300					300	\$29.91	\$8,973.00
0900	2601-2634100	MULCHING - HYDRAULIC	ACRE	1					1	\$2,000.00	\$2,000.00
0910	2601-2636044	SEEDING AND FERTILIZING - HYDRAULIC (URBAN)	ACRE	1					1	\$5,000.00	\$5,000.00
0920	2602-0000309	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 9 IN. DIA.	LF	200					200	\$2.00	\$400.00
0930	2602-0000350	REMOVAL OF PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE	LF	200					200	\$2.00	\$400.00
0940	2610-0000212	MULCH, SHREDDED BARK	CY	46					46	\$60.00	\$2,760.00
0950	2610-0000400	WATERING FOR PLANTS	MGAL	3,725					3,725	\$25.00	\$93,125.00
0960	2611-0000100	SHRUBS, FURNISHED AND INSTALLED - PERENNIALS/ORNAMENTAL GRASSES (WITH WARRANTY)	EACH	1,261					1,261	\$12.00	\$15,132.00
0960	2611-0000100	SHRUBS, FURNISHED AND INSTALLED - PERENNIALS/ORNAMENTAL GRASSES (WITH WARRANTY) MATERIAL ONLY									
0970	2611-0000200	TREES, FURNISHED AND INSTALLED - ORNAMENTAL (WITH WARRANTY)	EACH	57					57	\$335.00	\$19,095.00
0980	2611-0000200	TREES, FURNISHED AND INSTALLED - OVERSTORY (WITH WARRANTY)	EACH	44					44	\$385.00	\$16,940.00

TOTAL ORIGINAL CONTRACT \$2,920,902.14

Project Quantities				Project Amounts					Percent Complete
Div. 1 Part.	Div. 1 Non-Part.	Div. 2 Non-Part.	Div. 3 Non-Part.	Div. 1 Part.	Div. 1 Non-Part.	Div. 2 Non-Part.	Div. 3 Non-Part.	Total	
100%				\$17,999.57		\$0.00	\$0.00	\$17,999.57	100.00%
165.87				\$4,961.17		\$0.00	\$0.00	\$4,961.17	55.29%
0.45				\$900.00		\$0.00	\$0.00	\$900.00	45.00%
				\$0.00		\$0.00	\$0.00	\$0.00	0.00%
222				\$444.00		\$0.00	\$0.00	\$444.00	111.00%
222				\$444.00		\$0.00	\$0.00	\$444.00	111.00%
3				\$180.00		\$0.00	\$0.00	\$180.00	6.52%
				\$0.00		\$0.00	\$0.00	\$0.00	0.00%
				\$0.00		\$0.00	\$0.00	\$0.00	0.00%
				\$5,280.00		\$0.00	\$0.00	\$5,280.00	
59 @	65%			\$12,847.25		\$0.00	\$0.00	\$12,847.25	67.28%
40 @	65%			\$10,010.00		\$0.00	\$0.00	\$10,010.00	59.09%

SUBTOTAL \$2,236,609.49 \$0.00 \$355,013.45 \$93,372.50 \$2,684,995.44

CHANGE ORDER NO. 1											
0950	2610-0000400	WATERING FOR PLANTS	MGAL	3,725					-3,725	\$25.00	-\$93,125.00
8001	2599-9999010	TRENCH EXCAVATION	LS		1				1	\$6,686.75	\$6,686.75
8002	2599-9999010	CREW TIME DELAY	LS		1				1	\$920.00	\$920.00
8003	2510-6750600	REMOVAL OF INTAKES AND UTILITY ACCESSES	LS	1					1	\$2,068.50	\$2,068.50
8004	2611-0000100	SHRUBS, FURNISHED AND INSTALLED (WITH WARRANTY)	EA	190					190	\$2.75	\$522.50
8005	2610-0000400	WATERING FOR PLANTS	MGAL	32.500					32.500	\$110.00	\$3,575.00
TOTAL CHANGE ORDER NO. 1											-\$79,352.25

				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
			1	\$0.00	\$6,686.75	\$0.00	\$0.00	\$6,686.75	\$6,686.75	100.00%
			1	\$0.00	\$920.00	\$0.00	\$0.00	\$920.00	\$920.00	100.00%
			1	\$2,068.50	\$0.00	\$0.00	\$0.00	\$2,068.50	\$2,068.50	100.00%
				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
				\$2,068.50	\$7,606.75	\$0.00	\$0.00	\$9,675.25	\$9,675.25	

CHANGE ORDER NO. 2											
8006	2601-2642120	Stabilizing Crop - Seeding and Fertilizing (Urban)	ACR	1					1	\$1.00	\$5,000.00

			0.45	\$2,250.00	\$0.00	\$0.00	\$0.00	\$2,250.00	\$2,250.00	45.00%
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CHANGE ORDER NO. 3											
8007	2599-9999005	TREE DRAINAGE WELL	EA	14					14	\$939.29	\$13,150.06
8008	6100-2301010	PCC PAVEMENT COLD WEATHER PROTECTION	SY	4,052					4,052	\$1.00	\$4,052.00
TOTAL CHANGE ORDER NO. 3											\$17,202.06

			14	\$13,150.06	\$0.00	\$0.00	\$0.00	\$13,150.06	\$13,150.06	100.00%
			4,052	\$4,052.00	\$0.00	\$0.00	\$0.00	\$4,052.00	\$4,052.00	100.00%
				\$17,202.06	\$0.00	\$0.00	\$0.00	\$17,202.06	\$17,202.06	

TOTAL REVISED CONTRACT \$2,863,751.95

TOTAL \$2,258,130.05 \$7,606.75 \$355,013.45 \$93,372.50 \$2,714,122.75

	Div. 1 Part.	Div. 1 Non-Part.	Div. 2 Non-Part.	Div. 3 Non-Part.	Total	
Total Completed to Date =	\$2,258,130.05	\$7,606.75	\$355,013.45	\$93,372.50	\$2,714,122.75	94.78%
Amount Retained (@3%, \$30,000 Max.) =	\$24,959.78	\$84.08	\$3,924.07	\$1,032.07	\$30,000.00	
Total Completed Less Retainage =	\$2,233,170.27	\$7,522.67	\$351,089.38	\$92,340.43	\$2,684,122.75	
Less Previous Payments to Contractor =	\$2,189,319.20	\$7,519.80	\$350,954.92	\$46,410.79	\$2,594,204.71	
Amount Due Contractor this Application =	\$43,851.07	\$2.87	\$134.46	\$45,929.64	\$89,918.04	

Amount Due from Public Works = \$89,783.58 (Division 1 and Division 3)
 Amount Due from Water Department = \$134.46 (Division 2)
 Total = \$89,918.04

Eligible Amount = \$2,233,170.27 (Division 1 Participating Items Only)
 Participation @ 80% = \$1,786,536.22
 IDOT Withholding @ 5% = \$89,326.81
 Subtotal This Request = \$1,697,209.41
 Less Previously Reimbursed = \$1,663,882.59
 Amount To Be Reimbursed This Application = \$33,326.82

Specifications

**PLANS AND SPECIFICATIONS
FOR
WATER SYSTEM IMPROVEMENTS
OSKALOOSA MUNICIPAL WATER DEPARTMENT**

OSKALOOSA, IOWA

2019

**PLANS AND SPECIFICATIONS FOR
WATER SYSTEM IMPROVEMENTS
OSKALOOSA MUNICIPAL WATER DEPARTMENT
OSKALOOSA, IOWA
2019**

	<p>I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Iowa.</p> <p>_____</p> <p>Jack Pope, P.E. _____ Date</p> <p>License Number: 11715 My license renewal date is December 31, 2019.</p> <p>Pages or sheets covered by this seal: _____ All pages</p> <p>_____</p>
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Prepared by
GARDEN & ASSOCIATES, LTD.
1701 3rd Avenue East, Suite 1 – P.O. Box 451
Oskaloosa, IA 52577
641-672-2526

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NOTICE TO BIDDERS

WATER SYSTEM IMPROVEMENTS OSKALOOSA MUNICIPAL WATER DEPARTMENT OSKALOOSA, IOWA 2019

Time and Place for Filing Sealed Proposals. Sealed bids for the work comprising the improvements as stated below must be filed before **11:00 A.M. on March 7, 2019**, in the office of the Oskaloosa Municipal Water Board, 1208 South 7th Street, Oskaloosa, Iowa 52577.

Time and Place Sealed Proposals Will be Opened and Considered. Sealed proposals will be opened and bids tabulated at 11:00 A.M. on March 7, 2019, in the office of the Oskaloosa Municipal Water Department, 1208 South 7th Street, Oskaloosa, Iowa, for consideration by the Water Board at its meeting at 4:00 P.M. on March 11, 2019 in the Oskaloosa Municipal Water Board Office, 1208 South 7th Street, Oskaloosa, Iowa. The Water Board reserves the right to reject any and all bids.

Time for Commencement and Completion of Work. Work on the improvement shall be commenced immediately upon issuance of a written Notice to Proceed and be completed as stated below.

Bid Security. Each bidder shall accompany its bid with bid security as security that the successful bidder will enter into a contract for the work bid upon and will furnish after the award of contract a corporate surety bond, in form acceptable to the City, for the faithful performance of the contract, in an amount equal to one hundred percent of the amount of the contract. The bidder's security shall be in the amount fixed in the Instruction to Bidders and shall be in the form of a cashier's check, a certified check, or a bank money order drawn on an FDIC insured bank in Iowa or on a FDIC insured bank chartered under the laws of the United States; or a certified share draft drawn on a credit union in Iowa or chartered under the laws of the United States; or a bid bond on the form provided in the contract documents with corporate surety satisfactory to the City. The bid shall contain no condition except as provided in the specifications.

Contract Documents. **Electronic project documents are available at no cost** at www.gardenassociates.net by clicking the "Bid Documents" link and choosing the "WATER SYSTEM IMPROVEMENTS – OSKALOOSA MUNICIPAL WATER DEPARTMENT – OSKALOOSA, IOWA" project on the left side of the page. Project information, Engineer's cost opinion, and plan holder information is also available at this website. Plan downloads require the user to register for a free membership at QuestCDN.com. Download delivery fee is \$0.00, or Bid forms, plans and specifications may be obtained from Garden & Associates, Ltd., P.O. Box 451, 1701 3rd Avenue East, Suite 1, Oskaloosa, IA 52577 upon deposit of **Sixty Dollars (\$60.00)** which shall be refunded upon return of said plans and specifications within fourteen (14) days after award of the project. If said plans and specifications are not returned within the time specified and in a reusable condition, the deposit shall be forfeited. Copies of said specifications are also on file at the Office of the Oskaloosa Municipal Water Department.

Public Hearing on Proposed Contract Documents and Estimated Costs for Improvement. A public hearing will be held by the Oskaloosa Municipal Water Department on the proposed contract documents (plans, specifications and form of contract) and estimated cost for the

improvement at its meeting at 4:00 P.M. on March 11, 2019, in the Oskaloosa Municipal Water Board Office, 1208 South 7th Street, Oskaloosa, Iowa.

Preference of Products and Labor. Preference shall be given to domestic construction materials by the contractor, subcontractors, materialmen, and suppliers in performance of the contract and, further, by virtue of statutory authority, preference will be given to products and provisions grown and coal produced within the State of Iowa, and to Iowa domestic labor, to the extent lawfully required under Iowa statutes.

General Nature of Improvement. The work generally consists of the following:

Trench Foundation – 25 TON; Trench Compaction Testing – Lump Sum; Sanitary Sewer Service Stub, PVC, 4” and 6” – 200 LF; Water Main, Trenched, PVC, 6” – 65 LF; Water Main, Trenched, PVC, 8” – 4,460 LF; Water Main, Trenchless, RJ Dip with Nitrile Gaskets, 8” – 120 LF; Water Main, Trenchless, RJ PVC, 8” – 1,425 LF; Water Main with Casing Pipe, Trenchless, RJ PVC, 8” (15” PVC Casing Pipe) – 60 LF; Water Main with Casing Pipe, Trenchless, RJ DIP with Nitrile Gaskets, 8” (16” Steel Casing Pipe) – 60 LF; Meter Pit (Install Only) – 4 EA; Water Service Pipe, Trenched, Type K Copper or Polyethylene, 1” – 450 LF; Water Service Pipe, Trenchless, Type K Copper or Polyethylene, 1” – 930 LF; Water Service Pipe, Trenched, SDR 21 PVC, 2” – 30 LF; Water Service Corporation, 1” – 41 EA; Water Service Corporation, 2” – 1 EA; Water Service Curb Stop and Box, 1” – 35 EA; Gate Valve, 4” (Install Only) – 2 EA; Gate Valve, 6” (Install Only) – 4 EA; Gate Valve, 8” (Install Only) – 32 EA; Tapping Valve Assembly, 12”x8” – 2 EA; Fire Hydrant Assembly (Install Only) – 10 EA; Fire Hydrant Assembly Removal – 3 EA; Valve Box Removal – 6 EA; Existing Meter Pit Removal – 1 EA; Connection No.1 – Lump Sum; Connection No. 2 – Lump Sum; Connection No. 3 – Lump Sum; Connection No. 4 – Lump Sum; Connection No. 5 – Lump Sum; Connection No. 6 – Lump Sum; Connection No. 7 – Lump Sum; Connection No. 8 – Lump Sum; Connection No.9 – Lump Sum; Connection No. 10 – Lump Sum; Pavement, HMA, 4” Thick – 130 SY; Removal of Sidewalk – 134 SY; Removal of Driveway – 272 SY; Sidewalk, PCC, 4” Thick – 106 SY; Sidewalk, PCC, 6” Thick – 38 SY; Detectable Warning – 40 SF; Driveway, Paved, PCC, 6” Thick – 207 SY; Driveway, Granular (Class A Crushed Stone, IDOT Gradation No. 11) – 80 TON; Driveway, Granular (Macadam Stone Base, IDOT Gradation No. 13) – 35 TON; Full Depth Patches – 160 SY; Subbase Overexcavation – 52 TON; Temporary Traffic Control – Lump Sum; Hydraulic Seeding, Fertilizing, and Mulching – Lump Sum; SWPPP Preparation – Lump Sum; SWPPP Management – Lump Sum; Silt Fence – 2,000 LF; Silt Fence, Removal of Sediment – 2,000 LF; Silt Fence, Removal of Device – 2,000 LF; and Mobilization – Lump Sum.

Building materials, supplies, and equipment incorporated into said improvement are exempt from Iowa Department of Revenue and Finance sales tax and any applicable local option sales tax and school infrastructure local option sales tax pursuant to Iowa Code Sections: 422.42 (15) & (16), and 422.47 (5). Bidder shall not include payment of Iowa sales tax in Bid. Jurisdiction will provide Purchasing Agent Authorization Letter and Designated Exempt Entity Iowa Construction Sales Tax Exemption Certificate. Contractor will coordinate sales tax exempt purchases with subcontractors and material and equipment suppliers. Contractor will maintain records identifying the materials purchased sales tax exempt and will maintain records verifying the use of said materials on said improvement.

Payment to the Contractor for said improvements will be made in monthly estimates and one final payment. Monthly estimates will be equivalent to ninety-five percent (95%) of the contract value of the work completed during the preceding calendar month. Such monthly payment will in no way be construed as an act of acceptance for any part of the work partially or totally.

In accordance with Iowa statutes, a resident bidder shall be allowed a preference as against a nonresident bidder from a state or foreign country if that state or foreign country gives or requires any preference to bidders from that state or foreign country, including but not limited to any preference to bidders, the imposition of any type of labor force preference, or any other form of preferential treatment to bidders or laborers from that state or foreign country. The preference allowed shall be equal to the preference given or required by the state or foreign country in which the nonresident bidder is a resident. In the instance of a resident labor force preference, a nonresident bidder shall apply the same resident labor force preference to a public improvement in this state as would be required in the construction of a public improvement by the state or foreign country in which the nonresident bidder is a resident.

Final payment to the Contractor will be made no earlier than thirty (30) days from and after final acceptance of the work by the Jurisdiction. Before final payment is made, the Contractor shall file with the Jurisdiction lien waivers from material suppliers and/or subcontractors showing that they were paid in full for materials supplied and/or work performed on the project.

Liquidated damages in the amount of **Seven Hundred Dollars (\$700.00)** per working day will be assessed for each day that the work shall remain uncompleted after the end of the contract period with due allowance for extension of contract period due to conditions beyond the control of the Contractor.

Successful Bidder will be required to furnish Performance, Payment and Maintenance Bond acceptable to the Oskaloosa Municipal Water Department on the form provided in the specifications in amounts equal to one hundred percent (100%) of the contract price.

Award of the contract will be to the lowest responsive, responsible, qualified bidder submitting the lowest acceptable bid. The Oskaloosa Municipal Water Department hereby reserves the right to reject any or all bids, to waive informalities and irregularities and to enter into such contract as it may deem to be for the best interest of the Oskaloosa Municipal Water Department. A bidder shall not withdraw its proposal for a period of 60 calendar days after the date designated for opening of proposals.

The work under the proposed contract shall be fully completed and ready for final payment within 100 working days. The Notice to Proceed will be issued no later than May 1, 2019.

This Notice is given by authority of the Oskaloosa Municipal Water Department.

Chad Coon, General Manager
Oskaloosa Municipal Water Board

NOTICE OF PUBLIC HEARING

WATER SYSTEM IMPROVEMENTS OSKALOOSA MUNICIPAL WATER DEPARTMENT OSKALOOSA, IOWA 2019

The Oskaloosa Municipal Water Board will hold a public hearing on the proposed contract documents (plans, specifications and form of contract) and estimated cost for **“Water System Improvements – Oskaloosa Municipal Water Department – Oskaloosa, Iowa – 2019”** and as described in detail in the Plans and Specifications for said project now on file in the office of the Oskaloosa Municipal Water Department.

Notice is hereby given that the Oskaloosa Municipal Water Board, Oskaloosa, Iowa will meet at the Water Board Office at 1208 S. 7th Street, Oskaloosa, Iowa on the **11th day of March, 2019 at 4:00 P.M.**, at which time and place a hearing will be held on the proposed specifications, form of contract and estimate of cost for the construction of Water System Improvements – Oskaloosa Municipal Water Department – Oskaloosa, Iowa – 2019. At said hearing, the Water Board will receive and consider any objections made by and any interested party, to the plans and specifications, proposed form of contract and the estimate of cost for the project.

General Nature of Improvement. The work generally consists of the following:

Trench Foundation – 25 TON; Trench Compaction Testing – Lump Sum; Sanitary Sewer Service Stub, PVC, 4” and 6” – 200 LF; Water Main, Trenched, PVC, 6” – 65 LF; Water Main, Trenched, PVC, 8” – 4,460 LF; Water Main, Trenchless, RJ Dip with Nitrile Gaskets, 8” – 120 LF; Water Main, Trenchless, RJ PVC, 8” – 1,425 LF; Water Main with Casing Pipe, Trenchless, RJ PVC, 8” (15” PVC Casing Pipe) – 60 LF; Water Main with Casing Pipe, Trenchless, RJ DIP with Nitrile Gaskets, 8” (16” Steel Casing Pipe) – 60 LF; Meter Pit (Install Only) – 4 EA; Water Service Pipe, Trenched, Type K Copper or Polyethylene, 1” – 450 LF; Water Service Pipe, Trenchless, Type K Copper or Polyethylene, 1” – 930 LF; Water Service Pipe, Trenched, SDR 21 PVC, 2” – 30 LF; Water Service Corporation, 1” – 41 EA; Water Service Corporation, 2” – 1 EA; Water Service Curb Stop and Box, 1” – 35 EA; Gate Valve, 4” (Install Only) – 2 EA; Gate Valve, 6” (Install Only) – 4 EA; Gate Valve, 8” (Install Only) – 32 EA; Tapping Valve Assembly, 12”x8” – 2 EA; Fire Hydrant Assembly (Install Only) – 10 EA; Fire Hydrant Assembly Removal – 3 EA; Valve Box Removal – 6 EA; Existing Meter Pit Removal – 1 EA; Connection No.1 – Lump Sum; Connection No. 2 – Lump Sum; Connection No. 3 – Lump Sum; Connection No. 4 – Lump Sum; Connection No. 5 – Lump Sum; Connection No. 6 – Lump Sum; Connection No. 7 – Lump Sum; Connection No. 8 – Lump Sum; Connection No.9 – Lump Sum; Connection No. 10 – Lump Sum; Pavement, HMA, 4” Thick – 130 SY; Removal of Sidewalk – 134 SY; Removal of Driveway – 272 SY; Sidewalk, PCC, 4” Thick – 106 SY; Sidewalk, PCC, 6” Thick – 38 SY; Detectable Warning – 40 SF; Driveway, Paved, PCC, 6” Thick – 207 SY; Driveway, Granular (Class A Crushed Stone, IDOT Gradation No. 11) – 80 TON; Driveway, Granular (Macadam Stone Base, IDOT

Gradation No. 13) – 35 TON; Full Depth Patches – 160 SY; Subbase Overexcavation – 52 TON; Temporary Traffic Control – Lump Sum; Hydraulic Seeding, Fertilizing, and Mulching – Lump Sum; SWPPP Preparation – Lump Sum; SWPPP Management – Lump Sum; Silt Fence – 2,000 LF; Silt Fence, Removal of Sediment – 2,000 LF; Silt Fence, Removal of Device – 2,000 LF; and Mobilization – Lump Sum.

This Notice is given by authority of the Oskaloosa Municipal Water Department.

Chad Coon, General Manager
Oskaloosa Municipal Water Board

This Notice published in the Oskaloosa Herald.

Bid Date: March 7, 2019
Time: 11:00 A.M.

INSTRUCTIONS TO BIDDERS

Project Name WATER SYSTEM IMPROVEMENTS
OSKALOOSA MUNICIPAL WATER DEPARTMENT
OSKALOOSA, IOWA
2019

The work comprising the above referenced project shall be constructed in accordance with the 2019 edition of the SUDAS Standard Specifications and Oskaloosa Municipal Water Department Specifications and as further modified by supplemental specifications and special provisions included in the contract documents. The terms used in the contract revision of the documents are defined in said Standard Specifications. Before submitting your bid, review the requirements of Division 1, General Provisions and Covenants, in particular the sections regarding proposal requirements, bonding, contract execution and insurance requirements. Be certain that all documents have been completed properly, as failure to complete and sign all documents and to comply with the requirements listed below can cause your bid not to be read.

I. BID SECURITY

The bid security must be in the minimum amount of 10% of the total bid amount including all add alternates (do not deduct the amount of deduct alternates). Bid security shall be in the form of a cashier's check or a certified check, drawn on an FDIC insured bank in Iowa or drawn on an FDIC insured bank chartered under the laws of the United States; or a certified share draft drawn on a credit union in Iowa or chartered under the laws of the United States; or a bid bond executed by a corporation authorized to contract as a surety in Iowa or satisfactory to the Oskaloosa Municipal Water Department. The bid bond must be submitted on the enclosed Bid Bond form as no other bid bond forms are acceptable. All signatures on the bid bond must be original signatures in ink; facsimile (fax) of any signature or use of an electronic signature on the bid bond is not acceptable. Bid security other than said bid bond shall be made payable to the Oskaloosa Municipal Water Department. "Miscellaneous Bank Checks", and personal checks, as well as "Money Orders" and "Traveler's Checks" issued by persons, firms or corporations licensed under Chapter 533C of the Iowa Code, are not acceptable bid security.

II. SUBMISSION OF THE PROPOSAL AND IDENTITY OF BIDDER

- A. The proposal shall be sealed in an envelope, properly identified as the Proposal with the project title and the name and address of the bidder, and deposited with the Oskaloosa Municipal Water Department, at or before the time and at the place provided in the Notice to Bidders. It is the sole responsibility of the bidder to see that its proposal is delivered to the Oskaloosa Municipal Water

Department prior to the time for opening bids, along with the appropriate bid security sealed in the separate envelope identified as Bid Security and attached to the outside of the bid proposal envelope. Any proposal received after the scheduled time for the receiving of proposals will be returned to the bidder unopened and will not be considered. If the Oskaloosa Municipal Water Department provides envelopes for proposals and bid security, bidders shall be required to utilize such envelopes in the submission of their bids.

B. The following documents shall be completed, signed and returned in the Proposal envelope. The bid cannot be read if any of these documents are omitted from the Proposal envelope.

1. PROPOSAL – Complete each of the following parts:

- Part B – Acknowledgment of Addenda, if any have been issued
- Part C – Bid Items, Quantities and Prices
- Part F – Additional Requirements

The following proposal attachments must be completed and attached:

<u>ITEM NO.</u>	<u>DESCRIPTION OF ATTACHMENT</u>
1.	<u>Bidder Status Form</u>
2.	_____
3.	_____
4.	_____
5.	_____
6.	_____

- Part G – Identity of Bidder (including the Bidder Status Form)

Sign the proposal. The signature on the proposal and all proposal attachments must be an original signature in ink signed by the same individual who is the Company Owner or an authorized Officer of the Company; copies or facsimile of any signature or electronic signatures will not be accepted. The Bidder Status Form is required by the Iowa Labor Commissioner, pursuant to the Iowa Administrative Code rule 845-156.2(1). The Bidder must complete and submit the Bidder Status Form, signed by an authorized representative of the Bidder, with their bid proposal. Under Iowa Administrative Code rule 875-156.2(1), failure to provide the Bidder Status Form with the bid may result in the bid being deemed non-responsive and may result in the bid being rejected. The Worksheet: Authorized to Transact Business from the Labor Commission is including on the following page and can be used to assist Bidders in completing the Bidder Status Form.

TO: The Oskaloosa Municipal Water Department

PROPOSAL

PROPOSAL: PART A – SCOPE

The Oskaloosa Municipal Water Department hereinafter called the “Jurisdiction”, has need of a qualified contractor to complete the work comprising the below referenced improvement. The undersigned Bidder hereby proposes to complete the work comprising the below referenced improvement as specified in the contract documents, which are officially on file with the Oskaloosa Municipal Water Department, at the prices hereinafter provided in Part C of the Proposal, for the following described improvements:

**WATER SYSTEM IMPROVEMENTS
OSKALOOSA MUNICIPAL WATER DEPARTMENT
OSKALOOSA, IOWA
2019**

PROPOSAL: PART B – ACKNOWLEDGMENT OF ADDENDA

The Bidder hereby acknowledges that all addenda become a part of the contract documents when issued, and that each such addendum has been received and utilized in the preparation of this bid. The Bidder hereby acknowledges receipt of the following addenda by inserting the number of each addendum in the blanks below:

ADDENDUM NUMBER _____ ADDENDUM NUMBER _____

ADDENDUM NUMBER _____ ADDENDUM NUMBER _____

and certifies that said addenda were utilized in the preparation of this bid.

PROPOSAL: PART C – BID ITEMS, QUANTITIES AND PRICES

UNIT BID PRICE CONTRACTS: The Bidder must provide the Unit Bid Price, the Total Bid Price, any Alternate Prices and the Total Construction Costs on the Proposal Attachment: Part C – Bid Items, Quantities, and Prices. In case of discrepancy, the Unit Bid Price governs. The quantities shown on the Proposal Attachment: Part C – Bid Items, Quantities and Prices are approximate only, but are considered sufficiently adequate for the purpose of comparing bids. The Total Construction Cost plus any alternates selected by the City shall be used only for comparison of bids. The Total Construction Cost, including any Add-Alternates, shall be used for determining the sufficiency of the bid security.

BASE BID CONTRACTS: The Bidder must provide any Bid Prices, any Alternate Prices, and the Total of the Base Bid plus any Add-Alternates on the Proposal Attachment: Part C – Bid Items, Quantities, and Prices. The Total of the Base Bid plus any Alternates selected by the Oskaloosa Municipal Water Department shall be used only for comparison of bids. The Total of the Base Bid plus any Add-Alternates shall be used for determining the sufficiency of the bid security.

PROPOSAL: PART D – GENERAL

The Bidder hereby acknowledges that the Oskaloosa Municipal Water Department, in advertising for public bids for this project reserves the right to:

1. Reject any or all bids. Award of the contract, if any, to be to the lowest responsible, responsive bidder; and
2. Reject any or all alternates in determining the items to be included in the contract. Designation of the lowest responsible, responsive bidder to be based on comparison of the total bid plus any selected alternates; and
3. Make such alterations in the documents or in the proposal quantities as it determines necessary in accordance with the contract documents after execution of the contract. Such alterations shall not be considered a waiver of any conditions of the contract documents, and shall not invalidate any of the provisions thereof; and

The Bidder hereby agrees to:

1. Enter into a contract, if this proposal is selected, in the form approved by the Oskaloosa Municipal Water Department provide proof of registration with the Iowa Division of Labor in accordance with Chapter 91C of the Iowa Code, and furnish a performance, maintenance, and payment bond; and
2. Forfeit bid security, not as a penalty but as liquidated damages, upon failure to enter into such contract and/or to furnish said bond; and
3. Commence the work on this project on or before a date to be specified in a written notice to proceed by the Jurisdiction, and to fully complete the project within 150 working days, and to pay liquidated damages for noncompliance with said completion provisions at the rate of Seven Hundred dollars (\$700.00) for each consecutive calendar day thereafter that the work remains incomplete.

PROPOSAL: PART E – NON-COLLUSION AFFIDAVIT

The Bidder hereby certifies:

1. That this proposal is not affected by, contingent on, or dependent on any other proposal submitted for any improvement with the Oskaloosa Municipal Water Department; and
2. That no individual employed by the Bidder has employed any person to solicit or procure the work on this project, nor will any employee of the Bidder make any payment or agreement for payment of any compensation in connection with the procurement of this project; and

3. That no part of the bid price received by the Bidder was or will be paid to any person, corporation, firm, association, or other organization for soliciting the bid, other than the payment of their normal compensation to persons regularly employed by the Bidder whose services in connection with the construction of the project were in the regular course of their duties for the Bidder; and
4. That this proposal is genuine and not collusive or sham; that the Bidder has not colluded, conspired, connived or agreed, directly or indirectly, with any bidder or person, to submit a sham bid or to refrain from bidding, and has not in any manner, directly or indirectly, sought, by agreement or collusion, or communication or conference, with any person, to fix the bid price of the Bidder or of any other bidder, and that all statements in this proposal are true; and
5. That the individual(s) executing this proposal have the authority to execute this proposal on behalf of the Bidder.

PROPOSAL: PART F – ADDITIONAL REQUIREMENTS

The Bidder hereby agrees to comply with the additional requirements listed below which are included in this proposal and identified as proposal attachments:

<u>ITEM NO.</u>	<u>DESCRIPTION OF ATTACHMENT</u>
1.	Bidder Status Form _____
2.	_____
3.	_____
4.	_____
5.	_____
6.	_____

PROPOSAL: PART G – IDENTITY OF BIDDER

The Bidder shall indicate whether the bid is Submitted by a/an:

- Individual, Sole Proprietorship
- Partnership
- Corporation
- Limited Liability Company
- Joint-venture: all parties must join-in and execute all documents
- Other

Bidder

Signature

By _____

Name (Print/Type)

Title

The Bidder’s Public Registration Number, issued by the Iowa Commissioner of Labor pursuant to Section 91C.5 of the Iowa Code, is as follows:

Number _____ - _____

The Bidder should contact 515-242-5871 for registration information.

Failure to provide said Registration Number shall result in the bid being read under advisement. A contract will not be executed until the Contractor is registered.

Street Address

City, State, Zip Code

Telephone Number

Type or print the name and title of the company’s owner, president, CEO, etc. if a different person than entered above.

Name

Title

PROPOSAL

PROPOSAL ATTACHMENT: PART C - BID ITEMS, QUANTITIES AND PRICES

This is a UNIT BID PRICE CONTRACT. The bidder must provide the Unit Bid Prices, the Total Bid Price, and any Alternate Price(s) and the Total Construction Cost; in case of discrepancy, the Unit Bid Price governs. The quantities shown on the Proposal Attachment: Part C - Bid Items, Quantities and Prices are approximate only, but are considered sufficiently adequate for the purpose of comparing bids. The Total Construction Cost shall be used for determining the sufficiency of the bid security.

ITEM	DESCRIPTION	ESTIMATED UNITS	UNIT PRICE	AMOUNT
1 3010-108-C-0	Trench Foundation	TON 25	\$ _____	\$ _____
2 3010-108-G-0	Trench Compaction Testing	LS XXX	XXXX	\$ _____
3 4010-108-E-0	Sanitary Sewer Service Stub, PVC, 4" and 6"	LF 200	\$ _____	\$ _____
4 5010-108-A-1	Water Main, Trenched, PVC, 6"	LF 65	\$ _____	\$ _____
5 5010-108-A-1	Water Main, Trenched, PVC, 8"	LF 4,460	\$ _____	\$ _____
6 5010-108-A-2	Water Main, Trenchless, RJ DIP with Nitrile Gaskets, 8"	LF 120	\$ _____	\$ _____
7 5010-108-A-2	Water Main, Trenchless, RJ PVC, 8"	LF 1,425	\$ _____	\$ _____
8 5010-108-B-2	Water Main with Casing Pipe, Trenchless, RJ PVC, 8" (15" PVC Casing Pipe)	LF 60	\$ _____	\$ _____
9 5010-108-B-2	Water Main with Casing Pipe, Trenchless, RJ DIP with Nitrile Gaskets, 8" (16" Steel Casing Pipe)	LF 60	\$ _____	\$ _____
10 xxxx-xxx-x-x	Meter Pit (Install Only)	EA 4	\$ _____	\$ _____
11 5010-108-E-1	Water Service Pipe, Trenched, Type K Copper or Polyethylene, 1"	LF 450	\$ _____	\$ _____
12 5010-108-E-1	Water Service Pipe, Trenchless, Type K Copper or Polyethylene, 1"	LF 930	\$ _____	\$ _____
13 5010-108-E-1	Water Service Pipe, Trenched, SDR 21 PVC, 2"	LF 30	\$ _____	\$ _____
14 5010-108-E-2	Water Service Corporation, 1"	EA 41	\$ _____	\$ _____
15 5010-108-E-2	Water Service Corporation, 2"	EA 1	\$ _____	\$ _____
16 5010-108-E-3	Water Service Curb Stop and Box, 1"	EA 35	\$ _____	\$ _____
17 5020-108-A-0	Gate Valve, 4" (Install Only)	EA 2	\$ _____	\$ _____
18 5020-108-A-0	Gate Valve, 6" (Install Only)	EA 4	\$ _____	\$ _____
19 5020-108-A-0	Gate Valve, 8" (Install Only)	EA 32	\$ _____	\$ _____
20 5020-108-B-0	Tapping Valve Assembly, 12" x 8"	EA 2	\$ _____	\$ _____
21 5020-108-C-0	Fire Hydrant Assembly (Install Only)	EA 10	\$ _____	\$ _____
22 5020-108-I-0	Fire Hydrant Assembly Removal	EA 3	\$ _____	\$ _____
23 5020-108-K-0	Valve Box Removal	EA 6	\$ _____	\$ _____
24 xxxx-xxx-x-x	Existing Meter Pit Removal	EA 1	\$ _____	\$ _____
25 xxxx-xxx-x-x	Connection No. 1	LS XXX	XXXX	\$ _____
26 xxxx-xxx-x-x	Connection No. 2	LS XXX	XXXX	\$ _____
27 xxxx-xxx-x-x	Connection No. 3	LS XXX	XXXX	\$ _____
28 xxxx-xxx-x-x	Connection No. 4	LS XXX	XXXX	\$ _____
29 xxxx-xxx-x-x	Connection No. 5	LS XXX	XXXX	\$ _____
30 xxxx-xxx-x-x	Connection No. 6	LS XXX	XXXX	\$ _____
31 xxxx-xxx-x-x	Connection No. 7	LS XXX	XXXX	\$ _____
32 xxxx-xxx-x-x	Connection No. 8	LS XXX	XXXX	\$ _____
33 xxxx-xxx-x-x	Connection No. 9	LS XXX	XXXX	\$ _____
34 xxxx-xxx-x-x	Connection No. 10	LS XXX	XXXX	\$ _____

Item	Description	Estimated		Unit Price	Extended Price	
		Unit	Quantity			
CONTINUED						
35	7020-108-B-0	Pavement, HMA, 4" Thick	SY	130	\$ _____	\$ _____
36	7030-108-A-0	Removal of Sidewalk	SY	134	\$ _____	\$ _____
37	7030-108-A-0	Removal of Driveway	SY	272	\$ _____	\$ _____
38	7030-108-E-0	Sidewalk, PCC, 4" Thick	SY	106	\$ _____	\$ _____
39	7030-108-E-0	Sidewalk, PCC, 6" Thick	SY	38	\$ _____	\$ _____
40	7030-108-G-0	Detectable Warning	SF	40	\$ _____	\$ _____
41	7030-108-H-1	Driveway, Paved, PCC, 6" Thick	SY	207	\$ _____	\$ _____
42	7030-108-H-2	Driveway, Granular (Class A Crushed Stone, IDOT Gradation No. 11)	TON	80	\$ _____	\$ _____
43	7030-108-H-2	Driveway, Granular (Macadam Stone Base, IDOT Gradation No. 13)	TON	35	\$ _____	\$ _____
44	7040-108-A-0	Full Depth Patches	SY	160	\$ _____	\$ _____
45	7040-108-B-0	Subbase Overexcavation	TON	52	\$ _____	\$ _____
46	8030-108-A-0	Temporary Traffic Control	LS	XXX	XXXX	\$ _____
47	9010-108-B-0	Hydraulic Seeding, Fertilizing, and Mulching	LS	XXX	XXXX	\$ _____
48	9040-108-A-1	SWPPP Preparation	LS	XXX	XXXX	\$ _____
49	9040-108-A-1	SWPPP Management	LS	XXX	XXXX	\$ _____
50	9040-108-N-1	Silt Fence	LF	2,000	\$ _____	\$ _____
51	9040-108-N-2	Silt Fence, Removal of Sediment	LF	2,000	\$ _____	\$ _____
52	9040-108-N-3	Silt Fence, Removal of Device	LF	2,000	\$ _____	\$ _____
53	11,020-108-A	Mobilization	LS	XXX	XXXX	\$ _____
TOTAL BID AMOUNT					\$ _____	\$ _____

NOTE: The above prices do not include sales tax for building materials, supplies, and equipment incorporated into said improvements that are exempt from Iowa Department of Revenue and Finance sales tax and applicable local option sales tax and school infrastructure local option sales tax pursuant to Iowa Code Sections. Bidder shall include all other applicable fees and taxes in bid.

NOTE: It is understood that the above quantities are estimated for the purpose of this bid. All quantities are subject to revision by the Oskaloosa Municipal Water Department. Quantity changes which amount to twenty (20) percent or less of the total bid shall not affect the unit bid price unless otherwise noted in the contract documents.

Bidder Status Form

To be completed by all bidders

Part A

Please answer "Yes" or "No" for each of the following:

- Yes No My company is authorized to transact business in Iowa.
(To help you determine if your company is authorized, please review the worksheet on the next page).
- Yes No My company has an office to transact business in Iowa.
- Yes No My company's office in Iowa is suitable for more than receiving mail, telephone calls, and e-mail.
- Yes No My company has been conducting business in Iowa for at least 3 years prior to the first request for bids on this project.
- Yes No My company is not a subsidiary of another business entity or my company is a subsidiary of another business entity that would qualify as a resident bidder in Iowa.

If you answered "Yes" for each question above, your company qualifies as a resident bidder. Please complete Parts B and D of this form.

If you answered "No" to one or more questions above, your company is a nonresident bidder. Please complete Parts C and D of this form.

To be completed by resident bidders

Part B

My company has maintained offices in Iowa during the past 3 years at the following addresses:

Dates: ____ / ____ / ____ to ____ / ____ / ____ Address: _____

City, State, Zip: _____

Dates: ____ / ____ / ____ to ____ / ____ / ____ Address: _____

City, State, Zip: _____

Dates: ____ / ____ / ____ to ____ / ____ / ____ Address: _____

You may attach additional sheet(s) if needed. City, State, Zip: _____

To be completed by non-resident bidders

Part C

1. Name of home state or foreign country reported to the Iowa Secretary of State:

2. Does your company's home state or foreign country offer preferences to bidders who are residents? Yes No

3. If you answered "Yes" to question 2, identify each preference offered by your company's home state or foreign country and the appropriate legal citation.

You may attach additional sheet(s) if needed.

To be completed by all bidders

Part D

I certify that the statements made on this document are true and complete to the best of my knowledge and I know that my failure to provide accurate and truthful information may be a reason to reject my bid.

Firm Name: _____

Signature: _____ Date: _____

**You must submit the completed form to the governmental body requesting bids
per 875 Iowa Administrative Code Chapter 156.**

This form has been approved by the Iowa Labor Commissioner.

Worksheet: Authorization to Transact Business

This worksheet may be used to help complete Part A of the Resident Bidder Status form. If at least one of the following describes your business, you are authorized to transact business in Iowa.

- Yes No My business is currently registered as a contractor with the Iowa Division of Labor.
- Yes No My business is a sole proprietorship and I am an Iowa resident for Iowa income tax purposes.
- Yes No My business is a general partnership or joint venture. More than 50 percent of the general partners or joint venture parties are residents of Iowa for Iowa income tax purposes.
- Yes No My business is an active corporation with the Iowa Secretary of State and has paid all fees required by the Secretary of State, has filed its most recent biennial report, and has not filed articles of dissolution.
- Yes No My business is a corporation whose articles of incorporation are filed in a state other than Iowa, the corporation has received a certificate of authority from the Iowa secretary of state, has filed its most recent biennial report with the secretary of state, and has neither received a certificate of withdrawal from the secretary of state nor had its authority revoked.
- Yes No My business is a limited liability partnership which has filed a statement of qualification in this state and the statement has not been canceled.
- Yes No My business is a limited liability partnership which has filed a statement of qualification in a state other than Iowa, has filed a statement of foreign qualification in Iowa and a statement of cancellation has not been filed.
- Yes No My business is a limited partnership or limited liability limited partnership which has filed a certificate of limited partnership in this state, and has not filed a statement of termination.
- Yes No My business is a limited partnership or a limited liability limited partnership whose certificate of limited partnership is filed in a state other than Iowa, the limited partnership or limited liability limited partnership has received notification from the Iowa secretary of state that the application for certificate of authority has been approved and no notice of cancellation has been filed by the limited partnership or the limited liability limited partnership.
- Yes No My business is a limited liability company whose certificate of organization is filed in Iowa and has not filed a statement of termination.
- Yes No My business is a limited liability company whose certificate of organization is filed in a state other than Iowa, has received a certificate of authority to transact business in Iowa and the certificate has not been revoked or canceled.

BID BOND

KNOW ALL BY THESE PRESENTS:

That we, _____, as Principal,
and _____, as Surety, are
held and firmly bound unto The Oskaloosa Municipal Water Department, as Obligee, (hereinafter
referred to as the Jurisdiction), in the penal sum of _____
dollars (\$ _____
_____), lawful money of the United States, for which payment said Principal and Surety bind
themselves, their heirs, executors, administrators, successors, and assigns jointly and severally,
firmly by these presents.

The condition of the above obligation is such that whereas the Principal has submitted to the
Jurisdiction a certain proposal, in a separate envelope, and hereby made a part hereof, to enter into
a contract in writing, for the following described improvements;

**WATER SYSTEM IMPROVEMNETS
OSKALOOSA MUNICIPAL WATER DEPARTMENT
OSKALOOSA, IOWA
2019**

The Surety hereby stipulates and agrees that the obligations of said Surety and its bond shall be in
no way impaired or affected by any extension of the time within which Jurisdiction may accept
such bid or execute such Contract; and said Surety does hereby waive notice of any such extension.

In the event that any actions or proceedings are initiated with respect to this Bond, the parties agree
that the venue thereof shall be Mahaska County, State of Iowa. If legal action is required by the
Jurisdiction against the Surety or Principal to enforce the provisions of the bond or to collect the
monetary obligation incurring to the benefit of the Jurisdiction, the Surety or Principal agrees to
pay the Jurisdiction all damages, costs, and attorney fees incurred by enforcing any of the
provisions of this Bond. All rights, powers, and remedies of the Jurisdiction hereunder shall be
cumulative and not alternative and shall be in addition to all rights, powers and remedies given to
the Jurisdiction, by law. The Jurisdiction may proceed against Surety for any amount guaranteed
hereunder whether action is brought against Principal or whether Principal is joined in any such
action or actions or not.

NOW, THEREFORE, if said proposal by the Principal be accepted, and the Principal shall enter
into a contract with the Jurisdiction in accordance with the terms of such proposal, including the
provision of insurance and of a bond as may be specified in the contract documents, with good and
sufficient surety for the faithful performance of such contract, for the prompt payment of labor and
material furnished in the prosecution thereof, and for the maintenance of said improvements as
may be required therein, then this obligation shall become null and void; otherwise, the Principal
shall pay to the Jurisdiction the full amount of the bid bond, together with court costs, attorney's
fees, and any other expense of recovery.

Signed and sealed this _____ day of _____, 20_____.

SURETY:

PRINCIPAL:

Surety Company

By _____
Signature Attorney-in-Fact/Officer

Name of Attorney-in-Fact/Officer

Company Name

Company Address

City, State, Zip Code

Company Telephone Number

Bidder

By _____
Signature

Name (Print/Type)

Title

Address

City, State, Zip Code

Telephone Number

NOTE: All signatures on this bid bond must be original signatures in ink; copies or facsimile of any signature will not be accepted. This bond must be sealed with the Surety's raised, embossing seal. The Certificate or Power of Attorney accompanying this bond must be valid on its face and sealed with the Surety's raised, embossing seal.

NOTICE OF AWARD

Dated _____

TO: _____
(BIDDER)

ADDRESS: _____

Contract: _____

Project: _____

OWNER's Contract No. _____

You are notified that your Bid dated _____ for the above Contract has been considered. You are the apparent Successful Bidder and have been awarded a Contract for _____

The Contract Price of your Contract is _____ Dollars (\$ _____).

___ copies of each of the proposed Contract Documents (except Drawings) accompany this Notice of Award. ___ sets of the Drawings will be delivered separately or otherwise made available to you immediately.

You must comply with the following conditions precedent within 15 days of the date you receive this Notice of Award.

1. Deliver to the "Jurisdiction" three (3) fully executed counterparts of the Contract Documents. [Each of the Contract Documents must bear your signature.]

2. Deliver with the executed Contract Documents the Contract security (Bonds) as specified in the Notice to Bidders and Public Hearing and General Provisions and Covenants.

3. (List other conditions precedent).

Failure to comply with these conditions within the time specified will entitle "Jurisdiction" to consider your Bid in default, to annul this Notice of Award and to declare your Bid security forfeited.

Within ten days after you comply with the above conditions, "Jurisdiction" will return to you one fully executed counterpart of the Contract Documents.

(JURISDICTION)

By: _____
(AUTHORIZED SIGNATURE)

(TITLE)

CONTRACT

CONTRACT NO. _____
DATE _____

THIS CONTRACT, made and entered into at Oskaloosa, Iowa this ____ day of _____, 2019, by and between the Oskaloosa Municipal Water Department, hereinafter called the "Jurisdiction", and _____, hereinafter called the "Contractor".

WITNESSETH:

The Contractor hereby agrees to complete the work comprising the below referenced improvement as specified in the contract documents, which are officially on file with the Jurisdiction in the office of the Oskaloosa Municipal Water Department, 1208 South 7th Street, Oskaloosa, Iowa 52577. This contract includes all contract documents. The work under this contract shall be constructed in accordance with the Oskaloosa Municipal Water Department Specifications and SUDAS Standard Specifications, 2019 Edition and as further modified by the supplemental specifications and special provisions included in said contract documents, and the Contract Attachment which is attached hereto. The Contractor further agrees to complete the work in strict accordance with said contract documents, and guarantee the work as required by law, for the time required in said contract documents, after its acceptance by the Jurisdiction.

This contract is awarded and executed for completion of the work specified in the contract documents for the bid prices shown on the Contract Attachment: Bid Items, Quantities and Prices which were proposed by the Contractor in its proposal submitted in accordance with the Notice to Bidders for the following described improvements:

**WATER SYSTEM IMPROVEMENTS
OSKALOOSA MUNICIPAL WATER DEPARTMENT
OSKALOOSA, IOWA
2019**

The Contractor agrees to perform said work for and in consideration of the Jurisdiction's payment of the bid amount of _____ dollars (\$ _____) which amount shall constitute the required amount of the performance, maintenance, and payment bond. The Contractor hereby agrees to commence work under this contract on or before a date to be specified in a written Notice to Proceed by the Jurisdiction. Work shall be fully complete and ready for final payment within 100 working days. Liquidated damages in the amount of Seven Hundred Dollars (\$700.00) per working day will be assessed for each day that the work shall remain uncompleted after the end of the contract period.

IN WITNESS WHEREOF, the Parties hereto have executed this instrument, in triplicate on the date first shown written.

JURISDICTION

CONTRACTOR

By _____

Contractor

(Seal)
ATTEST:

By _____
Signature

Title

Street Address

City, State, Zip Code

Telephone

CONTRACTOR PUBLIC REGISTRATION INFORMATION To Be Provided By:

1. All Contractors: The Contractor shall enter its Public Registration Number ____-____-____-____-____-____ issued by the Iowa Commissioner of Labor pursuant to Section 91C.5 of the Iowa Code.

2. Out-of-State Contractors:
 - A. Pursuant to Section 91C.7 of the Iowa Code, an out-of-state contractor, before commencing a contract in excess of five thousand dollars in value in Iowa, shall file a bond with the Division of Labor Services of the Department of Workforce Development. The contractor should contact 515-242-5871 for further information. Prior to contract execution, the City Engineer may forward a copy of this contract to the Iowa Department of Workforce Development as notification of pending construction work. It is the contractor's responsibility to comply with said Section 91C.7 before commencing this work.
 - B. Prior to entering into contract, the designated low bidder, if it be a corporation organized under the laws of a state other than Iowa, shall file with the Jurisdictional Engineer a certificate from the Secretary of the State of Iowa showing that it has complied with all provisions of Chapter 490 of the Code of Iowa, or as amended, governing foreign corporations. For further information contact the Iowa Secretary of State Office at 515-281-5204.

NOTE: All signatures on this contract must be original signatures in ink; copies or facsimile of any signature will not be accepted.

CORPORATE ACKNOWLEDGMENT

State of _____)
) SS
_____ County)

On this ____ day of _____, 20 ____, before me, the undersigned, a Notary Public in and for the State of _____, personally appeared _____ and _____, to me known, who, being by me duly sworn, did say that they are the _____, and _____, respectively, of the corporation executing the foregoing instrument; that (no seal has been procured by) (the seal affixed thereto is the seal of) the corporation; that said instrument was signed (and sealed) on behalf of the corporation by authority of this Board of Directors; that _____ and _____ acknowledged the execution of the instrument to be the voluntary act and deed of the corporation, by it and by them voluntarily executed.

Notary Public in and for the State of _____
My commission expires _____, 20 ____

PARTNERSHIP ACKNOWLEDGMENT

State of _____)
) SS
_____ County)

On this ____ day of _____, 20 ____, before me, the undersigned, a Notary Public in and for the State of _____, personally appeared _____ to me personally known, who being by me duly sworn, did say that the person is one of the partners of _____, a partnership, and that the instrument was signed on behalf of the partnership by authority of the partners and the partner acknowledged the execution of the instrument to be the voluntary act and deed of the partnership by it and by the partner voluntarily executed.

Notary Public in and for the State of _____
My commission expires _____, 20 ____

INDIVIDUAL ACKNOWLEDGMENT

State of _____)
) SS
_____ County)

On this ____ day of _____, 20____, before me, the undersigned, a Notary Public in and for the State of _____, personally appeared _____ and _____, to me known to be the identical person(s) named in and who executed the foregoing instrument, and acknowledged that (he) (she) (they) executed the instrument as (his) (her) (their) voluntary act and deed.

Notary Public in and for the State of _____
My commission expires _____, 20____

LIMITED LIABILITY COMPANY ACKNOWLEDGMENT

State of _____)
) SS
_____ County)

On this ____ day of _____, 20____, before me a Notary Public in and for said county, personally appeared _____, to me personally known, who being by me duly sworn did say that person is _____ of said _____, that (the seal affixed to said instrument is the seal of said OR no seal has been procured by the said) _____, and that said instrument was signed and sealed on behalf of the said _____, by authority of its managers and the said _____ acknowledged the execution of said instrument to be the voluntary act and deed of said _____, by it voluntarily executed.

Notary Public in and for the State of _____
My commission expires _____, 20____

CONTRACT ATTACHMENT: ITEM 1: BID ITEMS, QUANTITIES AND PRICES

THIS CONTRACT IS AWARDED AND EXECUTED FOR COMPLETION OF THE WORK SPECIFIED IN THE CONTRACT DOCUMENTS FOR THE BID PRICES TABULATED BELOW AS PROPOSED BY THE CONTRACTOR IN ITS PROPOSAL SUBMITTED IN ACCORDANCE WITH NOTICE OF LETTING AND NOTICE OF PUBLIC HEARING. ALL QUANTITIES ARE SUBJECT TO REVISION BY THE OWNER. QUANTITY CHANGES WHICH AMOUNT TO TWENTY (20) PERCENT OR LESS OF THE AMOUNT BID SHALL NOT AFFECT THE UNIT BID PRICE.

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>ESTIMATED UNITS</u>	<u>UNIT PRICE</u>	<u>AMOUNT</u>
_____	_____	_____	\$ _____	\$ _____
_____	_____	_____	\$ _____	\$ _____
_____	_____	_____	\$ _____	\$ _____
_____	_____	_____	\$ _____	\$ _____
_____	_____	_____	\$ _____	\$ _____
_____	_____	_____	\$ _____	\$ _____
_____	_____	_____	\$ _____	\$ _____
_____	_____	_____	\$ _____	\$ _____
_____	_____	_____	\$ _____	\$ _____
_____	_____	_____	\$ _____	\$ _____
_____	_____	_____	\$ _____	\$ _____
TOTAL CONSTRUCTION COST				\$ _____

PERFORMANCE, PAYMENT AND MAINTENANCE BOND

KNOW ALL BY THESE PRESENTS:

That we, _____, as Principal (hereinafter the “Contractor” or “Principal” and _____, as Surety are held and firmly bound unto the Oskaloosa Municipal Water Department, as Obligee (hereinafter referred to as “the Jurisdiction”), and to all persons who may be injured by any breach of any of the conditions of this Bond in the penal sum of _____ DOLLARS (\$_____), lawful money of the United States, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, legal representatives and assigns, jointly or severally, firmly by these presents.

The conditions of the above obligations are such that whereas said Contractor entered into a contract with the “Jurisdiction”, bearing date the _____ day of _____, _____, (hereinafter the “Contract”) wherein said Contractor undertakes and agrees to construct the following described improvements:

**WATER SYSTEM IMPROVEMENTS
OSKALOOSA MUNICIPAL WATER DEPARTMENT
OSKALOOSA, IOWA
2019**

and to faithfully perform all the terms and requirements of said Contract within the time therein specified, in a good and workmanlike manner, and in accordance with the Contract Documents. Provided, however, that one year after the date of acceptance as complete of the work under the above referenced Contract, the maintenance portion of this Bond shall continue in force but the penal sum for maintenance shall be reduced to the sum of _____ DOLLARS (\$_____), which is the cost associated with those items shown on the proposal and in the Contract which require a maintenance bond period in excess of one year.

It is expressly understood and agreed by the Contractor and Surety in this bond that the following provisions are a part of this Bond and are binding upon said Contractor and Surety, to-wit:

1. **PERFORMANCE:** The Contractor shall well and faithfully observe, perform, fulfill and abide by each and every covenant, condition and part of said Contract and Contract Documents, by reference made a part hereof, for the above referenced improvements, and shall indemnify and save harmless the “Jurisdiction” from all outlay and expense incurred by the “Jurisdiction” by reason of the Contractor’s default of failure to perform as required. The Contractor shall also be responsible for the default or failure to perform as required under the Contract and Contract Documents by all its subcontractors, suppliers, agents, or employees furnishing materials or providing labor in the performance of the Contract.
2. **PAYMENT:** The Contractor and the Surety on this Bond are hereby agreed to pay all just claims submitted by persons, firms, subcontractors, and corporations furnishing materials for

or performing labor in the performance of the Contract on account of which this Bond is given, including but not limited to claims for all amounts due for labor, materials, lubricants, oil, gasoline, repairs on machinery, equipment and tools, consumed or used by the Contractor or any subcontractor, wherein the same are not satisfied out of the portion of the contract price which the "Jurisdiction" is required to retain until completion of the improvement, but the Contractor and Surety shall not be liable to said persons, firms, or corporations unless the claims of said claimants against said portion of the contract price shall have been established as provided by law. The Contractor and Surety hereby bind themselves to the obligations and conditions set forth in Chapter 573, Code of Iowa, which by this reference is made a part hereof as though fully set out herein.

3. MAINTENANCE: The Contractor and the Surety on this Bond hereby agree, at their own expense:
 - A. To remedy any and all defects that may develop in or result from work to be performed under the Contract within the period of four (4) years from the date of acceptance of the work under the Contract, by reason of defects in workmanship or materials used in construction of said work;
 - B. To keep all work in continuous good repair; and
 - C. To pay the "Jurisdiction" reasonable costs of monitoring and inspection to assure that any defects are remedied, and to repay the "Jurisdiction" all outlay and expense incurred as a result of Contractor's and Surety's failure to remedy any defect as required by this section.

Contractor's and Surety's agreement herein made extends to defects in workmanship or materials not discovered or known to the "Jurisdiction" at the time such work was accepted.

4. GENERAL: Every Surety on this Bond shall be deemed and held bound, any contract to the contrary notwithstanding, to the following provisions:
 - A. To consent without notice to any extension of time to the Contractor in which to perform the Contract;
 - B. To consent without notice to any change in the Contract or Contract Documents, which thereby increases the total contract price and the penal sum of this bond, provided that all such changes do not, in the aggregate, involve an increase of more than twenty percent of the total contract price, and that this bond shall then be released as to such excess increase; and
 - C. To consent without notice that this Bond shall remain in full force and effect until the Contract is completed, whether completed within the specified contract period, within an extension thereof, or within a period of time after the contract period has elapsed and the liquidated damage penalty is being charged against the Contractor.

The Contractor and every Surety on the bond shall be deemed and held bound, any contract to the contrary notwithstanding, to the following provisions:

- D. That no provision of this Bond or of any other contract shall be valid which limits to less than five years after the acceptance of the work under the Contract the right to sue on this Bond.

- E. That as used herein, the phrase “all outlay and expense” is not to be limited in any way, but shall include the actual and reasonable costs and expenses incurred by the “Jurisdiction” including interest, benefits and overhead where applicable. Accordingly, “all outlay and expense” would include but not be limited to all contract or employee expense, all equipment usage or rental, materials, testing, outside experts, attorneys fees (including overhead expenses of the “Jurisdiction’s” staff attorneys), and all costs and expenses of litigation as they are incurred by the “Jurisdiction”. It is intended the Contractor and Surety will defend and indemnify the “Jurisdiction” on all claims made against the “Jurisdiction” on account of Contractor’s failure to perform as required in the Contract and Contract Documents, that all agreements and promises set forth in the Contract and Contract Documents, in approved change orders, and in this Bond will be fulfilled, and that the “Jurisdiction” will be fully indemnified so that it will be put into the position it would have been in had the Contract been performed in the first instance as required.

In the event the “Jurisdiction” incurs any “outlay and expense” in defending itself with respect to any claim as to which the Contractor or Surety should have provided the defense, or in the enforcement of the promises given by the Contractor in the Contract, Contract Documents, or approved change orders, or in the enforcement of the promises given by the Contractor and Surety in this Bond, the Contractor and Surety agree that they will make the “Jurisdiction” whole for all such outlay and expense, provided that the Surety’s obligation under this bond shall not exceed 125% of the penal sum of this bond.

In the event that any actions or proceedings are initiated with respect to this Bond, the parties agree that the venue thereof shall be Mahaska County, State of Iowa. If legal action is required by the “Jurisdiction” to enforce the provisions of this Bond or to collect the monetary obligation incurring to the benefit of the “Jurisdiction”, the Contractor and the Surety agree, jointly and severally, to pay the “Jurisdiction” all outlay and expense incurred therefor by the “Jurisdiction”. All rights, powers, and remedies of the “Jurisdiction” hereunder shall be cumulative and not alternative and shall be in addition to Surety for any amount guaranteed hereunder whether action is brought against the Contractor or whether Contractor is joined in any such action or actions or not.

NOW THEREFORE, the condition of this obligation is such that if said Principal shall faithfully perform all the promises of the Principal, as set forth and provided in the Contract, in the Contract Documents, and in this Bond, then this obligation shall be null and void, otherwise it shall remain in full force and effect.

When a word, term, or phrase is used in this Bond, it shall be interpreted or construed first as defined in this Bond, the Contract, or the Contract Documents; second, if not defined in the Bond, Contract, or Contract Documents, it shall be interpreted or construed as defined in applicable provisions of the Iowa Code; third, if not defined in the Iowa Code, it shall be interpreted or construed according to its generally accepted meaning in the construction industry; and fourth, if it

has no generally accepted meaning in the construction industry, it shall be interpreted or construed according to its common or customary usage.

Failure to specify or particularize shall not exclude terms or provisions not mentioned and shall not limit liability hereunder. The Contract and Contract Documents are hereby made a part of this Bond.

Witness our hands, in triplicate, this _____ day of _____, _____.

Surety Countersigned By:

Name of Resident Commission Agent

Company Name

Company Address

City, State, Zip Code

Company Telephone Number

PRINCIPAL:

Contractor

By: _____
Signature

Title

SURETY:

Surety Company

By: _____
Signature Attorney-in-Fact Officer

Name of Attorney-in-Fact Officer

Company Name

Company Address

City, State, Zip Code

Company Telephone Number

- NOTE:**
- 1. All signatures on this performance, maintenance & payment bond must be original signatures in ink; copies or facsimile of any signature will not be accepted.**
 - 2. This bond must be sealed with the Surety's raised, embossing seal.**
 - 3. The Certificate or Power of Attorney accompanying this bond must be valid on its face and sealed with the Surety's raised, embossing seal.**
 - 4. The name and signature of the Surety's Attorney-in-Fact/Officer entered on this bond must be exactly as listed on the Certificate or Power of Attorney accompanying this bond.**

SPECIAL PROVISIONS

Special Provisions

These Special Provisions amend or supplement the Division 1 - General Provisions and Covenants of the Urban Standard Specifications for Public Improvements and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.

The terms used in these Special Provisions will have the meanings indicated in the General Conditions. Additional terms used in the Special Provisions have the meanings indicated below, which are applicable to both the singular and plural thereof.

SECTION 1010 - DEFINITIONS

Section 1.03 Definitions and Terms.

The term "Jurisdiction" as it is used throughout the contract documents shall mean "Oskaloosa Municipal Water Department". The term "Engineer" shall mean "Garden & Associates, Ltd. of Oskaloosa, Iowa".

SECTION 1020 – PROPOSAL REQUIREMENTS AND CONDITIONS

Add the following new paragraph immediately following paragraph 1.04 E:

“F. No drawings or physical testing of conditions in or relating to existing surface or subsurface structures or conditions have been utilized by the ENGINEER in the preparation of the Drawings and Specifications. It is the CONTRACTOR’s responsibility to become familiar with and satisfied as to local and site conditions that may affect cost, progress, performance and finishing of the work.”

Section 1020 - 1.08 B Alternate Sales and Use Tax (Optional Special Exemption Certificate) shall apply to this project. The Jurisdiction will issue sales tax exemption certificates to contractors and subcontractors, allowing them to purchase, or withdraw from inventory, materials for the contract free from sales tax pursuant to Iowa Code Sections 423.2 and 423.45.

SECTION 1040 – SCOPE OF WORK

Section 1.06 Increase or Decrease of Work: Delete Subsection 1.06.B. in its entirety and replace with the following:

- “B. Unless such alterations, increases, or decreases materially change the character of the work to be performed or the cost thereof, the altered work shall be paid for at the same unit prices as other parts of the work as established in the Contract. Contract quantity changes of 20 percent or less of an individual Bid Item shall not affect the Unit Price. If, however, the character of the work or the unit costs thereof are materially changed, due to unforeseen events or changes in Contract quantity in excess of 20 percent of an individual Bid Item, an allowance shall be made on such basis as may have been agreed to in advance of the performance of the work.

SECTION 1050 – CONTROL OF WORK

In Section 1050, following paragraph 1.01 D., add the following:

- “E. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor’s executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Jurisdiction, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer’s efforts will be directed toward providing for Jurisdiction a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Jurisdiction informed of the progress of the Work and will endeavor to guard Jurisdiction against defective Work.
- F. If Jurisdiction and Engineer have agreed that Engineer will furnish an authorized representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such authorized representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Section 1050 1.01 E. above. If Jurisdiction designates another representative or agent to represent Jurisdiction at the Site who is not Engineer’s consultant, agent, or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.
- G. Neither Engineer’s authority or responsibility under this Section or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

- H. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- I. The limitations upon authority and responsibility set forth in this Section 1050 1.01 E. above shall also apply to the authorized representative, if any.”

In Section 1050, following paragraph 1.05 A.2., add the following:

- “3. Number of copies of submittals required: 4.
- 4. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor’s obligations under the Contract Documents with respect to Contractor’s review of that submittal, and that Contractor approves the submittal.
- 5. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.”

In Section 1050, delete paragraph 1.05 C. in its entirety and add the following:

- “C. Engineer’s Review:
 - 1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer’s review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
 - 2. Engineer’s review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.
 - 3. Engineer’s review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
 - 4. Engineer’s review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample.
 - 5. Engineer’s review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any

circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.

6. Neither Engineer's receipt, review, acceptance or approval of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.
7. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 1.05 C.4. above."

SECTION 1070 – LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

In paragraphs 3.02, C., 2., g., amend by adding the following in bold text:

- "g. The policy shall not contain a total or absolute pollution exclusion. Coverage shall be provided for pollution exposures arising from products and completed operations, **3rd party injury, and property damage claims including clean-up costs for pollution. This policy shall be maintained for not less than three years after final completion.**"

In paragraphs 3.02, C., 5., amend by adding the following in bold text:

- "5. Umbrella/Excess Insurance: At the Contractor's option, the limits specified in Section 1070, 3.02, C, 1, 2, 3 may be satisfied with a combination of primary and Umbrella/Excess Insurance. At the Jurisdiction's option, the minimum insurance limits specified above may be increased by special provision. This increase may be satisfied with a combination of primary and Umbrella/Excess Insurance. **The Umbrella/Excess policy shall follow the form of each underlying policy.**"

In paragraphs 3.02, C., 6., a. and b., amend by adding the following in bold text:

- "a. Include the Jurisdiction **and Engineer** as an additional insured, per Section 1070, 3.06, B; and
- b. Be primary to and not in excess of or contributory with any other insurance available to the Jurisdiction **and Engineer.**"

In paragraph 3.03, B., amend by adding the following in bold text:

- "B. To the fullest extent permitted by law, the Contractor shall defend, indemnify, and hold harmless the Jurisdiction and its officers, agents, employees, and consultants **and the Engineer and its officers, agents, employees, and consultants** from and against all claims, damages, losses, and expenses, including but not limited to, attorney's fees, arising out of or resulting from the performance or prosecution of

the work by the Contractor, its subcontractors, agents, or employees; or arising from any neglect, default, or mismanagement or omissions by the Contractor, its subcontractors or consultants, suppliers, third parties, or the agents, officers, or employees of any of them in the performance of any duties imposed by the contract or by law; provided any such claim, damage, loss, or expense.”

In paragraph 3.03, E., amend by adding the following in bold text:

“E. If any litigation on account of such claims shall be commenced against the Jurisdiction **or Engineer**, the Contractor, upon notice thereof from the Jurisdiction, **or Engineer** shall defend the same at its sole cost and expense; and the record of any judgment rendered against the Jurisdiction **or Engineer** on account of such claims for damages shall be conclusive as against said Contractor and entitle the Jurisdiction **or Engineer** to recover the full amount thereof, with interest and cost, and attorney's fees incurred by said Jurisdiction **or Engineer**, whether the Jurisdiction **or Engineer** paid such amounts or not.”

In paragraph 3.06, A., amend by adding the following in bold text:

“A. All liability insurance policies the Contractor is required to provide pursuant to this Section 1070, Part 3 - Bonds and Insurance shall be by endorsement name and designate the Jurisdiction **and Engineer** as an additional insured.”

In paragraph 3.06, B., amend by adding the following in bold text and remove the stricken:

“B. The Additional Insured Endorsement shall include the following provisions:

The Jurisdiction **and Engineer**, including all ~~its~~ **their** elected and appointed officials, all its employees and volunteers, all its boards, commissions and/or authorities and their board members, employees, and volunteers, and all its officers, agents, and consultants, are named as Additional Insureds with respect to liability arising out of the Contractor’s work and services performed for the Jurisdiction. This coverage shall be primary to the Additional Insureds, and not contributing **with waiver of subrogation** with any other insurance or similar protection available to the Additional Insureds, whether other available coverage by primary, contributing, or excess.

The Additional Insured Endorsement shall be included on all Commercial General Liability, Automobile Liability, and Umbrella/Excess Insurance policies.”

In paragraph 3.07, A., amend by adding the following in bold text:

“A. The Contractor shall, prior to the Jurisdiction’s approval and execution of the Contract, provide to the Jurisdiction **and Engineer** a certificate or certificates of

insurance evidencing all required insurance coverages as required in this Section 1070, Part 3 – Bonds and Insurance, utilizing the ACORD certificate form, or equivalent, required by the Jurisdiction. The Certificate of Insurance requirement may be satisfied with a blanket certificate.”

In paragraph 3.08, A., amend by adding the following in bold text:

- “A. Upon the occurrence of any event, the liability for which is herein assumed by the Contractor, the Contractor agrees to forthwith notify the Jurisdiction **and Engineer** in writing of such happening, which notice shall give the details as to the happening, the cause as far as can be ascertained, the estimate of loss or damage done, the names of witnesses, if any, and stating the amount of any claim.”

NOTICE TO PROCEED

Owner: _____ Owner's Contract No.: _____
Contractor: _____ Contractor's Project No.: _____
Engineer: _____ Engineer's Project No.: _____
Project: _____ Contract Name: _____
Effective Date of Contract: _____

TO CONTRACTOR:

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on [_____, 20__]. *[see Paragraph 4.01 of the General Conditions]*

On that date, Contractor shall start performing its obligations under the Contract Documents. No Work shall be done at the Site prior to such date. In accordance with the Agreement, [the date of Substantial Completion is _____, and the date of readiness for final payment is _____] *or* [the number of days to achieve Substantial Completion is _____, and the number of days to achieve readiness for final payment is _____].

Before starting any Work at the Site, Contractor must comply with the following:
[Note any access limitations, security procedures, or other restrictions]

Owner:

Authorized Signature

By:

Title:

Date Issued:

Copy: Engineer

Contractor's Application for Payment No.

Application Period:		Application Date:
To (Owner):	From (Contractor):	Via (Engineer):
Project:	Contract:	
Owner's Contract No.:	Contractor's Project No.:	Engineer's Project No.:

**Application For Payment
Change Order Summary**

Approved Change Orders			
Number	Additions	Deductions	
			1. ORIGINAL CONTRACT PRICE..... \$ _____
			2. Net change by Change Orders..... \$ _____
			3. Current Contract Price (Line 1 ± 2)..... \$ _____
			4. TOTAL COMPLETED AND STORED TO DATE
			(Column F total on Progress Estimates)..... \$ _____
			5. RETAINAGE:
			a. X _____ Work Completed..... \$ _____
			b. X _____ Stored Material..... \$ _____
			c. Total Retainage (Line 5.a + Line 5.b)..... \$ _____
			6. AMOUNT ELIGIBLE TO DATE (Line 4 - Line 5.c)..... \$ _____
			7. LESS PREVIOUS PAYMENTS (Line 6 from prior Application)..... \$ _____
			8. AMOUNT DUE THIS APPLICATION..... \$ _____
			9. BALANCE TO FINISH, PLUS RETAINAGE
			(Column G total on Progress Estimates + Line 5.c above)..... \$ _____
TOTALS			
NET CHANGE BY CHANGE ORDERS			

<p>Contractor's Certification</p> <p>The undersigned Contractor certifies, to the best of its knowledge, the following:</p> <p>(1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with the Work covered by prior Applications for Payment;</p> <p>(2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or covered by this Application for Payment, will pass to Owner at time of payment free and clear of all Liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such Liens, security interest, or encumbrances); and</p> <p>(3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.</p>	
<p>Contractor Signature</p>	
By: _____	Date: _____

Payment of: \$ _____
(Line 8 or other - attach explanation of the other amount)

is recommended by: _____
(Engineer) (Date)

Payment of: \$ _____
(Line 8 or other - attach explanation of the other amount)

is approved by: _____
(Owner) (Date)

Approved by: _____
Funding or Financing Entity (if applicable) (Date)

Progress Estimate - Unit Price Work

Contractor's Application

For (Contract):						Application Number:					
Application Period:						Application Date:					
A					B	C	D	E	F		
Item		Contract Information				Estimated Quantity Installed	Value of Work Installed to Date	Materials Presently Stored (not in C)	Total Completed and Stored to Date (D + E)	% (F / B)	Balance to Finish (B - F)
Bid Item No.	Description	Item Quantity	Units	Unit Price	Total Value of Item (\$)						
	Totals										

Date of Issuance:

Effective Date:

Owner:

Owner's Contract No.:

Contractor:

Contractor's Project No.:

Engineer:

Engineer's Project No.:

Project:

Contract Name:

The Contract is modified as follows upon execution of this Change Order:

Description:

Attachments: *[List documents supporting change]*

CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIMES <i>[note changes in Milestones if applicable]</i>
Original Contract Price: \$ _____	Original Contract Times: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
[Increase] [Decrease] from previously approved Change Orders No. ___ to No. ___: \$ _____	[Increase] [Decrease] from previously approved Change Orders No. ___ to No. ___: Substantial Completion: _____ Ready for Final Payment: _____ days
Contract Price prior to this Change Order: \$ _____	Contract Times prior to this Change Order: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
[Increase] [Decrease] of this Change Order: \$ _____	[Increase] [Decrease] of this Change Order: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
Contract Price incorporating this Change Order: \$ _____	Contract Times with all approved Change Orders: Substantial Completion: _____ Ready for Final Payment: _____ days or dates

<p>RECOMMENDED:</p> <p>By: _____ Engineer (if required)</p> <p>Title: _____</p> <p>Date: _____</p>	<p>ACCEPTED:</p> <p>By: _____ Owner (Authorized Signature)</p> <p>Title: _____</p> <p>Date: _____</p>	<p>ACCEPTED:</p> <p>By: _____ Contractor (Authorized Signature)</p> <p>Title: _____</p> <p>Date: _____</p>
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Approved by Funding Agency (if applicable)

By: _____ Date: _____
Title: _____

CERTIFICATE OF SUBSTANTIAL COMPLETION

Owner:	Owner's Contract No.:
Contractor:	Contractor's Project No.:
Engineer:	Engineer's Project No.:
Project:	Contract Name:

This [preliminary] [final] Certificate of Substantial Completion applies to:

All Work The following specified portions of the Work:

Date of Substantial Completion

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor, and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Work or portion thereof designated above is hereby established, subject to the provisions of the Contract pertaining to Substantial Completion. The date of Substantial Completion in the final Certificate of Substantial Completion marks the commencement of the contractual correction period and applicable warranties required by the Contract.

A punch list of items to be completed or corrected is attached to this Certificate. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract.

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance, and warranties upon Owner's use or occupancy of the Work shall be as provided in the Contract, except as amended as follows: *[Note: Amendments of contractual responsibilities recorded in this Certificate should be the product of mutual agreement of Owner and Contractor; see Paragraph 15.03.D of the General Conditions.]*

Amendments to Owner's responsibilities: None
 As follows

Amendments to Contractor's responsibilities: None
 As follows:

The following documents are attached to and made a part of this Certificate: *[punch list; others]*

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents, nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract.

EXECUTED BY ENGINEER:		RECEIVED:		RECEIVED:	
By: _____	By: _____	By: _____	By: _____	By: _____	By: _____
(Authorized signature)	Owner (Authorized Signature)	Owner (Authorized Signature)	Owner (Authorized Signature)	Contractor (Authorized Signature)	Contractor (Authorized Signature)
Title: _____	Title: _____	Title: _____	Title: _____	Title: _____	Title: _____
Date: _____	Date: _____	Date: _____	Date: _____	Date: _____	Date: _____

WAIVER AND RELEASE OF LIEN

WHEREAS, the undersigned, _____
Name of Manufacturer, Materialman, or Subcontractor

has furnished to _____ the following:
Name of Contractor

_____ for use in the construction
Kind of Material and Services Furnished

of a project belonging to _____, and
designated as, _____.
Name of Project

NOW, THEREFORE, the undersigned, _____,
Name of Manufacturer, Materialman, or Subcontractor

for and in consideration of \$ _____, and other good and valuable consideration,
the receipt whereof is hereby acknowledged, do(es) hereby waive and release any and all liens,
or right to or claim of lien, on the above described project and premises, under any law, common
or statutory, on account of labor or materials, or both, hereto or hereafter furnished by the
undersigned to or for the account of said _____ for said project.
Name of Contractor

Given under my (our) hand(s) and seal(s) this _____ day of _____, 20____.

Name of Manufacturer, Materialman, or Subcontractor

By: _____

President, Vice-President, Partner, or Owner, or, if signed by other than one of the foregoing, accompanied by
Power of Attorney signed by one of the foregoing in favor of the signer. (Use designation applicable)

DETAILED SPECIFICATION REQUIREMENTS

DETAILED SPECIFICATION REQUIREMENTS

Index

Part 1 General

- 1.01 Section Includes
- 1.02 Modifications and/or Addenda
- 1.03 Water Main Materials
- 1.04 Connection to Existing Water Main
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Part 1 General

1.01 Section Includes

- A. Modifications and/or addenda to the SUDAS Standard Specifications and OMWD Standards.
- B. Project specific materials and products to be incorporated into the work.
- C. Project specific special construction procedures or requirements applicable to the work.
- D. Additional payment items not set forth in the specific Section of the specifications for which the work pertains.

1.02 Modifications and/or Addenda

- A. On Page 4 of Section 1080 – PROSECUTION AND PROGRESS, delete subparagraph 1.06 B. 2. in its entirety and substitute the following:
 - “2. After Commencement of Work: One full working day will be charged for any weekday, exclusive of Saturdays, Sundays, or a recognized legal holiday, when weather or other conditions (not under control of the Contractor) will permit construction operations to proceed for not less than 3/4 of a normal workday in the performance of a controlling item of work as determined by the Engineer. If such conditions allow operations to proceed for at least 1/2 but less than 3/4 of the normal working hours, one-half working day will be charged.

Working days will not be charged for Saturdays (unless a mandatory six-day work week is specified in the contract documents), Sundays, and recognized legal holidays the Contractor does not work. Working days will be charged for Saturdays, Sundays, and recognized legal holidays the contractor does work. It is the intent of the contract documents to charge working days for any day the Contractor works. A mandatory six-day work week is not required.”
- B. On page 2 of Section 5010, delete paragraph “C. Fittings” in its entirety. Separate payment for water main fittings will not be made. Cost for water main fittings shall be included in unit price for water main and considered incidental to construction.

- C. On Page 1 of Section 5020 under paragraph 1.08 A. Valve (Butterfly or Gate), delete subparagraph 3 in its entirety and substitute the following:
 “3. Includes: Unit price includes all equipment, materials and labor to install valve furnished by the Oskaloosa Municipal Water Department (OMWD) including excavation, installation, and backfill. Contractor shall be required to furnish all fittings including valve box and cover, valve box and stem extensions if necessary, T-bolts, gland units, tracer wire, and miscellaneous associated materials for complete installation. OMWD will deliver the valves to the job site”.
- D. On Page 2 of Section 5020 under paragraph 1.08 C. Fire Hydrant Assembly, delete subparagraph 3 in its entirety and substitute the following:
 “3. Includes: Unit price includes all equipment, materials and labor to install hydrant and gate valve assembly furnished by the Oskaloosa Municipal Water Department (OMWD) including excavation, installation, and backfill. Contractor shall be required to furnish all fittings including anchor tee, anchor pipe, thrust block, valve box and cover, valve box and stem extensions if necessary, T-bolts, gland units, tracer wire, tracer wire terminal box and splice kits, and miscellaneous associated materials for complete installation. OMWD will deliver hydrants and valves to the job site”.
- E. On Page 3 of Section 5020 add paragraph 1.08 L. Meter Pit (Install Only)
 L. Meter Pit (Install Only)
 1. Measurement: Each meter pit will be counted.
 2. Payment: Payment will be made at the unit price of each meter pit installed.
 3. Includes: The unit price includes all equipment, material and labor to install meter pit furnished by the Oskaloosa Municipal Water Department (OMWD) including excavation, installation, backfill, connection to existing service and miscellaneous associated items for complete installation. OMWD will deliver meter pit to job site.
- F. OMWD Standards – Division 3 – Water Main and Appurtenances
 1. On page 2 under subheading 2.1 Water Main, delete subparagraph 7 under paragraph A and substitute the following:
 “7. Bolts: Bolts and studs shall be 304 Stainless Steel.”
 a. Apply “Never Sieze” to bolts.
2. On Page 2 delete subparagraph d. under paragraph D.2 and substitute the following:
 d. Tee bolts: shall be 304 stainless steel.
3. On page 3 under subheading 2.4 Tracer Wire and Appurtenances, add the following under subparagraph A:
 “1. For directional drilled water main, high tensile strength wire required.
4. On page 3 under subheading 2.4 Tracer Wire and Appurtenances, delete paragraph C and substitute the following:
 “C. Splice Kit: Dryconn Waterproof Connector 90220 or equal.”
5. On Page 3 under subheading 2.5 Coupling, delete paragraph B. Hymax not an acceptable manufacturer.
6. On Page 3 under subheading 2.6 Gate Valve, delete subparagraph C.1 and substitute the following:
 1. Body and Bonnets: Ductile Iron, ASTM A536

7. On page 4 under subheading 2.8 Hydrant, add subparagraph A.6
6. Operating Stem: Stainless Steel
8. On page 5 under subheading 2.12 Water Service at the end of subparagraph A.2, delete 200 psi and substitute “250 psi”.
9. On page 5 under subheading 2.12 Water Services, delete paragraph C and substitute the following:
“C. Service Saddles: Brass service saddle; Ford 202BS or equal.”
10. On page 5 under paragraph F, delete all reference to flange joint. All couplings to be pack joint type.

1.03 Water Main Materials

- A. All water main materials incorporated into the project shall meet the requirements of Division 3 – Water Main and Appurtenances of the Standard Specifications for Water Main Construction, Oskaloosa Municipal Water Department (see Appendix A contained herein) and as modified herein before in lieu of those specified in SUDAS Standard Specification Sections 5010 and 5020. Construction will be in accordance with SUDUS, and as modified herein.
- B. Water main pipe material shall be Polyvinyl Chloride Pipe, PVC, on DIP where indicated.
- C. Water service pipe material shall be Copper, CU or polyethylene, PE, note install tracer wire on all service lines.

1.04 Connection to Existing Water Main

- A. General:
 1. Furnish and install all labor, equipment, and materials to connect new water main to the existing system as shown on plans.
- B. Measurement and Payment:
 1. Connections to Existing Water Main will be paid for at the contract lump sum price bid. Lump sum price includes excavation, removal of existing pipe, all fittings required (excluding valves), thrust blocks, backfill, and miscellaneous associated work. Lump sum price bid shall be full compensation for all work and material required excluding valves and straight pipe.
- C. Products:
 1. Furnish products in accordance with the Standard Specification for Water Main Construction, Oskaloosa Municipal Water Department.
- D. Execution:
 1. Install pipe, fittings and valves as required to make connections to the existing water main system as shown on plans and in accordance with Sections 5010 and 5020 of the specifications.
 2. Construct trench and place backfill material in accordance with Section 3010 of the specifications.

1.05 Owner Furnished Materials

- A. Owner will furnish the following listed materials for installation by Contractor.
 - 1. Gate Valves: Clow Valve Co. R/W. (Valve boxes by Contractor)
 - 2. Hydrants and auxiliary valves.
 - 3. Meter pits.
- B. T-bolts and gland units shall be supplied by Contractor for each valve and hydrant.
- C. Owner shall deliver materials to Contractor to job storage area; upon acceptance by Contractor, materials shall be responsibility of Contractor.

APPENDIX A

Division 3 – Water Main and Appurtenances

Standard Specifications for Water Main Construction Oskaloosa Municipal Water Department

DIVISION 3
WATER MAIN AND APPURTENANCES

Part 1 General

1.1 Section Includes

- A. Water main and appurtenances.
- B. Water services and appurtenances.
- C. Installation of water main and appurtenances and services.
- D. Disinfection and testing.

1.2 Submittals

- A. Submit the following to the Superintendent prior to beginning the work:
 - 1. Pipe material, wall thickness, class, type and/or schedule number.
 - 2. Certification that pipe material conforms to applicable specifications.
 - 3. Catalog data for valves, hydrants and other appurtenances showing compliance with specifications.
- B. Submit the following to Superintendent before placing work in operation:
 - 1. Results of pressure tests and leakage tests showing compliance with specifications.
 - 2. Results of bacteriologic tests showing compliance with specifications.

1.3 Related Work

- A. Section 1 - General Requirements.
- B. Section 2 - Excavation and Backfill.

1.4 Quality Assurance

- A. Furnish new pipe, valves, hydrants and appurtenances meeting AWWA requirements and as specified herein.
- B. Install pipe, valves, hydrants and appurtenances in accordance with AWWA requirements and as specified herein.
- C. Test and disinfect work in accordance with AWWA requirements and as specified herein.
- D. Comply with "Chapter 8 - Iowa Standards for Water Supply Distribution System" of Iowa Water Supply Facilities Standards.

1.5 References

- A. Pipe and Fittings:
 - 1. AWWA C104 - American National Standard for Cement-Mortar Lining for Ductile Iron Pipe and Fittings for Water.
 - 2. AWWA C105 American National Standard for Polyethylene Encasement for Ductile-Iron Pipe Systems.
 - 3. AWWA C110 American National Standard for Ductile-Iron and Gray-Iron Fittings, 2 In. through 48 In. (75 mm through 1200 mm), for Water and other Liquids.
 - 4. AWWA C111 American National Standard for Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and fittings.
 - 5. AWWA C150 American National Standard for the Thickness Design of Ductile-Iron Pipe.
 - 6. AWWA C153 American National Standard for Ductile-Iron Compact Fittings, 3 In. through 24 In. (76 mm through 610 mm) and 54 In. through 64 In. (1,400 mm through 1,600 mm) for Water Service.
 - 7. AWWA C901 Standard for Polyethylene (PE) Pressure Pipe and Tubing, 1/2 In. through 3 In. for Water Service.

- B. Valves and Hydrants:
 1. AWWA C502 Standard for Dry-Barrel Fire Hydrants (includes Addendum C502a-95).
 2. AWWA C509 Standard for Resilient-Seated Gate Valves for Water Supply Service (Includes addendum C509a-95).
- C. Pipe Installation:
 1. AWWA C600 Standard for Installation of Ductile-Iron Water Mains and their Appurtenances.
 2. AWWA C605 Standard for Underground Installation of Polyvinyl Chloride (PVC) Pressure Pipe and Fittings for Water.
- D. Disinfection of Facilities:
 1. AWWA C651 Standard for Disinfecting Water Mains.
- E. Service Lines:
 1. AWWA C800 Standard for Underground Service Line Valves and Fittings.
 2. AWWA C901 Standard for Polyethylene (PE) Pressure Pipe and Tubing, 1/2 In. through 3 In. for Water Service.

Part 2 Products

2.1 Water Main

- A. Ductile Iron Pipe, DIP: Ductile Iron Pipe with mechanical or push-on joints manufactured in accordance with AWWA C151 and manufactured in the U.S.A.
 1. Minimum Pressure Class: 350 psi in accordance with AWWA C150 for pipes 12" diameter or less; for pipe diameters larger than 12" and special laying conditions, selected pipe thickness in accordance with AWWA C150 for laying condition and depth of cover.
 2. Joints: Push-on or mechanical joints manufactured in accordance with AWWA C111.
 3. Fittings:
 - a. Ductile iron mechanical joint fittings manufactured in accordance with AWWA C110 or AWWA C153 and manufactured in the U.S.A.
 - b. Push-on mechanical joint fitting.
 4. Pipe and Fitting Lining: Cement lined in accordance with AWWA C104.
 5. Pipe and Fitting Exterior Coating: Asphaltic coating in accordance with AWWA C151.
 6. Pipe and Fitting Markings: Mark pipe in accordance with AWWA C151 and fittings in accordance with AWWA C110 or AWWA C153.
 7. Bolts: Bolts and studs of high strength steel with hexagon nuts and coated with corrosion resistant coating; COR-TEN or 304 Stainless Steel.
 - a. Spray all COR-TEN T-Bolts with rust proof coating.
- B. Restrained Joint Ductile Iron Pipe, RJ-DIP: Ductile Iron Pipe as specified herewith restrained push-on or mechanical joints; Clow Push-on Restrained Joint Pipe, Griffin Snap-Lok or Bolt-Lok, or equal.
- C. Polyvinyl Chloride Pipe, PVC: Polyvinyl Chloride pressure pipe and couplings with cast iron equivalent outside dimensions and manufactured in accordance with AWWA C900; Minimum pressure class: 150 psi; maximum DR: 18.
 1. Joints: Push-on joints with elastomeric gaskets manufactured in accordance with AWWA C900.
 2. Fittings: Ductile iron fittings and bolts as specified under Ductile Iron Pipe.
- D. Restrained Joint Polyvinyl Chlorine Pipe, RJ-PVC: AWWA C900 PVC Pipe with restrained joints, Certa-Lok C9001RJ, Certainteed or equal.
 1. Mechanical Joint Adapters: Restrained joint mechanical joint adapter designed for use with ductile iron mechanical joint fittings or pipe, Certa-Lok C9001RJ Gland Adapters or equal.
 2. Materials:
 - a. Gland: Ductile Iron A 536 Grade 70-50-05 or 60-42-10.
 - b. Spline: High strength polyamide thermoplastic.
 - c. Gaskets: Vulcanized SBR in accordance with AWWA C111.
 - d. Tee Bolts: As specified for Ductile Iron Pipe.

2.2 Polyethylene Pipe Encasement

- A. Polyethylene encasement tubing and sheeting meeting requirements of AWWA C105.
- B. Tube size or sheet width: As listed in AWWA C105.
- C. Tape: 2" wide, 10 mil thick pressure-sensitive polyethylene tape.

2.3 Thrust Blocks

- A. 3,000 psi cast-in-place concrete meeting requirements of IDOT Class C4 mix concrete.

2.4 Tracer Wire and Appurtenances

- A. Wire: No. 12 continuous solid copper wire, Type TW or THHN.
- B. Ground Rod: 60" by 3/4" copper ground rods with clamps designed to connect tracer wire to rod.
- C. Splice Kit: 3M 3832 or equal.
- D. Terminal Box: Neptune ARB receptacle or equal.

2.5 Couplings

- A. Bolted, straight and transition couplings, Smith-Blair 442 Stainless Steel.
 - 1. Sleeve: Ductile Iron ASTM A-536.
 - 2. Gaskets: Grade 30 compounded rubber of new materials.
 - 3. Follower Flanges: Ductile Iron ASTM A-536.
 - 4. Bolts and Nuts: 304 stainless steel.
 - 5. Coating: Shopcoat enamel.
- B. Alternate Coupling: Hymax 2000, as manufactured by Total Piping Solutions, Inc.:
 - 1. Sleeve: Carbon Steel NSF-61.
 - 2. Gasket: 2-layered EPDM Gasket.
 - 3. Bolts and Nuts: 304 stainless steel with coated nuts.
 - 4. Coating: Fusion-bonded epoxy.
- C. Alternate Coupling & Romac Macro.
 - 1. Sleeve: Ductile Iron.
 - 2. Gasket: 2-layered Nitrile Butadiene Rubber (NBR)
 - 3. Bolts & Nuts: 304 Stainless Steel.
 - 4. Coating: Fusion-bonded epoxy.

2.6 Gate Valves

- A. Resilient seated valve manufactured in accordance with AWWA C509; Clow Valve Co. R/W, Figure 6100; working pressure: 200 psi.
 - 1. 2" operating wrench nut.
 - 2. Open counter clockwise.
 - 3. Non-rising stem.
- B. Joints: Mechanical joints with 304 stainless steel bolts.
- C. Materials of construction:
 - 1. Body and Bonnet: Cast iron, ASTM A126 Class B.
 - 2. Wedge: Cast iron, ASTM A2126 Class B and completely encapsulated with urethane rubber.
 - a. Permanently bond urethane sealing rubber to wedge to meet ASTM tests for rubber metal bond.
 - 3. Stem: Cast bronze, ASTM B584 CDA68, with integral collars and cast bronze stem nut, ASTM B584 CDA844.
 - 4. O-rings: Buna-N.
 - 5. Exposed Hex Bolts: 304 stainless steel.
- D. Coating: Coat interior and exterior of valve with fusion bonded epoxy meeting requirements of AWWA C-550.
- E. Valve Box: Fit each valve with valve box as specified herein.

2.7 Valve Boxes

- A. Heavy duty cast iron valve box, screw type, Tyler Pipe Two Piece 6850 Series, or equal.
- B. Complete unit consisting of bottom, adjustable top stem and drop cover; mark drop cover with "Water".
 - 1. Provide extension pieces as required for complete installation.

2.8 Hydrants

- A. Dry barrel type fire hydrant manufactured in accordance with AWWA C502; Clow Valve Co. F-2545 Medallion Hydrant Assembly with 5 1/4" main valve and 6" inlet.
 - 1. Provide with two 2-1/2" NST hose nozzles and one 4-1/2" NST pumper nozzle with Type G nozzle caps.
 - 2. Type G, 7/8" square operating nut with weather cap; open counter clockwise (left).
 - 3. Bronze main valve seat ring.

 - 4. Stainless steel, 18-8 bolts.
 - 5. Mechanical joint bolts and nuts: 18-8 stainless steel.
- B. Factory apply interior, exterior and above ground coatings in accordance with AWWA C502; exterior, above ground: factory primed.
- C. Auxiliary Valve: Resilient seated valve manufactured in accordance with AWWA C509 as specified herein.
- D. Auxiliary Valve Box: Heavy cast iron valve box as specified herein.
- E. Anchoring Fittings: Anchoring fittings designed to provide positive joint restraint from hydrants to main connection, Clow Valve Co., Tyler Pipe or equal.
 - 1. Coupling: Mechanical joint anchoring coupling with integrally cast gland and rotating ring gland.
 - 2. Anchoring Pipe: Fit with rotating ring gland at one end and solid (non-rotating) gland on other end.
 - 3. Bolts and Nuts: Corrosion resistant bolts and nuts as specified Ductile Iron Pipe.
 - 4. Lining and Coatings: Cement line and coat exterior as specified for Ductile Iron Pipe.

2.9 Tapping Valve and Sleeve

- A. Sleeve: Stainless steel tapping sleeve, Ford Style FAST, or equal.
 - 1. 18-8 stainless steel body, bolts, nuts, lifter bar, armors, and outlet: carbon steel outlet flange conforming to AWWA C207 Class ASI 150 lb. drilling.
 - 2. GRP compound gasket designed to give 360° pipe coverage.
 - 3. Buna-N outlet gasket.
 - 4. Minimum pressure rating: 150 psi.
- B. Valve: Resilient seated valve manufactured in accordance with AWWA C509 as specified above with flanged and mechanical joints and designed for tapping, Clow Valve Co. F-6114.
- C. Valve Box: Heavy cast iron valve box as specified herein.

2.10 Retainer Glands

- A. Ductile Iron Pipe: Ductile iron glands designed with restraining mechanism which increases resistance as pressure increases; EBAA Iron, Inc., Megalug Series 1100 or equal.
 - 1. Gland: ASTM A536.
 - 2. Restraining Device: Ductile iron heat treated to minimum hardness of 370 BHN.
 - 3. Dimensions: Dimension for use with standardized mechanical joint bell.
 - 4. Minimum Working Pressure: 250 psi with 2:1 factor of safety.
- B. PVC Pipe: Ductile iron restraining gland as specified except restraining system designed specially for AWWA C900 PVC Pipe, EBAA Iron, Inc., Series 2000 PV Megalug or equal.
 - 1. Restraining Device: Plurality of individual activated gripping surfaces designed to maximize restraint capability and not damage pipe.
 - 2. Minimum Pressure Rating: Standardized rating of PVC Pipe on which it is used.

2.11 Casing Pipe and Accessories

- A. Casing Pipe: New, smooth wall steel pipe manufactured in accordance with ASTM A53; minimum yield strength of steel: 35,000 psi.
 - 1. Minimum wall thickness: 3/8".
 - 2. Coat inside and outside with asphaltic varnish.
 - 3. Welded joints in accordance AWS.
- B. Chocks: Center restrained type casing chocks made in two sections with elastomeric liner to isolate shell from carrier pipe and low friction runners, PowerSeal Model 4810 or equal.
 - 1. Metal Components: Type 304 (18-8) stainless steel.
 - 2. Liner: Neoprene rubber with antioxidant and antiozonant properties.
 - 3. Runners: UHMW Polyethylene, or equal, with high abrasion resistance and low friction coefficient.
- C. Wood Runners: Hardwood runners banded or strapped to carrier pipe with stainless steel banding; wire or galvanized steel bands not acceptable.
- D. Casing Seals: Modular, mechanical type seals of interlocking synthetic rubbers shaped to continuously fill annular space between casing and carrier pipe to provide watertight closure; provide complete with bolts designed to cause sealing elements to expand; Link-Seal Model PL, Thunderline Corporation or equal.

2.12 Water Services

- A. Pipe services through 2" in diameter. Minimum allowable size 1" diameter.
 - 1. Copper, CU: Type K copper conforming to ASTM B88 and AWWA C800.
 - 2. Polyethylene, PE: O.D. based, iron pipe size polyethylene pipe and fittings manufactured in accordance with AWWA C901 for PE 3408 materials; minimum pressure class: 200 psi.
- B. Corporation Stops: Through 2" Service:
 - 1. Copper Pipe: Ford Corporation Stops F1000 with AWWA/CC taper thread inlet by pack joint outlet for copper or F600 AWWA ICC taper thread inlet by flared copper outlet, or equal.
 - 2. Polyethylene Pipe: Ford F1001 Corporation Stops with AWWA/CC taper thread inlet by pack joint outlet for PE Pipe, or equal.
 - a. Install stainless steel inserts, Ford 70 series for PE Pipe, or equal.
- C. Service Saddles: Nylon coated, ductile iron, double strap stainless steel service saddles; Smith-Blair 317, or equal.
- D. Curb Stops: Through 2" services manufactured to meet AWWA C800 requirements.
 - 1. Copper Pipe: Ford Ball Valves B22 series with flared copper both ends or Ford B44 series with pack joint for copper, or equal.
 - 2. Polyethylene, PE Pipe: Ford Ball Valves, B66 series with pack joint for PE Pipe, or equal.
 - a. Install stainless steel inserts at each pack joint, Ford 70 series, or equal.
- E. Curb Boxes: Ford Arch Pattern Curb Boxes, or equal, with curb box base sized for curb stop installed.
 - 1. Upper Section Diameter: 1-1/4" diameter.
 - 2. Lid: 2 hole, Erie pattern.
 - 3. Stationary Rod: 304 stainless steel.
- F. Couplings
 - 1. Copper Pipe, CU: Ford C22 series flare copper to flare copper, or equal. Ford C24 Series for pack joint both ends.
 - 2. Polyethylene Pipe: Ford Series C66 pack joint both ends for PE Pipe or equal with Ford 70 stainless steel inserts at each pack joint.
 - 3. PE Pipe to CU Pipe: Ford C26 Series flare copper to PE Pipe or equal with Ford Series 70 stainless steel insert at pack joint.
- G. Service pipe and accessories for services larger than 2": Pipe and accessories as approved by Superintendent.

Part 3 - Execution

3.1 General Installation

- A. Protect pipe joints, valves, hydrants and appurtenances from damage and free of foreign material while handling and storing.
- B. Check pipe for defects prior to lowering in trench; use no deformed, defective, gouged, or otherwise impaired pipe joints or damaged pipe.
- C. Before laying pipe or installing appurtenances, verify all measurements at site and make necessary field measurements to accurately determine required pipe length.
- D. Clean pipe interior of foreign material before lowering into trench; keep clean at all times by securely closing open ends of pipe and fittings.
- E. Install watertight bulkheads on exposed ends of pipe when pipe installation not in progress.
- F. Place in trench in sound, undamaged conditions; do not injure pipe coating or lining; use webbed sling to install or move pipe; do not use end hooks.
- G. Deflect pipe joints in accordance with manufacturer's recommendations; use suitable fittings where grade and alignment requires offsets of more than 1/2" per foot.
- H. Install pipe and appurtenances as shown on Standard Drawings.

3.2 Minimum Depth of Cover

- A. Standard Depth of Cover: Bury pipe and appurtenances with minimum 5 feet of cover from top of pipe to finish grade or bottom of street surfacing unless otherwise directed by Superintendent.
- B. Service Lines Below Street Surfacing: Bury pipe and appurtenances with minimum 4-1/2 feet of cover from top of pipe to bottom of street surfacing unless otherwise directed by Superintendent.

3.3 Ductile Iron Pipe Installation

- A. Install and join pipe in accordance with AWWA C600 and as specified.
- B. Cut pipe in neat and workmanlike manner without damage to pipe coating or lining.
 - 1. Grind smooth cut ends and rough edges.
 - 2. For push-on joints, bevel cut ends as recommended by manufacturer.
 - 3. Completely coat damaged ends of cuts with bituminous sealer recommended by manufacturer.
- C. Joining-Mechanical Joint Pipe:
 - 1. Thoroughly clean last 8" outside of the spigot and inside of bell to remove oil, grit, excess coating and other foreign matter.
 - 2. Soap end of pipe and slip gland on the spigot end of pipe with lip extension of gland towards socket, or bell end.
 - 3. Paint rubber gasket with soap solution or approved lubricant and place on the spigot with thick edge toward gland.
 - 4. Push entire section of pipe forward to seal the spigot in bell; press gasket in place.
 - 5. Bolt and tighten with torque limiting wrench; torque as follows:

<u>Size, Inch</u>	<u>Torque, Ft-Lb</u>
5/8	45- 60
3/4	75-90
1 ----	100-120
1 1/4	120-150

- 6. Tighten bolts alternately 180° apart to produce equal pressure on all parts of gland.
- D. Joining Push-on Joints Pipe:
 - 1. Thoroughly clean inside of bell and outside of spigot end to remove oil, grit, excess coating and other foreign material.
 - 2. Insert gasket as recommended by pipe manufacturer.
 - 3. Apply gasket lubricant as recommended by pipe manufacturer.

4. Place spigot end into socket with care to prevent joint from contacting ground; complete join by forcing plain end to the bottom of the socket; join with forked tool or jack-type tool; do not force home with backbone.

3.4 PVC Pipe Installation

- A. Install PVC Pipe in accordance with AWWA C605 and as specified.
- B. Cut pipe in neat and workmanlike manner without damage to pipe.
 1. Cut to provide smooth end at a right angle to the longitudinal axis of the pipe.
 2. Debur and bevel spigot end of pipe to match factory bevels and re-mark with insertion line.
- C. Clean immediately before assembly; joint and spigot end shall be free of dirt, sand, grit, grease, or any foreign material.
- D. Apply manufacturer approved lubricant to joint.
- E. Joining Push-on Joints:
 1. Assemble joints under conditions that ensure clean mating and sealing surfaces.
 2. Position gasket in annular groove of bell and insert spigot end of pipe into bell.
 3. Use only gaskets supplied by pipe manufacturer.
- F. Joining Mechanical Joints: Assemble joint in accordance with the fitting manufacturer's recommendation.

3.5 Carrier Pipe Installation in Casing

- A. Install carrier pipe in casing as shown on Standard Drawing and in manner to allow removal of pipe.
 1. Use restrained joint pipe.
- B. Wood Skids: Provide minimum of 4 skids banded in place at 90° axis points along full length of pipe, excluding bell and spigot at each end of pipe; round or bevel leading edges of skids and cut notches for banding.
 1. Provide and install wood skids of sufficient thickness to prevent bell from resting on casing.
- C. Casing Chocks: Casing chocks used in lieu of wood skids.
 1. Minimum number of chocks: At both sides of each joint (1/2 to 1 foot from joint) and at the following chock spacing.

Pipe Size <u>Inches</u>	Max. Support <u>Spacing, Ft.</u>
6	6.5
8	7.5
10	8.0
12	8.0

- D. Push or pull pipe in place by hand or equipment in slow, uniform manner to prevent damage to pipe or pipe joints; if pulled in place, attach wood cross member to cable to prevent damage to end of pipe.
- E. Install casing seals after installation of carrier pipe.

3.6 Installation in Uncased Hole

- A. Install carrier pipe in uncased hole using trenchless construction techniques, and in manner to prevent damage to pipe; use restrained joint pipe.
- B. Push or pull pipe in place in slow, uniform manner; do not jerk pipe in place.
- C. If pulled in place, attach wood cross member to cable to prevent damage to end of pipe.
- D. Install to minimize number of joints in hole.
- E. If excess annular space between wall of bore hole and pipe, fill voids or space with flowable mortar.

3.7 Valve Installation

- A. Install with stems vertical and centered in box, as shown on Standard Drawing.
- B. Check all valve bolts when installed; tighten as necessary after valves are in operation and up to operating pressure.
- C. Support valves as required.
- D. Carefully tamp earth around each valve box or manhole to distance of 4 feet on all sides of box or to undisturbed trench face, if less than 4 feet; install as shown on Standard Drawing.

3.8 Hydrant Installation

- A. Install Plumb; set at elevation so that cover will not be less than for adjacent main; set grade mark on hydrant barrel at finished ground level.
- B. Set on concrete foundation and backfill with clean granular fill as shown on Standard Drawing.
- C. Carefully tamp backfill around hydrant to a distance of 4 feet on all sides of hydrant or to undisturbed trench face, if less than 4 feet.
- D. Tighten all stuffing boxes as hydrant is installed; operate hydrant in open and closed position to assure all parts are in working condition.
- E. Block hydrant in place.
- F. Install as shown on Standard Drawing.
- G. Install extension section on hydrants as required to meet finish grade.

3.9 Polyethylene Encasement Installation

- A. Protect pipe, fittings and appurtenances as directed by Superintendent.
- B. Install polyethylene encasement as specified in AWWA C105 and as specified.
- C. Pipe:
 - 1. Place tube of polyethylene encasement on pipe prior to lowering into trench.
 - 2. Pull material of length of pipe and tape tube to pipe; fold material around the adjacent spigot end and wrap with tape to hold tube in place.
 - 3. Overlap first tube with adjacent and secure with tape.
 - 4. Neatly draw excess material around pipe barrel, fold on top and tape in place.
- D. Valves, Hydrants and Fittings:
 - 1. Wrap with two layers of sheet polyethylene material and extend minimum of one (1) foot beyond the fitting joints onto adjacent pipe and fasten with tape.
 - 2. Tape as necessary to hold wrap in place.

3.10 Thrust Block Installation

- A. Provide concrete thrust blocks where piping changes direction or deadends.
- B. Carry thrust block to undisturbed edge of trench for bearing.
- C. Minimum thickness of thrust blocks: 18".
- D. Bearing Area of Thrust Blocks, SF:

<u>Pipe Size</u> <u>(inches)</u>	<u>90 Degree Bend</u>	<u>45 Degree Bend</u>	<u>Deadend</u>
4	4	2	3
6	6	3	4
8	11	6	8
10	17	9	12
12	24	13	17
14	33	18	23
16	43	23	31
18	54	29	38
20	66	36	47
24	97	52	68

- E. Refer to Standard Drawing for general arrangement of thrust blocks; place plywood between fittings and thrust block; do not plug end of fitting with concrete.

3.11 Tracer Wire Installation

- A. Install tracer wire at all locations other than public rights-of-way or where directed by Superintendent.
- B. Install as shown on Standard Drawing.
- C. Install tracer wire on all water line services.

3.12 Service Installation

- A. Install service connection for each building or residence requiring meter; minimum size: 1" diameter.
- B. Extend service pipe from corporation stop and terminate at curb stop approximately six (6) feet from property line or street side of sidewalk.
- C. Install tapping saddle for services connecting to PVC water main.

3.13 Connections to Existing System

- A. Connect to existing system with tapping valve and sleeve unless otherwise approved by Superintendent.
- B. Contractor shall furnish all labor, equipment and material to make connection; Water Department will furnish tapping machine and make tap.

3.14 Protection of Water Supplies

- A. Minimum horizontal separation of water mains from gravity sewer; 10 feet, unless:
 - 1. Bottom of the water main is at least 18" above the top of the sewer.
 - 2. Water main is placed in a separate trench or in the same trench on a bench of undisturbed earth at a minimum horizontal separation of 3 feet from the sewer.
 - 3. Should physical conditions prevent required horizontal clearance of 3 feet and the vertical separation of 18" between water mains and sewer, replace sewer with water main materials, meeting a minimum pressure rating of 150 psi.
 - a. Linear separation of at least two feet shall be provided.
- B. Minimum horizontal separation of water mains from sewer force mains: 10 feet, unless:
 - 1. Force main is constructed of water main materials meeting a minimum pressure rating of 150 psi.
 - 2. Water main is laid at least four (4) linear feet from the sewer force main.
- C. Separation of Water Main and Sewer Crossovers:
 - 1. Vertical separation of water mains crossing over any sanitary sewer should be at least 18" when measured from the bottom of the water main to the top of the sewer; if physical conditions prohibit this separation, the water main shall not be placed closer than 6" above a sewer or 18" below a sewer.
 - a. The separation distance shall be the maximum feasible in all cases.
 - 2. Where the water main crosses a sewer, one full length of water pipe shall be located so both joints are as far as possible from the sewer.
 - a. Adequately support water and sewer pipes and provide watertight joints.
 - b. Use low permeability soil for backfill material within 10 feet of the point of crossing.
- D. Should physical conditions exist such that exceptions to specifications are necessary, the design engineer must detail how the water main and sewer installation are to be engineered to provide protection equal to that provided by these specifications.
- E. Separation from Sewer Manholes:
 - 1. No water pipe shall pass through or come in contact with any part of a sewer manhole.
 - 2. A minimum horizontal separation of 3 feet shall be maintained.

3.15 Water Crossings

- A. Surface Water Crossings: Pipe for above-water crossings shall be adequately supported and anchored, protected from damage and freezing, and accessible for repair or replacement.
- B. Underwater Crossings: A minimum cover of five feet shall be provided over the pipe. When crossing water courses which are greater than 15 feet in width, the following shall be provided:
 - 1. The pipe shall be of special construction, having flexible, restrained or welded watertight joints.
 - 2. Valves shall be provided at both ends of water crossings so that the section can be isolated for testing or repair; the valves shall be easily accessible, and not subject to flooding.
 - 3. Permanent taps or other provisions to allow insertion of a small meter to determine leakage and obtain water samples shall be made on each side of the valve closest to the supply source.
 - 4. The stream bank shall be seeded, sodded or otherwise protected from erosion upon completion of the project.

3.16 Tests

- A. Test all piping after installation in accordance to AWWA C600 after backfill and thrust restraints are in place.
- B. Isolate new piping from existing system.
- C. Hydrostatic Test:
 - 1. Fill and Flush main with potable water before test to remove air; insert taps to release trapped air.
 - 2. Test at 150 psi for 2 hours; allowable pressure drop during test period: 5psi.
- D. Leakage Test:
 - 1. Conduct leakage test concurrently with pressure test; measure water loss by pumping from drum or by similar means.
 - 2. Maximum allowable leakage (L) in gallons per hour:

Ductile Iron Pipe:

$$L = \frac{SD \times P}{133,200} \times \frac{1}{2}$$

S = Length of pipe tested in feet

D = Pipe nominal diameter in inches.

P = Average test pressure, psig

PVC Pipe:

$$L = \frac{ND \times P}{7,400} \times \frac{1}{2}$$

N = Number of joints in length of pipe being tested

D = Normal diameter of pipe, inches

P = Average test pressure, psig

- 3. Provide all test pumps, test plugs, pipe and gauges, and make all required piping connections.
- 4. Examine trench for leakage during test; replace all defective pipe and fittings that do not pass leakage test; repeat test until requirements have been met.
- 5. Leakage and hydrostatic tests can be conducted simultaneously.

3.17 Disinfection

- A. Arrange with Superintendent to notify customers in affected areas that service will be discontinued or water will be unpalatable during disinfection period.
- B. Disinfect by injecting a solution of calcium hypochlorite and water at slow rate to provide a minimum residual chlorine content of 10 ppm in water main after 24 hour period; allow system to stand full of solution for 24 hours; disinfect in accordance to AWWA C651, Section 5.2.

1. Placing of Calcium Hypochlorite Granules: Place granules at upstream end of first pipe upstream, upstream end of each branch main and at maximum 500 foot intervals; quantity of granules shall be as follows:

<u>Pipe Diameter, Inches</u>	<u>Granules, Ounces</u>
4	0.5
6	1.0
8	2.0
10	3.0
12	4.0

- C. Hypochlorite Tablet method may be used with approval of Superintendent and in accordance with AWWA C651, Section 5.1.

1. Place tablets to provide average free chlorine residual concentration of 25 ppm (mg/l); place tablets in each section of pipe, one tablet in each hydrant, hydrant branch and other appurtenances; minimum number of 5g tablets for each pipe section as follows:

<u>Pipe Diameter, In.</u>	<u>Length of Pipe, Ft.</u>		
	<u>13 or Less</u>	<u>18</u>	<u>20</u>
4	1	1	1
6	1	1	1
8	1	2	2
10	2	3	3
12	3	4	4

- D. Minimum free chlorine residual at pipe extremities: 10 ppm at end of test period; if requirement is not met, repeat disinfection procedure.
- E. Operate all valves and hydrants in new main to assure full disinfection; repeat test procedure if necessary.
- F. Thoroughly flush main after test until extremities indicate same chlorine residual as supply water.
 1. Dispose of heavy chlorination to protect environment, neutralize with chemicals listed in AWWA C651 if potential for environmental damage exists.

3.18 Bacteriological Tests

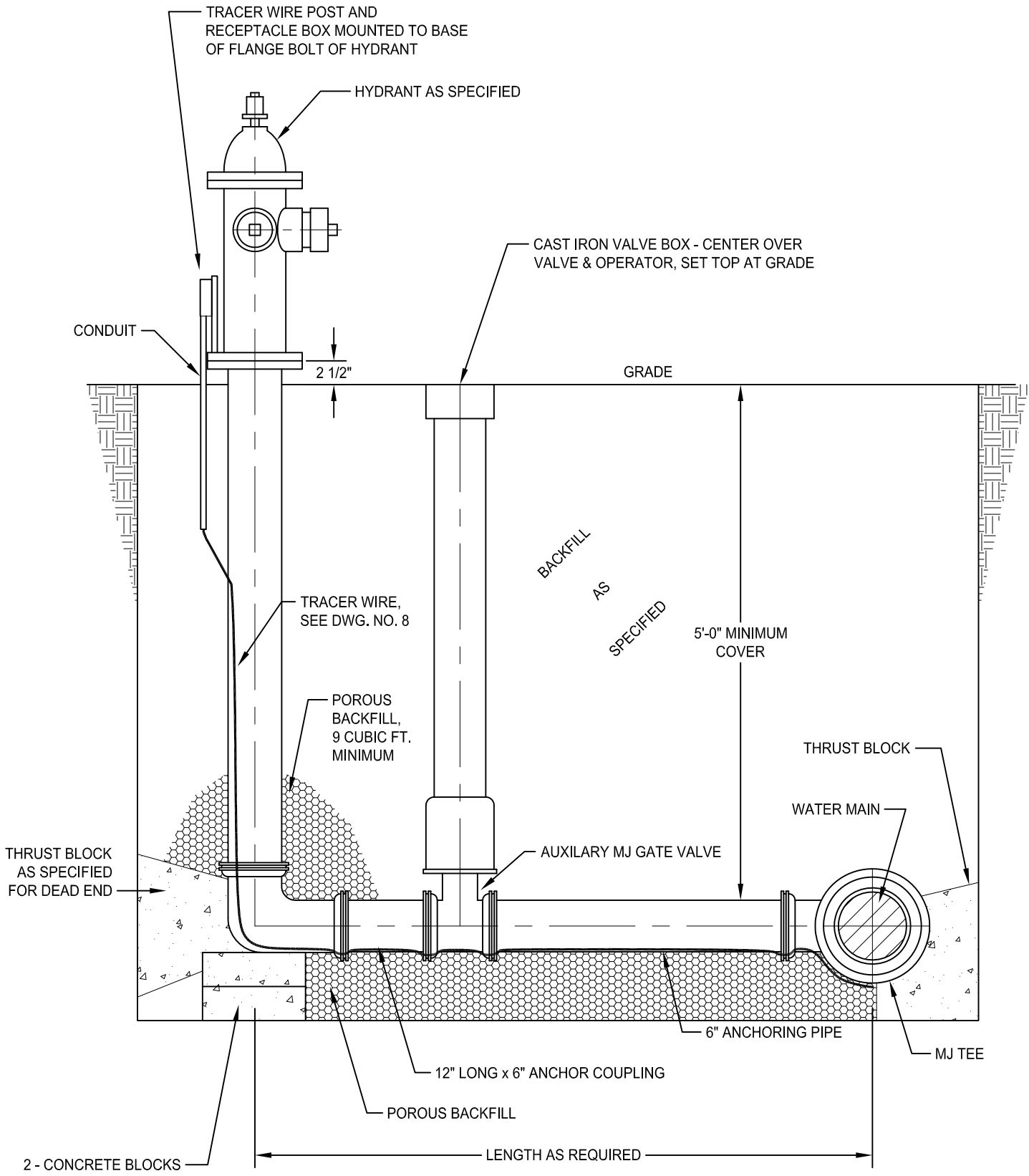
- A. Five (5) days after completion of disinfection, Superintendent will collect a bacteriological sample from section of main disinfected.
- B. Sample must test "SAFE"; if a sample tests "UNSATISFACTORY" or "UNSAFE", repeat disinfection procedure until sample tests "SAFE".
- C. Contractor provide sample containers and pay costs for testing and transportation.
- D. After final flushing and before the new water main is connected to the distribution system, two consecutive sets of acceptable samples, taken at least 24 hours apart, shall be collected from the new main. At least one set of samples shall be collected from every 1,200 ft of the new water main, plus one set from the end of the line and at least one set from each branch. All samples shall be tested for bacteriological (chemical and physical) quality in accordance with Standard Methods for the Examination of Water and Wastewater.

3.19 Lead and Steel Services

- A. Contractor shall notify Oskaloosa Municipal Water Department when existing lead or steel services are encountered.

- End of Division 3 -

STANDARD DRAWINGS

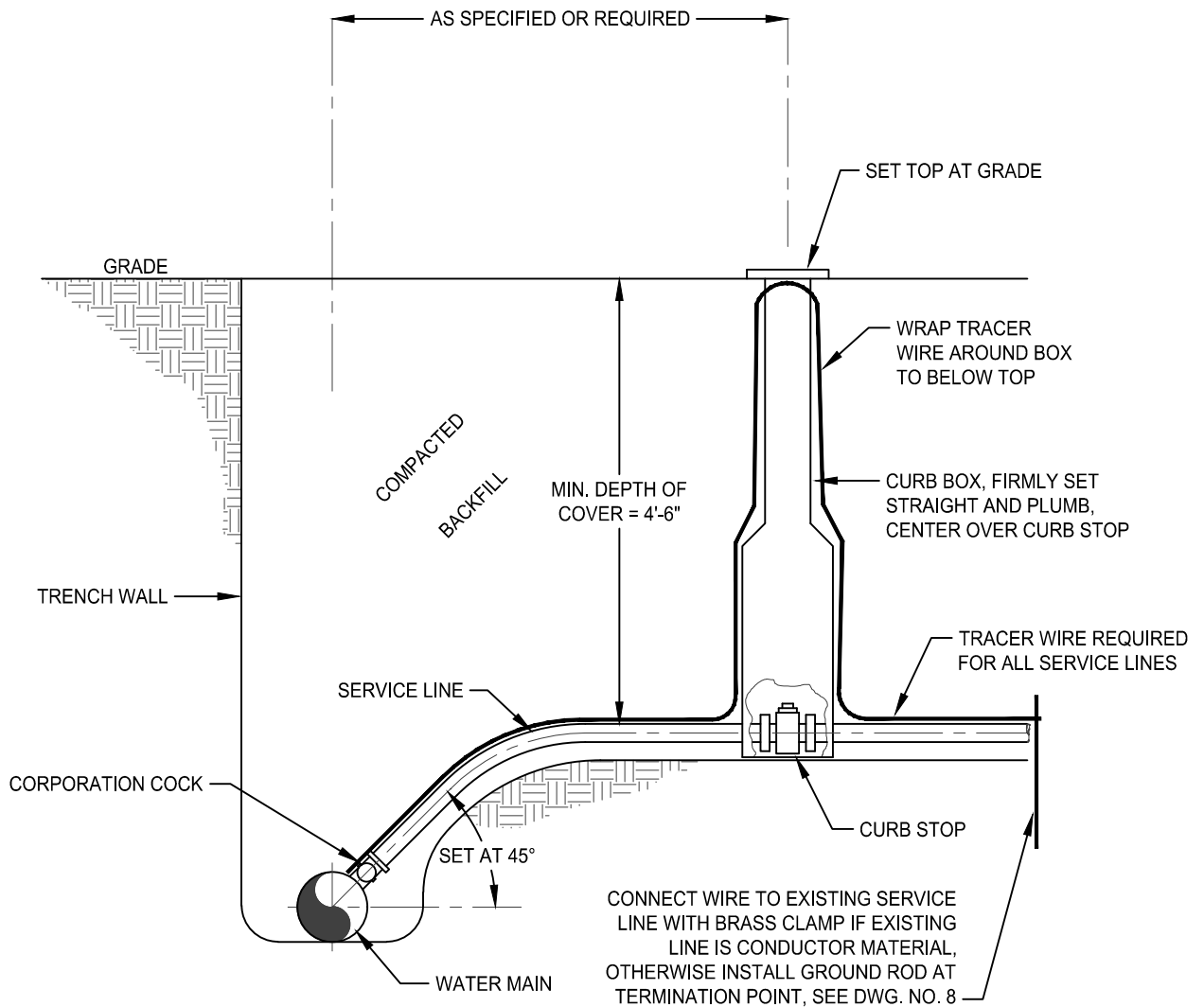


OSKALOOSA MUNICIPAL WATER DEPARTMENT

REVISIONS		
REV.NO.	DATE	DESCRIPTION

G GARDEN & ASSOCIATES, LTD.
 ENGINEERS & SURVEYORS
 OSKALOOSA, IOWA 641-672-2526

HYDRANT INSTALLATION		
DATE: 03/11	DRN. KJR	APP. JP
DWG. NO. 4	REV.	

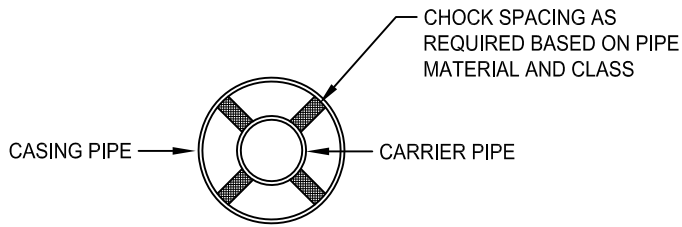


NOTES:

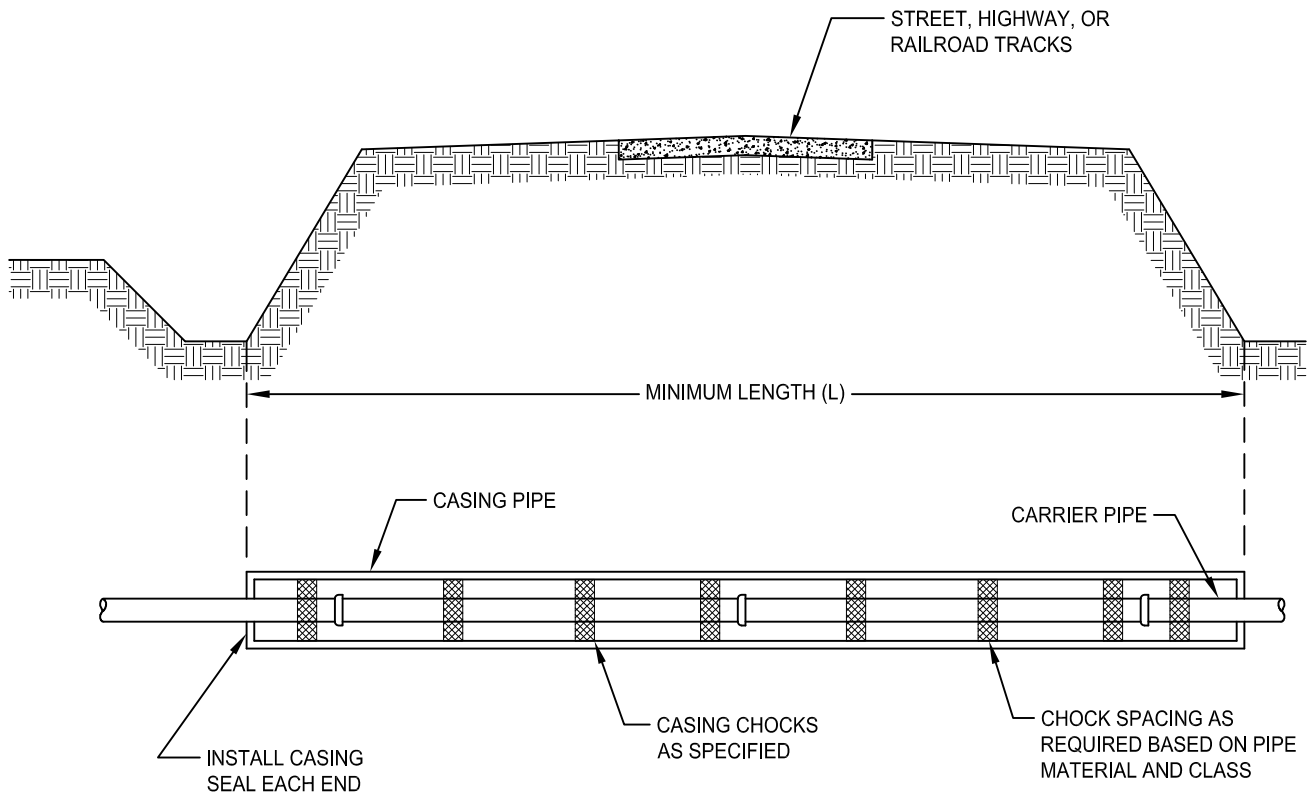
1. PVC WATER MAIN: PROVIDE AND INSTALL SERVICE SADDLE AS SPECIFIED.
2. DUCTILE IRON WATER MAIN: DIRECT TAP OR PROVIDE SADDLE FOR SERVICE.
3. IF SERVICE IS BELOW STREET SURFACING, PROVIDE MINIMUM 4'-6" OF COVER FROM BOTTOM OF SURFACING TO TOP OF SERVICE PIPE.
4. INSTALL TRACER WIRE AS SHOWN (TRACER WIRE FOR SERVICE LINES SHALL BE CONTINUOUS WITH TRACER WIRE FOR WATER MAIN).

OSKALOOSA MUNICIPAL WATER DEPARTMENT

REVISIONS			GARDEN & ASSOCIATES, LTD. ENGINEERS & SURVEYORS <small>OSKALOOSA, IOWA 641-672-2526</small>		SERVICE CONNECTION		
REV.NO.	DATE	DESCRIPTION			1" TO 2"		
			DATE: 03/11	DRN. KJR	APP. JP		
			DWG. NO. 5	REV. 1/19			



END SECTION



NOTES:

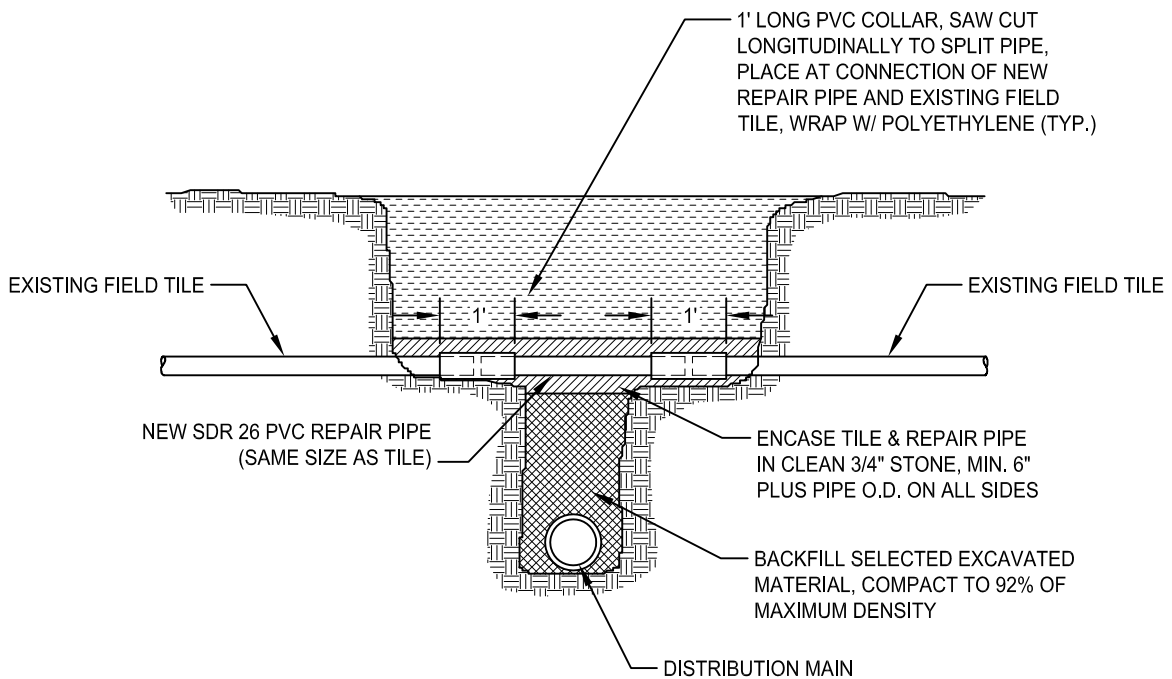
1. USE CASKING CHOCKS AS SPECIFIED.
2. CAP ENDS WITH CASKING SEAL AS SPECIFIED.
3. MINIMUM LENGTH (L):
 RAILROAD R.O.W.: AS REQUIRED BY PERMITTING RAILROAD AUTHORITY.
 HIGHWAY R.O.W.: R.O.W. TO R.O.W. UNLESS OTHERWISE ALLOWED BY I.D.O.T.
 COUNTY R.O.W.: AS REQUIRED BY MAHASKA COUNTY.
 CITY STREETS: AS REQUIRED BY CITY OF OSKALOOSA.

OSKALOOSA MUNICIPAL WATER DEPARTMENT

REVISIONS		
REV.NO.	DATE	DESCRIPTION

G GARDEN & ASSOCIATES, LTD.
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CASKING DETAIL			
DATE: 03/11	DRN. KJR	APP. JP	
DWG. NO. 6		REV.	



OSKALOOSA MUNICIPAL WATER DEPARTMENT

REVISIONS		
REV.NO.	DATE	DESCRIPTION

G GARDEN & ASSOCIATES, LTD.
ENGINEERS & SURVEYORS
OSKALOOSA, IOWA 641-672-2526

TYPICAL FIELD TILE CROSSING		
DATE: 03/11	DRN. KJR	APP. JP
DWG. NO. 7	REV.	