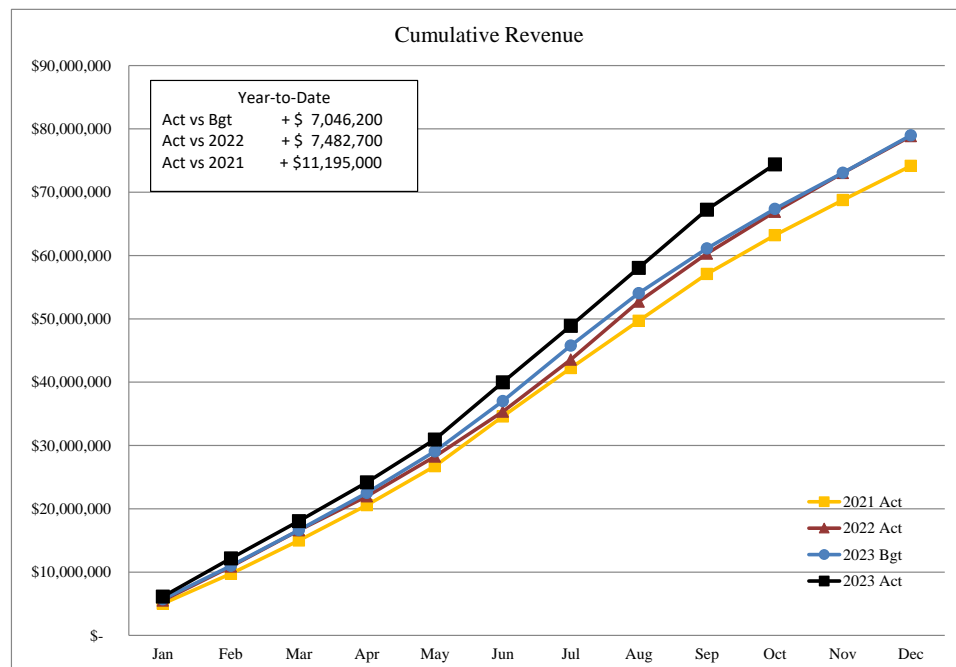
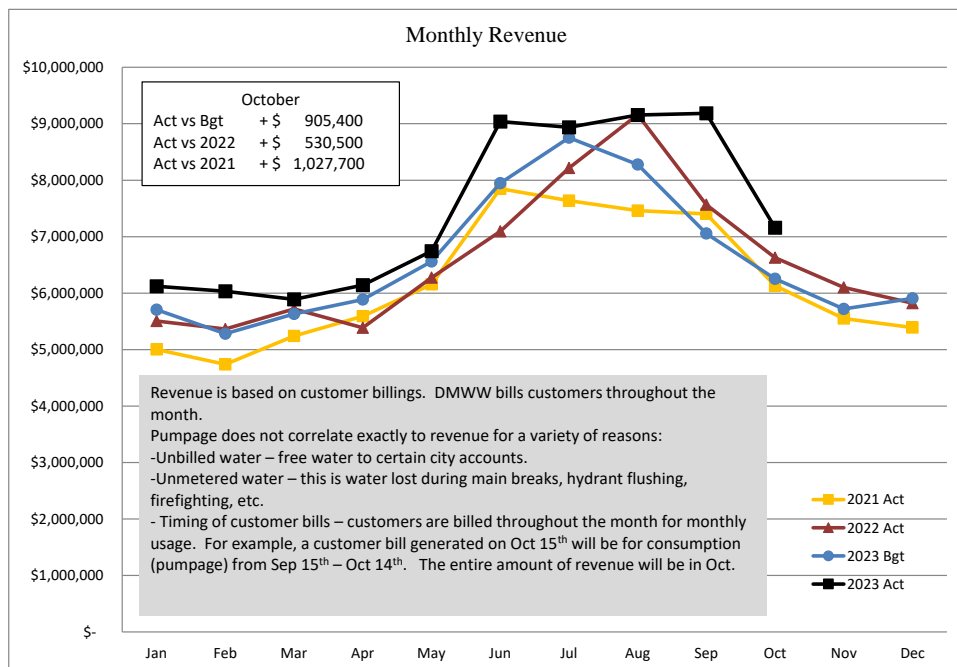
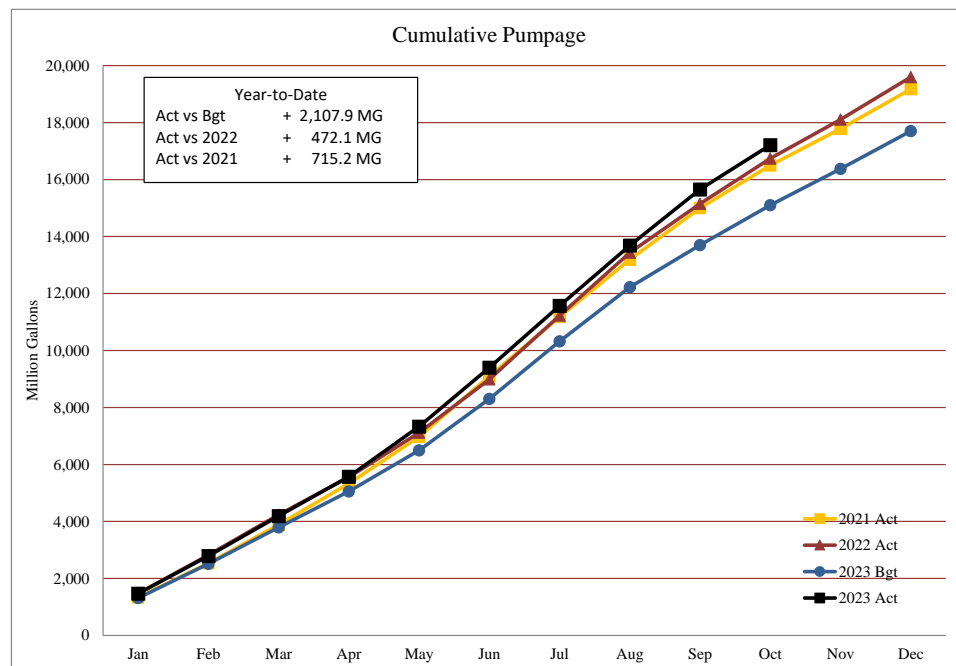
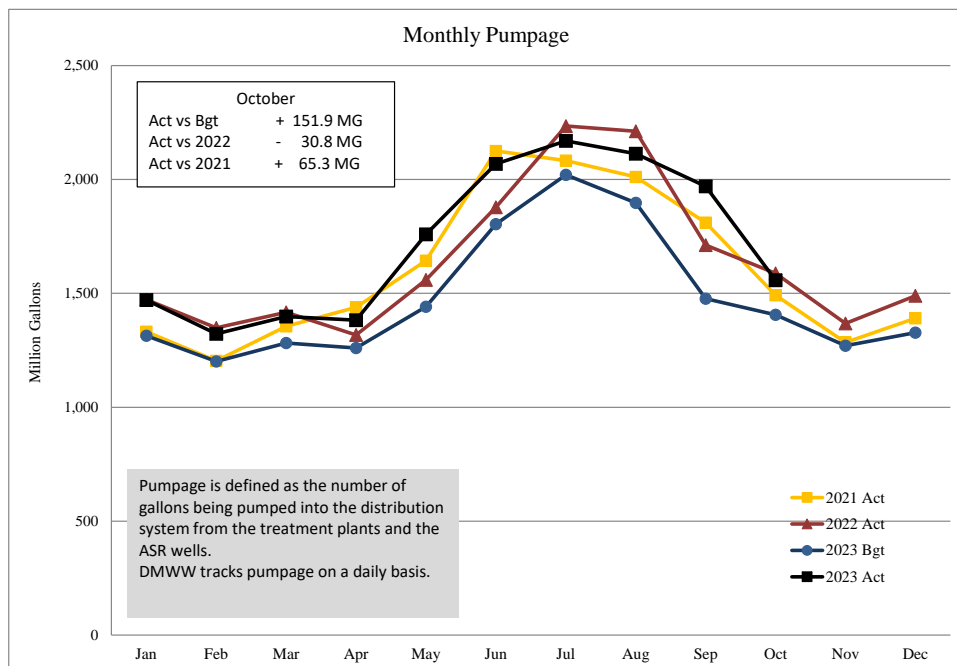


Pumpage & Revenue Graphs October, 2023



MEETING
Board of Water Works Trustees
Des Moines Water Works
November 28, 2023
2201 George Flagg Parkway
3:30 p.m.

Join Zoom Meeting
<https://us02web.zoom.us/j/83999395326?pwd=WEtmbGtMM1Jqazg1VTJreGhrcnl1Zz09>

Meeting ID: 839 9939 5326 Passcode: 786380

Decision Agenda

I. Consent Agenda:

- A. Minutes, October 31, 2023, Board of Water Works Trustees Meeting
Minutes, November 7, 2023, Finance and Audit Committee Meeting
Minutes, November 14, 2023, Planning Committee Meeting
- B. Financial Statements
- C. List of Payments for October 2023
- D. Summary of CEO-Approved Expenditures in Excess of \$40,000
- E. Next Meeting Date – December 19, 2023

II. Public Comment Period:

- Regional Governance

III. Action Items:

- A. Proposed 2024 Budget
 - 1. Public Hearing
 - 2. Discussion
 - 3. Action on Proposed Budget
- B. 2024 Water Treatment Chemicals
 - 1. Analysis of Bids
 - 2. Award of Contracts
- C. Request Authorization for CEO and General Manager to Execute Agreement for Outsourcing the Printing and Inserting of Des Moines Water Works' Customer Bills, Notices, and Letters
- D. Des Moines Water Works' Rules and Regulations Update
- E. Request Authorization to Execute a Service Territory Transfer Agreement with Warren Water District

- F. Resolution Conditionally Authorizing the Inclusion of Board of Water Works Trustees of The City of Des Moines, Iowa as a Founding Agency of Central Iowa Water Works and Setting Public Hearing on Transfer of Assets
- G. Proposed 2024 Schedule for Board of Water Works Trustees Meetings and Committee Meetings
- H. IDOT Polk 35-80 Hickman Interchange
 - 1. Public Hearing
 - 2. Adoption of Form of Contract, Plans and Specifications, and Estimated Cost
 - 3. Analysis of Bids Received
 - 4. Award of Contract and Authorization to Execute Contract
- I. 2023 MWTP Chemical Feed Improvements
 - 1. Public Hearing
 - 2. Adoption of Form of Contract, Plans and Specifications, and Estimated Cost
 - 3. Analysis of Bids Received
 - 4. Award of Contract and Authorization to Execute Contract
- J. Request Authorization for CEO and General Manager to Execute Agreements for Professional Services for UF Membrane Pilot Skid Testing
- K. Request the Permission to Establish the Date of the Public Hearing for Ground Lease Agreement with USCOC of Greater Iowa, LLC., at Tenny Standpipe as the Date of the January Board Meeting
- L. Request Permission to Issue a Purchase Order for Parts and Repairs of the Des Moines River Intake Gates
- M. Request Authorization to Solicit Bids for Saylorville Water Treatment Plant (SWTP) West Feeder Main Phase 3 and Establish the Date of the Public Hearing as the Date of the January 2024 Board Meeting
- N. Request Authorization for CEO and General Manager to Execute Professional Services Agreement with Snyder & Associates, Inc., for 2023 Des Moines Water Main Replacement – Contract 5
- O. Acquisition of Easement Saylorville Water Treatment Plant (SWTP) West Feeder Main Phase 3 from Johnston Golf Development, LLC

IV. Information Items:

- A. Board Committee Reports
 - Finance and Audit Committee
 - Planning Committee
 - Greater Des Moines Botanical Garden Board
 - Des Moines Water Works Park Foundation Board
- B. CEO and General Manager’s Comments
- C. Safety Update
- D. Contract Status and Professional Services Agreements

OSHA Recordable Injuries YTD: 6	
Motor Vehicle Injury:	1
Strain/Sprain:	5

V. Adjournment

Schedule of Board Activities – December Time: 3:30 p.m.		
<u>Date</u>	<u>Location</u>	<u>Meeting</u>
December 5	Board Room & Virtual	Finance & Audit Committee Meeting
December 12	Board Room & Virtual	Planning Committee Meeting
December 19	Board Room & Virtual	Board of Water Works Trustees

AGENDA ITEM FORM

SUBJECT: Consent Agenda

SUMMARY:

- A. Minutes, October 31, 2023, Board of Water Works Trustees Meeting
Request: Approve October 31, 2023, Minutes
Minutes, November 7, 2023, Finance and Audit Committee Meeting
Request: Approve November 7, 2023, Minutes
Minutes, November 14, 2023, Planning Committee Meeting
Request: Approve November 14, 2023, Minutes
- B. Financial Statements
- At October 2023, total assets of the Des Moines Water Works were \$499.8 million, liabilities totaled \$45.8 million, deferred outflows totaled \$11.6 million, deferred inflows totaled \$11.1 million and contributions and retained earnings were \$454.5 million.
 - Total operating revenue for the month of October was \$7.7 million. Expenses (operating and non-operating) for the month were approximately \$5.6 million, leaving net earnings of approximately \$2.1 million.
 - **Request:** Receive and File for Audit the October 2023 Financial Statements.
- C. List of Payments for October 2023
Request: Approve October 2023 payments
- D. Summary of CEO-approved expenditures in excess of \$40,000
Request: Approve the CEO-approved expenditures in excess of \$40,000
- E. Next Meeting Date – December 19, 2023
Request: Approve December 19, 2023, as the date of the next meeting of the Board of Water Works Trustees.

FISCAL IMPACT:

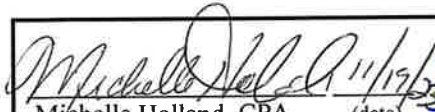
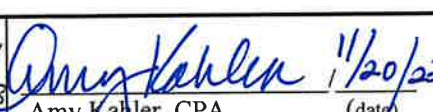
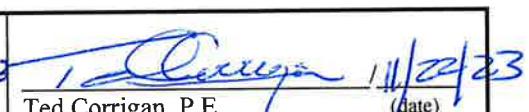
No impact to budget.

RECOMMENDED ACTION:

Approve Consent Agenda Items A, B, C, D, and E.

BOARD REQUIRED ACTION:

Motion to approve Consent Agenda.

 Michelle Holland, CPA Controller (date) <u>11/19/23</u>	 Amy Kahler, CPA Chief Financial Officer (date) <u>11/20/23</u>	 Ted Corrigan, P.E. CEO and General Manager (date) <u>11/22/23</u>
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Attachments: October 31, 2023, Board of Water Works Trustees Meeting Minutes; November 7, 2023, Finance and Audit Committee Meeting Minutes; November 14, 2023, Planning Committee Meeting; September 2023 Financial Statements; List of Payments; Summary of CEO-approved expenditures in excess of \$40,000

**MINUTES OF CALLED MEETING OF THE BOARD OF WATER WORKS TRUSTEES
PURSUANT TO NOTICE
Tuesday, October 31, 2023**

Present (or Participating by Video or Audio Conference Link):

Board Members: Chairperson Ms. Andrea Boulton, presiding; Mr. Alec Davis, Mr. Graham Gillette, Ms. Susan Huppert, and Ms. Diane Munns

Staff members: Rick Baldon, Scott Bierman, Pat Bruner, Caitlin Caldwell, Nathan Casey, Ted Corrigan, Kyle Danley, Doug Garnett, Amy Kahler, Mike McCurnin, Jenny Puffer, Laura Sarcone, Michelle Watson, and Dylan White

Also in attendance: John Lande and Rick Malm (legal counsel)

Chairperson Ms. Andrea Boulton called the meeting to order at 3:30 p.m.

Consent Agenda

A motion was made by Mr. Gillette, seconded by Ms. Huppert, to approve Consent Items A, B, C, D, and E (Approval of Minutes, September 26, 2023, Board of Water Works Trustees Meeting; Minutes, October 3, 2023, Finance and Audit Committee Meeting; Minutes, October 10, 2023, Planning Committee Meeting; Receipt and filing of the financial statements for audit purposes; Approval of Payments for September 2023; Approval of Summary of CEO-Approved Expenditures in Excess of \$40,000; and Approval of November 28, 2023, as the next meeting of the Board of Water Works Trustees). Upon vote, the motion was adopted, with each member of the Board listed above as present voting in favor of the motion.

Public Comment Period

Regional Governance - Mr. Corrigan provided an update on regionalization.

2024 Corporate Insurance

Proposed 2024 insurance coverages and premiums were presented. As proposed, DMWW's corporate insurance renewal rates for 2024 will increase from \$1,247,361 (for 2023) to \$1,368,441.

A motion was made by Mr. Gillette, seconded by Ms. Munns to accept insurance program renewal submitted by AssuredPartners as presented. Upon vote, the motion was adopted, with each member of the Board voting in favor of the motion.

Receive and File Cost of Service Report

At the recommendation of Raftelis, DMWW has been using a forward-looking revenue requirements Cost of Service model. Staff has input the proposed 2024 budget into the Raftelis Cost of Service model. The result of that analysis is the basis for the 2024 rate setting discussions and was the basis for rates presented at the October 2023 Finance & Audit Committee Meeting.

Staff has prepared an executive summary report of the cost of service results using the 2024 budget numbers. Figure 14 summarizes the cost of service (budget) and anticipated revenues (rates) by service area. The Raftelis model assigns the costs attributable to peaking based on the demands each customer places on the system and calculates costs for wholesale customers as a class, as well as by individual wholesale customer. While we use actual peaking data for each wholesale customer, the model uses a calculated peak day to allocate costs to the retail and full service customer classes.

Figure 14: Cost of Service Results

<u>Customer</u>	<u>Cost of Service</u>	<u>4/1 Proposed Rate Increase</u>	<u>2024 Projected Revenue</u>	<u>COS Recovery</u>
Retail				
Des Moines Inside City	\$ 39,193,127	6%	\$ 38,096,872	97%
Des Moines Outside City	2,776,039	10%	1,402,777	51%
Total: Retail	\$ 41,969,167		\$ 39,499,649	94%
Full Service				
Polk County	\$ 7,040,886	6%	\$ 7,840,259	111%
Runnells	170,884	6%	180,601	106%
Cumming	149,091	6%	151,030	101%
Alleman	108,515	6%	136,741	126%
Pleasant Hill Inside City	3,004,447	6%	3,130,036	104%
Pleasant Hill Outside City	5,614	10%	3,882	69%
PCRWD	189,598	10%/\$1 Avail Inc	170,876	90%
Berwick	262,243	10%/\$1 Avail Inc	188,513	72%
Windsor Heights	954,049	6%	1,067,435	112%
Less: Future FS Capital Costs	(2,091,160)			
Total: Full Service	\$ 9,794,166		\$ 12,869,373	131%
Wholesale - PC				
Altoona	\$ 180,200	6%	\$ 40,280	22%
Ankeny	6,378,107	6%	7,648,726	120%
Bondurant	628,720	6%	690,627	110%
Clive	2,650,707	6%	2,428,718	92%
Norwalk	1,402,717	6%	1,237,379	88%
Waukee	2,522,730	6%	2,376,923	94%
Urbandale	6,641,319	6%	5,853,085	88%
Warren Rural Water	1,985,883	6%	2,175,492	110%
West Des Moines	4,274,685	6%	3,274,735	77%
Xenia	2,135,498	6%	2,503,528	117%
Polk City	504,774	6%	402,865	80%
Total: Wholesale - PC	\$ 29,305,339		\$ 28,632,358	98%
Wholesale with Storage				
West Des Moines - Storage	\$ 110,175	3%	\$ 30,372	28%
Johnston	3,566,096	3%	3,697,979	104%
Water Development Co	68,319	3%	83,532	122%
Total: Wholesale with Storage	\$ 3,744,591		\$ 3,811,883	102%
Total: Utility	\$ 84,813,263		\$ 84,813,263	100%

Staff will distribute the cost of service report to wholesale and Total Service customers once accepted by the Board of Trustees.

A motion was made by Mr. Gillette, and seconded by Mr. Davis, to receive and file the Cost of Service Study. Upon vote, the motion was adopted, with each member of the Board voting in favor of the motion.

Approval of Proposed 2024 Water Rates

Proposed 2024 water rates were discussed at the October Finance and Audit Committee meeting

Retail Rates

Staff recommends a 6% rate increase for Des Moines and most other retail customers, with a few exceptions as detailed in the board materials. Based on Cost of Service cost recovery percentages, staff recommends a 10% increase for Des Moines Outside City customers, Polk County Rural Water District, and Berwick service area. Staff recommends no increases in capital improvement fees or water availability charges for 2024.

Wholesale Rates

Staff recommends maintaining the current rate structure for 2024 wholesale rates. In light of Cost of Service results also discussed at Finance & Audit, staff recommends a 6% increase in the wholesale Purchased Capacity rate, and a 3% increase in the wholesale With Storage rate. Rates for all customer classes have significantly improved in their alignment with costs since 2020, when DMWW began a 3-year phase in of rate adjustments to more closely align revenues with the costs to serve each customer class.

Water rates and capital improvement fees by customer class are summarized in the attachment. Water availability charges by service territory and meter size are also summarized. Proposed rates will take effect April 1, 2024.

A motion was made by Ms. Munns, seconded by Mr. Gillette to approve the proposed rates as presented to be effective for all water bills issued on or after April 1, 2024, and to direct staff to publish the adopted rates as provided by law as follows:

	2023 Rate Per 1,000 Gallons	2024 Rate Per 1,000 Gallons	Increase	Percent Increase	Dollar Monthly Increase for Avg. Home With:	
					2 Person 3,750 gal	4 Person 7,500 gal
Des Moines Inside City						
Residential (Step 1)	\$5.64	\$5.98	\$0.34	6.00%	\$1.28	\$2.55
Commercial (Step 2)	3.79	4.02	0.23	6.00%		
Industrial (Step 3)	2.91	3.08	0.17	6.00%		
Capital Improvement Fee						
Step 1	\$0.25	\$0.25	\$0.00	0.00%	\$0.00	\$0.00
Step 2	0.17	0.17	0.00	0.00%		
Step 3	0.13	0.13	0.00	0.00%		
Des Moines Outside City						
Residential (Step 1)	\$6.82	\$7.50	\$0.68	10.00%	\$2.55	\$5.10
Commercial (Step 2)	5.13	5.64	0.51	10.00%		
Industrial (Step 3)	3.66	4.03	0.37	10.00%		
Off Peak	3.03	3.33	0.30	10.00%		
Polk County						
Residential (Step 1)	\$11.12	\$11.79	\$0.67	6.00%	\$2.51	\$5.03
Commercial (Step 2)	6.80	7.21	0.41	6.00%		
Industrial (Step 3)	5.31	5.63	0.32	6.00%		
Capital Improvement Fee						
Step 1	\$1.50	\$1.50	\$0.00	0.00%	\$0.00	\$0.00
Step 2	0.92	0.92	0.00	0.00%		
Step 3	0.71	0.71	0.00	0.00%		
Pleasant Hill						
Residential (Step 1)	\$10.34	\$10.96	\$0.62	6.00%	\$2.33	\$4.65
Commercial (Step 2)	8.72	9.24	0.52	6.00%		
Outside City	17.72	19.49	1.77	10.00%	\$6.64	\$13.28
Windsor Heights	\$5.75	\$6.10	\$0.35	6.00%	\$1.31	\$2.63
Capital Improvement Fee	2.00	2.00	0.00	0.00%	\$0.00	\$0.00
PCRWD #1	\$5.42	\$5.96	\$0.54	10.00%	\$3.03	\$5.05
Berwick	\$4.62	\$5.08	\$0.46	10.00%	\$2.73	\$4.45
Runnells						
Water	\$9.35	\$9.91	\$0.56	6.00%	\$2.10	\$4.20
Waste Water	10.14	10.75	0.61	6.00%	\$2.29	\$4.58
Cumming	\$9.64	\$10.22	\$0.58	6.00%	\$2.18	\$4.35
Alleman	\$11.45	\$12.14	\$0.69	6.00%	\$2.59	\$5.18
Wholesale						
Purchased Capacity	\$3.39	\$3.59	\$0.20	6.00%		
With Storage	\$4.57	\$4.71	\$0.14	3.00%		

Upon vote, the motion was adopted, with each member of the Board voting in favor of the motion.

Proposed 2024 Budget – Establish Public Hearing as the Date of the November 2023 Board Meeting

The Board conducts a public hearing on its annual budget each year before considering its adoption. A motion was made by Mr. Gillette, seconded by Ms. Huppert, to establish the date of a Public Hearing on the Proposed 2024 Budget as the date of the November 2023 Board meeting and to direct staff to publish notice of such public hearing as set forth in the Des Moines Water Works Board Policy Manual. Upon vote, the motion was adopted, with each member of the Board voting in favor of the motion.

Resolution of Intent to Participate and Authorizing the Inclusion of the Des Moines Water Works in Final Draft Agreement Establishing Central Iowa Water Works

Discussions to form a regional production utility, Central Iowa Water Works (CIWW) have been occurring in earnest since 2017, when representatives from Des Moines Water Works, Urbandale Water Utility and West Des Moines Water Works launched a study into regional governance options. A national financial consultant specializing in utility management was retained. A group representing communities across the metro met in open meetings throughout 2018 and 2019. Throughout 2022 and 2023, several drafts of a 28/28F Agreement have been distributed, revised, and edited based on comments received from all potential members. On September 15th, 2023, the 3rd & Final Draft of the CIWW 28E/28F was distributed and is being reviewed for finalization and creation of an Execution 28E/28F.

A motion was made by Mr. Gillette and seconded by Ms. Huppert, to pass the Resolution of Intent to Participate and Authorizing the Inclusion of the Des Moines Water Works in Final Draft Agreement Establishing Central Iowa Water Works. Upon vote, the motion was adopted, with each member of the Board listed above as present voting in favor of the motion.

Approval of Settlement of Main Break Lawsuit

On April 5-6, 2022, Halbrook Excavating, Inc. and Iowa Trenchless, LLC were boring underneath NE 14th Street between NE 54th Avenue and NE 58th Avenue. The boring made contact with a critical 24-inch concrete feeder main and caused a break. Des Moines Water Works (DMWW) incurred approximately \$150,000 in costs to complete an emergency main break repair and manage a variety of operational adjustments related to this feeder main being out of service.

DMWW filed a lawsuit against Halbrook and Trenchless in December 2022 to recover damages for the break. After mediation in September 2023, Halbrook and Trenchless have proposed to pay DMWW \$100,000 in exchange for mutual releases of claims. Staff recommends accepting the settlement on these terms.

A motion was made by Mr. Gillette and seconded by Ms. Huppert, to accept the settlement proposal and authorize staff to execute settlement and release agreement with Halbrook and Trenchless. Upon vote, the motion was adopted, with each member of the Board listed above as present voting in favor of the motion.

Acceptance of Gallery Valve Chamber Structures Reconstruction – Phase 2

At its May 2022 Board meeting, the Board of Water Works Trustees awarded a contract to Nate Todd Construction, LLC, in the amount of \$498,750 for the Gallery Valve Chamber Structures Reconstruction – Phase 2 project. All work associated with this contract has been satisfactorily completed. The project was completed for the original contract sum without need for change orders. The final contract price for the Gallery Valve Chamber Structures Reconstructions – Phase 2 project is \$498,750.

A motion was made by Mr. Gillette and seconded by Ms. Munns, to accept the Gallery Valve Chamber Structures Reconstruction – Phase 2 project, completed by Nate Todd Construction, LLC. in the amount of \$498,750. Upon vote, the motion was adopted, with each member of the Board voting in favor of the motion.

Request Authorization to Execute the First Amendment Chapter 28E Agreement with the City of Ankeny for Construction and Funding of the Saylorville Water Treatment Plant North Feeder Main

In January of 2007, Des Moines Water Works (DMWW) and the City of Ankeny (Ankeny) executed a 28E agreement calling for the design and construction of Water Utility Improvements which primarily included a 24-inch feeder main along NW 26th St. from NW 66th Ave. to SW Oralabor Road. DMWW staff have referred to this feeder main as the Saylorville Water Treatment Plant North Feeder Main. DMWW and Ankeny, per the 28E agreement, shared capacity in the 24-inch feeder main and the agreement defined a proper cost-share. Other elements of the agreement called for design and construction of assets to be used for the sole benefit of Ankeny. Ankeny paid fully for those elements of the agreement.

Staff approached Ankeny in 2022 to discuss fair compensation for DMWW to surrender to Ankeny its capacity in the original 24-inch feeder main. The amount of \$603,150 was agreed upon, if Ankeny paid within the 2023 calendar year. The First Amendment to the Chapter 28E Agreement with the City of Ankeny for Construction and Funding of the Saylorville Water Treatment Plant North Feeder Main documents the \$603,150 amount and further clarifies issues related to existing and future taps, on-going operations and maintenance, and ownership details. Staff and legal counsel from DMWW and Ankeny have reviewed the proposed amendment.

A motion was made by Ms. Munns and seconded by Mr. Davis, to authorize the Chairperson to execute the First Amendment to the Chapter 28E Agreement with the City of Ankeny for Construction and Funding of the Saylorville Water Treatment Plant North Feeder Main project. Upon vote, the motion was adopted, with each member of the Board voting in favor of the motion.

Request Authorization for CEO and General Manager to Execute Professional Services Agreement with Snyder & Associates, Inc., for Construction Services for the Des Moines Water Works Grounds Maintenance Facility

At its June 2023 meeting, the Board of Water Works Trustees authorized staff to solicit bids for the Des Moines Water Works Grounds Maintenance Facility project. Eight (8) bids were received and analyzed, and a contract was awarded to Henkel Construction in the amount of \$3,780,900 at the August 2023 Board meeting.

Des Moines Water Works (DMWW) normally uses its own staff to perform construction inspection on such projects. With more aggressive capital spending occurring at DMWW, staff would prefer to acquire construction inspection on this project from an outside resource. This decision will help preserve construction inspection type hours for water main replacement efforts.

A motion was made by Mr. Davis and seconded by Ms. Huppert, to authorize the CEO and General Manager to execute a Professional Services Agreement with Snyder & Associates, Inc., in the amount of \$111,322 for Construction Services for the Des Moines Water Works Grounds Maintenance Facility. Upon vote, the motion was adopted, with each member of the Board voting in favor of the motion.

Request Permission to Establish the Date of Public Hearing for Environmental Review of Aquifer Storage and Recovery (ASR) Well as the Date of the December 2023 Board Meeting

At its December 2022 meeting, the Board of Water Works Trustees authorized the CEO and General Manager to execute a Professional Services Agreement with Strand Associates, Inc., for the 2023 Aquifer Storage and Recovery (ASR) Well design. Strand Associates, Inc., will also provide engineering consulting services throughout the course of construction of the project.

DMWW proposes to further improve its operations by designing and constructing an additional ASR well facility at the Polk County Pumping Station. The project costs are intended to be funded or reimbursed through a loan from the State Revolving Fund (SRF). As a part of the SRF loan application process, the Iowa Department of Natural Resources (IDNR) performs an environmental review for the project. Once the environmental review is completed, the borrower must hold a public hearing to inform the public of the project impacts and provide a forum for the public to present comments. The IDNR has completed the environmental review for the proposed ASR well project and issued an Environmental Information Document (EID) that concluded the project would pose no significant impact.

A motion was made by Ms. Munns and seconded by Mr. Davis, to establish the date of the December 2023 Board meeting as the date of Public Hearing for environmental review of the Aquifer Storage and Recovery (ASR) Well project. Upon vote, the motion was adopted, with each member of the Board voting in favor of the motion.

Request Authorization for CEO and General Manager to Execute Amendment No. 2 to the Professional Services Agreement with HDR Engineering, Inc., for Saylorville Water Treatment Plant Capacity Expansion Design and Construction Services

Staff prepared a Request For Proposals (RFP) for completing the design, bidding support, and construction support of the source, treatment, and finished water pumping elements associated with the 10 MGD expansion at the Saylorville Water Treatment Plant (SWTP). One proposal was received on November 3, 2022, and reviewed by staff. Since this will be considered a regional asset, staff and the CIWW (Central Iowa Water Works) TC (Technical Committee) reviewed the proposal and agreed that the HDR Engineering, Inc. (HDR), and Black & Veatch team were certainly qualified and capable of performing this work. At the December 20, 2022, Board meeting, the CEO and General Manager was authorized to enter into an agreement with HDR for the completion of this important work.

On February 6, 2023, the CEO and General Manager executed a Professional Services Agreement (PSA) with HDR for the SWTP Capacity Expansion project in the amount of \$12,999,057 which included geological work including a variety of soil borings and two interval pump tests. Amendment No. 1 was executed in the amount of \$111,551 and was necessary to allow Black & Veatch, sub-consultant on the project, to perform additional calibrations on the hydrogeologic model provided by United States Geological Survey (USGS) and to keep the project on a timelier schedule. HDR and staff have negotiated the scope and fee associated with a proposed Amendment No. 2 to the original agreement in the amount of \$825,000 for providing up to three 72-hour constant rate pump tests. Staff recommends the Board authorize the CEO and General Manager to execute Amendment No. 2 to the PSA with HDR Engineering, Inc., in the amount of \$825,000.

A motion was made by Ms. Munns and seconded by Ms. Huppert, to authorize the CEO and General Manager to execute Amendment No. 2 to the Professional Services Agreement with HDR Engineering, Inc., in the amount of \$825,000 for the SWTP Capacity Expansion project. Upon vote, the motion was adopted, with each member of the Board voting in favor of the motion.

Request Authorization to Solicit Bids for 2023 FWTP Pump Station HVAC Upgrades and Establish the Date of the Public Hearing as the Date of the December 2023 Board Meeting

The spaces that are generally occupied in the Pumping Station building at the Fleur Drive Water Treatment Plant are currently conditioned with a 21-ton rooftop unit (RTU), terminal air boxes, and controls that were installed in 1989 and are beyond their useful life.

DMWW plans to install a new 20-ton rooftop unit and a dedicated 6-ton unit to serve the control room and server room. The reason for this is the control room is continuously occupied and therefore has different ventilation and energy recovery requirements. Staff recommends the Board authorize staff to solicit bids for the 2023 FWTP Pump Station HVAC Upgrades project and establish the date of the Public Hearing as the date of the December 2023 Board meeting.

A motion was made by Ms. Huppert and seconded by Mr. Davis, to authorize staff to solicit bids for the 2023 FWTP Pump Station HVAC Upgrades project and establish the date of the Public Hearing as the date of the December 2023 Board meeting, and direct staff to publish notice as provided by law. Upon vote, the motion was adopted, with each member of the Board voting in favor of the motion.

Request Authorization to Solicit Bids for 2024 Filter Media Replacement – Fleur Drive Water Treatment Plant and Establish the Date of the Public Hearing as the Date of the December 2023 Board Meeting

At its June 2023 meeting, the Board of Water Works Trustees authorized the CEO and General Manager to execute a Professional Services Agreement with CDM Smith, Inc., for conducting a filtration pilot study for the existing filtration plant at the Fleur Drive Water Treatment Plant. The purpose of this pilot study is to evaluate alternative filter media configurations to address water quality and filtration capacity issues in the existing filtration plant at the Fleur Drive Water Treatment Plant.

While the filtration pilot study is conducted, the filter media in four of the existing sixteen filters needs to be replaced. This is due to the deteriorated condition of the filter media which was last replaced in the 1990s. Staff and its consultant, CDM Smith, Inc., are preparing plans, specifications, and contract documents for replacing the filter media in four of the existing filters beginning in January 2024. Work is scheduled to be completed by the summer of 2024.

A motion was made by Mr. Gillette and seconded by Ms. Munns, to authorize staff to solicit bids for the 2024 Filter Media Replacement – Fleur Drive Water Treatment Plant project and establish the date of the Public Hearing as the date of the December 2023 Board meeting. Upon vote, the motion was adopted, with each member of the Board voting in favor of the motion.

Request Authorization to Solicit Bids for 2023 Des Moines Water Main Replacement – Contract 4 and Establish the Date of the Public Hearing as the Date of the December 2023 Board Meeting

As part of the approved 2023 Des Moines Water Main Replacement budget, the streets identified below are to receive new water mains due to a history of main breaks and other service issues. Snyder & Associates is preparing and finalizing the plans, specifications, and contract documents for the 2023 Des Moines Water Main Replacement - Contract 4. The streets selected for this water main replacement contract consist of many short segments that are interconnected.

Work on E Pleasant View Drive will call for the installation of approximately 1529 feet of 8-inch Polyvinyl Chloride (PVC) and 590 feet of 8-inch Ductile Iron Pipe (DIP) water main. Work on E Virginia Avenue will call for the installation of approximately 527 feet of 8-inch Polyvinyl Chloride (PVC) and 0 feet of 8-inch Ductile Iron Pipe (DIP) water main. Work on SE 6th Street will call for the installation of approximately 385 feet of 8-inch Polyvinyl Chloride (PVC) and 20 feet of 8-inch Ductile Iron Pipe (DIP) water main. Work on SE 7th Street will call for the installation of approximately 260 feet of 8-inch Polyvinyl Chloride (PVC) and 248 feet of 8-inch Ductile Iron Pipe (DIP) water main. The engineer's estimate for this contract is \$1,677,000.00.

A motion was made by Mr. Gillette and seconded by Ms. Munns, to authorize staff to solicit bids for 2023 Des Moines Water Main Replacement - Contract 4 and establish the date of the Public Hearing as the date of the December 2023 Board meeting, and direct staff to publish notice as provided by law. Upon vote, the motion was adopted, with each member of the Board voting in favor of the motion.

Regional 28E Review – Possible Closed Session

A motion was made by Mr. Gillette, seconded by Ms. Huppert, to go into closed session pursuant to Iowa Code Section 388.9(1) to discuss marketing and pricing strategies and proprietary information that may impact its competitive position by public disclosure not required of potential or actual competitors related to ongoing negotiations over creating an integrated regional water authority. Each of these topics should be discussed in closed session to avoid disclosure likely to prejudice or disadvantage the position of the Des Moines Water Works. Iowa Code Section 622.10 to request and receive legal advice from retained legal counsel and to avoid waiver of the attorney-client privilege. Iowa Code Section 22.7(65) to review a tentative and preliminary draft prior to completion of the proposed Central Iowa Water Works 28E agreement; and Iowa Code Section 21.5(1)(a) to discuss or review records which are required or authorized by State or federal law to be kept confidential.

Upon roll-call vote, the motion was adopted, with Ms. Boulton, Mr. Davis, Mr. Gillette, Ms. Huppert, and Ms. Munns voting in favor of the motion.

The meeting then went into closed session.
The Board subsequently returned to open session.

No action was taken as a result of the closed session discussion.

Board Committee Reports

The following reports were provided:

- Finance and Audit Committee – A meeting was held on October 3, 2023, as reflected in the minutes thereof. Mr. Davis gave a brief summary of the meeting.
- Planning Committee – A meeting was held on October 10, 2023, as reflected in the minutes thereof. Ms. Huppert gave a brief summary of the meeting.
- Greater Des Moines Botanical Garden – Mr. Gillette had no update to share.
- Des Moines Water Works Park Foundation – Ms. Boulton gave a brief summary of the Donor Appreciation Dinner that was held a few weeks ago.

CEO and General Manager's Comments

Mr. Corrigan provided an update on the utility's Strategic Plan initiatives.

Safety Update

Mr. Corrigan and Mr. White gave an update on safety. Mr. White highlighted near misses and 2023 Safety Skills Training Assignments.

6:09 p.m. adjourned

**MINUTES OF MEETING OF FINANCE AND AUDIT COMMITTEE
OF THE BOARD OF WATER WORKS TRUSTEES
PURSUANT TO NOTICE**

Tuesday, November 7, 2023

3:30 p.m.

Present (or Participating by Video or Audio Conference Link):

Board Members: Mr. Alec Davis and Ms. Dianne Munns

Staff Members: Pat Bruner, Caitlin Caldwell, Nathan Casey, Ted Corrigan, Kyle Danley,
Doug Garnett, Amy Kahler, Jenny Puffer, Laura Sarcone, Melissa Walker,
Lindsey Wanderscheid

Also in attendance: None

Meeting called to order at 3:31 p.m.

1. Departmental Budget Overview

Department Directors gave an overview of their respective departments' budgets, highlighting variances from 2023 to 2024.

2. CFO's Comments

Ms. Kahler gave an update on the new finance software NetSuite and how the finance department is adjusting to it.

3. Public Comments – There were no comments from the public.

Meeting adjourned at 4:27 p.m.

**MINUTES OF MEETING OF PLANNING COMMITTEE
OF THE BOARD OF WATER WORKS TRUSTEES
PURSUANT TO NOTICE**

Tuesday, November 14, 2023

3:30 p.m.

Present (or Participating by Video or Audio Conference Link):

Board Members: Mr. Graham Gillette and Ms. Susan Huppert

Staff Members: Pat Bruner, Caitlin Caldwell, Nathan Casey, Ted Corrigan, Kyle Danley,
Doug Garnett, Michelle Holland, Amy Kahler, Mike McCurnin, Laura
Sarcone, and Lindsey Wanderscheid

Also in Attendance: Sherri Daley and Tim Zombik

Meeting called to order at 3:30 p.m.

Outsourcing the Printing & Inserting of DMWW Customer Bills, Notices, and Letters

Ms. Holland gave a presentation on outsourcing the printing and inserting of DMWW customer bills, notices, and letters. DMWW Finance and IT staff issued an RFP in August to outsource the printing and inserting functions to an outside vendor. Seven responses were received and after careful consideration Staff recommends outsourcing the printing and inserting of customer bills, notices, and letters with InfoSend.

DMWW Rules & Regulations Update

Ms. Puffer provided an overview of proposed changes and clarifications to the DMWW Water Service Rules and Regulations for 2024. Stating that materials for water service installation must conform with Iowa Department of Natural Resources requirements if located within 200' of a Leaking Underground Storage Tank (LUST). Rewriting the conditions when a public water main will be allowed to be installed on private property. Adding language regarding properties that have a non-testable backflow device on boilers. Editing language to state that service termination will result for failure to submit a passing backflow test. Adding an inspection fee for large taps. Updating the Water Shortage Plan to allow a minimum domestic quantity to be applied for billing to meet basic human water consumption needs.

Fee schedules have been updated to reflect increases in labor and material costs based on the Engineering News Record Construction Cost Index for the month of August 2023.

The Finance Department is continuing to assess the System Development Fees and additional changes will be presented sometime in Spring 2024.

It is proposed that these revisions, including the revised fees, become effective on January 1, 2024.

COO's Comments

Mr. Danley shared with the group that last Friday DMWW held a Veteran's Day Program recognizing twenty current employees that have served. He also highlighted a Central Iowa Water Works online information session that was held today.

Public Comments - There were no comments from the public.

Meeting adjourned at 4:20 p.m.

**DES MOINES WATER WORKS
FINANCIAL STATEMENT COMMENTS
FOR THE MONTH ENDED October 31, 2023**

STATEMENT OF NET POSITION

Below are summaries of financial position and activity for the month of October 2023:

Summary Net Position (in millions)

	Oct 31, 2023	Dec 31, 2022
Cash	\$25.1	\$24.4
Invested Cash	37.2	23.1
Accounts Receivable	12.1	12.0
Operating Reserves	15.2	13.4
Other Assets	8.9	7.3
Fixed Assets	618.6	618.6
Less: Accum Depreciation/Amortization	<u>(240.1)</u>	<u>(228.8)</u>
Net Fixed Assets	378.5	389.8
Construction in Progress	<u>22.8</u>	<u>9.6</u>
Total Assets	<u>499.8</u>	<u>479.6</u>
Deferred Outflows of Resources	11.6	11.6
Total Assets & Deferred Outflows of Resources	<u>511.4</u>	<u>491.2</u>
Current Liabilities	10.8	14.6
Long-Term Liabilities	32.8	32.8
Other Liabilities	<u>2.2</u>	<u>2.0</u>
Total Liabilities	45.8	49.4
Deferred Inflows of Resources	11.1	11.1
Net Position	<u>454.5</u>	<u>430.7</u>
Total Liabilities, Deferred Inflows of Resources & Net Position	<u>511.4</u>	<u>491.2</u>

The deferred inflows and deferred outflows of resources are composed of the differences between actual and expected experience of different components of the pension plan related to future reporting periods. These differences are measured each year and then recognized in pension expense over multiple future reporting periods depending on the nature of the difference (e.g., investment returns, demographic experience, assumption changes, etc.). Deferred outflow of resources is a consumption of net assets applicable to a future reporting period. Deferred inflow of resources is an acquisition of net assets applicable to a future reporting period.

STATEMENT OF EARNINGS

Summary information from the Statement of Earnings is as follows:

	October 2023	Year to date 2023	Year to date 2022
Operating Revenue	\$ 7.7 million	\$ 79.6 million	\$ 71.8 million
Operating Expenses	\$ 5.9 million	\$ 57.6 million	\$ 53.0 million
Other Income (Expense)	\$ 0.3 million	\$ 1.8 million	\$ 0.3 million
Net Earnings	\$ 2.1 million	\$ 23.8 million	\$ 19.1 million

The table below summarizes expenses for the period-to-date ended October 2023 and 2022:

OPERATING EXPENSES

Year-to-Date Ending October 31, 2023 and 2022

	YTD Oct 2023	% of Total	YTD Oct 2022	% of Total
Labor	\$ 14,189,215	31%	\$ 13,551,915	32%
Benefits	7,342,270	16%	7,500,770	18%
Purchased Services	7,068,198	15%	7,190,654	17%
Materials and Equipment	4,525,091	10%	3,403,837	8%
Chemicals	7,331,577	16%	5,460,593	13%
Utilities/Telephone	3,248,986	7%	2,924,201	7%
Insurance	1,707,680	4%	1,309,882	3%
Postage	370,161	1%	342,583	1%
Other	515,851	1%	402,255	1%
	\$ 46,299,029	100%	\$ 42,086,690	100%

PROJECT EXPENSES

Total expenditures for operating projects through October 2023 were approximately \$46.3 million or 80% of the operating budget. Overall expenditures on capital projects were approximately \$13.2 million or 16% of the capital budget.

DES MOINES WATER WORKS
Statement of Net Position
For the Period Ending October 31, 2023 and December 31, 2022

	2023	2022	Change
ASSETS			
Cash			
Petty Cash	\$ 1,900	\$ 1,900	
Interest Bearing Cash	25,123,366	24,362,029	
Total	\$ 25,125,266	\$ 24,363,929	\$ 761,337
Invested Cash			
Cash on Hand	\$ 562,987	\$ 452,194	
U.S. Government Securities	36,594,057	22,635,308	
Total	\$ 37,157,044	\$ 23,087,502	\$ 14,069,542
Accounts Receivable			
Accounts Receivable	\$ 9,088,808	\$ 8,936,610	
Accounts Receivable Unbilled	2,914,894	2,914,894	
Accrued Interest Receivable	93,985	98,524	
Total	\$ 12,097,687	\$ 11,950,028	\$ 147,659
Board Designated Reserves			
Operating			
Cash On Hand	\$ 2,300,363	\$ 23,509	
U.S. Government Securities	12,866,272	13,383,339	
Total	\$ 15,166,636	\$ 13,406,848	\$ 1,759,788
Other Assets			
Materials in Stock Accounts	\$ 4,915,813	\$ 4,770,969	
Water Receivable Long-Term	232,466	241,040	
Lease Receivable	1,068,490	1,068,490	
Prepaid Insurance	4,780	937,132	
Prepaid Expense	2,804,372	487,730	
Accum Unrealized Gain/(Loss) Invest	(82,314)	(165,986)	
Total	\$ 8,943,608	\$ 7,339,376	\$ 1,604,232

DES MOINES WATER WORKS
Statement of Net Position
For the Period Ending October 31, 2023 and December 31, 2022

	2023	2022	Change
ASSETS-CONTINUED			
Fixed Assets			
Land & Right of Way	\$ 8,208,369	\$ 8,208,369	
Structures and Machinery	177,404,410	177,404,410	
Water Supply System	61,641,214	61,641,214	
Urbandale Booster System	509,687	509,687	
Pipelines	298,387,507	298,387,507	
Meters	33,622,365	33,622,365	
Laboratory Equipment	822,658	822,658	
Distribution Equipment	1,664,460	1,664,460	
Mobile Equipment	4,464,544	4,464,544	
Vehicles	3,019,327	3,019,327	
Office Equipment	1,346,166	1,346,166	
MIS Equipment	27,407,397	27,407,397	
Intangible Right-to-use Asset	115,750	115,750	
Total	\$ 618,613,855	\$ 618,613,855	
Accumulated Depreciation/Amortization	(240,111,973)	(228,831,547)	
Construction in Progress	\$ 22,810,894	9,644,209	
Total Fixed Assets	\$ 401,312,776	\$ 399,426,517	\$ 1,886,259
TOTAL ASSETS	\$ 499,803,016	\$ 479,574,199	\$ 20,228,817
DEFERRED OUTFLOWS OF RESOURCES			
Pension Related Amounts	11,596,970	11,596,970	
Total	\$ 11,596,970	\$ 11,596,970	\$ -
TOTAL ASSETS & DEFERRED OUTFLOWS OF RESOURCES	\$ 511,399,986	\$ 491,171,169	\$ 20,228,817

DES MOINES WATER WORKS
Statement of Net Position
For the Period Ending October 31, 2023 and December 31, 2022

	2023	2022	Change
LIABILITIES			
Current Liabilities			
Accounts Payable	\$ 325,810	\$ 2,732,873	
Construction Payables	3,476,553	5,108,072	
Salaries and Wages Payable	575,466	1,048,736	
Accrued Leave	3,758,369	3,758,369	
State Tax Payable	395,124	323,030	
Work Comp Reserves	490,917	490,917	
Fees Collected for Other Entities	1,780,595	1,114,223	
Unclaimed Refunds	10,285	10,622	
Total	\$ 10,813,118	\$ 14,586,842	\$ (3,773,723)
Long Term Liabilities			
Pension Liability	\$ 18,270,897	\$ 18,270,897	
Other Post-Employment Benefit Liability	14,425,185	14,425,185	
Lease Liability	57,236	57,236	
Total	\$ 32,753,318	\$ 32,753,318	\$ -
Other Liabilities			
Deposits by Consumers	\$ 2,128,713	\$ 2,010,429	
Project H2O	46,412	11,046	
Miscellaneous Liabilities	9,745	9,745	
Total	\$ 2,184,870	\$ 2,031,219	\$ 153,650
TOTAL LIABILITIES	\$ 45,751,306	\$ 49,371,379	\$ (3,620,073)
DEFERRED INFLOWS OF RESOURCES			
Pension Related Amounts	\$ 2,931,843	\$ 2,931,843	
Other Post-Employment Benefit Amounts	7,166,158	7,166,158	
Lease Amounts	1,048,471	1,048,471	
Total	\$ 11,146,472	\$ 11,146,472	\$ -
NET POSITION	\$ 454,502,208	\$ 430,653,318	\$ 23,848,890
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES & NET POSITION	\$ 511,399,986	\$ 491,171,169	\$ 20,228,817

Des Moines Water Works
Statement of Earnings and Retained Earnings
For the Month Ended October 31, 2023, the Ten Month Endings October 31, 2023
and the Ten Months Ending October 31, 2022

	Current Month 2023	Year-To-Date 2023	Yearly Budget 2023	Actual vs. Budget Variance	Year-To-Date 2022	Year-To-Date Current vs. Prior Year
OPERATING REVENUE						
Water Sales	\$ 7,157,928	\$ 74,401,108	\$ 78,982,504	\$ (4,581,396)	\$ 66,918,444	\$ 7,482,664
Sewer Services - Runnells	7,789	78,797	77,291	1,506	76,568	2,229
Late Fees	46,327	400,169	375,000	25,169	388,136	12,033
Other Sales and Services	220,345	2,160,225	3,023,245	(863,020)	1,970,399	189,826
Billing Services Revenue	188,641	1,615,801	2,166,000	(550,199)	1,555,036	60,765
Land Use Revenue	15,648	176,566	216,000	(39,434)	178,112	(1,546)
Connection Fees	100,750	756,400	400,000	356,400	735,324	21,076
Cash Discount and Refunds	410	2,943	-	2,943	3,395	(452)
Total Operating Revenues	\$ 7,737,838	\$ 79,592,009	\$ 85,240,040	\$ (5,648,031)	\$ 71,825,414	\$ 7,766,595
OPERATING EXPENSES						
Labor	\$ 1,312,067	\$ 14,189,215	\$ 17,714,194	\$ 3,524,979	\$ 13,551,915	\$ (637,300)
Benefits	335,102	3,437,120	4,244,600	807,480	3,316,426	(120,694)
Retirement Benefits	361,056	3,905,150	5,454,800	1,549,650	4,184,344	279,194
Postage	45,894	370,161	450,000	79,839	342,583	(27,578)
Telephone	18,459	243,922	288,735	44,813	235,003	(8,919)
Insurance	204,506	1,707,680	1,625,000	(82,680)	1,309,882	(397,798)
Casualty Loss	104,729	138,247	110,000	(28,247)	28,481	(109,766)
Loss on Bad Accounts	(1,225)	(15,619)	155,000	170,619	(8,517)	7,102
Purchased Services	779,922	7,068,198	10,990,850	3,922,652	7,190,654	122,456
Training	1,025	171,683	251,270	79,587	102,645	(69,038)
Materials and Equipment	490,336	4,525,091	4,371,355	(153,736)	3,403,837	(1,121,254)
Chemicals	650,348	7,331,577	8,952,971	1,621,394	5,460,593	(1,870,984)
Utilities	470,697	3,005,064	3,149,500	144,436	2,689,198	(315,866)
Gasoline/Fuel	354	221,540	382,680	161,140	279,646	58,106
Total Operating Expense	\$ 4,773,270	\$ 46,299,029	\$ 58,140,955	\$ 11,841,926	\$ 42,086,690	\$ (4,212,339)
Depreciation & Amort Expense	\$ 1,124,635	11,280,426	13,583,232	2,302,806	\$ 10,877,217	(403,209)
Net Income from Operations	1,839,933	22,012,554	13,515,853	8,496,701	18,861,507	3,151,047
Other Income (Expense) :						
Capital Contributions	\$ -	\$ -	\$ -	\$ -	\$ 263,557	\$ (263,557)
Investment Income	\$ 46,304	\$ 354,357	\$ 195,600	\$ 158,757	66,357	288,000
Net Change - Investment Values	206,799	1,470,563	-	1,470,563	(63,288)	1,533,851
Interest Income / Expense	8	8	-	8	(2,617)	2,625
Gain/Loss on Fixed Assets	-	11,408	-	11,408	-	11,408
Other Income (Expense), net	\$ 253,111	\$ 1,836,336	\$ 195,600	\$ 1,640,736	\$ 264,009	\$ 1,572,327
Net Earnings	\$ 2,093,044	\$ 23,848,890	\$ 13,711,453	\$ 10,137,437	\$ 19,125,516	\$ 4,723,374
Retained Earnings, January 1		\$ 430,653,318			\$ 396,920,642	
Ending Retained Earnings		\$ 454,502,208			\$ 416,046,158	

**DES MOINES WATER WORKS
STATEMENT OF INVESTMENT CHANGES
FOR THE MONTH ENDED OCTOBER 31, 2023**

INVESTED RESERVES

	Balance at 9/30/2023	Additions	Deductions	Balance at 10/31/2023
Operating				
Cash on Hand	\$67,267	2,236,869	3,773	\$2,300,363
U.S. Government Securities	\$15,055,871	35,401	2,225,000	\$12,866,272
Total Invested Reserves	\$15,123,139	\$2,272,270	\$2,228,773	\$15,166,636

The estimated annual yield at market for 10/31/2023 was 1.52%

INVESTED OPERATING CASH

	Balance at 9/30/2023	Additions	Deductions	Balance at 10/31/2023
Operating				
Cash on Hand	\$481,627	90,579	9,220	\$562,987
U.S. Government Securities	\$36,468,748	125,309	-	36,594,057
Total Invested Reserves	\$36,950,376	\$215,888	\$9,220	\$37,157,044

The estimated annual yield at market for 10/31/2023 was 1.52%

**DES MOINES WATER WORKS
STATEMENT OF INVESTMENT CHANGES
YEAR TO DATE 2023**

PENSION FUND

	Balance 1/1/2023	Transfers, Expenses & Deposits	Benefit Payments	Investment Return	Balance at 10/31/2023	YTD % Return
<i>Fixed Income</i>						
Mellon Capital Mgmt - Bond Market Index	5,884,782	2,058,006	(3,230,844)	(124,212)	4,587,732	-2.46%
Neuberger Berman / Mellon / DDJ - High Yield I	2,054,249	(23,497)		97,942	2,128,693	4.80%
Principal Global Investors - Income	17,705,946	403,519	2,821	(510,545)	17,601,742	-2.86%
<i>Large U.S. Equity</i>						
Principal Global Investors - Equity Income	6,222,871	150,268		(217,808)	6,155,331	-3.46%
Principal Global Investors - Large Cap S&P 500 Index	2,608,625	(209,943)		280,143	2,678,825	11.15%
T. Rowe Price / Brown Advisory - Large Cap Growth	6,026,644	(997,696)		1,266,597	6,295,545	22.65%
<i>Small/Mid U.S. Equity</i>						
Robert Baird / Eagle Asset Mgmt - Mid Cap Growth III	894,171	(39,301)		5,966	860,836	0.68%
DFA / Vaughan Nelson / LA Capital - Small Cap Value II	457,533	(7,821)		(5,138)	444,574	-1.13%
AB / Brown / Emerald - Small Cap Growth I	453,452	(21,885)		(13,538)	418,029	-3.05%
LA Capital Mgmt / Victory - Mid Cap Value I	918,826	25,495		(28,394)	915,927	-3.05%
<i>International Equity</i>						
Causeway / Barrow Hanley - Overseas	1,698,521	115,055		133,814	1,947,391	7.65%
Principal Global Investors / DFA - International Small Cap	769,177	(836,789)		67,612	0	8.78%
Principal Global Investors - Diversified International	3,865,020	175,443		128,892	4,169,355	3.27%
Origin Asset Management LLP - Origin Emerging Markets	1,345,371	(94,079)		(4,308)	1,246,984	-0.33%
Total Principal Financial	\$ 50,905,188	\$ 696,776	\$ (3,228,022)	\$ 1,077,022	\$ 49,450,964	2.18%

DES MOINES WATER WORKS
Project Costs by Department - Summary
Year to Date ended October 31, 2023
83% of Year Completed

	YTD Actual	Yearly Budget 2023	Budget Adjustment / Carry Over	Net Yearly 2023 Budget	Variance	% of Budget
Operating						
Office of the CEO/General Manager	\$1,186,541	\$2,412,086	\$0	\$2,412,086	\$1,225,545	49%
Customer Service	\$4,498,366	\$5,605,717	\$0	\$5,605,717	\$1,107,351	80%
Engineering	\$1,774,592	\$1,776,480	\$0	\$1,776,480	\$1,888	100%
Finance	\$5,504,310	\$5,848,016	(\$2,886)	\$5,845,130	\$340,820	94%
Human Resources	\$775,991	\$956,492	\$0	\$956,492	\$180,501	81%
Information Technology	\$2,693,596	\$3,393,739	\$0	\$3,393,739	\$700,143	79%
Office of the Chief Operating Officer	\$1,988,167	\$2,818,019	\$2,886	\$2,820,905	\$832,738	70%
Water Distribution	\$6,750,535	\$8,206,335	(\$105,000)	\$8,101,335	\$1,350,800	83%
Water Production	\$21,126,932	\$27,124,071	\$105,000	\$27,229,071	\$6,102,139	78%
Total Operating	\$46,299,029	\$58,140,955	\$0	\$58,140,955	\$11,841,925	80%
Capital						
Office of the CEO/General Manager	\$0	\$0	\$0	\$0	\$0	No Budget
Customer Service	\$1,153,725	\$1,736,895	\$0	\$1,736,895	\$583,170	66%
Engineering	\$8,959,845	\$54,338,440	\$20,472,250	\$74,810,690	\$65,850,845	12%
Finance	\$0	\$0	\$0	\$0	\$0	No Budget
Human Resources	\$0	\$0	\$0	\$0	\$0	No Budget
Information Technology	\$615,509	\$2,140,750	\$0	\$2,140,750	\$1,525,241	29%
Office of the Chief Operating Officer	\$8,365	\$251,473	\$0	\$251,473	\$243,108	3%
Water Distribution	\$525,681	\$1,673,131	\$0	\$1,673,131	\$1,147,450	31%
Water Production	\$1,951,275	\$2,321,067	\$784,000	\$3,105,067	\$1,153,792	63%
Total Capital	\$13,214,400	\$62,461,756	\$21,256,250	\$83,718,006	\$70,503,606	16%
Total Project Costs	\$59,513,431	\$120,602,711	\$21,256,250	\$141,858,961	\$82,345,531	42%

DES MOINES WATER WORKS
Project Costs by Department - Summary
Year to Date ended October 31, 2023
83% of Year Completed

Office of the CEO/General Manager

		YTD Actual	Yearly Budget 2023	Budget Adjustment / Carry Over	Net Yearly 2023 Budget	Variance	% of Budget
Operating							
950-200	New Business, Community & Economic Dev	\$57,769	\$78,036	\$0	\$78,036	\$20,267	74%
996-001	CEO Department Administration	\$573,945	\$413,571	\$0	\$413,571	(\$160,374)	139%
996-030	Board Activities	\$198,335	\$1,327,026	\$0	\$1,327,026	\$1,128,691	15%
996-200	Business Strategies	\$119,771	\$188,972	\$0	\$188,972	\$69,201	63%
996-210	Project Management	\$103,184	\$98,635	\$0	\$98,635	(\$4,549)	105%
995-010	Public Policy - WS Advocate	\$133,537	\$305,846	\$0	\$305,846	\$172,309	44%
Total Operating		\$1,186,541	\$2,412,086	\$0	\$2,412,086	\$1,225,545	49%
OCEO Capital							
Total Capital		\$0	\$0	\$0	\$0	\$0	\$0
Total Office of CEO/General Manager		\$1,186,541	\$2,412,086	\$0	\$2,412,086	\$1,225,545	49%

DES MOINES WATER WORKS
Project Costs by Department - Summary
Year to Date ended October 31, 2023
83% of Year Completed

Customer Service

		YTD Actual	Yearly Budget 2023	Budget Adjustment / Carry Over	Net Yearly 2023 Budget	Variance	% of Budget
Operating							
950-001	Customer Service Admin	\$1,929,406	\$2,145,683	\$0	\$2,145,683	\$216,277	90%
950-100	CS Contact Ctr and Data Quality	\$799,398	\$1,200,183	\$0	\$1,200,183	\$400,785	67%
950-300	Public Relations and Communication	\$160,008	\$265,902	\$0	\$265,902	\$105,894	60%
950-500	CS Collections and Dispatch	\$403,541	\$626,014	\$0	\$626,014	\$222,473	64%
950-600	Field CS and Water Quality	\$1,206,013	\$1,367,935	\$0	\$1,367,935	\$161,922	88%
	Total Operating	\$4,498,366	\$5,605,717	\$0	\$5,605,717	\$1,107,351	80%
Capital							
955-060	Field Customer Service Capital	\$1,125,655	\$1,736,895	\$0	\$1,736,895	\$611,240	65%
925-160	Radio Frequency - Capital	\$28,070	\$0	\$0	\$0	(\$28,070)	No Budget
	Total Capital	\$1,153,725	\$1,736,895	\$0	\$1,736,895	\$583,170	66%
Total Customer Service		\$5,652,092	\$7,342,612	\$0	\$7,342,612	\$1,690,520	77%

DES MOINES WATER WORKS
Project Costs by Department - Summary
Year to Date ended October 31, 2023
83% of Year Completed

Engineering

		YTD Actual	Yearly Budget 2023	Budget Adjustment / Carry Over	Net Yearly 2023 Budget	Variance	% of Budget
Operating							
940-001	Engineering Dept Administration	\$1,754,235	\$1,706,063	\$0	\$1,706,063	(\$48,172)	103%
940-010	Engineering Studies	\$20,357	\$70,417	\$0	\$70,417	\$50,060	29%
	Total Operating	\$1,774,592	\$1,776,480	\$0	\$1,776,480	\$1,888	100%
Capital							
945-010	Facility Management	\$1,584,726	\$3,956,359	\$4,351,750	\$8,308,109	\$6,723,383	19%
945-012	New ASR Well	\$784,344	\$2,750,882	\$638,000	\$3,388,882	\$2,604,538	23%
945-080	WMR - Des Moines	\$2,697,012	\$9,452,241	\$5,000,000	\$14,452,241	\$11,755,229	19%
945-090	WMR - Polk County	\$190,096	\$3,137,711	\$3,000,000	\$6,137,711	\$5,947,615	3%
945-095	WMR - Windsor Heights	\$28,292	\$28,221	\$784,000	\$812,221	\$783,929	3%
945-100	WMR - Pleasant Hill	\$288	\$300,000	\$0	\$300,000	\$299,712	0%
945-120	WMR - Cumming	\$1,583	\$0	\$0	\$0	(\$1,583)	No Budget
945-200	Development Plan Review & Inspection	\$310,866	\$284,784	\$42,000	\$326,784	\$15,918	95%
945-210	Core Network Feeder Mains	\$836,576	\$4,165,673	\$0	\$4,165,673	\$3,329,097	20%
945-220	Fleur Drive Treatment Plant	\$834,531	\$8,945,587	\$3,675,500	\$12,621,087	\$11,786,556	7%
945-225	McMullen Water Treatment Plant	\$238,306	\$789,543	\$1,781,000	\$2,570,543	\$2,332,237	9%
945-228	Saylorville Water Treatment Plant	\$1,262,369	\$20,527,439	\$0	\$20,527,439	\$19,265,070	6%
945-230	Remote Facilities - Pumping & Storage	\$56,080	\$0	\$1,200,000	\$1,200,000	\$1,143,920	5%
945-235	Joint NW Storage, PS and Feeder Mains	\$114,082	\$0	\$0	\$0	(\$114,082)	No Budget
945-245	Joint SW Storage, PS and Feeder Mains	\$17,437	\$0	\$0	\$0	(\$17,437)	No Budget
945-250	Waukee-Xenia Feeder Main & Pump Station	\$3,259	\$0	\$0	\$0	(\$3,259)	No Budget
	Total Capital	\$8,959,845	\$54,338,440	\$20,472,250	\$74,810,690	\$65,850,845	12%
Total Engineering		\$10,734,437	\$56,114,920	\$20,472,250	\$76,587,170	\$65,852,733	14%

DES MOINES WATER WORKS
Project Costs by Department - Summary
Year to Date ended October 31, 2023
83% of Year Completed

Finance

		YTD Actual	Yearly Budget 2023	Budget Adjustment / Carry Over	Net Yearly 2023 Budget	Variance	% of Budget
Operating							
930-001	Finance Dept Administration	\$842,856	\$1,034,466	(\$2,886)	\$1,031,580	\$188,724	82%
930-010	Financial Services	\$2,267,488	\$2,284,090	\$0	\$2,284,090	\$16,602	99%
930-086	Other Accounting Expenses	\$13,611	\$0	\$0	\$0	(\$13,611)	No Budget
930-090	Purchasing	\$94,755	\$97,989	\$0	\$97,989	\$3,234	97%
950-410	A/R Management	\$780,888	\$892,813	\$0	\$892,813	\$111,925	87%
970-010	Central Stores	\$94,098	\$128,179	\$0	\$128,179	\$34,081	73%
970-500	GDMBG Operations and Maintenance	\$100,135	\$100,000	\$0	\$100,000	(\$135)	100%
	Department Operating	\$4,193,831	\$4,537,537	(\$2,886)	\$4,534,651	\$340,820	92%
930-010	Financial Services - PILOT	\$1,310,479	\$1,310,479	\$0	\$1,310,479	\$0	100%
	Total Operating	\$5,504,310	\$5,848,016	(\$2,886)	\$5,845,130	\$340,820	94%
Capital							
955-090	Pmt/Mail Processing Capital	\$0	\$0	\$0	\$0	\$0	No Budget
	Total Capital	\$0	\$0	\$0	\$0	\$0	No Budget
Total Finance		\$5,504,310	\$5,848,016	(\$2,886)	\$5,845,130	\$340,820	94%

DES MOINES WATER WORKS
Project Costs by Department - Summary
Year to Date ended October 31, 2023
83% of Year Completed

Human Resources

		YTD Actual	Yearly Budget 2023	Budget Adjustment / Carry Over	Net Yearly 2023 Budget	Variance	% of Budget
Operating							
910-001	HR Dept Administration	\$286,304	\$334,425	\$0	\$334,425	\$48,121	86%
910-010	Employee Relations	\$236,908	\$262,179	\$0	\$262,179	\$25,271	90%
910-060	Employment	\$162,483	\$134,901	\$0	\$134,901	(\$27,582)	120%
910-110	Compensation/Benefits	\$89,258	\$143,265	\$0	\$143,265	\$54,007	62%
910-150	Employee Learning & Growth	\$1,038	\$81,722	\$0	\$81,722	\$80,684	1%
Total Operating		\$775,991	\$956,492	\$0	\$956,492	\$180,501	81%
Capital							
Total Capital		\$0	\$0	\$0	\$0	\$0	No Budget
Total Human Resources		\$775,991	\$956,492	\$0	\$956,492	\$180,501	81%

DES MOINES WATER WORKS
Project Costs by Department - Summary
Year to Date ended October 31, 2023
83% of Year Completed

Information Technology

		YTD Actual	Yearly Budget 2023	Budget Adjustment / Carry Over	Net Yearly 2023 Budget	Variance	% of Budget
Operating							
920-001	IT Dept Administration	\$667,700	\$817,646	\$0	\$817,646	\$149,946	82%
920-160	Technical Services	\$243,315	\$270,953	\$0	\$270,953	\$27,638	90%
920-240	IT Development & Application Svcs	\$108,134	\$205,712	\$0	\$205,712	\$97,578	53%
920-250	IT Services	\$927,823	\$1,192,514	\$0	\$1,192,514	\$264,691	78%
920-350	System Services	\$746,624	\$906,914	\$0	\$906,914	\$160,290	82%
	Total Operating	\$2,693,596	\$3,393,739	\$0	\$3,393,739	\$700,143	79%
Capital							
925-010	Info Systems Capital	\$615,509	\$2,140,750	\$0	\$2,140,750	\$1,525,241	29%
	Total Capital	\$615,509	\$2,140,750	\$0	\$2,140,750	\$1,525,241	29%
Total Information Technology		\$3,309,105	\$5,534,489	\$0	\$5,534,489	\$2,225,384	60%

DES MOINES WATER WORKS
Project Costs by Department - Summary
Year to Date ended October 31, 2023
83% of Year Completed

Office of the Chief Operating Officer

		YTD Actual	Yearly Budget 2023	Budget Adjustment / Carry Over	Net Yearly 2023 Budget	Variance	% of Budget
Operating							
993-000	OCOO Dept Administration	\$541,426	\$857,364	\$0	\$857,364	\$315,938	63%
960-510	Risk & Incident Management	\$629,554	\$926,008	\$2,886	\$928,894	\$299,340	68%
910-240	Safety	\$226,630	\$231,620	\$0	\$231,620	\$4,990	98%
970-060	Grounds Maintenance	\$590,557	\$803,027	\$0	\$803,027	\$212,470	74%
	Total Operating	\$1,988,167	\$2,818,019	\$2,886	\$2,820,905	\$832,738	70%
Capital							
975-005	Grounds Maintenance Capital	\$8,365	\$251,473	\$0	\$251,473	\$243,108	3%
	Total Capital	\$8,365	\$251,473	\$0	\$251,473	\$243,108	3%
Total Office of the COO		\$1,996,532	\$3,069,492	\$2,886	\$3,072,378	\$1,075,846	65%

DES MOINES WATER WORKS
Project Costs by Department - Summary
Year to Date ended October 31, 2023
83% of Year Completed

Water Distribution

		YTD Actual	Yearly Budget 2023	Budget Adjustment / Carry Over	Net Yearly 2023 Budget	Variance	% of Budget
Operating							
960-001	Water Dist Dept Administration	\$2,035,362	\$3,204,357	\$0	\$3,204,357	\$1,168,995	64%
960-010	Distribution Administration	\$129,450	\$132,812	\$0	\$132,812	\$3,362	97%
960-100	Dist System Maint/Repairs	\$2,875,668	\$3,096,374	(\$105,000)	\$2,991,374	\$115,706	96%
960-160	Water Distribution Support	\$346,874	\$195,424	\$0	\$195,424	(\$151,450)	177%
960-180	Leak Detection	\$649,621	\$756,222	\$0	\$756,222	\$106,601	86%
960-250	Distribution Billed Services	\$713,560	\$821,146	\$0	\$821,146	\$107,586	87%
	Total Operating	\$6,750,535	\$8,206,335	(\$105,000)	\$8,101,335	\$1,350,800	83%
Capital							
965-010	Distribution System Improvements	\$513,639	\$1,638,831	\$0	\$1,638,831	\$1,125,192	31%
965-025	Dist Billed Services Capital	\$0	\$22,500	\$0	\$22,500	\$22,500	0%
965-200	Leak Detection Equipment	\$12,042	\$11,800	\$0	\$11,800	(\$242)	102%
	Total Capital	\$525,681	\$1,673,131	\$0	\$1,673,131	\$1,147,450	31%
Total Water Distribution		\$7,276,216	\$9,879,466	(\$105,000)	\$9,774,466	\$2,498,250	74%

DES MOINES WATER WORKS
Project Costs by Department - Summary
Year to Date ended October 31, 2023
83% of Year Completed

Water Production

		YTD Actual	Yearly Budget 2023	Budget Adjustment / Carry Over	Net Yearly 2023 Budget	Variance	% of Budget
Operating							
970-110	Facility Maintenance	\$578,178	\$753,039	\$0	\$753,039	\$174,861	77%
970-200	Vehicle Maintenance	\$1,050,635	\$1,306,157	\$105,000	\$1,411,157	\$360,522	74%
970-360	Communication Sys Maintenance	\$21,160	\$53,064	\$0	\$53,064	\$31,904	40%
970-450	HVAC Operations & Maintenance	\$101,713	\$99,577	\$0	\$99,577	(\$2,136)	102%
980-001	Water Production Dept Admin	\$3,368,008	\$4,388,290	\$0	\$4,388,290	\$1,020,282	77%
980-010	Water Production Operations	\$1,049,067	\$1,189,600	\$0	\$1,189,600	\$140,533	88%
980-020	Fleur Treatment Chem/Energy	\$7,238,113	\$8,903,133	\$0	\$8,903,133	\$1,665,020	81%
980-030	McMullen Treatment Chem/Energy	\$2,324,789	\$3,231,252	\$0	\$3,231,252	\$906,463	72%
980-040	Saylorville Treatment Chem/Energy	\$1,036,997	\$1,605,047	\$0	\$1,605,047	\$568,050	65%
980-200	Fleur Plant Maintenance	\$1,472,740	\$1,893,639	\$0	\$1,893,639	\$420,899	78%
980-250	McMullen Plant Maintenance	\$373,310	\$582,851	\$0	\$582,851	\$209,541	64%
980-300	Saylorville Plant Maintenance	\$475,445	\$521,680	\$0	\$521,680	\$46,235	91%
980-350	WP Maintenance Oversight	\$154,163	\$220,992	\$0	\$220,992	\$66,829	70%
980-410	Louise P. Moon Pumping & Maint.	\$454,858	\$581,339	\$0	\$581,339	\$126,481	78%
980-420	PC PS Maintenance	\$144,402	\$160,986	\$0	\$160,986	\$16,584	90%
980-430	DM Remote Storage & Pumping	\$640,596	\$805,605	\$0	\$805,605	\$165,009	80%
980-500	Routine Laboratory Monitoring	\$590,503	\$657,139	\$0	\$657,139	\$66,636	90%
980-530	Source Water Quality	\$52,256	\$170,681	\$0	\$170,681	\$118,425	31%
	Total Operating	\$21,126,932	\$27,124,071	\$105,000	\$27,229,071	\$6,102,139	78%
Capital							
985-010	Water Production Reinvestment	\$878,879	\$1,196,609	\$0	\$1,196,609	\$317,730	73%
975-010	Vehicle Capital	\$1,072,396	\$1,124,458	\$784,000	\$1,908,458	\$836,062	56%
	Total Capital	\$1,951,275	\$2,321,067	\$784,000	\$3,105,067	\$1,153,792	63%
Total Water Production		\$23,078,207	\$29,445,138	\$889,000	\$30,334,138	\$7,255,931	76%

**Consent Agenda
Item 1-C**

MONTHLY SCHEDULE FOR THE MONTH OF OCTOBER 2023

ACCOUNTS PAYABLE MONTHLY SCHEDULE	Weekly Check Runs	9,774,172.57
EMPLOYEE PAYROLL	Bi Weekly Payrolls	<u>893,536.64</u>
TOTAL		<u><u>\$10,667,709.21</u></u>

PAYMENTS FOR OCTOBER, 2023

PeopleSoft Financials

Report ID: DWAPR002.sqr

<u>Check No.</u>	<u>Paid to:</u>	<u>Description</u>	<u>Amount</u>
80958	IPERS Collections	Pension Plan Contribution	\$352,786.91
101323	Des Moines Metro Credit Union	Credit Union Payable	22,062.00
102723	Des Moines Metro Credit Union	Credit Union Payable	22,262.00
101623	Treasurer State of Iowa	Unclaimed Refunds	15,586.12
102623	Discovery Benefits	Flex Spending - Reimbursements	218.78
122393	EMC Risk Services, Inc	Workers Comp	34,710.14
122394	EMC Risk Services, Inc	Workers Comp	5,141.72
122448	EMC Risk Services, Inc	Workers Comp	54,681.53
122899	EMC Risk Services, Inc	Workers Comp	8,649.90
231013	Principal Life Insurance	Deferred Compensation Payable	61,347.19
231027	Principal Life Insurance	Deferred Compensation Payable	61,089.53
271894	Master Single Payment Vendor	Refunds	119.43
271895	Master Single Payment Vendor	Refunds	162.48
271896	Master Single Payment Vendor	Refunds	22.34
271897	Master Single Payment Vendor	Refunds	33.26
271898	Master Single Payment Vendor	Refunds	707.60
271899	Master Single Payment Vendor	Refunds	42.49
271900	Master Single Payment Vendor	Refunds	119.79
271901	Master Single Payment Vendor	Refunds	144.90
271902	Master Single Payment Vendor	Refunds	127.32
271903	Master Single Payment Vendor	Refunds	121.48
271904	Master Single Payment Vendor	Refunds	80.40
271905	Master Single Payment Vendor	Refunds	2,100.93
271906	Master Single Payment Vendor	Refunds	50.39
271907	Master Single Payment Vendor	Refunds	16.68
271908	Master Single Payment Vendor	Refunds	58.91
271909	Master Single Payment Vendor	Refunds	4,225.42
271910	ACCO	Materials & Supplies	1,133.00
271911	AT&T Mobility	Cell Phones	113.09
271912	AccuCopy	Printing & Copies	293.56
271913	Accurate Hydraulics & Machine Serv., Inc	Purchased Services	800.00
271914	Acme Tools	Materials & Supplies	842.76
271915	Air-Mach Air Compressor &	Materials & Supplies	1,910.00
271916	Airgas North Central	Vehicle Maintenance Materials	588.40
271917	Amazon Capital Services Inc	Materials & Supplies	457.49
271918	American Fence of Iowa	Contractors	2,103.00
271919	Arnold Motor Supply	Vehicle Maintenance Materials	6.69
271920	AssuredPartners Great Plains LLC	General Insurance Premiums	1,501.00
271921	BDI Signs Business Designs, Inc	Materials & Supplies	870.00
271922	Barnhart	Contractors	2,064.40
271923	Blank Park Zoo	Food & Beverages	545.00
271924	Bob's Discount Furniture	Materials & Supplies	1,247.00
271925	CPI International	Inventory	864.88
271926	Canon Financial Services INC	Printing & Copies	1,713.41
271927	Capital Sanitary Supply	Inventory	524.10
271928	Central Iowa Ready Mix	Concrete	1,258.50
271929	Central Service & Supply, Inc.	Materials & Supplies	958.31
271930	CenturyLink	Telephone Services	293.99
271931	Chuck & Larry's Transmission	Purchased Services	935.10
271932	City Supply Corporation	Inventory	77.68
271933	City of Des Moines	Contractors	1,065.00
271934	Combined Systems Technology, Inc.	Materials & Supplies	532.74
271935	Construction & Aggregate Products, Inc.	Materials & Supplies	2,110.76
271936	Core and Main	Inventory	1,168.61
271937	Cortrol Process Systems	Inventory	987.85
271938	Des Moines Iron Company	Vehicle Maintenance Materials	1,241.16
271939	Dezurik c/o Mellen & Associates	Materials & Supplies	2,329.83

PAYMENTS FOR OCTOBER, 2023

PeopleSoft Financials

Report ID: DWAPR002.sqr

<u>Check No.</u>	<u>Paid to:</u>	<u>Description</u>	<u>Amount</u>
271940	Douglas K. Oscarson	Consultants	1,787.10
271941	Dultmeier Sales LLC	Inventory	171.66
271942	Factory Motor Parts Company	Vehicle Maintenance Materials	174.28
271943	Fastenal Company	Inventory	135.00
271944	First Choice Coffee	Office Supplies	581.00
271945	Fisher Scientific	Materials & Supplies	182.67
271946	Force Fitters	Materials & Supplies	237.75
271947	Grainger, Inc.	Materials & Supplies	1,898.01
271948	Graybar Electric Company	Inventory	679.23
271949	H & H Plumbing Inc	Plumbing	883.66
271950	Image Solutions	Employee Job Costs	1,303.90
271951	Ingersoll Rand	Inventory	431.31
271952	Voided Check		0.00
271953	Iowa Department of Natural Resources	Purchased Services	85.00
271954	Iowa Environmental Services	Purchased Services	75.00
271955	Iowa Prison Industries	Materials & Supplies	791.41
271956	Iowa Public Radio	Advertising	1,394.00
271957	Izaak Walton League	Prepaid Expense	1,300.00
271958	Joseph Lake	Licenses & Certifications	72.00
271959	Keltek Incorporated	Inventory	723.93
271960	Kryger Glass	Purchased Services	185.00
271961	Kyle Simpson	Licenses & Certifications	72.00
271962	Lawson Products, Inc.	Inventory	28.94
271963	Lindsey Wanderscheid	Mileage	303.58
271964	Logan Contractors Supply, Inc.	Inventory	704.40
271965	MSC Industrial Supply Company	Inventory	156.72
271966	MTI Distributing	Vehicle Maintenance Materials	245.24
271967	McMaster-Carr Supply Company	Inventory	1,452.51
271968	Mead O'Brien, Inc.	Inventory	838.74
271969	Mediacom Business	Internet Connectivity	454.90
271970	Merrill Axle & Wheel Service, Inc.	Purchased Services	125.00
271971	Metal Prep	Materials & Supplies	75.67
271972	Murphy Tractor & Equipment	Vehicle Maintenance Materials	123.31
271973	Napa Auto Parts	Vehicle Maintenance Materials	2,198.25
271974	Nathan Baker	Safety Glasses	73.95
271975	One Source	Purchased Services	1,094.95
271976	Peterbilt of Des Moines	Vehicle Maintenance Materials	742.40
271977	Plumb Supply Company	Inventory	576.94
271978	Premier Safety	Inventory	910.16
271979	Propio Language Services	Purchased Services	727.69
271980	Ramco Innovations	Materials & Supplies	1,335.90
271981	Reppert Rigging & Hauling Co.	Contractors	400.00
271982	Revenue Advantage	Purchased Services	950.00
271983	Rick's Towing	Contractors	383.00
271984	Roy's Towing and Recovery	Purchased Services	647.50
271985	SVPA Architects Inc	Contractors	1,419.36
271986	Servicemaster - Rice	Casualty Losses	1,818.73
271987	Servicemaster Commercial Carpet, Inc.	Purchased Services	924.00
271988	Shirley Howard	Materials & Supplies	52.74
271989	Star Equipment, Ltd.	Contractors	209.31
271990	Storey-Kenworthy Company	Office Supplies	482.70
271991	TK Elevator Corporation	Purchased Services	707.08
271992	TPx Communications	Internet Connectivity	753.05
271993	Tompkins Industries, Inc.	Vehicle Maintenance Materials	152.35
271994	Total Tool	Inventory	443.64
271995	U.S. Autoforce	Vehicle Maintenance Materials	870.16
271996	ULINE	Inventory	78.26

PAYMENTS FOR OCTOBER, 2023

PeopleSoft Financials

Report ID: DWAPR002.sqr

<u>Check No.</u>	<u>Paid to:</u>	<u>Description</u>	<u>Amount</u>
271997	UPS	Delivery/Freight	29.24
271998	USA Bluebook	Inventory	2,049.94
271999	VWR International LLC	Inventory	496.78
272000	Van Meter Industrial, Inc.	Materials & Supplies	109.13
272001	Van-Wall Group	Vehicle Maintenance Materials	164.92
272002	Washer Systems of Iowa	Vehicle Maintenance Materials	151.28
272003	Waste Solutions of Iowa	Purchased Services	273.00
272004	Whatcha Smokin BBQ & Brew	Food & Beverages	597.50
272005	White Cap	Inventory	294.34
272006	Woodland Lake Estate Association	Woodland Lakes Estates Payable	2,106.85
272007	Advanced Waste Management Systems	Materials & Supplies	19,696.29
272008	Advocacy Strategies, LLC	Consultants	10,625.00
272009	Ahlers, Cooney, PC	Legal Fees	4,417.50
272010	Air Products	Inventory	6,971.02
272011	CTI Ready Mix	Concrete	6,835.50
272012	Cintas	Materials & Supplies	3,981.94
272013	City of Alleman	Alleman Payable	5,185.85
272014	City of Cumming	Cumming Payable	6,044.44
272015	City of Pleasant Hill	Billing Service Revenue	295,417.05
272016	City of Runnells	Billing Service Revenue	4,788.26
272017	City of Windsor Heights	Billing Service Revenue	48,814.94
272018	Dixie Petro-Chem, Inc.	Inventory	17,298.55
272019	Evoqua Water Technologies LLC	Inventory	10,496.92
272020	Greenfield Plaza Sanitary Sewer	Billing Service Revenue	21,904.87
272021	HDR Engineering	Contractors	5,642.50
272022	HomeServe USA	Billing Service Revenue	205,319.60
272023	IFS Canada, Inc	Consultants	67,293.00
272024	IP Pathways, LLC	Maintenance Contracts	11,132.30
272025	Insight Public Sector, Inc	Purchased Services	110,818.41
272026	Iowa Contracting Inc	Asphalt	3,576.00
272027	KFI Engineers	Contractors	11,989.00
272028	Kemira Water Solutions, Inc	Inventory	25,210.44
272029	KnowBe4 LLC	Consultants	5,934.00
272030	Mail Services LLC	Postage	19,548.51
272031	Martin Marietta Aggregates	Inventory	38,019.18
272032	Mid American Energy	Casualty Losses	34,316.10
272033	Mid American Energy	Utilities - Electric & Natural Gas	24,433.51
272034	Midwest Office Technology, Inc.	Printing & Copies	3,451.15
272035	Mississippi Lime Company	Inventory	83,129.15
272036	Municipal Supply, Inc.	Inventory	20,151.68
272037	Neptune Technology Group Inc	Materials & Supplies	26,032.80
272038	Ottson Oil Company	Inventory	9,676.80
272039	Phoenix Security Contractors, LLC	Purchased Services	46,170.51
272040	Polk County	Billing Service Revenue	66,849.52
272041	Polk County Treasurer	Billing Service Revenue	23,671.05
272042	Pollard Company	Materials & Supplies	7,130.70
272043	Power Seal	Inventory	3,079.83
272044	Renewable Energy Group	Inventory	17,087.53
272045	Sandstone Management, LTD	Contractors	9,117.00
272046	Stivers	Vehicle Maintenance Materials	50,358.03
272047	Synergy Contracting LLC	Plumbing	7,350.63
272048	Tero International Inc	Training	32,336.92
272049	Torgerson Excavating	Plumbing	36,793.00
272050	Trimble	Office Supplies	10,726.49
272051	Truck Center Companies	Purchased Services	4,880.89
272052	Unified Contracting Services	Contractors	3,000.00
272053	Univar	Inventory	9,081.51

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272054	Urbandale/Windsor Heights Sanitary Dist	Billing Service Revenue	37,695.78
272055	Valley Plumbing Company, Inc.	Plumbing	3,198.00
272056	WRH, Inc.	Contractors	68,875.00
272057	Waldinger Corporation	Contractors	7,791.00
272058	Warren Water District	Purchased Services	4,058.25
272059	Wiss, Janney, Elstner Associates, Inc.	Contractors	14,000.00
272060	Ziegler Inc.	Contractors	4,831.14
272061	General Lee's Smoke Shack	Food & Beverages	1,945.67
272062	Iowa Department of Natural Resources	Purchased Services	100.00
272063	Master Single Payment Vendor	Refunds	29.05
272064	Master Single Payment Vendor	Refunds	95.29
272065	Voided Check		0.00
272066	Voided Check		0.00
272067	Master Single Payment Vendor	Refunds	137.71
272068	Master Single Payment Vendor	Refunds	166.89
272069	Master Single Payment Vendor	Refunds	51.21
272070	Master Single Payment Vendor	Refunds	50.15
272071	Master Single Payment Vendor	Refunds	45.84
272072	Master Single Payment Vendor	Refunds	170.71
272073	Master Single Payment Vendor	Refunds	54.19
272074	Master Single Payment Vendor	Refunds	136.29
272075	Master Single Payment Vendor	Refunds	96.73
272076	Master Single Payment Vendor	Refunds	51.78
272077	Master Single Payment Vendor	Refunds	25.99
272078	Master Single Payment Vendor	Refunds	73.80
272079	Master Single Payment Vendor	Refunds	25.13
272080	Master Single Payment Vendor	Refunds	34.24
272081	Master Single Payment Vendor	Refunds	53.13
272082	Master Single Payment Vendor	Refunds	36.92
272083	Master Single Payment Vendor	Refunds	134.72
272084	Master Single Payment Vendor	Refunds	137.68
272085	Master Single Payment Vendor	Refunds	545.86
272086	Master Single Payment Vendor	Refunds	145.71
272087	Master Single Payment Vendor	Refunds	98.34
272088	Master Single Payment Vendor	Refunds	87.96
272089	Master Single Payment Vendor	Refunds	142.83
272090	Master Single Payment Vendor	Refunds	8.84
272091	Master Single Payment Vendor	Refunds	61.80
272092	Master Single Payment Vendor	Refunds	44.25
272093	Master Single Payment Vendor	Refunds	76.33
272094	Master Single Payment Vendor	Refunds	65.59
272095	Acme Tools	Materials & Supplies	2,342.38
272096	Air Products	Inventory	2,146.00
272097	Airgas North Central	Inventory	620.48
272098	Amazon Capital Services Inc	Materials & Supplies	1,608.73
272099	BDI Signs Business Designs, Inc	Vehicle Maintenance Materials	160.00
272100	Baker Group	Contractors	2,322.00
272101	Bearing Headquarters Company	Inventory	205.12
272102	Bentley Systems, Inc.	Maintenance Contracts	2,195.25
272103	Blackburn Manufacturing Company	Inventory	457.64
272104	DMWW Employeee	Reissue of payroll check	875.45
272105	C. H. McGuiness Company, Inc.	Materials & Supplies	111.60
272106	Capital Sanitary Supply	Inventory	466.94
272107	Casey's Business Mastercard	Gasoline	70.43
272108	Central Iowa Ready Mix	Concrete	672.00
272109	Cintas	Purchased Services	2,196.41
272110	City Supply Corporation	Materials & Supplies	911.36

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272111	City of Des Moines	Concrete	222.25
272112	City of Des Moines	Contractors	605.00
272113	City of Pleasant Hill	Contractors	40.00
272114	Commercial Supply Co	Inventory	310.00
272115	Construction & Aggregate Products, Inc.	Materials & Supplies	1,419.50
272116	DXP	Inventory	763.34
272117	DMWW Employee	Reissue of payroll check	2,332.52
272118	Des Moines Asphalt & Paving Co., Inc.	Asphalt	276.75
272119	Des Moines Steel Company, Inc.	Vehicle Maintenance Materials	954.00
272120	Douglas K. Oscarson	Consultants	1,798.20
272121	Dultmeier Sales LLC	Inventory	62.56
272122	Fastenal Company	Inventory	16.90
272123	Fisher Scientific	Inventory	149.60
272124	Force Fitters	Employee Job Costs	1,856.25
272125	Gilcrest Jewett Lumber Company	Inventory	93.24
272126	Grainger, Inc.	Materials & Supplies	1,643.47
272127	Home City Ice	Park Materials	377.50
272128	IFS Canada, Inc	Consultants	1,053.00
272129	IP Pathways, LLC	Data Processing Equipment	1,959.46
272130	In The Bag	Food & Beverages	486.00
272131	Interstate All Battery	Inventory	87.60
272132	Iowa Prison Industries	Aggregate Materials	34.00
272133	Justin Newman	Safety Clothing	256.78
272134	Keystone Laboratories	Purchased Services	88.50
272135	Kirkham Michael	Contractors	320.00
272136	Liberty Tire Recycling Services Iowa	Purchased Services	309.03
272137	MSC Industrial Supply Company	Inventory	1,684.37
272138	MTI Distributing	Vehicle Maintenance Materials	49.99
272139	Midwest Office Technology, Inc.	Printing & Copies	659.60
272140	Midwest Wheel Companies	Vehicle Maintenance Materials	1,997.06
272141	Pat Bruner	Materials & Supplies	92.87
272142	Plumb Supply Company	Inventory	756.62
272143	Premier Safety	Inventory	961.92
272144	Quick Supply Company	Materials & Supplies	1,804.00
272145	R & A Risk Professionals	Contractors	1,952.50
272146	Ramco Innovations	Inventory	16.24
272147	Russell Rees	Safety Boots	160.50
272148	DMWW Employee	Reissue of payroll check	1,605.86
272149	Steve Birkestrand	Safety Boots	133.96
272150	Stivers	Vehicle Maintenance Materials	197.52
272151	Strauss Security Solutions	Materials & Supplies	85.34
272152	Tech Sales Company	Inventory	1,760.45
272153	Terry Webster	Mileage	117.90
272154	The Filter Shop	Materials & Supplies	183.17
272155	The Rotary Club of Des Moines	Dues and Memberships	287.00
272156	Trimble	Office Supplies	1,365.00
272157	Truck Center Companies	Vehicle Maintenance Materials	220.09
272158	U.S. Autoforce	Vehicle Maintenance Materials	518.72
272159	ULINE	Vehicle Maintenance Materials	561.12
272160	UPS	Delivery/Freight	29.77
272161	USA Safety Supply Corp	Inventory	166.86
272162	Unified Contracting Services	Contractors	750.00
272163	VWR International LLC	Inventory	344.50
272164	Verizon Connect Telo, Inc.	Vehicle Maintenance Materials	2,014.20
272165	West Des Moines Water Works	Sewer	110.03
272166	Wex Bank	Gasoline	162.07
272167	Aclara Technologies, LLC	Inventory	4,585.50

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272168	Aureon Communications, LLC.	Internet Connectivity	3,702.96
272169	Avista Technologies	Inventory	19,500.00
272170	Baker Electric, Inc.	Contractors	2,600.00
272171	Bolton & Menk, Inc	Contractors	11,791.50
272172	Bonnie's Barricades	Contractors	8,849.55
272173	Brockway Mechanical & Roofing Co, Inc.	Contractors	3,126.00
272174	CTI Ready Mix	Concrete	8,170.50
272175	Contract Specialty, L.C.	Park Materials	3,094.00
272176	Core and Main	Inventory	7,949.43
272177	Corell Contractors	Contractors	711,217.21
272178	Dixie Petro-Chem, Inc.	Inventory	18,871.39
272179	FBG Services	Purchased Services	11,688.00
272180	Graybar Electric Company	Materials & Supplies	4,964.19
272181	HNTB Corporation	Contractors	49,684.25
272182	Heartland Business Systems	Purchased Services	8,041.00
272183	IMEG Corp	Contractors	19,000.00
272184	Iowa Contracting Inc	Asphalt	3,816.00
272185	Iowa Department of Transportation	Prepaid Expense	2,500,000.00
272186	Kemira Water Solutions, Inc	Inventory	25,043.04
272187	Logan Contractors Supply, Inc.	Materials & Supplies	3,989.08
272188	Mail Services LLC	Postage	9,126.63
272189	Martin Marietta Aggregates	Inventory	6,667.00
272190	McMaster-Carr Supply Company	Vehicle Maintenance Materials	2,586.38
272191	Mississippi Lime Company	Inventory	71,511.22
272192	Municipal Supply, Inc.	Inventory	39,464.12
272193	Murphy Tractor & Equipment	Vehicle Maintenance Materials	128,476.31
272194	Northway Well and Pump Company	Contractors	38,500.00
272195	Power Seal	Inventory	5,339.77
272196	Raftelis	Consultants	7,785.00
272197	Snyder & Associates, Inc.	Contractors	114,982.43
272198	State Hygienic Laboratory	Purchased Services	3,465.50
272199	UPHDM Occupational Medicine	Purchased Services	3,895.10
272200	Van Meter Industrial, Inc.	Contractors	24,622.05
272201	Verizon Wireless Messaging Service	Cell Phones	4,850.89
272202	Vessco	Inventory	4,393.79
272203	Waste Management of Iowa Inc.	Purchased Services	2,910.27
272204	Ziegler Inc.	Contractors	4,370.36
272205	Master Single Payment Vendor	Refunds	120.59
272206	Master Single Payment Vendor	Refunds	76.03
272207	Master Single Payment Vendor	Refunds	51.42
272208	Master Single Payment Vendor	Refunds	51.43
272209	Master Single Payment Vendor	Refunds	112.59
272210	Master Single Payment Vendor	Refunds	177.20
272211	Master Single Payment Vendor	Refunds	104.91
272212	Master Single Payment Vendor	Refunds	114.52
272213	Master Single Payment Vendor	Refunds	41.90
272214	Master Single Payment Vendor	Refunds	92.05
272215	Master Single Payment Vendor	Refunds	84.70
272216	Master Single Payment Vendor	Refunds	113.55
272217	Master Single Payment Vendor	Refunds	33.24
272218	Master Single Payment Vendor	Refunds	18.93
272219	Master Single Payment Vendor	Refunds	179.41
272220	Master Single Payment Vendor	Refunds	63.84
272221	Master Single Payment Vendor	Refunds	363.57
272222	Master Single Payment Vendor	Refunds	121.52
272223	Master Single Payment Vendor	Refunds	75.72
272224	Master Single Payment Vendor	Refunds	104.87

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272225	Master Single Payment Vendor	Refunds	85.23
272226	Master Single Payment Vendor	Refunds	67.45
272227	Master Single Payment Vendor	Refunds	35.05
272228	Master Single Payment Vendor	Refunds	149.34
272229	Master Single Payment Vendor	Refunds	161.90
272230	Master Single Payment Vendor	Refunds	99.23
272231	Master Single Payment Vendor	Refunds	106.93
272232	Master Single Payment Vendor	Refunds	156.55
272233	Master Single Payment Vendor	Refunds	56.46
272234	Master Single Payment Vendor	Refunds	159.49
272235	Master Single Payment Vendor	Refunds	48.50
272236	Master Single Payment Vendor	Refunds	11.05
272237	Master Single Payment Vendor	Refunds	101.29
272238	Master Single Payment Vendor	Refunds	53.50
272239	Master Single Payment Vendor	Refunds	68.00
272240	Master Single Payment Vendor	Refunds	105.57
272241	Master Single Payment Vendor	Refunds	26.85
272242	Master Single Payment Vendor	Refunds	150.94
272243	Master Single Payment Vendor	Refunds	74.65
272244	Master Single Payment Vendor	Refunds	133.90
272245	Master Single Payment Vendor	Refunds	89.01
272246	Master Single Payment Vendor	Refunds	527.42
272247	Master Single Payment Vendor	Refunds	119.82
272248	Master Single Payment Vendor	Refunds	75.61
272249	Master Single Payment Vendor	Refunds	42.76
272250	Master Single Payment Vendor	Refunds	101.91
272251	Master Single Payment Vendor	Refunds	130.34
272252	Master Single Payment Vendor	Refunds	62.85
272253	Master Single Payment Vendor	Refunds	98.72
272254	Accurate Hydraulics & Machine Serv., Inc	Materials & Supplies	184.06
272255	Acme Tools	Inventory	1,289.04
272256	Amazon Capital Services Inc	Materials & Supplies	791.82
272257	American Radiator	Purchased Services	192.50
272258	American Water Works Association	Dues and Memberships	275.00
272259	Armored Knights., Inc	Purchased Services	536.80
272260	Badger Meter, Inc	Inventory	363.87
272261	Baker Group	Contractors	1,824.00
272262	Bearing Headquarters Company	Materials & Supplies	213.37
272263	Bentley Ridge Tree Farm	Park Materials	714.00
272264	Betty Neuman & McMahon, PLC	Legal Fees	833.00
272265	CTI Ready Mix	Concrete	1,550.00
272266	Canon Financial Services INC	Printing & Copies	394.61
272267	Capital Sanitary Supply	Inventory	1,955.79
272268	Casey's Business Mastercard	Gasoline	71.54
272269	CenturyLink	Telephone Services	102.72
272270	City Supply Corporation	Materials & Supplies	1,718.38
272271	Cody Hay	Training	92.75
272272	Construction & Aggregate Products, Inc.	Materials & Supplies	944.14
272273	DXP	Inventory	315.08
272274	Delta Dental of Iowa	Vision Withholding	1,239.76
272275	Des Moines Iron Company	Vehicle Maintenance Materials	1,565.91
272276	Des Moines Register	Purchased Services	1,276.12
272277	Des Moines Water Works Petty Cash	Materials & Supplies	616.21
272278	Douglas K. Oscarson	Consultants	1,776.00
272279	Dultmeier Sales LLC	Inventory	168.53
272280	Environmental Resource Assoc.	Materials & Supplies	1,828.28
272281	Fastenal Company	Inventory	34.35

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272282	First Choice Coffee	Food & Beverages	702.50
272283	Fisher Scientific	Materials & Supplies	1,051.80
272284	General Fire & Safety Equipment	Contractors	115.00
272285	Gilcrest Jewett Lumber Company	Inventory	55.35
272286	Graybar Electric Company	Inventory	1,840.32
272287	HY-VEE	Food & Beverages	74.41
272288	Home City Ice	Park Materials	265.00
272289	Hotsy Cleaning Systems	Vehicle Maintenance Materials	721.91
272290	Image Solutions	Aggregate Materials	47.05
272291	In The Bag	Food & Beverages	111.00
272292	Indelco Plastics	Inventory	168.06
272293	Industrial Glassware	Materials & Supplies	1,151.72
272294	Industrial Scientific Corporation	Dues and Memberships	2,315.03
272295	Ingersoll Rand	Inventory	1,787.08
272296	Insight Public Sector, Inc	Materials & Supplies	314.51
272297	Iowa Prison Industries	Materials & Supplies	891.00
272298	Kansas City Calibration Laboratory	Contractors	189.62
272299	Keystone Laboratories	Purchased Services	74.50
272300	Kinzler Construction Services	Purchased Services	1,126.50
272301	Language Testing International	Materials & Supplies	63.00
272302	Larry's Window Service, Inc.	Purchased Services	120.00
272303	Lawson Products, Inc.	Inventory	61.25
272304	Logan Contractors Supply, Inc.	Materials & Supplies	1,206.58
272305	MSC Industrial Supply Company	Inventory	468.00
272306	McClure Engineering Company	Contractors	2,444.44
272307	McMaster-Carr Supply Company	Materials & Supplies	1,211.26
272308	Menard's	Materials & Supplies	11.94
272309	Menard's	Materials & Supplies	257.46
272310	Midland Plastics	Inventory	1,730.50
272311	Midwest Office Technology, Inc.	Park Materials	267.68
272312	Millennium Filters LLC	Inventory	101.06
272313	Northern Tool and Equipment	Vehicle Maintenance Materials	85.96
272314	Paragon IT Professionals	Consultants	1,480.00
272315	Peterbilt of Des Moines	Vehicle Maintenance Materials	2,469.60
272316	Plumb Supply Company	Inventory	1,681.31
272317	Power Seal	Inventory	1,894.28
272318	Print Image Solutions, Inc.	Inventory	863.20
272319	Products, Incorporated	Inventory	128.60
272320	Protex Central, Inc.	Contractors	877.00
272321	Quality Flow Iowa, INC	Materials & Supplies	775.99
272322	Ramco Innovations	Contractors	540.29
272323	Rexco Equipment, Inc.	Vehicle Maintenance Materials	89.49
272324	Seton Identification Products	Inventory	323.24
272325	Star Equipment, Ltd.	Inventory	269.60
272326	Steve Birkestrand	Safety Glasses	371.20
272327	Stivers	Vehicle Maintenance Materials	333.03
272328	Strauss Security Solutions	Purchased Services	373.50
272329	Superior Industrial Equipment	Inventory	1,026.03
272330	Sweco/Pearson Arnold	Inventory	2,083.17
272331	Team Services, Inc.	Contractors	1,856.62
272332	Tech Sales Company	Inventory	350.00
272333	The Shredder	Purchased Services	87.00
272334	Total Tool	Inventory	895.70
272335	U.S. Autoforce	Vehicle Maintenance Materials	1,017.88
272336	ULINE	Inventory	54.23
272337	UPHDM Occupational Medicine	Purchased Services	1,218.25
272338	USA Safety Supply Corp	Materials & Supplies	1,268.43

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272339	United Seeds, Inc.	Park Materials	427.50
272340	United States Plastic Corporation	Inventory	28.50
272341	VWR International LLC	Materials & Supplies	85.00
272342	Van Meter Industrial, Inc.	Inventory	932.16
272343	Vessco	Inventory	1,152.51
272344	Waste Solutions of Iowa	Purchased Services	1,049.00
272345	White Cap	Materials & Supplies	730.72
272346	Ziegler Inc.	Contractors	1,732.47
272347	Aclara Technologies, LLC	Inventory	82,532.64
272348	Air Products	Inventory	4,578.52
272349	Baker Electric, Inc.	Contractors	12,482.52
272350	Bolton & Menk, Inc	Contractors	6,174.00
272351	Boomi, LP	Consultants	16,395.00
272352	C. H. McGuinness Company, Inc.	Contractors	3,441.73
272353	Calgon Carbon Kuraray	Inventory	94,984.00
272354	Central States Group	Materials & Supplies	27,742.03
272355	Central States Railroad	Casualty Losses	66,396.00
272356	Combined Systems Technology, Inc.	Materials & Supplies	3,900.00
272357	Consolidated Water Solutions	Materials & Supplies	184,545.01
272358	Core and Main	Inventory	5,693.60
272359	Dickinson, Mackaman, Tyler, & Hagen, PC	Legal Fees	19,172.50
272360	Dixie Petro-Chem, Inc.	Inventory	18,461.89
272361	Electrical Engineering & Equipment Co.	Contractors	3,371.52
272362	Gold Standard Diagnostics	Inventory	5,550.10
272363	GovernmentJobs.com, Inc.	Maintenance Contracts	7,151.30
272364	Grainger, Inc.	Materials & Supplies	6,312.00
272365	HDR Engineering	Contractors	59,751.01
272366	Hach Chemical Company	Inventory	3,120.00
272367	I'll Do It	Contractors	10,796.00
272368	IDEXX Laboratories, Inc.	Materials & Supplies	2,635.81
272369	Iowa One Call	Purchased Services	5,140.30
272370	Kemira Water Solutions, Inc	Inventory	49,935.42
272371	Mail Services LLC	Postage	8,395.20
272372	Mid American Energy	Utilities - Electric & Natural Gas	383,953.61
272373	Mississippi Lime Company	Inventory	47,933.69
272374	Municipal Supply, Inc.	Inventory	46,954.36
272375	Napa Auto Parts	Vehicle Maintenance Materials	5,151.43
272376	Neptune Technology Group Inc	Inventory	59,218.37
272377	Ottson Oil Company	Inventory	3,304.95
272378	Premier Safety	Inventory	2,599.59
272379	Protectoplas Company	Contractors	4,912.64
272380	Straub Corporation	Inventory	2,883.75
272381	Tension Envelope Corporation	Inventory	3,076.44
272382	Torgerson Excavating	Plumbing	79,289.13
272383	Tri-State Overhead Crane Company	Contractors	6,033.19
272384	USA Bluebook	Inventory	4,669.20
272385	Univar	Inventory	9,138.46
272386	Wellmark Blue Cross & Blue Shield of IA	Group Insurance Premiums	25,102.70
272387	Master Single Payment Vendor	Refunds	1,787.70
272388	Master Single Payment Vendor	Refunds	144.72
272389	Master Single Payment Vendor	Refunds	40.78
272390	Master Single Payment Vendor	Refunds	1,644.23
272391	Master Single Payment Vendor	Refunds	7.76
272392	Master Single Payment Vendor	Refunds	180.11
272393	Master Single Payment Vendor	Refunds	129.87
272394	Master Single Payment Vendor	Refunds	120.35
272395	Master Single Payment Vendor	Refunds	170.32

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272396	Master Single Payment Vendor	Refunds	112.35
272397	Master Single Payment Vendor	Refunds	121.74
272398	Master Single Payment Vendor	Refunds	47.83
272399	Master Single Payment Vendor	Refunds	18.42
272400	Master Single Payment Vendor	Refunds	40.27
272401	Master Single Payment Vendor	Refunds	33.25
272402	Master Single Payment Vendor	Refunds	141.15
272403	Master Single Payment Vendor	Refunds	539.27
272404	Master Single Payment Vendor	Refunds	165.44
272405	Master Single Payment Vendor	Refunds	46.92
272406	Master Single Payment Vendor	Refunds	419.87
272407	Master Single Payment Vendor	Refunds	126.25
272408	Master Single Payment Vendor	Refunds	77.96
272409	Master Single Payment Vendor	Refunds	76.34
272410	AE Outdoor Power	Vehicle Maintenance Materials	36.72
272411	AccuCopy	Contractors	103.16
272412	Accurate Hydraulics & Machine Serv., Inc	Inventory	99.19
272413	Acme Tools	Materials & Supplies	709.41
272414	Airgas North Central	Inventory	999.04
272415	Amazon Capital Services Inc	Materials & Supplies	397.20
272416	American Fence of Iowa	Contractors	825.00
272417	Bearing Headquarters Company	Inventory	13.10
272418	Bob Brown Chevrolet, Inc.	Vehicle Maintenance Materials	421.73
272419	CPI International	Inventory	2,305.75
272420	Canon Financial Services INC	Printing & Copies	1,175.70
272421	Capital Sanitary Supply	Inventory	115.48
272422	Carmen Goodwin	Mileage	34.27
272423	Casey's Business Mastercard	Vehicle Maintenance Materials	114.42
272424	CenturyLink	Telephone Services	62.25
272425	City Supply Corporation	Inventory	1,228.06
272426	City of Des Moines	Contractors	540.00
272427	Commercial Supply Co	Inventory	387.50
272428	Consumer Energy	Electrical Power	356.65
272429	Core and Main	Materials & Supplies	1,497.81
272430	Des Moines Iron Company	Vehicle Maintenance Materials	1,568.24
272431	Douglas K. Oscarson	Consultants	1,787.10
272432	Eldridge Welding & Machine	Materials & Supplies	1,223.75
272433	Electronic Engineering Company	Contractors	1,225.97
272434	Ferrellgas, Inc.	Vehicle Maintenance Materials	35.85
272435	Graybar Electric Company	Tools	419.35
272436	HY-VEE	Food & Beverages	270.00
272437	Hach Chemical Company	Materials & Supplies	1,125.00
272438	Home City Ice	Park Materials	395.00
272439	I & S Group, Inc.	Contractors	637.50
272440	IDEXX Laboratories, Inc.	Materials & Supplies	1,043.25
272441	Illinois Mutual & Life Casualty Company	Insurance Withholding	17.81
272442	Image Solutions	Office Supplies	86.00
272443	Ingersoll Rand	Contractors	324.00
272444	Interstate All Battery	Materials & Supplies	94.40
272445	Joseph Lake	Licenses & Certifications	70.50
272446	Keystone Laboratories	Purchased Services	218.75
272447	Kustom Concrete Pumping	Contractors	2,397.50
272448	Lawson Products, Inc.	Inventory	105.52
272449	Logan Contractors Supply, Inc.	Materials & Supplies	1,803.10
272450	MSC Industrial Supply Company	Inventory	230.64
272451	McMaster-Carr Supply Company	Inventory	651.51
272452	Mediacom Business	Internet Connectivity	454.90

PAYMENTS FOR OCTOBER, 2023

PeopleSoft Financials

Report ID: DWAPR002.sqr

<u>Check No.</u>	<u>Paid to:</u>	<u>Description</u>	<u>Amount</u>
272453	Melissa Goben	Materials & Supplies and Mileage	143.79
272454	Menard's	Materials & Supplies	277.04
272455	Midwest Office Technology, Inc.	Printing & Copies	510.08
272456	O'Halloran International	Purchased Services	817.90
272457	Ottson Oil Company	Vehicle Maintenance Materials	1,651.13
272458	Plumb Supply Company	Inventory	1,748.59
272459	Premier Safety	Inventory	1,308.54
272460	Protex Central, Inc.	Contractors	397.50
272461	Ramco Innovations	Inventory	871.36
272462	Rick's Towing	Contractors	383.00
272463	Roy's Towing and Recovery	Purchased Services	165.00
272464	Savanna Wentland	Safety Boots	160.49
272465	Servicemaster - Rice	Casualty Losses	2,198.33
272466	Shane Scott	Licenses & Certifications	115.83
272467	Stanley Consultants	Contractors	1,428.00
272468	Star Equipment, Ltd.	Inventory	1,170.70
272469	Stew Hansen's Dodge City Inc.	Vehicle Maintenance Materials	194.12
272470	Straub Corporation	Inventory	2,284.50
272471	Strauss Security Solutions	Office Equipment	1,486.10
272472	The Filter Shop	Inventory	106.00
272473	Tompkins Industries, Inc.	Vehicle Maintenance Materials	30.92
272474	Tony Moro Power Coat and Blasting	Contractors	760.00
272475	Total Tool	Inventory	52.50
272476	Truck Center Companies	Vehicle Maintenance Materials	12.62
272477	UPS	Delivery/Freight	20.73
272478	USA Safety Supply Corp	Inventory	110.75
272479	Van Meter Industrial, Inc.	Materials & Supplies	1,659.21
272480	Washer Systems of Iowa	Inventory	86.78
272481	Waste Management of Iowa Inc.	Purchased Services	631.72
272482	Ziegler Inc.	Vehicle Maintenance Materials	518.94
272483	Aclara Technologies, LLC	Inventory	6,970.00
272484	Air Products	Inventory	4,747.88
272485	Baker Group	Contractors	2,502.00
272486	Blue Conduit Abernathy Schwartz Partners	Contractors	109,500.00
272487	Bonnie's Barricades	Contractors	4,758.70
272488	CTI Ready Mix	Concrete	22,902.50
272489	Calgon Carbon Kuraray	Inventory	63,904.00
272490	Cintas	Purchased Services	4,426.00
272491	Cortrol Process Systems	Inventory	9,364.25
272492	Dixie Petro-Chem, Inc.	Inventory	8,995.19
272493	Electrical Engineering & Equipment Co.	Purchased Services	2,911.21
272494	Force Fitters	Inventory	3,558.25
272495	Grainger, Inc.	Inventory	4,938.00
272496	Harn R/O Systems Inc.	Contractors	31,000.00
272497	Hutcheson Engineering Products Inc.	Inventory	3,683.16
272498	I'll Do It	Contractors	6,754.00
272499	Iowa Contracting Inc	Asphalt	9,648.00
272500	KFI Engineers	Contractors	15,817.50
272501	Kemetco Research Inc	Materials & Supplies	5,700.00
272502	Kemira Water Solutions, Inc	Inventory	12,426.66
272503	Mail Services LLC	Postage	9,053.34
272504	Mid American Energy	Utilities - Electric & Natural Gas	86,386.91
272505	Mississippi Lime Company	Inventory	50,067.14
272506	Municipal Supply, Inc.	Inventory	9,372.75
272507	Neptune Technology Group Inc	Inventory	61,566.60
272508	Schimberg	Materials & Supplies	5,448.34
272509	Seneca Companies	Contractors	13,628.10

PAYMENTS FOR OCTOBER, 2023

PeopleSoft Financials

Report ID: DWAPR002.sqr

<u>Check No.</u>	<u>Paid to:</u>	<u>Description</u>	<u>Amount</u>
272510	Strand Associates	Contractors	13,166.71
272511	Synergy Contracting LLC	Contracts Payable	83,947.56
272512	Torgerson Excavating	Plumbing	14,866.00
272513	US Army Corps of Engineers	Purchased Services	6,640.00
272514	USA Bluebook	Inventory	4,349.72
272515	Univar	Inventory	8,996.06
272516	Vessco	Inventory	3,193.24
272517	Voya Financial	Insurance Withholding	8,842.06
272518	Wiss, Janney, Elstner Associates, Inc.	Contractors	4,600.00
272519	Iowa Department of Natural Resources	Purchased Services	451.80
343375	Treasurer State of Iowa	Iowa State Sales Tax Payable	168,399.20
377121	Treasurer State of Iowa	Iowa Water Excise Tax Payable	272,799.96
986622	ADP, LLC	Purchased Services	7,657.95
100123	EBS	Employee Health Premiums	313,678.28
101323	Collection Services Center	Garnishment of Wages	2,348.31
101323	Treasurer State of Iowa	State Withholding Taxes Payable	26,922.08
101323	Internal Revenue Service	Withholding Taxes Payable	179,553.83
102723	Collection Services Center	Garnishment of Wages	2,491.39
102723	Treasurer State of Iowa	State Withholding Taxes Payable	27,188.64
102723	Internal Revenue Service	Withholding Taxes Payable	181,150.90
103123	EBS	Employee Health Premiums	28,821.18
TOTAL			<u>\$9,774,172.57</u>

CEO APPROVED EXPENDITURES GREATER THAN \$40,000
MONTHLY SCHEDULE FOR THE MONTH OF OCT 2023

Check #	Vendor	Description	Amount	Details
272355	Central States Railroad	Casualty Losses	66,396.00	Liability Claim - SE 18th water main break
272382	Torgerson Excavating	Plumbing	79,289.13	\$63,623.13 Lead Service Line Replacement

AGENDA ITEM FORM

SUBJECT: Proposed 2024 Budget

SUMMARY:

- The budget for 2024 is based on total operating revenue of \$91.8 million.
- The proposed operating budget totals \$60.9 million which is an increase of 4.7% (or \$2.7 million) over the approved 2023 budget. Moderate increases in operating labor, chemicals, and purchased services are the largest contributors to the increase of the operating budget.
- Capital expenditures budgeted for 2024 total \$69.4 million. The budget includes \$3.3 million of capital projects to be funded with State Revolving Fund loans. There is \$17.2 million budgeted for the continuing costs of expanding the Saylorville Water Treatment Plant, including the expansion of raw water, expansion of the treatment plant, and construction of necessary feeder mains. These expansion projects are expected to be funded through regional participation.

See the attached memo for detailed information concerning the proposed 2024 budget.

These materials were discussed at the October Finance & Audit committee meeting, the October Board Meeting, and the November Finance & Audit committee meeting.

FISCAL IMPACT:

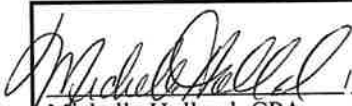
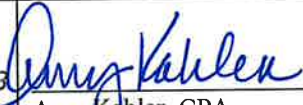

This budget establishes the guidelines for the 2024 operations and capital replacement program for the utility.

RECOMMENDED ACTION:

Approve the Des Moines Water Works 2024 budget.

BOARD REQUIRED ACTION:

Public Hearing – Opened by Chairperson for comments from the public regarding the budget for 2024.
Chairperson closes the hearing.
Motion for the approval of the 2024 Des Moines Water Works budget.

 Michelle Holland, CPA Controller	 Amy Kahler, CPA Chief Financial Officer	 Ted Corrigan, P.E. CEO and General Manager
11/17/23 (date)	11/20/23 (date)	11/22/23 (date)

Attachment: 2024 Budget Memo.

DATE: November 19, 2023

TO: Ted Corrigan, CEO & General Manager

FROM: Amy Kahler, Chief Financial Officer
Michelle Holland, Controller

SUBJECT: Proposed 2024 Budget

The attached document contains the following:

2024 Budget Highlights

2024 Overview of Budget Process

Proposed 2024 Budget Summary and Comparison to 2023 Budget

Details of Proposed Revenue, Additional Funding, Operating Expenses, and Capital Expenses

Summary of Expenditures 2020-2024

Future Capital Expenses

2024 Operating Work Plans Recommended for Funding

2024 Capital Work Plans Recommended for Funding

Appendix: DMWW Budget Process & Timeline

2024 Budget Highlights

PUMPAGE

18.2 BILLION GALLONS

- Based on 7-year average pumpage
- 17.7 billion gallons in 2023 budget

WATER REVENUE

\$84.8 MILLION

(\$5.8 million or 7.3% higher than 2023 budget)

HEADCOUNT

Additional staff in 2024 Budget:

- +2.0 Engineering
- +1.0 Information Technology
- +2.0 Water Distribution
- +1.0 Water Production
- +1.0 Central Stores

OPERATING EXPENSES

\$60.9 MILLION

(\$2.7 million or 4.7% higher than 2023 budget)

CAPITAL EXPENSES

\$69.4 MILLION

(Capital budget in 2023 was \$62.5 million)

CAPITAL PROJECTS FUNDED BY DMWW DEBT (SRF)

\$3.3 million

CONTINUED CAPITAL EXPENSES FOR:

- ASR Well \$3.3 million

CAPITAL PROJECTS FUNDED WITH REGIONAL PARTICIPATION

\$17.2 million

CONTINUED CAPITAL EXPENSES FOR:

- SWTP Raw Water Expansion \$ 3.5 million
- SWTP Plant Expansion \$ 4.1 million
- SWTP W Feeder Main \$ 9.2 million
- Tenny-LP Moon Feeder Main \$ 0.4 million

CAPITAL PROJECTS FUNDED BY UTILITY REVENUES (\$31.8 million) & OTHER FUNDING SOURCES (\$2.0 million)

Water Main Replacement (Des Moines, Polk County, Pleasant Hill, Windsor Heights)	Upgrade to Generator Control System
Installation of VFD on West High Lift Pumps	Improvement of SCADA Network
Modifications to Distribution Building	DM River Well Field
Rehabilitation of Collector Wells at McMullen	Continuing Basin Reclaiming
UF and RO Membrane Replacement at SWTP	Ongoing Departmental Capital – Customer Service, I.T., Water Distribution, Water Production
Several other projects at Fleur Drive Treatment Plant, McMullen Treatment Plant and Saylorville Treatment Plant	

2024 Overview of Budget Process

The Des Moines Water Works budget process is very detailed and requires a high level of participation from all departments. We use an activity-based methodology which correlates to our internal financial reporting. Activity-based costing provides the cost tracking and allocations required for our Cost of Service calculations.

The utility prepares a zero-based budget by “project” or activity. Staff identifies strategic goals, identifies the tasks to achieve those goals, and requests the funding necessary to support the tasks and goals. While many companies use a traditional budgeting approach that simply increases the prior year’s budget by a set percentage, DMWW’s zero-based, activity-based budget process reconsiders and justifies all activities of the business every year. The process is detailed, time-consuming, and rigorous; however, the methodology is decision oriented, supports the utility’s Cost of Service study, and results in a budget that is more aligned with strategic goals.

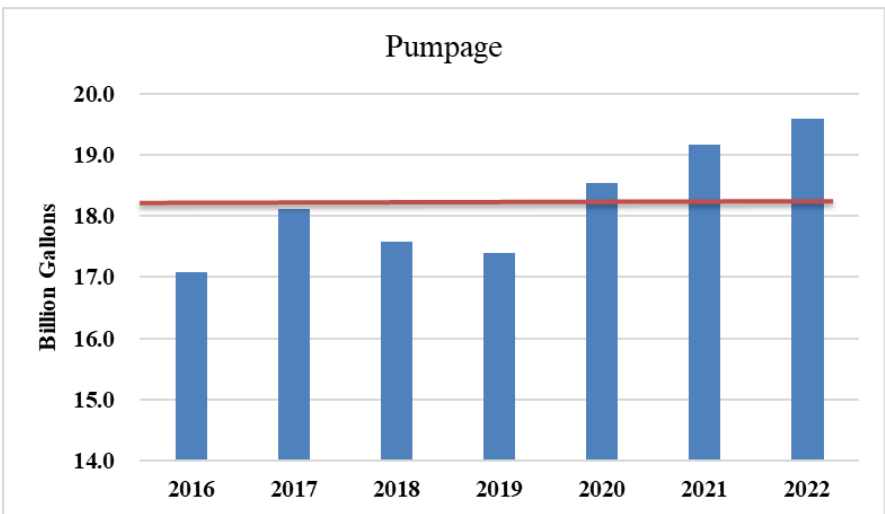
Budget files for operating and capital expenses are created by Finance. These files include prior year budget and actual information for comparative purposes and are created uniformly so that they total into a utility-wide budget. Additionally, there are several monthly financial reports to aid budgeters in reviewing and analyzing data to determine a proper level of expense for the upcoming budget year.

Budgeting is a compilation of assumptions, estimations, and a reliance on financial information and other relevant data.

One of the first assumptions made is water pumpage, which is used to budget water revenue and production at each treatment plant. Actual pumpage varies from year to year and is somewhat unpredictable. Weather has a significant impact on pumpage.

The pumpage budget for 2024 is 18.2 billion gallons. The 2024 pumpage budget was calculated based on the average annual pumpage for the last seven years. This is an increase of 500 million gallons from the 2023 budget. By budgeting an average pumpage level, rather than any extreme, there is less likelihood of being significantly different than budget.

The chart below shows the last seven years of pumpage.



The annual pumpage number drives several components of the budget:

1. Water Revenue Budget

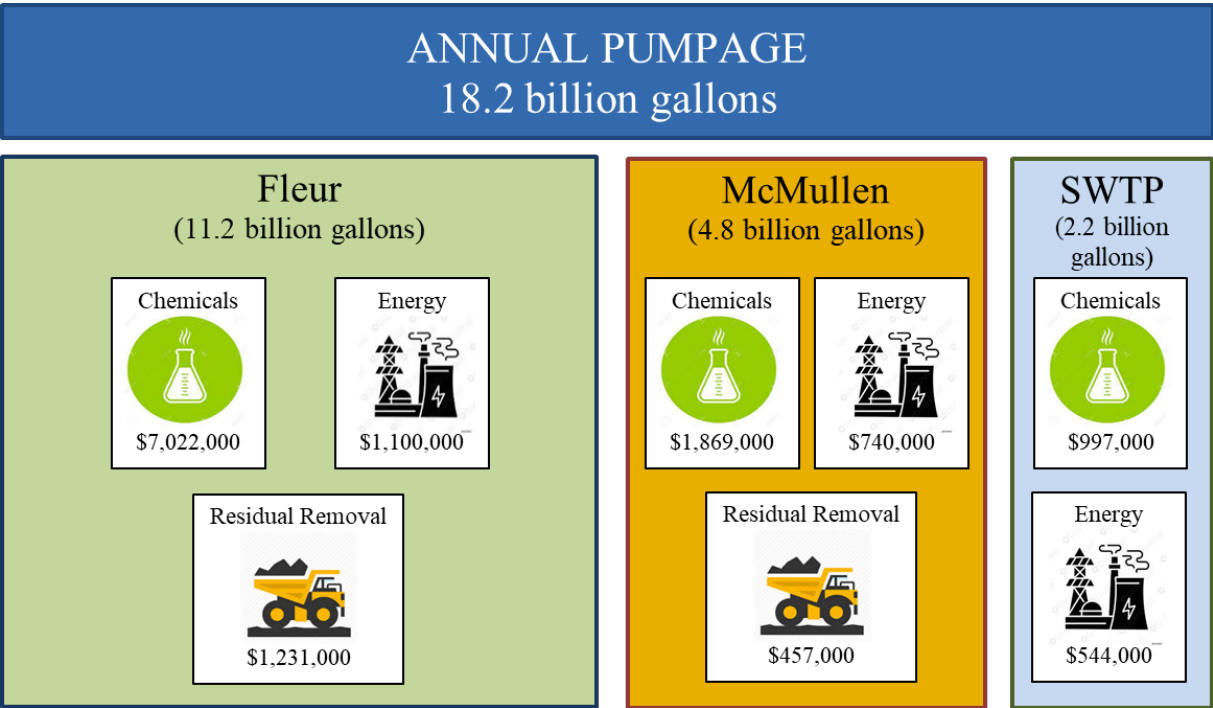
From the budgeted pumped gallons, a “billed consumption” number is calculated. On average, approximately 90% of water pumpage is billed. The 10% unbilled water represents main breaks, hydrant flushing, fire service, water used in production, and free water provided to the City of Des Moines.

The total billed consumption is then allocated to the service areas based on historical usage. And finally, the projected water rates are applied to those consumption numbers by service area to calculate budgeted revenues.

2. Production at Treatment Facilities

The annual pumpage number is also used to determine the production at each of the three treatment facilities. Once the allocation of pumpage is determined, chemicals, energy, and residual removal expenses are budgeted based on the projected levels of production at each facility. The ongoing mission of water treatment at DMWW is to maintain a consistent finished product despite dynamic changes in raw water quality and quantity. Therefore, day-to-day decisions are made to provide an adequate supply of water from each treatment plant in a manner that balances the factors of finished water quality, overall treatment expense, and regulatory compliance.

The graphic below shows the allocation of budgeted pumpage and costs across the three treatment plants.



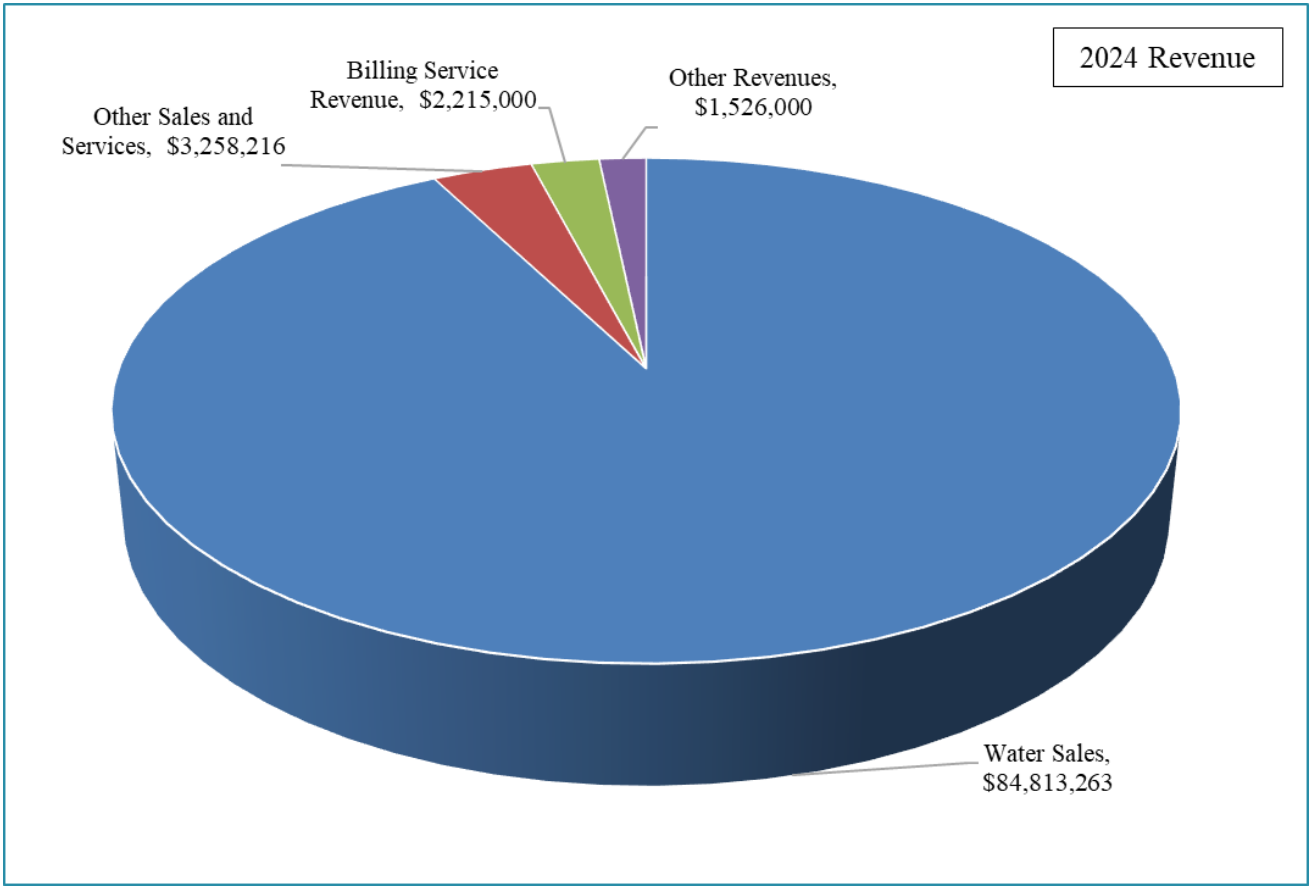
DES MOINES WATER WORKS
PROPOSED 2024 BUDGET SUMMARY AND COMPARISON TO 2023 BUDGET

	2024	2023	Percentage
	Proposed Budget	Approved Budget	Change
REVENUE:			
Water sales	\$ 84,813,263	\$ 79,059,795	7.3%
Penalties and fees	450,000	375,000	20.0%
Other sales and services	3,258,216	3,023,245	7.8%
Billing service revenue	2,215,000	2,166,000	2.3%
Land & building use revenue	216,000	216,000	0.0%
Connection Fees	600,000	400,000	50.0%
Interest income	260,000	195,600	32.9%
Total revenue available for expenses	\$ 91,812,479	\$ 85,435,640	7.5%
ADDITIONAL FUNDING:			
Unspent funds carried over from prior year's approved budget	\$ 15,047,830	\$ 1,269,980	1084.9%
Development Plan Review	60,000	78,600	(23.7%)
Capital projects funded by outside entities	1,431,000	25,000	5624.0%
Projects funded by SRF proceeds (DMWW Debt)	3,344,754	6,271,686	(46.7%)
Projects funded through regional participation	17,170,323	24,391,805	(29.6%)
American Rescue Plan Act (ARPA) funds through City of Des Moines	500,000	1,500,000	(66.7%)
Funds received for capacity in feeder main (Ankeny)	-	500,000	(100.0%)
PY Excess Revenues to offset regionalization expense	1,080,000	1,130,000	(4.4%)
Total additional funding available for expenses	\$ 38,633,907	\$ 35,167,071	9.9%
Total revenue and additional funding	\$ 130,446,386	\$ 120,602,711	8.2%
EXPENSES:			
<i>Operating expenses:</i>			
Labor	\$ 18,192,527	\$ 17,310,594	5.1%
Benefits	10,154,070	10,103,000	0.5%
Chemicals	9,887,667	8,952,971	10.4%
Residual Removal	1,687,768	2,317,346	(27.2%)
Utilities	3,556,686	3,149,500	12.9%
Gasoline/Fuel	304,232	382,680	(20.5%)
Purchased Services	9,507,188	8,673,504	9.6%
Training	290,275	251,270	15.5%
Materials and Equipment	4,472,000	4,371,355	2.3%
Insurance	1,830,200	1,625,000	12.6%
Postage	425,000	450,000	(5.6%)
Telephone	308,628	288,735	6.9%
Casualty Loss	110,000	110,000	0.0%
Loss on Bad Accounts	150,000	155,000	(3.2%)
Subtotal - Operating expenses	\$ 60,876,241	\$ 58,140,955	4.7%
<i>Capital expenditures:</i>			
Requests for new capital projects	\$ 54,352,315	\$ 61,191,776	(11.2%)
Multiple-year capital projects began before 2024 (carryover)	15,047,830	1,269,980	1084.9%
Subtotal - Capital expenditures	\$ 69,400,145	\$ 62,461,756	11.1%
<i>Debt service obligations:</i>			
Des Moines Water Works' direct obligation	\$ 170,000	\$ -	-
Total projected uses	\$ 130,446,386	\$ 120,602,711	8.2%
Net position of revenues to expenses	0	0	

REVENUE PROJECTIONS

Operating revenue for 2024 is budgeted at \$91.8 million. This is an increase of approximately \$6.4 million, or a 7.5% increase over the approved 2023 budget.

This revenue budget includes 18.2 billion gallons of pumpage which is 500 million gallons higher than the 2023 budget of 17.7 billion gallons. The 2024 budget includes volume rate increases of 6% for most retail customers¹ and for the wholesale Purchased Capacity customer class¹. These rates will be effective on April 1, 2024. Capital improvement fees remain unchanged in the 2024 budget. Water availability fees remain largely unchanged in the 2024 budget.¹



Water Sales are the most significant source of operating revenue, making up approximately 92% of total revenue. Water sales are budgeted to be \$84.8 million in 2024 which is \$5.8 million higher than the 2023 water sales budget.

Other Sales and Services are budgeted at nearly \$3.3 million. These revenues represent amounts budgeted within the departmental work plans. This includes reconnect fees, stop box repairs, distribution system repairs, lab testing, etc.

¹ Detailed rate recommendations are discussed in a separate memo within distributed Finance & Audit materials.

Billing Service Revenue is budgeted at nearly \$2.2 million. This represents fees charged to various cities, including Des Moines, Pleasant Hill, Windsor Heights, and others, for billing and collection services. This also includes revenue from HomeServe USA for billing and collection of fees from the optional service line maintenance program for residential customers.

Other Revenues, which are grouped together on the chart above, are budgeted at roughly \$1.5 million and is made up of:

Penalties & Fees	\$450,000
Connection Fees	\$600,000
Land & Bldg Lease Revenue	\$216,000
Interest Income on Invested Reserves	\$260,000

Additional funding is made up of several components in the 2024 budget:

- Unspent funds that have been carried over from the prior year’s budget
- Iowa State Revolving Fund (SRF) Loans
 - The design and partial construction of an ASR well at the Polk County Pump Station site is budgeted to be funded with an SRF loan.
- Regional Participation
 - Capital projects to be funded through regional participation:
 - The initial ongoing design costs and targeted analyses related to expanding both the source and treatment elements of the Saylorville Water Treatment Plant from 10 MGD to 20 MGD.
 - Substantial construction of a feeder main that will provide connectivity from the Saylorville Water Treatment Plant to critical feeder mains located near Merle Hay Road and I-80.
 - Design and initial construction of the Tenny to LP Moon Feeder Connection project, a 24” feeder main on Hickman Road from Merle Hay Road to 70th Street that will enhance future flows west toward LP Moon Pumping and Storage Facility.
- West Des Moines
 - Anticipated funding from West Des Moines for the installation of a control valve and actuator to balance flow between Fleur Drive Water Treatment Plant and the McMullen Water Treatment Plant.
- American Rescue Plan Act of 2021 (ARPA) Funds from City of Des Moines.
 - City of Des Moines indicated they would be willing to direct a total of \$2.0 million towards water main replacement and/or alterations for city projects. The 2024 budget includes \$500,000 of ARPA funding.

- **Prior Year Excess Revenues**
Pumpage and water revenue have exceeded budget for the last several years and operating expenses have generally been favorable to budget as well. These factors have resulted in excess cash reserves. The 2024 budget includes infusing nearly \$1.1 million of the excess cash to offset the one-time regionalization expenses that are included in the budget. Much of these regionalization expenses were budgeted in a prior year but have remained unspent; hence, use of prior year excess revenues is deemed appropriate.

EXPENSE BUDGET

There are three primary components of the expense budget:

1. Operating Expense Budget

While pumpage is determined at the top level and pushed down, the operating expense budget is built from the ground up. To derive a budget, a set of assumptions must be used to calculate expenses. Historical data and estimates of future per-unit costs are two factors used to estimate direct treatment costs.

For example, one project within the Distribution System Maintenance work plan is “Repairs – Broken Mains.” The number of main breaks is budgeted using an average over the last several years. Once the number of main breaks is determined, the future cost elements of fixing a main break are projected. These costs include pipe materials, concrete, aggregate materials, street permits, rental barricades, and of course, the labor of our distribution crews.

This type of detailed budgeting is done for the 300+ operating projects within the utility.

2. Capital Expense Budget

A similar process is followed to build the capital budget. The 5-year capital improvement plan (CIP) is the starting point for the capital budget. The projects identified in the CIP are pulled into the budget templates and new projects are added for evolving capital needs. The proposed capital projects are reviewed, prioritized, and ultimately included or excluded from the budget depending on available financial resources.

3. Staffing Budget

Finally, during the departmental review meetings, discussions take place on current staffing levels and requests for additional staff. Senior managers who request staff additions provide information on the need for additional staff and justification for how additional staff will help meet strategic objectives and address current and future challenges. Similar to balancing revenue to expenses, there are more staff requests than available funding. Requests for staff additions are prioritized by the review team based on several factors: including critical business needs, strategic priorities, and succession planning.

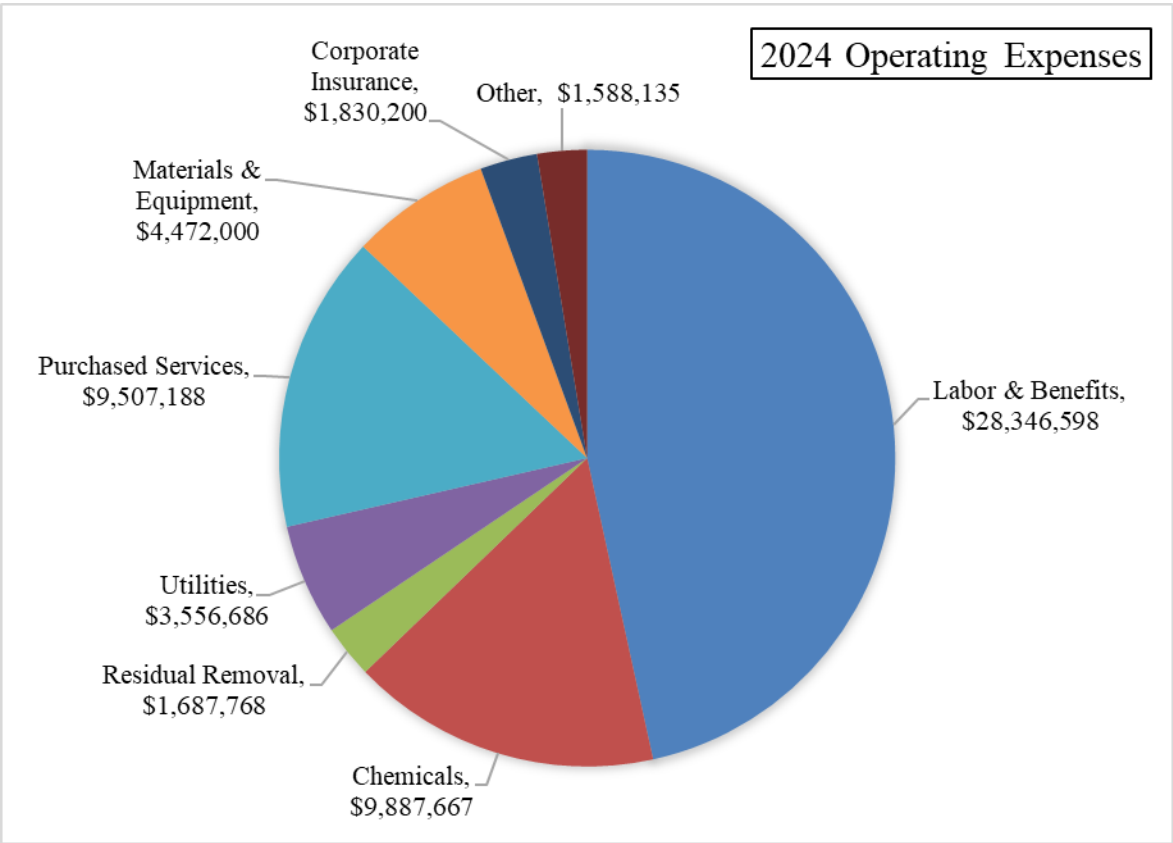
Each of these three components is discussed in more detail below.

Operating Expense Budget

The operating expense budget reflects the budgeted costs of the day-to-day operations of the utility. The proposed operating budget totals nearly \$60.9 million. This is an increase of 4.7% or approximately \$2.7 million from the approved 2023 budget.

The table and chart below show the budgeted operating expenses, the increase over the prior years’ budget for the last five years, and the components of the 2024 operating budget:

Operating Budget		
Year	Operating Budget	Increase
2020	\$ 48,545,551	5.4%
2021	\$ 50,738,899	4.5%
2022	\$ 53,046,346	4.5%
2023	\$ 58,140,955	9.6%
2024	\$ 60,876,241	4.7%



The components of the 2024 operating budget compared to the 2023 operating budget are shown in the table below with more detailed explanations on the following pages.

Operating Expenses	2024 Bgt	2023 Bgt	Change
Labor	\$ 18,192,527	\$ 17,310,594	\$ 881,934
Benefits	10,154,070	10,103,000	51,070
Chemicals	9,887,667	8,952,971	934,696
Residual Removal	1,687,768	2,317,346	(629,578)
Utilities	3,556,686	3,149,500	407,186
Gasoline/Fuel	304,232	382,680	(78,448)
Purchased Services	9,507,188	8,673,504	833,684
Training	290,275	251,270	39,005
Materials and Equipment	4,472,000	4,371,355	100,645
Insurance	1,830,200	1,625,000	205,200
Postage	425,000	450,000	(25,000)
Telephone	308,628	288,735	19,893
Casualty Loss	110,000	110,000	-
Loss on Bad Accounts	150,000	155,000	(5,000)
TOTAL OPERATING EXPENSES	\$ 60,876,241	\$ 58,140,955	\$ 2,735,287

Operating **Labor** is budgeted nearly \$900,000 higher than the 2023 budget. There are approximately 10,000 more hours being budgeted in operating projects in 2024. Some of the increase is a result of adding staff in the 2024 budget, which affects both operating and capital labor hours. There is an increase of 5.3 full-time-equivalents in the 2024 budget compared to the 2023 budget. Most of the increase is in the operations/engineering departments. Additionally, labor rate increases also contribute to the growth in labor expense.

Benefit expenses are relatively flat compared to the 2023 budget. The cost of the DMWW contribution to employees' medical premiums is budgeted to increase \$352,000 in 2024 based on the moderate increases we've been incurring the last few years. Along with a labor rate increase comes increases to those benefits tied to wages, such as FICA taxes, DMWW contribution to IPERS, and the deferred compensation plan. This accounts for \$182,000 of the overall increase. Offsetting these increases is a budgeted reduction of the actuarial defined contribution to the DMWW Pension Plan. It is budgeted at \$1.2 million in 2024, which is \$500,000 lower than the 2023 budget of \$1.7 million. The actual contribution to the pension plan in 2023 is \$980,000.

Chemical expenses are budgeted to increase 10.4%, or nearly \$935,000 in 2024. Some of the increase is a result of increasing budgeted pumpage from 17.7 billion gallons in 2023 to 18.2 billion gallons in 2024. Chemical prices appear to be leveling off from record increases in the past few years.

During budgeting, the Water Production operations staff looks at historical usage trends for each chemical at each plant. That determines the projected amount of chemicals to be used for the 2024

budget. The actual usage of chemicals at the treatment plants will be made on a day-to-day basis throughout the year to provide safe, potable water.

Residual (lime) Removal expenses are down nearly \$630,000. Each year, the Fleur and McMullen treatment plants produce lime residuals. The residuals at Fleur are removed as produced. The 2024 budget assumes removal expenses for 45,000 tons of Fleur residual material. The contract for residual removal was renewed in 2023 with a lower cost per ton, which equates to a decrease of \$344,000 compared to the 2023 budget.

Residual removal expenses at McMullen are minimal in 2024. This results in \$285,000 of lower expenses compared to the 2023 budget. The residuals at McMullen go through a multi-year cycle. The cycle is: fill lagoon with residuals, dry residuals, remove residuals from the lagoon to a drying area which is located near the lagoon on DMWW property, remove residuals from the drying area to off-site storage or to the final disposal site. There are two lagoons and two drying areas at the McMullen Treatment Plant. The removal cost for the McMullen residual material is multifaceted as well. There are costs incurred when the residual hauler moves material from the lagoon to the drying area, when they move materials to off-site storage, and when they move material to the final disposal site. In 2023, the west lagoon will be filled with residuals and the east lagoon will have residual material drying. The 2024 budget assumes the remaining 20,000 tons of material in the drying area will be hauled to the final disposal site. There are no costs in the 2024 budget, nor were there any in the 2023 budget, for expenses related to hauling materials from a lagoon to the drying area or to off-site storage.

Utilities expenses are up 12.9%, or \$407,000, in 2024. Most of the utility expense is electricity used in the treatment process. The increase in budgeted pumpage and actual electric costs per million gallons of treatment accounts for much of the increase.

Gasoline/Fuel expenses are down \$78,000 due to lower costs budgeted for fuel and diesel.

Purchased Services are up 9.6% from the 2023 budget. Many categories of purchased services have gone up a moderate amount including I.T. maintenance security services, stop box repairs, processing fees for electronic payments, services related to printing and mailing of DMWW bills, and services relating to facility maintenance.

Regionalization expenses of nearly \$1.1 million have been included in the 2024 budget. These budgeted expenses represent primarily the initial start-up contribution assigned to DMWW. The 2023 budget included nearly the same amount; however, these expenses have been largely unspent due to ongoing regionalization discussions. There is offsetting funding for this expense from prior year excess revenues.

Purchases Services budgeted in 2024 by category are shown in the table below:

Purchased Services	2024 Proposed Budget
PILOT	\$ 1,309,000
Regionalization	1,080,000
I.T. Maintenance Contracts	1,124,000
Plant Maintenance	819,000
Remote Site Maintenance	350,000
Distribution Maintenance/Repair	280,000
Stop Box Repairs	280,000
Banking/Audit/Payroll Fees	178,000
Credit Card/E-check/Bill-pay Fees	236,000
Mail Processing	216,000
Security	686,000
Facility Maintenance	293,000
GDMBG annual payment	50,000
Public Policy/Watershed Initiatives	164,000
“Other” Services (numerous)	<u>2,442,188</u>
Total	\$ 9,507,188

Materials & Equipment expenses include the supplies and materials used primarily in distribution, plant and remote site maintenance, laboratory supplies, and facility and vehicle maintenance. Expenses are budgeted 2.3% higher in 2024, which equates to \$101,000.

Corporate Insurance expenses include the premium cost for the utility’s insurance policies along with budgeted costs for workers’ compensation claims. The 2024 budget assumes premium expenses will increase by \$105,000 and workers’ compensation claims will increase by \$100,000 based on historical trends in claims.

Other expenses include postage expenses, telephone, casualty losses, training, bad debt write-off, etc. The amount budgeted for 2024 is approximately \$10,000 lower than the 2023 budget.

Details of all the Operating Work Plans and the comparison between the 2024 Proposed Budget and the 2023 Approved Budget begin on page 20.

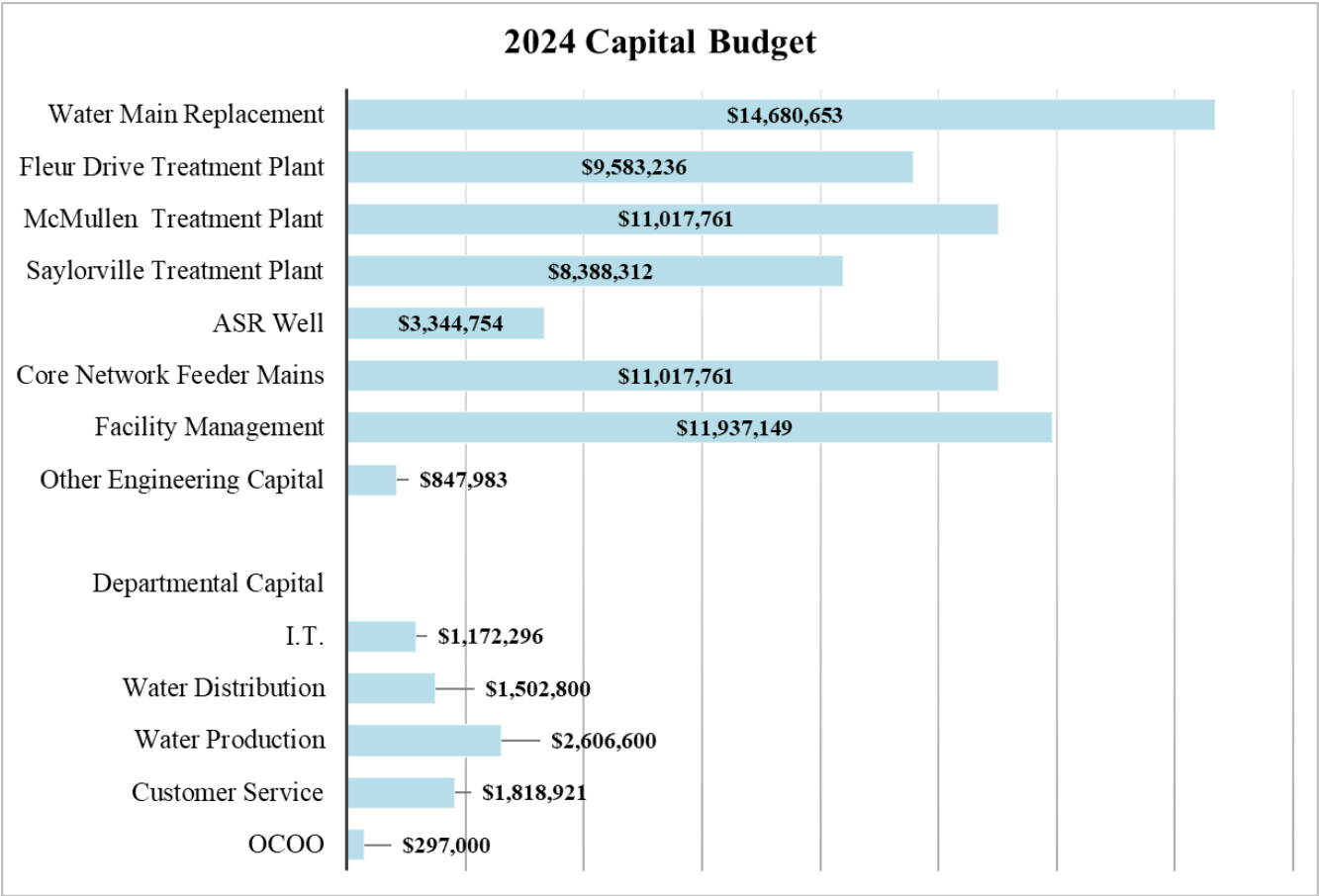
Capital Expense Budget

The 2024 capital budget includes \$69.4 million of capital requests.

Approximately \$15.0 million of the capital budget is for projects that are carried over from the prior year’s budget. Due to the efforts involved in planning, designing, bidding, and constructing large capital items, it is common for some capital spending to carry forward into a new budget year.

Other funding sources for capital projects included in the 2024 budget include \$3.3 million of SRF loans, \$17.2 million through regional participation, \$500,000 of ARPA funds from City of Des Moines, \$1.4 million for a core feeder main control valve project funded by West Des Moines, and roughly \$100,000 from other sources.

That leaves approximately \$31.8 million of capital projects from the utility’s revenue in 2024. This compares to \$28.4 million of capital projects budgeted from the utility’s revenues in 2023.



Water main replacement is budgeted at \$14.7 million in 2024. This amount includes main replacement in Des Moines, Pleasant Hill, Windsor Heights, and the unincorporated Polk County service area. In Des Moines and Polk County, staff continues to coordinate with the City of Des Moines, Polk County, and IDOT to integrate water system improvements within others’ contracts, while also preserving funds to generate our own water main replacement contracts. One programmed construction project is

slated for Windsor Heights. Pleasant Hill funds are aimed at design and initial construction efforts for a new control valve and a booster station rehabilitation.

Projects budgeted at the Fleur Drive Treatment Plant are varied. On the electrical and control side, projects involving an upgrade to our generator control system, a variable frequency drive on a high service pump, and a SCADA Master Plan remain in the budget. The filter plant will see replacement media in four filters while ongoing pilot testing and design work occurs in 2024. Preliminary engineering for carbon dioxide and powdered activated carbon remain in the budget, but the schedule has been slowed slightly. Design efforts related to a Des Moines River Alluvial well field to supply Fleur remains in the budget, as do basin rechaining and a variety of smaller projects.

The McMullen Treatment Plant budget includes projects for rehabilitating a collector well, replacing ferric chloride storage tanks and feed lines, increasing storage and feed capacity for powdered activated carbon, and installation of an isolation valve to isolate well #5 from the raw water system.

The Saylorville Water Treatment Plant budget contains the initial ongoing design costs and targeted analyses related to expanding both the source and treatment elements of the plant from 10 MGD to 20 MGD. The total of these two projects budgeted in 2024 is \$7.6 million and is expected to be funded through regional participation. There are also projects budgeted for ongoing replacement of the RO and UF membranes.

Design and partial construction of a new ASR well at the Polk County Pump Station site is included in the 2024 budget at \$3.3 million. This project is expected to be financed with SRF loan proceeds.

The Core Network Feeder Main work plan contains two projects related to the overall expansion at the Saylorville Water Treatment Plant. One is an extension of an existing feeder main in Johnston to allow a direct feeder main connection from the Saylorville Water Treatment Plant to existing feeder mains located near Merle Hay Road and I-80. The design of the first project will be complete in 2023 and substantial amounts of construction are planned for 2024. The second project is a feeder main connection on Hickman Road that will enhance flows from Tenny Standpipe and the Fleur Drive Water Treatment Plant to the LP Moon Pumping and Ground Storage site located in Clive. Design work should be completed early in 2024 with initial construction efforts beginning in the latter half of 2024. Both projects will bring immediate operational benefit in advance of the plant expansion. The amount budgeted in 2024 for both projects is \$10.6 million and is expected to be funded through regional participation. Additionally, a project estimated at \$1.4 million to install a control valve and actuator to balance flow between the Fleur Drive Water Treatment Plant and McMullen Treatment Plant will be funded by West Des Moines Water Works. Balancing flow at this critical point on the feeder main system is necessary to allow the Fleur Drive Water Treatment Plant to supply peak flows associated with new data centers planned in West Des Moines.

Facility Management projects include funds for restoration of concrete at the Hazen Tower. Tower restoration and replacement are proposed to follow in subsequent years. At the Fleur Drive Water Treatment Plant, modification to the distribution building (including demolition of the former ramp

and repurposing of the former upper garage area), replacing the elevator in the chemical building, HVAC improvements, and closed loop cooling systems are included in the proposed budget. The McMullen Treatment Plant will see replacement of the trucking scale that is integral to sludge hauling operations. There are several projects budgeted to continue efforts to address safety concerns, replace or improve structural elements of facilities such as roofs, stairs, floors, and concrete.

There are departmental capital items that are budgeted each year to maintain and upgrade assets. While the expenses are recurring, the same review process and prioritization occurs as with the other capital requests to determine the overall capital budget.

The I.T. capital budget includes \$550,000 to upgrade the CIS Infinity System to the latest version and to include a new Customer Engagement Portal. The I.T. budget continues to include funds for upgrading and replacing client hardware, network infrastructure, and cybersecurity controls.

The Water Distribution capital budget includes funds for replacing hydrants and valves, replacing large tools to perform field tasks, as well as other upgrades.

The Customer Service budget provides for meter replacement and automated meter reading equipment (e.g., MTU) change-outs.

Water Production has a capital budget to replace motors, pumps, and other individual parts within the treatment and remote facilities.

Vehicle and equipment replacement is included in the Water Production budget.

Details of the Capital Work Plans begin on page 32.

Summary of Expenditures

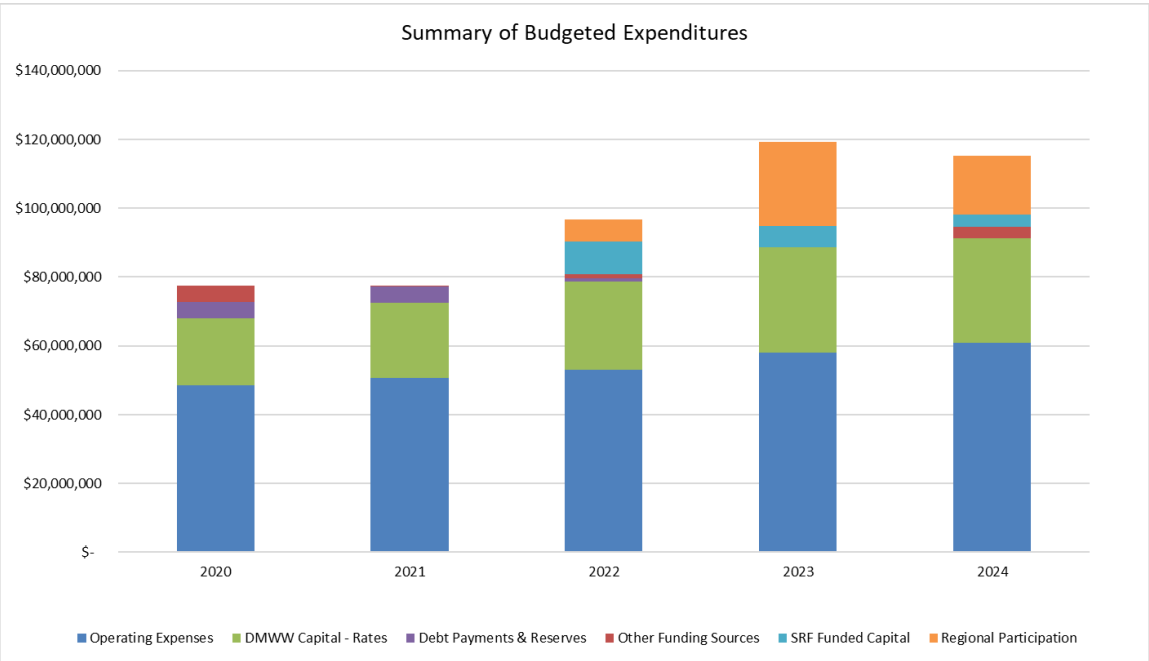
The following chart shows five years of budgeted cash expenditures in key categories. As expected, due to rising costs, operating expenses and DMWW funded capital expenses have steadily increased over the five-year period.

Debt service payments were fairly consistent from 2018-2021. The 2012A and 2012B bonds were paid off in 2021. There were minimal debt service payments budgeted in 2022, none in 2023, and minimal payments are budgeted in 2024. The ASR well, which is the only project budgeted in 2024 to be paid through SRF debt funding, is expected to start construction in 2024. While planning and design costs are borrowed at 0% interest for a period up to three years, entering the construction phase of the project triggers the commencement of loan payments.

The budget to increase operating reserves was budgeted at \$500,000 for 2019-2022. This has been removed from the 2023 and 2024 budgets as operating reserves will be increased from prior years' excess cash.

Capital projects with other funding sources vary from year to year. These are primarily joint projects such as feeder mains and pump stations which will benefit those entities contributing the funds. The 2024 budget includes \$500,000 for expected funds received from ARPA through the City of Des Moines and \$1.4 million from West Des Moines Water Works for installation of a control valve and actuator to supply peak flows associated with new data centers planned in West Des Moines.

Finally, the 2022-2024 budgets include capital projects to be funded by SRF borrowings and regional participation.



Future Capital Expenses

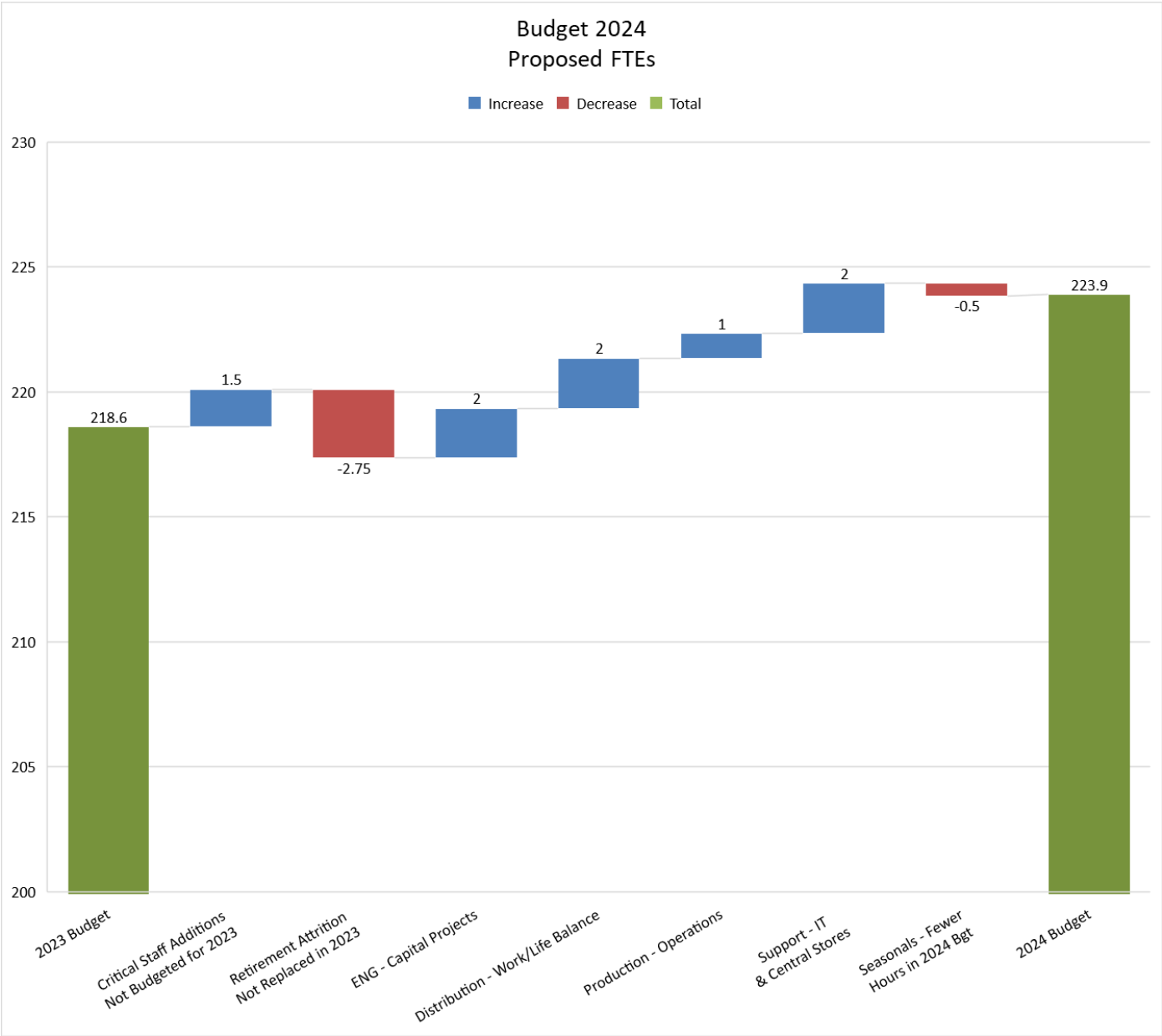
There are significant dollars budgeted in 2024 for projects that will take more than a year to construct or implement. The chart below shows the expenses budgeted in 2024 along with an estimate of the total cost of the project. Several of these projects have incurred expenses prior to 2024 but still have expenditures to be budgeted in future years. These projects have been included in the 5-year Capital Improvement Plan and are estimated in today's dollars. Certainly, as the design work is completed, the scope of work is identified, and the projects go through the formal bidding process, the amounts will be updated in future budget years.

Projects	2024	Total Project Cost
Funded with DMWW Debt (SRF)		
ASR @ Polk County Pump Station	\$ 3.3	\$ 9.5
Funded with Regional Participation		
SWTP 10MGD Raw Water Expansion	\$ 3.5	\$ 56.2
SWTP 10MGD Plant Expansion	4.1	80.0
SWTP W Feeder Main Phase 3	9.2	11.2
Tenny-LP Moon Feeder Main	0.4	3.8
Total	\$ 17.2	\$ 151.2
Funded by Rates		
FDTP 5kV Switch Gear	\$ 1.1	\$ 6.9
FDTP Bulk PAC System	0.1	3.0
FDTP CO2 Feed	0.1	2.8
DM River Well Field	2.0	39.1
SCADA	0.8	12.5
FDTP Filter Plant Rehabilitation	0.5	48.8
FDTP Lime Sludge Filter Press	0.3	8.7
FDTP HVAC	0.0	0.4
FDTP Levee Gates	0.1	0.2
MWTP Safety Showers	0.2	0.4
MWTP PAC Storage-Feed	0.4	0.6
SEP-Bondurant Pump Station	0.4	3.6
WMR-Des Moines	9.7	7.9
WMR-Polk County	3.7	2.5
WMR-Pleasant Hill	0.6	1.8
Total	\$ 18.8	\$ 132.2

Staffing Budget

Labor and benefit costs make up a significant portion of the utility’s staffing budget and are a part of both the operating and capital budgets.

The 2024 budget provides for a net increase of 5.3 FTEs to staffing. This is comprised of 1.5 FTEs for critical staff additions in 2023, a reduction in 2023 of 2.75 FTEs lost in attrition not being replaced, and seven additional budgeted FTEs in 2024. The following graph provides additional information on staff changes.



The non-labor piece of benefit expenses is budgeted at roughly \$10.2 million and includes costs for insurance premiums, employer contributions to IPERS, deferred compensation, and social security taxes, contributions to the DMWW pension plan, and flex pay.

	2024 Proposed Budget	2023 Approved Budget	Percentage Change
Labor			
Operating	\$ 18,192,527	\$ 17,310,593	
Capital	2,855,557	2,676,795	
	\$ 21,048,085	\$ 19,987,388	5.3%
Benefits			
Insurance Premiums			
Employee Medical	\$ 4,266,470	\$ 3,914,000	
Retiree Medical	272,800	269,000	
Life/LTD/AD&D	68,300	61,600	
Retirement Expenses			
IPERS (9.44%)	1,954,300	1,865,900	
FICA taxes (7.65%)	1,583,700	1,512,100	
DMWW Pension	1,200,000	1,700,000	
Deferred Compensation	392,100	376,800	
Flex Dollars	390,900	378,100	
Car Allowance	25,500	25,500	
Total Benefits	\$ 10,154,070	\$ 10,103,000	0.5%
<i>% of total labor</i>	<i>48.2%</i>	<i>50.5%</i>	
Total Labor & Benefits	\$ 31,202,155	\$ 30,090,388	3.7%

2024 Operating Work Plans Recommended for Funding

OFFICE OF THE CHIEF EXECUTIVE OFFICER (CEO)	2024 Proposed Budget	2023 Approved Budget	\$ Diff	% Diff
Board Activities	\$ 1,287,747	\$ 1,327,026	\$ (39,279)	-3.0%
Facilitation of Board-related activities in accordance with Code of Iowa requirements and to assure a well-informed Board of Trustees fully prepared to render policy decisions for the optimal benefit of the utility. The 2023 budget included nearly \$1.1M for regionalization expenses that are largely unspent. The same level of funding is budgeted in 2024.				
CEO Office Operations	\$ 306,646	\$ 234,254	\$ 72,392	30.9%
Provides for the efficient administrative and leadership support for the Office of the CEO including staff appraisals, professional support for senior management on miscellaneous non-project issues, and communication/support with outside organizations and other utilities. The 2024 budget includes \$75,000 to address climate action planning.				
Business Strategy	\$ 197,162	\$ 188,976	\$ 8,187	4.3%
Provides for the costs associated with the visionary leadership of the utility which includes supervisor meetings, senior management team meetings, and CEO walk-arounds.				
Project Management	\$ 52,376	\$ 98,635	\$ (46,259)	-46.9%
Provides costs associated with managing the Energy Management System as well as operational projects as assigned by the CEO. The 2024 budget assumes decrease of consulting hours.				
Public Policy - WS Advocate	\$ 250,372	\$ 305,848	\$ (55,477)	-18.1%
Includes activities to influence and monitor public policy and resource allocation decisions of state and federal legislative and regulatory initiatives which have a potential impact on the utility and/or the drinking water industry's ability to provide safe drinking water to consumers in a cost effective and sustainable manner. Lower level of spending - \$25,000 - on watershed planning initiatives in 2024 budget. Labor hours are reduced in 2024 budget to reflect where hours are actually being charged.				
TOTAL OFFICE OF THE CHIEF EXECUTIVE OFFICER (CEO)	\$ 2,094,303	\$ 2,154,738	\$ (60,435)	-2.8%

2024 Operating Work Plans Recommended for Funding

CUSTOMER SERVICE	2024 Proposed Budget	2023 Approved Budget	\$ Diff	% Diff
CS Administration	\$ 134,787	\$ 91,717	\$ 43,070	47.0%
Captures the general and administrative costs of customer service, including training. Increase is related to training expenses due to Dispatch and Backflow/Water Quality staff moving from Water Distribution to Customer Service.				
CS Contact Center and Data Quality	\$ 905,849	\$ 917,857	\$ (12,008)	-1.3%
Costs to provide quality customer service to both external and internal customers. This includes providing walk-in, written and telephone customer service to the customers of DMWW, as well as our billing and collecting customers. Also encompasses account maintenance and collection activities.				
Field CS and Water Quality	\$ 1,496,898	\$ 1,553,231	\$ (56,333)	-3.6%
Includes the costs of field service workers in completing work orders, repairing meters, administration of contracted plumbers, and repairing stop boxes. Labor hours reduced in 2024 budget to reflect where hours are actually being charged.				
CS Collections and Dispatch	\$ 789,575	\$ 723,044	\$ 66,531	9.2%
This work plan provides a summary of the overall costs associated with 24-hour support for our utility, covering various areas, but with a particular emphasis on our Field Service and Distribution Field Operations. Additionally, it encompasses our collection efforts, which involve liens, in-house collections, and bad debt write-offs. It also houses the utility's emergency notification system. Labor hours increased in 2024 budget to reflect Field Ops/Collection Supervisor's focus on the projects within this work plan. Prior Supervisor - Utility Incident Manager - had a broader focus within Water Distribution.				
Communications & Public Relations	\$ 203,428	\$ 265,900	\$ (62,473)	-23.5%
Provides for activities related to public relations, utility communications, website and social media support, graphics services, marketing, speaking engagements and treatment plant tours. Decrease related to moving public relations and communications from outside consultant to internal staff.				
New Business, Community & Economic Dev	\$ 77,722	\$ 78,037	\$ (315)	-0.4%
Includes client contact with key wholesale and commercial/industrial customers and the development and execution of action plans as a result of identified new business opportunities. Includes the contribution to the Greater Des Moines Partnership.				
TOTAL CUSTOMER SERVICE	\$ 3,608,259	\$ 3,629,786	\$ (21,528)	-0.6%

2024 Operating Work Plans Recommended for Funding

	2024 Proposed Budget	2023 Approved Budget	\$ Diff	% Diff
FINANCE				
Finance Administration	\$ 86,482	\$ 98,922	\$ (12,440)	-12.6%
Summarizes the administrative costs for the Finance department including clerical support, performance management, and training.				
Financial Services	\$ 3,816,623	\$ 3,594,566	\$ 222,057	6.2%
Summarizes the costs related to the financial services performed throughout, and for the benefit of, the entire utility. Services include, but are not limited to: payroll, accounts payable, financial reporting, banking, annual audit, cost of service study, etc. This work plan also includes the corporate insurance premiums and the PILOT to City of Des Moines.				
Corporate Insurance increase of \$105,000				
Workers Comp claims increase of \$100,000 due to claims trending				
Water Affordability Rate consultant. No budget in 2024, \$70k budget in 2023				
Labor increase \$85,000 - more hours moved back to this budget. 2023 hours included significant hours for implementing the new financial system (I.T. Capital)				
Payment Processing	\$ 333,677	\$ 286,694	\$ 46,982	16.4%
Summarizes the costs to perform accounts receivable billing, collection, and balancing functions for the utility.				
Processing fees related to electronic payments increased by \$41,000				
Mail Processing	\$ 675,732	\$ 606,116	\$ 69,616	11.5%
Summarizes the costs to prepare and mail customer bills.				
Increase in services related to outsourcing printing and mailing function				
Offset by decreased labor costs due to employee retirement.				
Purchasing & Central Stores	\$ 297,528	\$ 244,170	\$ 53,359	21.9%
Provides support to our internal customers for purchasing, warehousing and delivering of product in a cost effective and timely manner.				
Additional FTE budgeted in 2024 to continue focus on internal customers due to increased deliveries, pick tickets, and maintenance of the warehouse.				
GDMBG In Kind Services	\$ 50,000	\$ 100,000	\$ (50,000)	-50.0%
Summarizes the in-kind services provided to the GDMBG according to our agreement.				
Per agreement, the level of contribution in 2024 is \$50,000				
TOTAL FINANCE	\$ 5,260,041	\$ 4,930,468	\$ 329,573	6.7%

2024 Operating Work Plans Recommended for Funding

ENGINEERING	2024 Proposed Budget	2023 Approved Budget	\$ Diff	% Diff
Engineering Management	\$ 403,868	\$ 348,053	\$ 55,815	16.0%
<p>Tracks operating costs including: communication with staff, training for Engineering staff, leadership and department meetings, safety chats, customer service, administrative support activities, attendance at city pre-app meetings, Engineering leadership support of the Water Works Park Foundation, and cell tower administration.</p> <p>Labor hours increased in 2024 budget to more accurately reflect where hours are actually being charged.</p>				
Engineering Studies	\$ 66,669	\$ 70,416	\$ (3,747)	-5.3%
<p>Covers the cost to conduct engineering studies to determine the feasibility of future capital projects as well as monitoring efforts around DMWW facilities.</p> <p>2024 budget includes three projects: distribution system modeling, Pleasant Hill system study, and tower inspections.</p>				
TOTAL ENGINEERING	\$ 470,536	\$ 418,469	\$ 52,068	12.4%

2024 Operating Work Plans Recommended for Funding

HUMAN RESOURCES	2024 Proposed Budget	2023 Approved Budget	\$ Diff	% Diff
HR Admin Captures the general clerical and administrative costs of the Human Resources department.	\$ 125,110	\$ 116,386	\$ 8,723	7.5%
Employee Relations Includes costs for the use of focus groups, labor/management committees, recognition initiatives, the Spigot employee newsletter, employee meetings, one-on-one issue identification and resolution, formal grievance resolution, and administration of DMWW's drug-free workplace program. Increase due to additional funds being budgeted for union relations and workers compensation administration.	\$ 291,232	\$ 262,181	\$ 29,051	11.1%
Employment Provides resources for recruiting and selecting quality new employees for vacant positions. Equal Employment Opportunity and affirmative action compliance is also assured.	\$ 136,660	\$ 134,903	\$ 1,757	1.3%
Compensation Benefits Includes costs associated with maintaining and enhancing a competitive, cost-effective and compliant employee compensation and benefits program. The 2024 budget includes funds to perform a compensation study of benchmark CPS positions.	\$ 180,719	\$ 143,266	\$ 37,453	26.1%
Employee Learning & Growth Provides for the administration and coordination of utility-wide employee training, continual learning, career planning, and work-life balance initiatives. The 2024 budget includes an increase for employee training as part of a multi-year DEI curriculum.	\$ 69,421	\$ 81,723	\$ (12,302)	-15.1%
TOTAL HUMAN RESOURCES	\$ 803,141	\$ 738,458	\$ 64,683	8.8%

2024 Operating Work Plans Recommended for Funding

INFORMATION TECHNOLOGY	2024 Proposed Budget	2023 Approved Budget	\$ Diff	% Diff
IT Administration Captures the general and administrative costs of the I.T. department including: invoice processing, budget tracking, performance management and training. Labor hours increased in 2024 budget to reflect where hours are actually being charged.	\$ 248,436	\$ 222,325	\$ 26,111	11.7%
Technical Services Provides technical support for all hardware and software components used for client computing. This includes file serving, printing, PC software and hardware maintenance, computer operations, helpdesk support, PC upgrades and patches. Additionally, IT computer operations are supported, including activities around nightly processing, reporting, and printing. Includes lower costs for Adobe annual maintenance and removal of temporary I.T. support.	\$ 204,751	\$ 270,953	\$ (66,202)	-24.4%
IT Development Provides technical support for all applications and software components used for corporate computing. This includes application support and application development. Lower budget in 2024 as Clevest related items were completed in 2023 and CIS Infinity upgrade is budgeted as a capital expense in 2024. Remaining funds are budgeted to address change orders in any of the systems.	\$ 97,663	\$ 205,712	\$ (108,049)	-52.5%
System Services Provides technical support for all network hardware, software, and components used for utility computing. This includes all networking, file serving, printing, disaster recovery, security, backups, internet connectivity, upgrades, and patches. Includes a new FTE for network/telecom support. There are marginal increases in utilities and maintenance costs, as well as \$8,000 for a fail-over project at PCPS to allow for auto-failover in the event of a loss of primary communication.	\$ 1,091,778	\$ 906,914	\$ 184,864	20.4%
IT Services Provides resources to support all facets of software and hardware as they relate to core I.T. services including in-house software applications, purchased applications, support, reporting, and technical consulting. Maintenance contracts for the various systems used at the utility continue to see annual increases. The largest increases are for the new financial system, NetSuite for Government along with a new integration software that will connect EAM, ADP, and CIS to NetSuite. Additionally, departmental software products have been added to the 2024 budget for lead service lines and document imaging.	\$ 1,320,453	\$ 1,192,513	\$ 127,941	10.7%
TOTAL INFORMATION TECHNOLOGY	\$ 2,963,081	\$ 2,798,416	\$ 164,665	5.9%

2024 Operating Work Plans Recommended for Funding

OFFICE OF THE CHIEF OPERATING OFFICER (COO)	2024 Proposed Budget	2023 Approved Budget	\$ Diff	% Diff
OCOO Department Administration Administrative costs for the Office of the Chief Operating Officer including employee meetings, performance management, and training. Labor hours increased in 2024 budget to reflect where hours are actually being charged.	\$ 103,657	\$ 85,828	\$ 17,829	20.8%
Risk & Incident Mgmt Costs including park police, contract security, access control, surveillance, emergency operations, and flood protective measures. Also includes costs associated with liability claims.	\$ 923,955	\$ 926,007	\$ (2,052)	-0.2%
Grounds Maintenance Management and maintenance of DMWW properties as well as properties maintained under 28E agreements with the City of Des Moines. Includes labor and materials to administer park events that are held in Water Works Park.	\$ 819,843	\$ 803,026	\$ 16,817	2.1%
Safety Captures the general and administrative costs of the safety program - which includes labor, outside consultants to provide training, and safety materials and supplies. Increased labor hours being budgeted in 2024 to more accurately reflect the time employees spend completing required safety training.	\$ 299,188	\$ 231,628	\$ 67,560	29.2%
TOTAL OFFICE OF THE CHIEF OPERATING OFFICER (OCOO)	\$ 2,146,643	\$ 2,046,489	\$ 100,154	4.9%

2024 Operating Work Plans Recommended for Funding

	2024 Proposed Budget	2023 Approved Budget	\$ Diff	% Diff
WATER DISTRIBUTION				
Distribution Administration (Distribution Support)	\$ 277,598	\$ 231,994	\$ 45,605	19.7%
Administrative costs for the Distribution department including clerical support, employee meetings, performance management, and training. This workplan is primarily made up of labor. A new position of Field Training Specialist was created in 2023 with the labor hours being budgeted in the training project under this workplan.				
Des Moines Field Support	\$ 489,625	\$ 195,426	\$ 294,198	150.5%
Tasks required to support distribution system maintenance and utility locates; including work order processing, twenty-four hour dispatch, record updates, database maintenance, and customer contact. The increase is due to the inclusion of \$280,000 in 2024 to replace 20 lead service lines.				
Distribution System Maintenance & Repair	\$ 3,403,219	\$ 3,096,379	\$ 306,840	9.9%
Costs for distribution system maintenance and repair tasks which include repairing broken water mains, hydrant and valve maintenance and repair, flushing dead end water mains, adjusting valve boxes to grade for city paving projects, and maintaining cathodic protection systems. Non-labor expenses have increased roughly \$120,000 due to the increasing cost of materials used to repair main breaks. The 2024 includes 2 additional FTEs - Installer & Crew Leader - to relieve a stretched Distribution workforce.				
Leak Detection & Locating	\$ 769,479	\$ 756,221	\$ 13,257	1.8%
Costs for leak detection, locating, customer distribution services (complaints/inquiries), and feeder signage maintenance.				
Distribution Billed Services	\$ 858,255	\$ 821,142	\$ 37,114	4.5%
Costs for billed services including making taps for new service lines, providing contracted leak location services, repairing damaged facilities, and repairing inoperable service valves. Minor increases in 2024 budget are related to additional costs for service line connections.				
TOTAL WATER DISTRIBUTION	\$ 5,798,176	\$ 5,101,162	\$ 697,014	13.7%

2024 Operating Work Plans Recommended for Funding

WATER PRODUCTION	2024 Proposed Budget	2023 Approved Budget	\$ Diff	% Diff
Water Production Admin Administrative and support costs for the Water Production department including clerical support, employee meetings, performance management, and training. Increase in 2024 budget is for additional training costs and labor hours increased in other administrative projects to more accurately reflect where hours are being charged.	\$ 598,461	\$ 527,169	\$ 71,293	13.5%
Radio Communication Equipment Maintenance and supervision expenses of the trunked radio system and telemetry system.	\$ 53,370	\$ 53,064	\$ 306	0.6%
HVAC Operations & Maint To operate, maintain, and repair all heating, air conditioning, and ventilation equipment for all DMWW facilities. Increases are related to utilizing contracting services to maintain numerous aging HVAC units.	\$ 146,192	\$ 99,577	\$ 46,616	46.8%
Water Production Operations To provide a safe and reliable drinking water supply to the customers of Des Moines Water Works in sufficient quantities and at adequate pressures to meet their needs. Includes minor increase in labor hours budgeted in 2024.	\$ 1,253,566	\$ 1,189,599	\$ 63,967	5.4%
Fleur Plant Chemicals & Energy Provide the water treatment chemicals and energy necessary to insure the production of safe, high quality water in sufficient quantities to meet our customers' needs. Provides funding for the removal of lime softening residuals. Increase in budgeted pumpage by 500 million gallons at FDTP accounts for much of the increase. Chemical expenses are increasing \$741,000. Roughly \$310,000 of the increase is related to higher pumpage. The remainder of the increase is due to increased chemical costs. Utility expenses are increasing \$110,000. Residual removal expenses are down \$344,000, primarily due to the contract renewal with Synagro at a lower cost per ton to remove product.	\$ 9,408,851	\$ 8,903,132	\$ 505,719	5.7%
McMullen Plant Chemicals & Energy Provide the water treatment chemicals and energy necessary to insure the production of safe, high quality water in sufficient quantities to meet our customers' needs. Provides funding for the removal of lime softening residuals. Budgeted pumpage at MWTP is unchanged in the 2024 budget. Chemical expenses are increasing \$166,000. Utility expenses are increasing \$73,000. Residual removal expenses are down \$285,000. The contract renewal with Synagro is at a lower cost per ton and there are fewer tons to remove from the drying area.	\$ 3,191,823	\$ 3,231,250	\$ (39,427)	-1.2%
SWTP Chemicals & Energy Provide the water treatment chemicals and energy necessary to insure the production of safe, high quality water in sufficient quantities to meet our customers' needs. Budgeted pumpage at SWTP is unchanged in the 2024 budget. Chemical expenses are increasing \$27,000. Utility expenses are increasing \$72,000.	\$ 1,695,439	\$ 1,605,045	\$ 90,393	5.6%

2024 Operating Work Plans Recommended for Funding

WATER PRODUCTION	2024 Proposed Budget	2023 Approved Budget	\$ Diff	% Diff
Fleur Maintenance Includes all maintenance and repair expenses of the Fleur Drive treatment plant, Des Moines River intake/pump station, Fleur electric substation, flooding station, and pressed sludge lagoons. Increased costs for materials and services to maintain the treatment plant is the primary driver of the variance. This work plan includes most of the hours for a new Control Systems Specialist, an addition in the 2024 budget.	\$ 1,979,942	\$ 1,893,633	\$ 86,309	4.6%
McMullen Maintenance Includes all maintenance and repair expenses of the McMullen Treatment Plant, radial collector wells, Crystal Lake, and ASR. Increased costs for materials and services to maintain the treatment plant is the primary driver of the variance.	\$ 610,479	\$ 582,844	\$ 27,635	4.7%
SWTP Maintenance Includes mechanical and electrical maintenance for the Saylorville Water Treatment Plant. Increased costs for materials and services to maintain the treatment plant is the primary driver of the variance.	\$ 624,845	\$ 521,678	\$ 103,168	19.8%
WP Maintenance Oversight Provides oversight efforts for the daily planning of maintenance in Water Production. Also encompasses the efforts to maintain the CMMS system. Includes minor increase in labor hours budgeted in 2024.	\$ 239,727	\$ 220,992	\$ 18,735	8.5%
Louise P. Moon Pumping Maintenance Provides for maintenance of the Louise P. Moon Storage and Pumping Facility, the Waukee Booster Station, the LPM ASR facility, and Waukee/Xenia Booster station which will ensure water is provided in acceptable quantities at desirable pressures. The largest driver of this increase relates to electricity usage at the pumping station and the ASR well.	\$ 610,156	\$ 581,336	\$ 28,819	5.0%
Polk County Storage & Pumping Provides for maintenance of the Polk County Pumping Station which will ensure water is provided to our Ankeny and Polk County customers in acceptable quantities at desirable pressures.	\$ 169,446	\$ 160,985	\$ 8,461	5.3%
Des Moines Remote Storage Provides for the maintenance of remote facilities within the cities of Des Moines and Pleasant Hill, the Norwalk booster station, Polk City booster station, Southeast Polk/Bondurant chloramination facility, sites in Runnells for water and waste water operations, Army Post Road ASR facility, and the new Joint Maffitt Lake Booster Station. There are 21 remote sites in this budget. Each is up a moderate amount due to higher costs. \$100,000 of the increase is related to abandoning the SE Polk Pump Station.	\$ 967,669	\$ 805,602	\$ 162,067	20.1%
Lab Operations Routine, non-investigative testing in the chemistry laboratory related to regulatory compliance and assessment of treatment plant processes.	\$ 657,198	\$ 657,140	\$ 57	0.0%
Water Quality Research Investigative testing concerning water quality and plant process improvements.	\$ 170,034	\$ 170,678	\$ (644)	-0.4%

2024 Operating Work Plans Recommended for Funding

WATER PRODUCTION	2024 Proposed Budget	2023 Approved Budget	\$ Diff	% Diff
Facility Maintenance Captures the general and administrative costs of building upkeep and general facility maintenance. Increases due to electricity costs at the main office building and contracted cleaning services are partially offset by a reduction in labor hours due to staff retirement.	\$ 810,567	\$ 753,041	\$ 57,527	7.6%
Vehicle Maintenance Costs for maintaining the vehicles and equipment for our internal users. It also provides support to fabricating and repairing tools and parts for our customers. Increased costs for materials and services to maintain the fleet are offset by lower fuel costs being projected in the 2024 budget.	\$ 1,314,921	\$ 1,306,157	\$ 8,764	0.7%
TOTAL WATER PRODUCTION	\$ 24,502,686	\$ 23,262,923	\$ 1,239,764	5.3%

2024 Operating Work Plans Recommended for Funding

Summary Operating Expenses	2024 Proposed Budget	2023 Approved Budget	Inc / (Dec)
Total by Department			
CEO	2,094,303	2,154,738	(60,435)
Customer Service	3,608,259	3,629,786	(21,528)
Engineering	470,536	418,469	52,068
Finance	5,260,041	4,912,468	347,573
HR	803,141	738,458	64,683
IT	2,963,081	2,798,416	164,665
Office of the COO	2,146,643	2,046,489	100,154
Water Distribution	5,798,176	5,101,162	697,014
Water Production	24,502,686	23,262,923	1,239,764
Utility Benefits	13,229,374	13,078,046	151,328
Includes non-productive time (vacation, sick, holiday) and benefits (health insurance, deferred comp match, pension, IPERS, FICA, retiree payouts in 2022, etc.)			
Total Recommended Operating Budget	<u>60,876,241</u>	<u>58,140,955</u>	2,735,287 4.7%

2024 Operating Work Plans Recommended for Funding

DMWW CAPITAL	2024 Proposed Budget	2023 Approved Budget	\$ Diff	% Diff
Field Customer Service Capital	\$ 1,818,921	\$ 1,756,895	\$ 62,026	3.5%
Provides capital materials (meters & MTUs) needed to update and keep our current meter reading system updated and provide accurate meter reads needed for billing. We will also continue to work towards completion of our meter change-out program of meters in service for over 17 years.				
Facility Management	\$ 11,937,149	\$ 3,859,222	\$ 8,077,926	209.3%
Includes costs of providing rehabilitation and enhancements as needed to extend the service life and improve the function of buildings and structures owned by Des Moines Water Works.				
Projects budgeted include:				
Grounds Shop	\$ 4,051,250			
FDT Distribution Ramp	1,386,118			
Hazen Concrete	891,948			
PS HVAC	817,546			
DMR Isolation Valve	769,870			
MWTP Truck Scale	765,076			
FDT Chemical Elevator	753,015			
FDT Generator Closed Loop Cooling	592,619			
FDT EHL Closed Loop Cooling	422,534			
FDT Safety Showers	364,013			
	<u>\$ 10,813,990</u>			
Fleur Drive Treatment Plant	\$ 9,586,236	\$ 8,945,585	\$ 640,651	7.2%
Includes costs of providing rehabilitation and enhancements as needed to extend the service life and improve the function of buildings and structures at the Fleur Drive Treatment Plant.				
Projects budgeted include:				
DM River Well Field	\$ 1,952,262			
VFD HL Pumps	1,622,352			
5kV Switch Gear	1,146,246			
SCADA	753,691			
Filter Media Replace	736,029			
Treatment Basin Rechainning	657,600			
Filter Plant Rehab	520,580			
WHL Pumps Rebuild	346,154			
Gallery Valves	332,702			
	<u>\$ 8,067,615</u>			
McMullen Treatment Plant	\$ 2,202,680	\$ 789,543	\$ 1,413,138	179.0%
Includes costs of providing rehabilitation and enhancements as needed to extend the service life and improve the function of buildings and structures at the McMullen Treatment Plant.				
Projects budgeted include:				
Collector Wells - Rehab	\$ 946,765			
Ferric Chloride Expansion	391,032			
Ferric Feed Line	383,236			
PAC Storage-Feed	366,843			
	<u>\$ 2,087,876</u>			

2024 Operating Work Plans Recommended for Funding

DMWW CAPITAL	2024 Proposed Budget	2023 Approved Budget	\$ Diff	% Diff
Saylorville Treatment Plant	\$ 8,388,312	\$ 20,527,440	\$ (12,139,127)	-59.1%
Includes costs of providing rehabilitation and enhancements as needed to extend the service life and improve the function of buildings and structures at the Saylorville Treatment Plant.				
Projects budgeted include:				
Plant Expansion - 10MGD	\$ 4,061,963			
Raw Water Expansion - 10MGD	3,543,006			
UF Membrane Repl	563,624			
RO Membrane Repl	219,719			
	<u>\$ 8,388,312</u>			
ASR Well	\$ 3,344,754	\$ 2,750,882	\$ 593,872	21.6%
Captures costs to construct a new ASR well at Polk County Pump Station.				
Water Main Replacement	\$ 14,680,653	\$ 12,918,171	\$ 1,762,482	13.6%
Captures costs of maintaining and upgrading the water distribution system by replacing mains that have a history of breaks, will result in improved water flow, or that need to be relocated to accommodate city, county, or state construction projects.				
Water main replacement by service area:				
Des Moines	\$ 9,722,447			
Polk County	3,706,688			
Windsor Heights	628,939			
Pleasant Hill	622,579			
	<u>\$ 14,680,653</u>			
Core Network Feeder Mains	\$ 11,017,761	\$ 4,165,672	\$ 6,852,089	164.5%
Projects here typically include the transmission, storage, and pumping that serve as core network facilities. Typically these are significant enhancements/additions that serve, or effectively stand to serve, the broader regional water system needs.				
Projects budgeted include:				
Maffitt East Feeder Main Control Valve	\$ 1,452,407			
SWTP-W Feeder Main	9,154,109			
Feeder Main Tenny-LPM	411,245			
	<u>\$ 11,017,761</u>			
Remote Facilities	\$ 360,924	\$ -	\$ 360,924	0.0%
Provides initial funds to replace the existing SE Polk/Bondurant Pump Station with a new above ground facility.				
Development Plan Review	\$ 484,058	\$ 284,784	\$ 199,275	70.0%
Provides a mechanism to track the time spent by Engineering staff to review development of large tap plans, inspect construction, and update records for new mains and services.				
I.T. Capital	\$ 1,172,296	\$ 2,140,750	\$ (968,454)	-45.2%
Provides funding for investments into hardware and software infrastructures to ensure that a reliable, secure, capable, fully functional computing environment is available to our users and customers. The 2024 budget includes continued funds for ongoing replacement of hardware and software, Microsoft licensing, and cyber-security.				
The 2023 budget includes \$1.0M to implement a new financial software (NetSuite for Government).				
Water Distribution System Improvements	\$ 1,502,800	\$ 1,732,273	\$ (229,474)	-13.2%
Summarized costs for distribution system upgrades such as tying in dead end mains and installation of new hydrants and valves. Replacement tools and equipment are also included in this work plan.				

2024 Operating Work Plans Recommended for Funding

DMWW CAPITAL		2024 Proposed Budget	2023 Approved Budget	\$ Diff	% Diff
Grounds Capital		\$ 297,000	\$ 251,473	\$ 45,528	18.1%
Provides for capital replacement for specific grounds and park maintenance capital. The 2024 budget includes costs for resurfacing roads from Gate 2 at FDTP to the stock pile road.					
Water Production Plant Reinvestment		\$ 1,238,500	\$ 1,196,609	\$ 41,892	3.5%
Provides necessary capital for replacement and/or improvements of existing equipment and the addition of new equipment to ensure the effective operation of the utility and its processes.					
Vehicle Replacement		\$ 1,368,100	\$ 1,124,458	\$ 243,642	21.7%
Captures the cost of replacing vehicles and related equipment.					
Finance Capital					
Captures the cost of remodeling at Central Stores		\$ -	\$ 18,000	\$ (18,000)	-100.0%
TOTAL DMWW CAPITAL		\$ 69,400,145	\$ 62,461,756	\$ 6,938,389	11.1%
Summary by Funding Source					
Carryover		\$ 15,047,830	\$ 1,269,980		
Funded by Outside Entities		1,991,000	2,103,600		
Funded by DMWW Debt (SRF Loans)		3,344,754	6,271,686		
Funded through Regional Participation		17,170,323	24,391,805		
Funded by Utility Revenue		31,846,238	28,424,685		
		\$ 69,400,145	\$ 62,461,756		

Appendix: DMWW Budget Process & Timeline

April – May

- Finance prepares budget templates for 2024 budget entry.
- Finance provides budget training/refreshers, as needed.

June – July

- Departmental teams prepare project/work plan budgets which include labor hours by position (which results in labor dollars) and non-labor resources requested. A work plan is a grouping of like projects. For example:
 - Department: Water Production
 - Work Plan: Fleur Maintenance
 - Projects: Raw Intake/Pumping, Basins, Chemical Systems, Filter Plant, etc.
- Senior managers review the work plans of their department.

August-September

- Review of all work plans by “review team” which consists of CEO/GM, Chief Operating Officer, Chief Financial Officer, and Controller.
- Initial review session with department senior manager and the review team
- Teams revise work plans based on feedback from their review session.
- Finance staff compiles work plans into utility budget.

September

- Senior management team meets to balance available resources with budget requests.

October

- Finance staff presents budget for discussion and review at Board Committee meetings.
- Board reviews and discusses budget at October meeting, sets public hearing for November board meeting.

November

- Public hearing is held, and Board approves budget at November meeting.

December

- Budget documents are forwarded to Des Moines City Clerk for receipt and file by City Council.

AGENDA ITEM FORM

SUBJECT: 2024 Water Treatment Chemicals – Analysis of Bids and Authorize Execution of Contracts

SUMMARY:

Below is the bid analysis and purchase recommendations for the 2024 water treatment chemical supplies, presented by Julia Johnston, Purchasing/Central Stores Supervisor.

FISCAL IMPACT:

Based on estimated quantities of use, total cost of water treatment chemicals for 2024 will be **\$7,980,917.09**. Chemicals in this recommendation include requirements for the Fleur, McMullen, and Saylorville Water Treatment Plants.



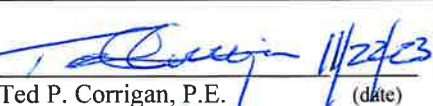
RECOMMENDED ACTION:

Award the 2024 chemical contracts to bidders as follows:

Chemical	Low Responsible Bidder	Per	2024 cost	2023 cost
Antiscalent	Avista	lb.	\$ 1.4700	\$ 1.9500
Aluminum Sulfate - Ground	Chemtrade	lb.	\$.4000	\$ 0.3875
Activated Carbon - (FDWTP)	Carbpure	lb.	\$.7100	\$ 1.6000
Activated Carbon - (MWTP)	Carbpure	lb.	\$.7100	\$ 1.7000
Carbon Dioxide - Liquid	Air Products	lb.	\$.0675	\$ 0.0580
Citric Acid	Shannon Chemical	lb.	\$ 1.2200	\$ 1.7500
Ferric Chloride	Kemira	lb.	\$.2780	\$ 0.2790
Hydrofluosilicic Acid	Pencoco	lb.	\$.2920	\$ 0.2770
Hydrochloric Acid	Acco	gal	\$ 3.800	\$ 4.12727
Aluminum Chloride Hydroxide Sulfate IC1179P	Veolia	lb.	\$.8700	\$ 0.8100
Polyphosphate	Carus	lb.	\$.9600	\$ 1.3000
Soda Ash	Dubois	lb.	\$.2490	\$ 0.2730
Solar Salt - per ton	Step Saver	ton	\$ 260.00	\$ 235.00
Sodium Hypochlorite	Vertex	gal.	\$ 1.740	\$ 1.984
Sodium Hydroxide 30%	Univar	gal.	\$ 1.7664	\$ 2.2663
Sodium Bisulfite	PVS	lb.	\$.1895	\$ 0.1930
Sodium Permanganate	Shannon Chemical	lb.	\$ 1.2700	\$ 1.70
Lime - Quick Pebble (FDWTP and MWTP)	Mississippi Lime	ton	\$ 228.81	\$ 215.50

BOARD REQUIRED ACTION:

Motion to award the 2024 contracts for water treatment chemical supplies to the above bidders.

 Julia Johnston Purchasing/Central Stores Supervisor (date) 11/21/23	 Nathan Casey Director of Water Production (date) 11/21/23	 Ted P. Corrigan, P.E. CEO and General Manager (date) 11/24/23
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Attachment: Chemical Price Change Summary Report, 2024 Powdered Activated Carbon Selection Memorandum, 2024 Analysis of Lime Bids, 2024 Kemetco Lime Reactivity Testing Report

MEMORANDUM

DATE: October 25, 2023

TO: Ted Corrigan, Kyle Danley, Nathan Casey, Mike Adams, Josh Russell,
Julia Johnston, Bre Barber, PWS 7727031

FROM: Jeff Mitchell, Supervisor of Laboratory

SUBJECT: 2024 Powdered Activated Carbon Selection

Des Moines Water Works (DMWW) examined 8 varieties of Powdered Activated Carbon (PAC) for odor and total organic carbon removal. Performance or price alone would not be a fair comparison, so the results of the jar tests were used to provide a cost per million gallons of treated water. Charts below will show these costs for each criterion. Calculations were made for both the Fleur Dr. Treatment Plant and McMullen Treatment Plant. Final selection was determined from total annual projected cost based on odor and TOC removal. Water Production will recommend Carb Pure HRA as our selection for 2024 PAC.

ODOR REMOVAL

Fleur Dr. Treatment Plant

Carbon	Cost/#	Dose (mg/L)		
		for odor removal	#s/MG	\$/MG
Carb Pure HRA	0.71	15	125.1	88.82
Carb Pure TRA	1.12	15	125.1	140.11
Atlas Alpine Pac	0.875	20	166.8	145.95
Pacific Coast PAC-L	1.02	20	166.8	170.14
Donau Watercarb 800	1.0996	20	166.8	183.41
Calgon WPH	1.62	15	125.1	202.66
Pacific Coast PAC-L+	1.353	20	166.8	225.68
Carbon Activated Corp 900	1.48	20	166.8	246.86

McMullen Treatment Plant

Carbon	Cost/#	Dose (mg/L) for odor removal	#s/MG	\$/MG
Carb Pure HRA	0.71	15	125.1	88.82
Carb Pure TRA	1.12	15	125.1	140.11
Donau Watercarb 800	1.02955	20	166.8	171.73
Atlas Alpine Pac	1.04	20	166.8	173.47
Pacific Coast PAC-L	1.16	20	166.8	193.49
Calgon WPH	1.76	15	125.1	220.18
Pacific Coast PAC-L+	1.49	20	166.8	248.53
Carbon Activated Corp 900	1.59	20	166.8	265.21

% TOC REMOVAL Fleur Dr. Treatment Plant

Carbon	Cost/#	mg/L for 15% TOC Removal	#s/MG	\$/MG
Donau Watercarb	1.0996	15	125.1	137.56
Carb Pure HRA	0.71	30	250.2	177.64
Carbon Activated Corp 900	1.48	15	125.1	185.15
Carb Pure TRA	1.12	20	166.8	186.82
Atlas Alpine Pac	0.875	30	250.2	218.93
Calgon WPH	1.62	20	166.8	270.22
Pacific Coast PAC-L**	1.02	50	417	425.34
Pacific Coast PAC-L+**	1.353	50	417	564.20

McMullen Treatment Plant

Carbon	Cost/#	mg/L for 15% TOC Removal	#s/MG	\$/MG
Donau Watercarb	1.03	15	125.10	128.80
Carb Pure HRA	0.71	30	250.20	177.64
Carb Pure TRA	1.12	20	166.80	186.82
Carbon Activated Corp 900	1.59	15	125.10	198.91
Atlas Alpine Pac	1.04	30	250.20	260.21
Calgon WPH	1.76	20	166.80	293.57
Pacific Coast PAC-L**	1.16	50	417	483.72
Pacific Coast PAC-L+**	1.49	50	417	621.33

** Did not reach 15% removal rates with dosages tested

DMWW set the dosage for TOC at 15% removal for cost estimates. Removal efficiencies above this level are beneficial for our operations, but do not factor into the pricing and dosage calculations.

DMWW's largest use for PAC is taste/odor control and TOC removal. When operations sets dosages based on these it can be roughly estimated that 50% of time it will be based on Taste/Odor removal and 50% of the time for TOC removal. Utilizing the cost per MG and the estimated production for the year we can calculate an estimated annual cost for each use. Since the bid is for supplying both plants, we can add the estimated cost of both Fleur Dr and McMullen treatment plants together. The following table is a total estimated cost based on these parameters:

ANNUAL COST FOR ODOR AND TOC REMOVAL AT BOTH TREATMENT PLANTS

Carbon	ODOR	15% TOC Removal	50 T/O:50 TOC Annual Cost
Carb Pure HRA	405,556.686	811,113.372	608,335.03
Atlas Alpine Pac	699,434.10	699,434.10	699,434.10
Donau Watercarb 800	823,443.83	617,582.87	720,513.35
Carb Pure TRA	639,751.39	853,001.86	746,376.62
Carbon Activated Corp 900	1,149,198.62	861,898.97	1,005,548.80
Calgon WPH	946,371.49	1,261,828.66	1,104,100.07
Pacific Coast PAC-L	804,863.38	2,012,158.44	1,408,510.91
Pacific Coast PAC-L+	1,057,878.63	2,644,696.57	1,851,287.60

Once both plants are calculated for the cost of Taste/Odor and TOC removal with each carbon we can see that the lowest cost per usage will be Carb Pure HRA. Water Production will recommend Carb Pure HRA as our selection for 2024 PAC.

MEMORANDUM

DATE: November 14, 2023

TO: Kyle Danley, Chief Operating Officer

FROM: Nathan W. Casey, Director of Water Production

SUBJECT: 2024 Analysis of Lime Bids

A summary of the bids received for the supply of lime to our two lime softening plants is given below. The prices shown are for bottom drop truck delivery of 1/2" pebble lime. Bid analysis was completed using these prices and laboratory testing.

Vendor	Fleur & McMullen (\$/Ton)	Fleur (\$/Ton)	McMullen (\$/Ton)
Pete Lien & Sons	\$213.00	\$213.00	\$213.00
Mississippi Lime Company	\$228.81	\$238.81	\$238.81
Lhoist	\$516.73	\$516.73	\$516.73

There are four options for consideration. One is to allow Pete Lien & Sons to provide both plants at \$213.00/ton. The second is to have Mississippi provide both plants at \$228.81/ton, and third is to allow Lhoist to provide both plants at \$516.76. The fourth option splits the plants and uses Pete Lien & Sons at Fleur and Mississippi at McMullen

Des Moines Water Works hired Kemetco Research Inc. to conduct testing in accordance with ASTM standards, to quantify the relative lime efficiency and evaluate handling of the three lime sources. Laboratory testing showed Mississippi performed the best in all lime efficiency tests. This means both Pete Lien & Sons and Lhoist would require a higher lime dose and would produce more inert materials. The lab noted that the Pete Lien & Sons lime sample was the best they had ever seen from the company. Analysis of the four options is summarized below. The analysis considers the different volumes of water to be treated at each plant, the purity difference between the three products, and the costs to remove inert materials from each product via our lime sludge dewatering process at the Fleur Plant.

Fleur Pumpage (MG)	11,300	2024 Lime Bid Analysis				
McMullen Pumpage (MG)	4,800					
Option #1	Bid	Price/Ton	Dosage(mg/L)	Pounds/Year	Tons/Year	Cost/Year
Pete Lien & Sons	Pete Lien & Sons @ FDWTP	\$213.00	262	24,714,965	12,357	\$2,632,143.72
	Pete Lien & Sons @ MWTP	\$213.00	215	8,608,681	4,304	\$916,824.57
	FDWTP - Sludge	\$26.64			828	\$22,056.62
	Total Option #1- Pete Lien & Sons					\$3,571,024.92
Option #2	Bid	Price/Ton	Dosage(mg/L)	Pounds/Year	Tons/Year	Cost/Year
Mississippi	Mississippi @ FDWTP	\$228.81	250	23,560,500	11,780	\$2,695,439.00
	Mississippi @ MWTP	\$228.81	205	8,206,560	4,103	\$938,871.50
	FDWTP - Sludge	\$26.64			542	\$14,435.99
	Total Option #2- Mississippi					\$3,648,746.49
Option #3	Bid	Price/Ton	Dosage(mg/L)	Pounds/Year	Tons/Year	Cost/Year
LHOIST	LHOIST @ FDWTP	\$516.73	277	26,081,474	13,041	\$6,738,539.90
	LHOIST @ MWTP	\$516.73	227	9,084,662	4,542	\$2,347,158.68
	FDWTP - Sludge	\$26.64			900	\$23,970.96
	Total Option #3 - Lhoist					\$9,109,669.54
Option #4	Bid	Price/Ton	Dosage(mg/L)	Pounds/Year	Tons/Year	Cost/Year
Pete Lien & Sons Fleur and Mississippi at McMullen	Pete Lien & Sons @ FDWTP	\$213.00	262	24,714,965	12,357	\$2,632,143.72
	Mississippi @ MWTP	\$238.81	205	8,206,560	4,103	\$979,904.30
	FDWTP - Sludge	\$26.64			828	\$22,056.62
	Total Option #4- Mixed Suppliers					\$3,634,104.64

Pete Lien & Sons is the lowest cost alternative. This is a new lime supplier which we have not previously used. Lime from Pete Lien & Sons will come from a plant in Laramie Wyoming. References from Pete Lien & Sons were contacted and one concerning comment was received from more than one customer. At times deliveries can be several days late, especially during inclement weather. Due to our limited lime storage capacity, lime loads being several days late could have an impact on our operation. One former customer also shared issues with variability in product quality.

As a test, we used loads of Pete Lien & Sons lime at Fleur and McMullen. During this test, we experienced approximately twice as much grit when using Pete Lien & Sons as we would from Mississippi. While we didn't have any slaking problems during this test, previous experience has shown that McMullen has operational issues when handling lime with this amount of grit. With the McMullen Plant being remotely monitored, these types of operating issues are especially difficult to address and require emergency intervention, up to and including reduced production. At this time, without additional testing, we cannot recommend using Pete Lien & Sons at McMullen.

This leaves option 2, Mississippi for both plants, and option 4, Pete Lien & Sons at Fleur and Mississippi at McMullen. Option 4 provides an estimated savings of \$14,641.85 over option 2. Since the investment Mississippi made in the local rail transfer station, they have been able to establish an impeccable track record of on-time lime deliveries. Mississippi keeps several rail cars full of lime only a few miles away from Fleur Drive. This reduces the risk of missed lime

deliveries from trucks driving from several states away. The quality of Mississippi's product has been consistently high throughout our experience over the past several years. At this time, staff believes the advantages of additional lime storage and higher quality product provided by Mississippi outweighs the \$14,641.85 cost savings provided by Pete Lien & Sons.

Staff recommends award of the 2024 Lime contract for both the Fleur Drive and McMullen Water Treatment Plants to Mississippi for \$228.81/per ton.

Chemical Price Change Summary Report 2023 to 2024

Plant	Chemical	New Price	Old Price	Percentage Change	Estimated Usage	Unit of Measure	2024 Total	2024 Vendor
Fleur	Activated Carbon	\$ 0.71000	\$ 1.60000	-55.63%	895,299	Pounds	\$635,662.29	Carbpure
Fleur	Aluminum Sulfate	\$ 0.40000	\$ 0.38750	3.23%	1,130,904	Pounds	\$452,361.60	Chemtrade
Fleur	Carbon Dioxide	\$ 0.06750	\$ 0.05800	16.38%	2,855,533	Pounds	\$192,748.48	Air Products
Fleur	Ferric Chloride	\$ 0.27800	\$ 0.27900	-0.36%	3,392,712	Pounds	\$943,173.94	Kemira
Fleur	Hydrofluosilicic Acid	\$ 0.29200	\$ 0.27700	5.42%	301,574	Pounds	\$88,059.61	Pencco
Fleur	Lime	\$ 228.81	\$ 215.50	6.18%	11,780	Tons	\$2,695,439.00	Mississippi Lime
Fleur	Soda Ash	\$ 0.24900	\$ 0.27300	-8.79%	131,939	Pounds	\$32,852.81	Dubois
Fleur	Solar Salt	\$ 260.00	\$ 235.00	10.64%	221	Tons	\$57,581.81	Step Saver
Fleur	Sodium Hypochlorite	\$ 1.74000	\$ 1.98400	-12.30%	224,163	Gallons	\$390,044.19	Vertex
Fleur	Polyphosphate	\$ 0.96000	\$ 1.30000	-26.15%	207,332	Pounds	\$199,038.72	Carus
Fleur Drive Sub-Total							\$5,686,962.45	
McMullen	Activated Carbon	\$ 0.71000	\$ 1.70000	-58.24%	140,112	Pounds	\$99,479.52	Carbpure
McMullen	Carbon Dioxide	\$ 0.06750	\$ 0.05800	16.38%	960,768	Pounds	\$64,851.84	Air Products
McMullen	Sodium Hypochlorite	\$ 1.74000	\$ 1.98400	-12.30%	95,220	Gallons	\$165,682.49	Vertex
McMullen	Ferric Chloride	\$ 0.27800	\$ 0.27900	-0.36%	920,736	Pounds	\$255,964.61	Kemira
McMullen	Hydrofluosilicic Acid	\$ 0.29200	\$ 0.27700	5.42%	100,080	Pounds	\$29,223.36	Pencco
McMullen	Lime	\$ 228.81	\$ 215.50	6.18%	4,103	Tons	\$938,871.50	Mississippi Lime
McMullen	Polyphosphate	\$ 0.96000	\$ 1.30000	-26.15%	32,026	Pounds	\$30,744.96	Carus
McMullen Sub-Total							\$1,584,818.28	
SWTP	Antiscalant	\$ 1.47000	\$ 1.95000	-24.62%	55,044	Pounds	\$80,914.68	Avista
SWTP	Citric Acid	\$ 1.22000	\$ 1.75000	-30.29%	133,023	Pounds	\$162,288.06	Shannon Chemical
SWTP	Hydrofluosilicic Acid	\$ 0.29200	\$ 0.27700	5.42%	51,374	Pounds	\$15,001.21	Pencco
SWTP	Polyphosphate	\$ 0.96000	\$ 1.30000	-26.15%	0	Pounds		Carus
SWTP	Sodium Bisulfite	\$ 0.18950	\$ 0.19300	-1.81%	293,568	Pounds	\$55,631.14	PVS
SWTP	Sodium Hydroxide 30%	\$ 1.76640	\$ 2.26630	-22.06%	76,168	Gallons	\$134,542.97	Univar
SWTP	Sodium Hypochlorite	\$ 1.74000	\$ 1.98400	-12.30%	65,464	Gallons	\$113,906.71	Vertex
SWTP	Sodium Permanganate	\$ 1.27000	\$ 1.70000	-25.29%	64,218	Pounds	\$81,556.86	Shannon Chemical
SWTP	Poly Aluminum Chloride	\$ 0.87000	\$ 0.81000	7.41%	73,392	Pounds	\$63,851.04	Veolia
SWTP	Hydrochloric Acid	\$ 3.80000	\$ 4.12727	-7.93%	380	Gallons	\$1,443.69	Acco
SWTP Sub-Total							\$709,136.36	
Des Moines Water Works 2024Total							\$7,980,917.09	

DES MOINES WATER TREATMENT PLANT: INDEPENDENT LIME QA/QC CHEMICAL REVIEW

Lime Reactivity Testing Report

PROJECT ID: R1909

PREPARED FOR:

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October 20, 2023

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EXECUTIVE SUMMARY

Three unique calcium oxide pebble lime samples, at $-\frac{1}{2}$ " size, were received by Kemetco Research on September 22nd, 2023. Kemetco conducted testing, in accordance with ASTM standards, to quantify and evaluate the relative lime efficiency and handling of the three lime sources. For this round of testing, Kemetco received lime samples from the following: Mississippi Lime, Pete Lien & Sons' Jonathon Lime Plant, and Lhoist.

Testing compared the efficiency of the milk of lime slurry that would be produced by Des Moines Water Works (DMWW) after the calcium oxide lime was slaked, replicating slaking conditions reasonably achievable with the existing equipment currently at the DMWW facility. It is paramount that lime efficiency testing be conducted in a manner to reflect real world conditions, as opposed to only theoretical laboratory conditions. The six main components in determining lime efficiency for these three lime sources are summarized in the table below.

Table 1. Comparison of three calcium oxide sources using key lime efficiency indicators.

LIME EFFICIENCY INDICATORS		SOURCE		
		Mississippi	Pete Lien	Lhoist
Total Active Slaking Time (TAST)	min	4.3	2.2	4.5
% Grit (+30 Mesh Residue) CaO	%	0.21	1.20	4.73
% Solids after Slaking	%	25.76	25.19	25.18
Available Lime Index (ALI)	%	95.38	93.33	93.12
Loss on Ignition (LOI)	%	2.98	3.55	3.47
Neutralization Capacity	g/(250.0 g of std'd 1.500% H ₂ SO ₄)	3.027	3.115	3.200

A detailed review of all the lime testing data, taken into context, showed that the lime samples from Mississippi performed the best in all lime efficiency tests overall, the sample from Pete Lien & Sons lime came in second place, and the lime samples from Lhoist lime came in third place.

Mississippi lime had the highest conversion of CaO to Ca(OH)₂ after slaking with the lowest grit content, meaning that on a mass efficiency comparison, Mississippi samples produced more usable Ca(OH)₂ slurry than the other two samples. The resultant solids from slaking also demonstrated Mississippi lime to have the highest neutralization capacity. The as-received samples from Mississippi had on average 0.46% more hydrated lime available after slaking.

Lime Reactivity Testing Report

The other two lime samples required more lime consumption (Pete Lien & Sons at 2.9% more and Lhoist at 5.7% more) to achieve the same neutralization capacity as the Mississippi lime. Mississippi lime also had the lowest LOI at 2.98%, slightly lower than the other two. Grit production also needs to be considered.

The conclusions of the current lime testing program are as follows:

1. It is expected that the Mississippi lime sample is the most efficient of the three new samples tested.
2. If all lime quality factors and testing are taken into account to treat the same amount of water as 1.000 tons of the Mississippi lime, the equivalent requirement would be 1.049 tons of Pete Lien & Sons and 1.107 tons of Lhoist lime.
3. It goes without saying that the cost per ton to site needs to be factored into the lime efficiency data.
4. The Pete Lien & Sons lime sample was the best ever seen from this company. It seems to be from a new quarry or alternatively treated at a different calcining facility. It had the fastest and highest slaking temperature rise, indicating the fastest slaking kinetics and shortest retention time required in a slaker for complete slaking. Its total active slaking time was only 2.2 minutes, which is on average two times faster than the other two lime sources. The resultant lime slurry was extremely thick, resembling the consistency of whipping cream.
5. The amount of solids produced after lime slaking, meaning $\text{Ca}(\text{OH})_2$ available for neutralization, were comparable between the three lime samples, with Mississippi lime coming out slightly on top.

NOTE: The reported test data is based on the three lime samples as received on September 22nd, 2023 by Kemetco Research, tested in accordance with ASTM standards.

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1. INTRODUCTION

The tests employed in this study quantify the chemical efficiency of calcium oxide (lime) sourced from three separate vendors, to aid in the evaluation of the lime supply.

The parameters examined were similar to the batch evaluated in September 2022. The following six groups of tests were performed:

1. Quicklime (calcium oxide) reactivity or slaking rate to indicate lime quality in general terms.
2. Percent grit determination (or plus 30 mesh residue) after slaking, because this large fraction is effectively waste material, and therefore, not utilized in standard pH adjustment processes.
3. Percent solids determination of the resultant milk of lime after slaking tests under standard controlled conditions to indicate slaking efficiency or the percent of hydration from calcium oxide to calcium hydroxide.
4. Available Lime Index (ALI) to determine the percentage of calcium oxide in the source lime supply that is available for slaking reactivity, and then to determine if fully slaked is available for the subsequent neutralization step as calcium hydroxide reactivity.
5. Loss on Ignition (LOI) to determine the portion of a quicklime supply that did not effectively calcine during the calcination process. It is a good indicator of calcining efficiency in the 'as delivered' calcium oxide.
6. Neutralization capacity and kinetics tests to determine the efficiency of the calcium hydroxide (the final product of slaking) in effecting a change in pH. Higher quality and efficiency calcium hydroxide not only more effectively adjust the pH on a weight to weight basis but does so more quickly.

Overall lime efficiency and utilization is determined by a combination of all six tests.

2. SAMPLES RECEIVED

Table 2. Samples received by Kemetco.

VENDOR Sample ID	RECEIVED at KEMETCO			
	Date	Packaging	Description	Quantity
Mississippi Quicklime	9/22/2023	box & zip loc bag, vacuum sealed	1/2" pebble lime	Three bags with a gross weight of 1985.3 g
Pete Lien & Sons: Jonathon Lime Plant	9/22/2023	box & double bagged, no vac. sealed	1/2" pebble lime	Three bags with a gross weight of 1901.0 g
Lhoist	9/22/2023	box & double bagged, no vac. sealed	1/2" pebble lime	Three bags with a gross weight of 2443.9 g



Figure 1. Mississippi (top), Pete Lien (bottom-left) and Lhoist (bottom-right) samples as received, Sept. 22, 2023.

3. OVERVIEW OF LIME EVALUATION TESTS PERFORMED

Table 3. Description of lime tests conducted.

Test Performed	#of Tests Performed	Test Standards/Methods	Samples Tested
Slaking Rate Test	9: Three tests for each of the three samples	ASTM C110-5, Section 11 4.0:1 using 25 °C H ₂ O	Lime as supplied by Mississippi, Pete Lien & Sons, and Lhoist on Sept. 2023
Residue & Sieve Analysis (% Grit)	3: One test for each of the three samples	ASTM C110-15, Section 15 Plus 30 mesh grit %	Milk of lime slurry as produced
% Solids Determination	9: Three tests for each of the three samples	Slurry (weighed, dried, weighed) at 105 °C	Milk of lime slurry as produced by slaking rate tests
Available Lime Index (ALI)	6: Two tests for each of the three samples	ASTM C25-99, Section 28	Lime as supplied by Mississippi, Pete Lien & Sons, and Lhoist on Sept. 2023
Loss on Ignition (LOI)	3: One test for each of the three samples	ASTM C25-99, Section 19	Lime as supplied by Mississippi, Pete Lien & Sons, and Lhoist on Sept. 2023
Neutralization Capacity/Kinetics	23: Minimum five ranging tests for each of the three samples	ASTM C400-98 guidelines, Kemetco Procedure	Milk of lime slurry as produced by slaking rate tests

4. SLAKING RATE TESTS

Slaking rate tests were performed in this study to generate lime slurry samples in a controlled environment that could be used in downstream evaluative tests, such as those for comparative neutralization capacity, % grit and solids % determination tests. The goal was to use these resultant hydrates to further define and quantify the potential lime reagent efficiencies for different lime sources, where possible.

It was assumed the solid samples, as received from the three lime vendors, were produced in lime kilns and crushing plants under normal plant operating conditions.

Each unique lime sample was slaked three times so that triplicate results could be obtained for accuracy. In total, nine slaking tests were performed.

The nine slaking tests performed by Kemetco were designed to use identical lime sources, meaning potential suppliers and similar water quality as available at Des Moines Water Works and at standard ASTM test conditions. The ratio of water to quicklime by weight was 4:1 (w/w). Since the exact amount of quicklime input was known for these tests, by filtering, drying, and weighing the resultant solids, a determination of the mass of solids produced could also be accurately made.

The quicklime samples used for the nine slaking tests were crushed to approximately 6 mesh using a cone crusher and riffle sample splitter and then immediately placed in a sealed bag to prevent air slaking. A representative sample of this crushed sample was used for each slaking test performed. Any oversized quicklime pebbles were still used in the slaking tests as per ASTM C110-15 Section 11.



Figure 2. Typical CaO, as prepared for slaking, involves rapid crushing to -6 mesh, screening, and riffing to obtain a representative sample.

There are three components to determine lime efficiency; these measure how the product of more efficient calcium oxide slaking can be related and quantified to an efficient or reactive calcium hydroxide compound:

1. The first component is neutralization capacity and kinetics testing, to determine calcium hydroxide particle reactivity. Calcium hydroxide particles produced at higher temperatures have higher specific surface area and therefore have faster and more complete dissolution in water (i.e., higher particle reactivity).
2. The second component is by determining the percentage of calcium hydroxide conversion. A higher percentage of calcium hydroxide conversion correlates to more efficient slaking.
3. The third component is by comparing grit production or plus 30 mesh residue production under differing slaking parameters.

These three components are interrelated and used to quantify lime and lime slaking efficiency.

Quicklime reactivity with water is measured by the rate of release of the heat of hydration that is produced while making slurry. For the purpose of this report, quicklime reactivity was determined by measuring the slaking rate, as described in ASTM C110-15. Quicklime reactivity in this context describes quicklime slaking kinetics, measured by recording the actual temperature rise and the rate of temperature rise. Some useful principals follow:

1. Quicklime is considered more reactive if it has a faster and greater slaking temperature rise.
2. Quicklime that has a faster temperature rise requires less retention time in a slaker for complete slaking, effectively increasing slaking equipment throughput.
3. In general, the higher the temperature rise during the slaking process, the more reactive the quicklime is considered to be overall.
4. The more complete the slaking, the better the quality of the resulting lime slurry, due to the higher hydration or conversion percentage of CaO to Ca(OH)_2 .

Slaking rate was determined using a laboratory equipment set-up similar to what is depicted in Appendix A. In these tests, 400 mL of distilled water was heated to the indicated temperature before being transferred into an insulated Dewar flask. Details of the procedure used can be found in the ASTM standard C-110-015 Section 11.

4.1 SLAKING WATER QUALITY CONSIDERATIONS

The best lime slaking results are always obtained when using heated potable water. Des Moines Water Works uses finished water for slaking, originating either from the Raccoon River or the Des Moines River. The water that was used for the nine slaking tests performed by Kemetco was demineralized water, which is essentially the same as finished or potable water when it comes to lime slaking.

The only significant concern in using the site-finished water as lime slaking water is the seasonal variation of the incoming water temperature. In colder winter months, the temperature could fall as low as 4.4 °C, and in the summer, it is typically around 15.6 °C.

In order to achieve a good target final slaking temperature of at least 79.4 °C in the winter months, it may be necessary to heat incoming water to 15.6 °C using steam or another type of heater. The other option could be to allow the Detention slaker to automatically adjust the water to lime ratio lower in order to operate at a thicker, more exothermic mixture. A lower water to lime ratio produces higher percent solids slurry that will also be more viscous. Slaker operations would require monitoring for acceptable operations due to the percent solids and viscosity, especially through the grit screen and the gravity flow discharge line to the slurry holding tank.

Results of the reactivity or slaking rate test can be significantly affected by impurities present in the slaking water, as well as the initial slaking water temperature. The presence of anions such as sulfate, phosphate or carbonate in the water can retard the slaking reaction and, for this reason, distilled water can be used as a reference standard.

Slaking rate can also be reduced by the adsorption of water or carbon dioxide during improper storage of the quicklime sample.

4.2 SLAKING RATE TEST RESULTS

In total, nine slaking tests were performed. Each unique lime sample was slaked three times so that triplicate results could be obtained for accuracy. The results reported in Table 4 represent averages of those tests.

When examining any temperature rise at a specified time and the total active slaking time (TAST), the sample from Pete Lien & Sons was the far superior lime sample of the three. Within 30 seconds, the average recorded temperature was 71.0°C, which equates to a temperature increase of 46.0°C. The temperature increase at 30 seconds for the Mississippi and Lhoist lime samples were 20.6°C and 13.7°C respectively, which is less than half of what the Pete Lien & Sons sample achieved in the same time period. This sharp temperature increase exhibited by the Pete Lien & Sons sample resulted in the quickest total active slaking time of 2.2 minutes of the three lime samples. The total active slaking time for Mississippi and Lhoist were 4.3 and 4.5 minutes respectively, a minor difference between the two.

However, when examining the graph of Figure 3 more closely, it is evident the Pete Lien & Sons sample experienced the quickest temperature drop when compared to the other two lime samples. Its final slaking temperature, which is the main critical parameter in producing a higher quality milk of lime, was 79.1°C while the Mississippi lime reached a final temperature of 78.1°C. The final temperature of Lhoist was 76.9°C, the lowest of the three lime samples.

It should be noted that during the slaking tests for Pete Lien & Sons, its resultant milk of lime slurry was the most viscous and required the most rinse water for grit determination. A discussion of this will be in section 5.

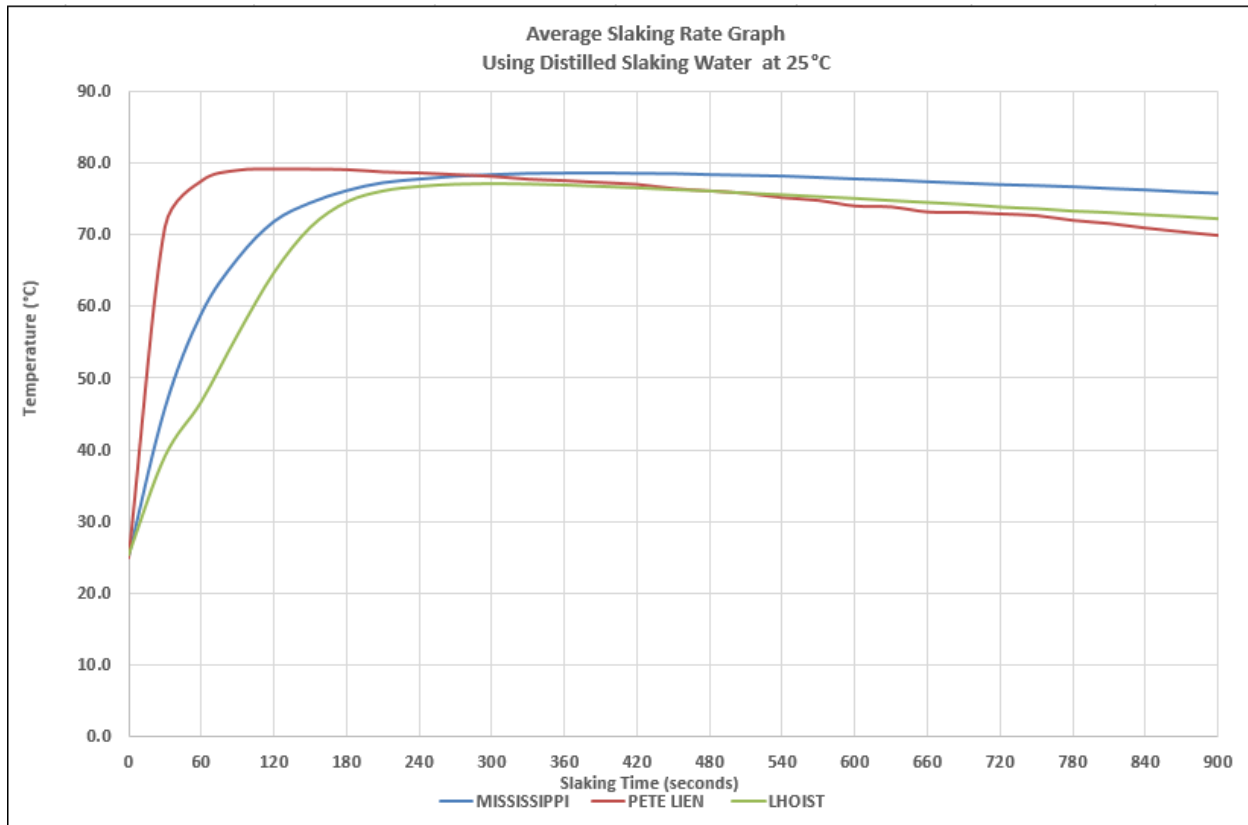


Figure 3. Average slaking rates of the three lime sources tested in 2023.

Table 4. Averaged slaking test data including grit production.

PARAMETER	SOURCE		
	Mississippi	Pete Lien	Lhoist
Initial Temperature (°C)	25.3	25.0	25.4
Temperature increase at 30 s (°C)	20.6	46.0	13.7
Temperature increase at 1.0 min (°C)	33.8	52.4	21.3
Temperature increase at 3.0 min (°C)	50.9	54.0	49.1
Total Temperature Rise (°C)	52.8	54.1	51.6
Total Active Slaking Time (TAST) (min)	4.3	2.2	4.5
% Grit	0.21	1.20	4.73

5. PERCENT GRIT AND +30 MESH RESIDUE PRODUCTION

Grit production measures the plus 30 mesh portion (+ 600 µm) of the resultant slurry produced by slaking lime. Often this portion is screened out and disposed of.

Standard ASTM grit or residue screening procedures were followed for the three lime samples.

This larger sized fraction of grit is considered inert or ineffective when used in a water treatment or acid neutralization process. The typical calcium hydroxide particle that is readily dissolved as used in neutralization commonly has a d50 of between 6 to 10 µm and a d80 of between 60 to 90 µm. It stands to reason that particles over 600 µm are not primarily calcium hydroxide particles.

5.1 PERCENT GRIT (+30 MESH RESIDUE) TEST RESULTS

When slaked under identical conditions, Lhoist had 3.5% to 4.5% more grit content than the other two lime samples:

- ◆ For every 100 grams of Ca(OH)_2 for Mississippi Lime, 0.21 grams were over 600 µm.
- ◆ For every 100 grams of Ca(OH)_2 for Pete Lien & Sons Lime, 1.20 grams were over 600 µm.
- ◆ For every 100 grams of Ca(OH)_2 for Lhoist Lime, 4.73 grams were over 600 µm.

Percentage grit is shown in Table 5. Mississippi lime contains the least grit followed by Pete Lien & Sons lime and then Lhoist lime. +30 mesh residues are presented in Figure 4; the grits in Pete Lien & Sons lime contained some coarse solids.

Table 5. Grit (+30 Mesh Residue).

Lime Source	Final Slaking Temperature (°C)	+30 mesh Grit (%)
Mississippi	78.1	0.21
Pete Lien	79.1	1.20
Lhoist	76.9	4.73



Figure 4: Grit/+30 Mesh Production: Mississippi Lime (left), Pete Lien & Sons (middle) and Lhoist (right)

As mentioned earlier in section 4.2, the resultant milk of lime slurry from Pete Lien & Sons was the most viscous of the three lime samples. When rinsing the lime slurry through a 30 mesh sieve to determine grit content, a significant amount of water had to be used. This can be problematic in real world operations, especially at circuits that specifically deal with the transfer and storage of milk of lime slurry.

6. PERCENT SOLIDS TESTS

Slaking at a higher final slaking temperature is generally known to be more efficient, and therefore, a higher percentage of conversion from calcium oxide to calcium hydroxide is expected to occur. This hydration results in up to a theoretical 32% stoichiometric mass gain.

Calcium oxide has an atomic mass of 56.0774 grams per mole. Calcium hydroxide has an atomic mass of 74.093 grams per mole.

For every 100 g of pure CaO that is fully hydrated, 32 g of water is consumed to produce 132 g of Ca(OH)₂. This assumes 100% pure CaO and assumes a slaking efficiency of 100%. Since this is not a normal industrial reality, the efficiency calculations are adjusted accordingly, based on percent solids test results.

The reported percent solids include the grit portion. In other words, it is the percent solids as produced by the slaking reaction prior to screening out oversized solids. This percent solids number is a combination of the degree of CaO conversion to Ca(OH)₂ and the amount of grit produced. The amount of grit produced typically does not undergo a chemical reaction during the slaking process.

The Ca(OH)₂ solids were obtained from the milk of lime slurry produced from the nine slaking rate tests (Section 4). Lime slurry from the slaking tests was filtered and dried in an oven overnight at low temperature (<105°C) before weighing. Each 500 g slurry contained 100 g CaO and 400 g water, thus, the highest achievable percent solids was 26.4% when assuming 100% pure CaO and 100% slaking efficiency.

6.1 PERCENT SOLIDS TEST RESULTS

Despite the difference in final slaking temperatures of the three lime samples (Section 4.2), percent solids obtained were all similar. When comparing Pete Lien & Sons and Lhoist, their respective percent solids were identical. Mississippi lime on average had 0.57% more solids than the other two samples. Overall, the differences in percent solids were minimal and within the error of testing and analysis. Percent solids results are listed in Table 6.

Table 6. Percent solids after standard slaking tests.

Lime Source	Avg. Slaked Slurry Wt. (g)	Avg. Dry Wt. (g)	Avg % Solids
Mississippi	500.43	128.93	25.76
Pete Lien & Sons	500.25	126.02	25.19
Lhoist	500.42	126.01	25.18

7. AVAILABLE LIME INDEX (ALI) TESTS

The available lime index test (ALI) was performed by Kemetco on each of the new lime samples provided by the lime suppliers.

The ALI is a useful quick index relating the general quality of a particular quicklime source by highlighting how much potential calcium oxide is available for slaking.

The actual degree of slaking or conversion to calcium hydroxide depends on many parameters that all need to be satisfied in order to optimize the slaking process. In other words, the ALI tells the potential of quicklime conversion to slaked lime but not the actual degree of conversion.

7.1 AVAILABLE LIME INDEX TEST RESULTS

The Mississippi lime had the highest available lime index (ALI) at 95.4%, indicating this lime had the highest potential of CaO conversion to Ca(OH)₂. The Pete Lien & Sons and Lhoist lime sources had nearly identical ALI numbers, with the Pete Lien & Sons lime edging out the Lhoist lime by 0.2%. All lime samples showed very high ALI percentages (>92%), confirming that they were very high calcium quicklime sources.

When examining the Pete Lien & Sons sample during the ALI titrations, its -50 mesh fraction also behaved in a similar fashion as observed during the slaking tests (subsection 4.2). The -50 mesh sample formed a clumpy paste at the bottom of the flask once added to 40 mL of demineralized water. However, after further mixing and boiling in subsequent steps, the paste broke down and suspended into solution. The other two lime sources did not exhibit this behavior.

Table 7. Available Lime Index (ALI) summary for 2023 samples.

PARAMETER		SOURCE					
		Mississippi		Pete Lien		Lhoist	
Titration	#	1	2	3	4	5	6
Vol. 1 N HCl	mL	95.4	95.5	93.5	93.3	93.1	93.3
Sample Wt.	g	2.805	2.807	2.806	2.806	2.806	2.807
Available Lime (CaO)	%	95.4	95.4	93.4	93.2	93.0	93.2
Average	%	95.4		93.3		93.1	

8. LOSS ON IGNITION (LOI) TESTS

Loss on Ignition (LOI) is an ASTM test that determines the portion of a quicklime supply that may not have effectively calcined during the calcination process in the lime supplier's kiln. LOI can be a good indicator of slaking efficiency in the as delivered calcium oxide.

Essentially the limestone or CaCO_3 that did not liberate its CO_2 during normal calcining operations will be liberated during this LOI test at $1,000^\circ\text{C}$ along with free moisture.

8.1 LOI TEST RESULTS

The LOI result indicated Mississippi lime contained the least limestone, followed by Lhoist and Pete Lien & Sons. However, the difference between Pete Lien & Sons and Lhoist is only 0.07%. LOI results are presented in Table 8.

Table 8. Loss on Ignition (LOI) summary for 2023 samples.

Sample Name	Avg LOI (%)
Mississippi -100 mesh	2.98
Pete Lien -100 mesh	3.55
Lhoist -100 mesh	3.47

9. NEUTRALIZATION CAPACITY & KINETICS TESTS

The hydrated lime samples used in the neutralization tests for Figure 6 were generated by the previous slaking rate tests (section 4) in a tightly controlled laboratory environment to ensure identical slaking conditions for the two lime sources.

The samples were filtered using two layers of fine lab filter paper and dried overnight in a drying oven at low temperature (<105 °C) to avoid sample degradation. The dried filter cake was weighed and rolled between two layers of Kraft paper. Once rolled the samples were sieved dry into +30 mesh / +100 mesh and -100 mesh fractions. The -100 mesh fractions of the three lime samples were used for the Neutralization Capacity and Kinetics testing to ensure a comparative test.

The Neutralization Capacity and Kinetics test is a modified test developed by Kemetco based on the ASTM C 400-98 guidelines. The experimental setup is shown in Figure 5.

The typical neutralization capacity test equipment required includes:

- ◆ Standard concentrated sulfuric acid to make up 1.500% standard
- ◆ Certified standard sodium hydroxide to standardize sulfuric acid
- ◆ Scale capacity 1,000 grams +/- 0.001 grams
- ◆ pH probes with 3-point calibration and standards (pH 4 / pH 7 / pH 12)
- ◆ Magnetic stirrers and bars

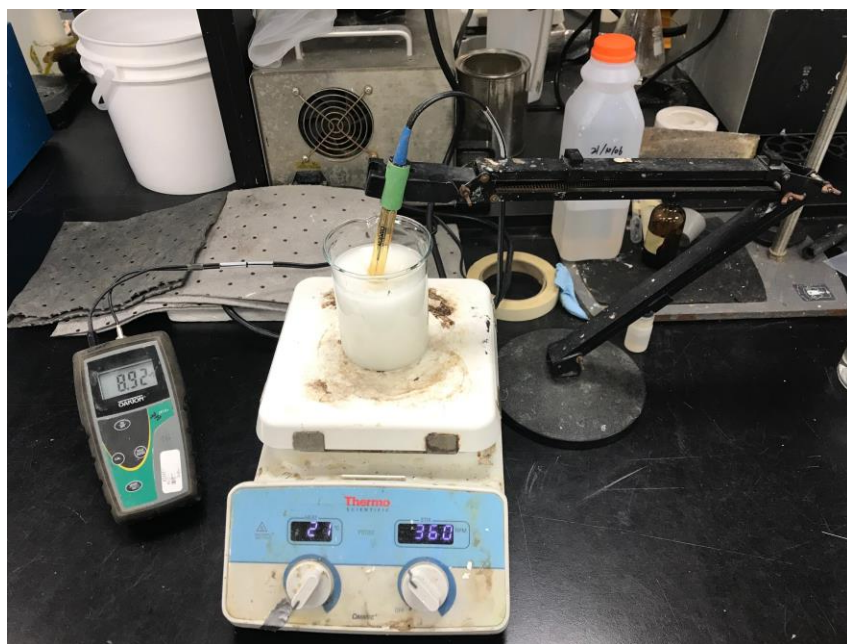


Figure 5: Neutralization capacity and kinetics test set-up.

9.1 NEUTRALIZATION CAPACITY & KINETICS TEST RESULTS

A total of 23 neutralization titration tests were performed. Most of these were considered as ranging, to zone in on the matching performance curves, paying attention to a pH value of 4.0–4.5 at the 5-minute mark, as well as a similar final pH value at the 20 to 30-minute mark.

The three neutralization curves shown in Figure 6 indicate that the three lime sources represent very similar kinetics in the first five minutes, and Lhoist lime had the fastest kinetics after five minutes, while Mississippi lime had slower kinetics. The time to reach pH 8 for Mississippi lime was 19 minutes, Pete Lien & Sons lime took 9–10 minutes and Lhoist lime took 7–8 minutes. The final pH at 30 minutes was 8.51, 10.56 and 10.74 for Mississippi, Pete Lien & Sons, and Lhoist lime, respectively.

Despite the slow kinetics and low final pH of Mississippi lime, it required the least amount of lime to neutralize the same amount of standardized acid. Therefore, it had the highest neutralization capacity.

The green line, which is Pete Lien & Sons lime, needed only 3.115 g of dry calcium hydroxide to neutralize 250.00 g of standardized 1.500% H_2SO_4 acid.

The orange line, which is Lhoist Lime, used 3.200 g of dry calcium hydroxide to neutralize 250.00 g of standardized 1.500% H_2SO_4 acid.

The blue line, which is Mississippi Lime, needed 3.027 grams of dry calcium hydroxide to neutralize 250.00 g of standardized 1.500% H_2SO_4 acid.

The titration tests show Mississippi lime had the highest neutralization capacity but slowest kinetics when compared to the other two lime sources.

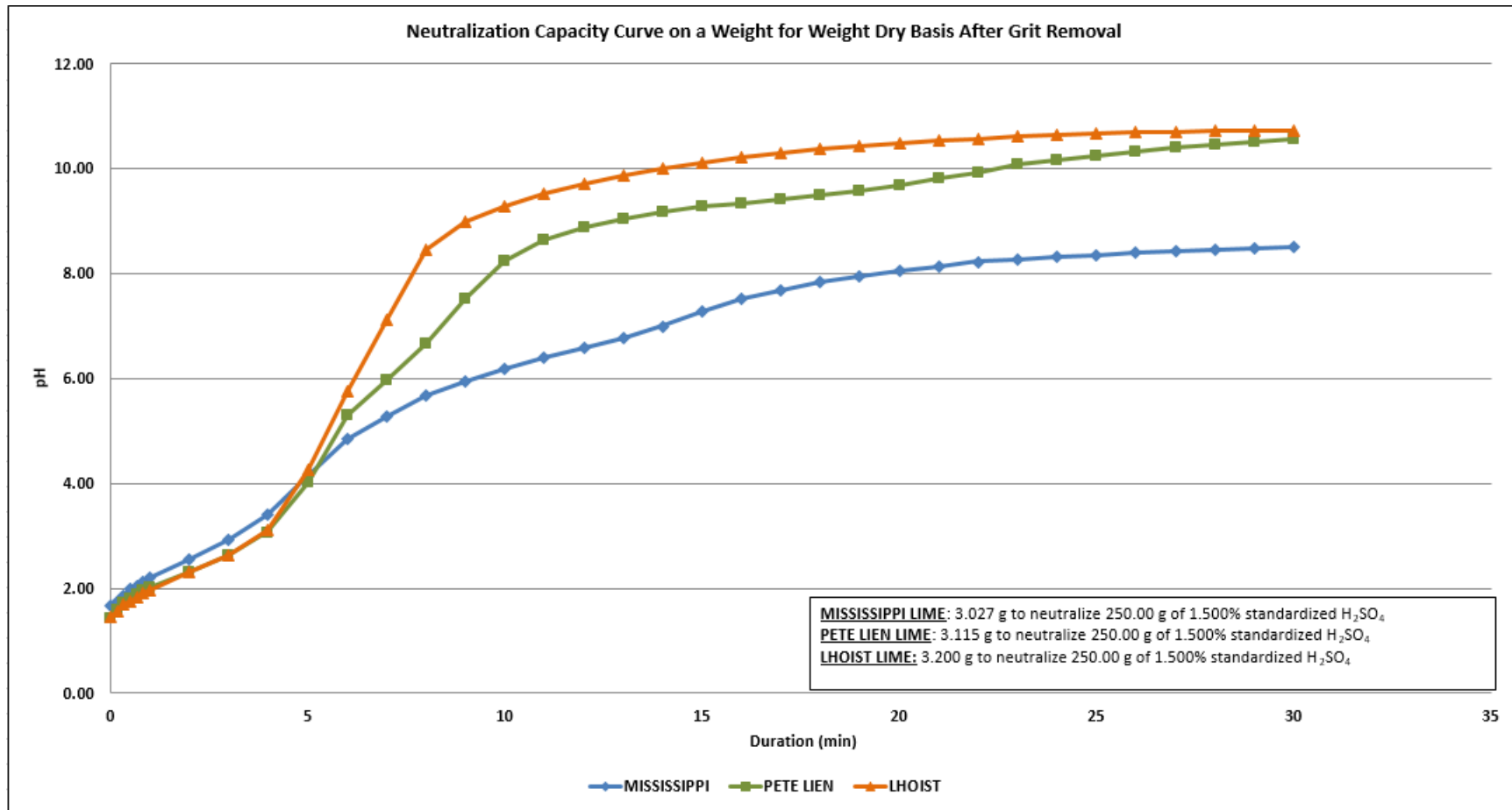
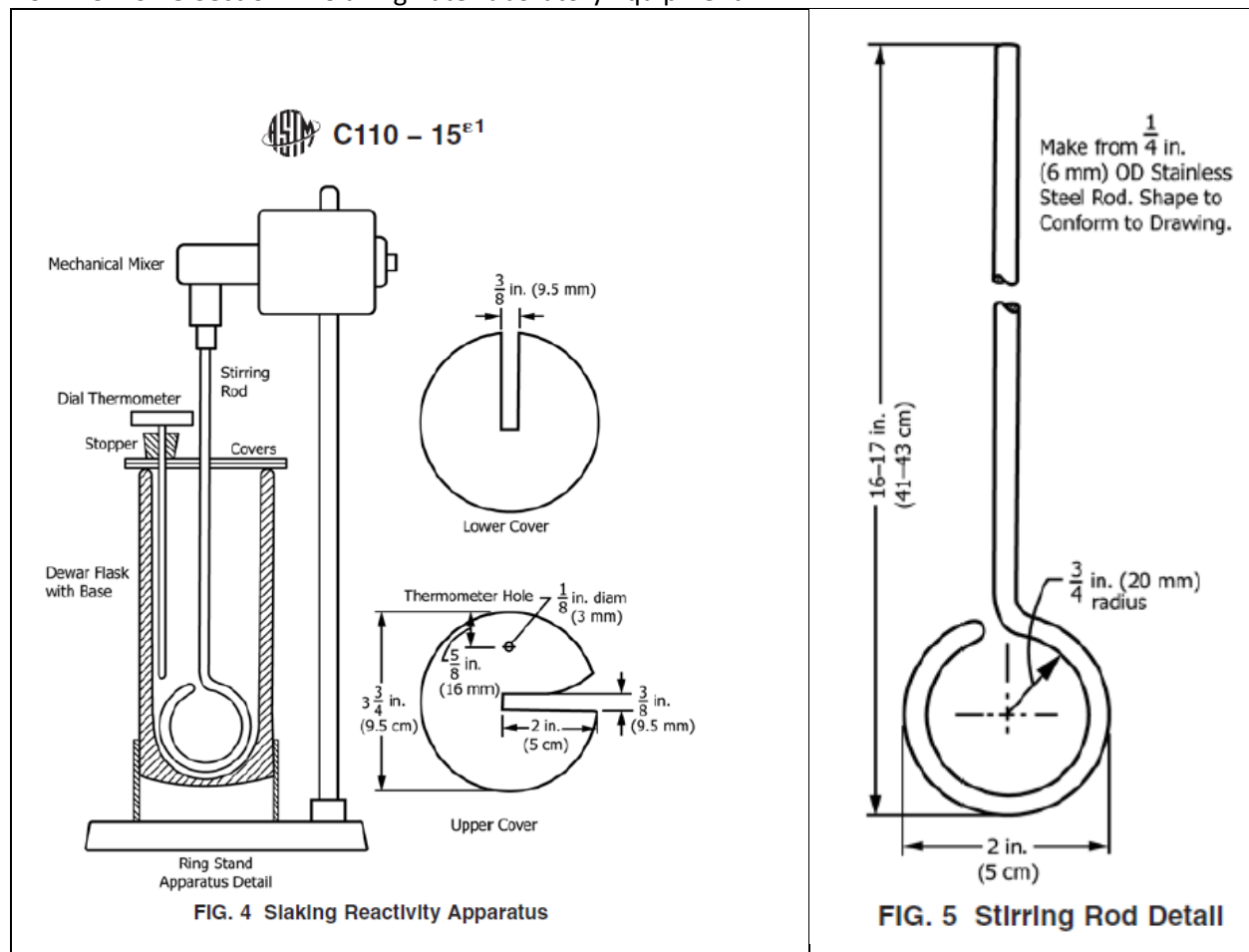


Figure 6: Comparison of neutralization capacity and kinetics of the 2023 samples.

APPENDICES

APPENDIX A: ASTM C110-15 SECTION 11 SLAKING EQUIPMENT

ASTM C110-15 Section 11 Slaking Rate Laboratory Equipment



APPENDIX B: SLAKING RATE DATA

Slaking rate data tests performed by Kemetco Research, September 2023.

Lime Source	MISSISSIPPI			PETE LIEN			LHOIST		
Test Date	25-Sep-23	25-Sep-23	25-Sep-23	25-Sep-23	25-Sep-23	26-Sep-23	26-Sep-23	26-Sep-23	26-Sep-23
Test #	ST#1	ST#2	ST#3	ST#4	ST#5	ST#6	ST#7	ST#8	ST#9
Quicklime/Water	100.08 g/400.33 g	100.03 g/400.52 g	100.01 g/400.31 g	100.09 g/400.22 g	100.07 g/400.12 g	100.04 g/400.33 g	100.05 g/400.33 g	100.09 g/400.36 g	100.03 g/400.4 g
Reactor	Smaller Thermos	Smaller Thermos	Smaller Thermos	Smaller Thermos	Smaller Thermos	Smaller Thermos	Smaller Thermos	Smaller Thermos	Smaller Thermos
Impeller/Speed	Smaller Ring 400 rpm	Smaller Ring 400 rpm	Smaller Ring 400 rpm	Smaller Ring 400 rpm	Smaller Ring 400 rpm	Smaller Ring 400 rpm	Smaller Ring 400 rpm	Smaller Ring 400 rpm	Smaller Ring 400 rpm
T _{int} /T _{total}	25.5/77.2	25.2/78.4	25.1/78.6	25.1/80.0	25.0/78.7	25.0/78.7	25.3/76.8	25.1/77.0	25.7/77.0
TR _{30s}	19.8	20.6	21.5	46.1	46.2	45.7	13.8	14.3	13.0
TR _{3min}	50.6	50.9	51.2	54.9	53.5	53.5	49.4	49.0	48.9
TR _{total}	51.7	53.2	53.5	54.9	53.7	53.7	51.5	51.9	51.3
Active Time (min)	4.0	4.5	4.5	2.5	2.0	2.0	4.5	4.5	4.5
Water Source	deionized water	deionized water	deionized water	deionized water	deionized water	deionized water	deionized water	deionized water	deionized water
Comment	RPM drop?		used for grit analysis	viscous slurry	viscous slurry	used for grit, viscous slurry, RPM drop?			used for grit
Time (mins : secs)	Temperature (°C)	Temperature (°C)	Temperature (°C)	Temperature (°C)	Temperature (°C)	Temperature (°C)	Temperature (°C)	Temperature (°C)	Temperature (°C)
0	25.5	25.2	25.1	25.1	25.0	25.0	25.3	25.1	25.7
30	45.3	45.8	46.6	71.2	71.2	70.7	39.1	39.4	38.7
60	58.7	59.1	59.3	77.6	77.4	77.2	47.4	45.9	46.7
90	66.8	66.5	66.8	79.3	78.8	78.6	56.5	55.6	55.9
120	71.7	72.3	71.6	79.8	78.7	78.7	64.8	64.2	64.9
150	74.6	74.3	74.5	80.0	78.6	78.6	70.9	70.8	71.1
180	76.1	76.1	76.3	80.0	78.5	78.5	74.7	74.1	74.6
210	77.0	77.3	77.5	79.9	78.0	78.1	75.8	76.0	76.2
240	77.2	78.0	78.1	79.9	77.6	78.1	76.5	76.6	76.8
270	77.5	78.4	78.6	79.6	77.5	77.8	76.8	77.0	77.0
300	77.7	78.7	78.8	79.5	77.2	77.5	76.8	77.2	77.1
330	77.8	78.9	79.0	79.3	76.7	77.0	76.7	77.2	77.0
360	77.8	79.0	79.0	79.2	76.4	76.8	76.6	77.0	76.9
390	77.7	79.1	79.1	78.8	76.2	76.6	76.4	76.9	76.6
420	77.5	79.1	79.1	78.6	76.6	75.6	76.2	76.7	76.4
450	77.5	79.1	79.0	78.2	75.6	75.3	75.9	76.5	76.2
480	77.3	79.0	78.9	78.0	75.2	74.9	75.8	76.3	75.9
510	77.1	78.9	78.9	77.3	75.2	74.6	75.5	76.0	75.6
540	77.0	78.9	78.7	76.2	75.0	74.1	75.3	75.8	75.3
570	76.7	78.7	78.6	75.3	74.6	74.2	75.0	75.6	75.0
600	76.4	78.6	78.4	75.0	74.0	72.8	74.8	75.3	74.8
630	76.2	78.5	78.2	75.0	74.0	72.4	74.5	75.0	74.5
660	75.9	78.3	78.0	74.5	73.8	71.0	74.2	74.8	74.2
690	75.5	78.2	77.9	73.9	73.0	72.3	73.9	74.6	73.9
720	75.3	78.0	77.7	73.1	73.0	72.4	73.6	74.3	73.4
750	75.3	77.8	77.5	72.2	73.0	72.6	73.3	74.0	73.3
780	75.1	77.6	77.4	72.0	72.6	71.2	73.0	73.6	73.0
810	74.8	77.4	77.2	71.6	71.9	71.0	72.8	73.5	72.7
840	74.6	77.2	77.0	71.1	71.3	70.2	72.5	73.2	72.4
870	74.2	77.0	76.8	70.5	70.6	69.9	72.2	73.0	72.1
900	74.0	76.8	76.6	69.5	70.2	69.8	71.9	72.7	71.8

APPENDIX C: COA OF PETE LIEN & SONS (JONATHON PEBBLE LIME)

PETE LIEN & SONS, Inc.

MAILING ADDRESS: P.O. Box 440 RAPID CITY, SD 57709-0440 PH: 605-342-7224
PHYSICAL ADDRESS: 3401 UNIVERSAL DR. RAPID CITY, SD 57702 FX: 605-342-6979

Date: 09/01/23

Customer: Des Moines Water Works

RE: Pete Lien & Sons Certificate of Analysis Jonathon Pebble Lime



Pete Lien & Sons, Inc. produces Limestone, Calcium Oxide (Quicklime), Calcium Hydroxide (Hydrated Lime) products that meet the applicable requirements, standards & certifications to include, but not limited to, AWWA B202, ASTM C207, AASHTO M303, & Underwriters Laboratory's certification for NSF / ANSI 60 – Drinking Water Treatment Chemicals.

The following certificate of analysis (C.O.A.) was conducted at the Pete Lien & Sons Quality Assurance Laboratory and is applicable to the Sample date and corresponding number(s) noted below.

Sample Date: 08/31/23	<u>Quicklime – Laramie, WY – Jonathon Plant</u>	
Manufactured Date: 08/31/23	Gradation	%Passing
Available CaO (Calcium Oxide): 94.37%	1"	100%
L.O.I (Loss on Ignition): .51 %	¾ "	98.8%
Reactivity (3 Minute): 58.1 ΔT °C	½"	49.4%
Objectionable Material: .15%	3/8"	18.4%
	¼ "	9.5%
	4 Mesh	7.95%
	100 Mesh	2.23%

Respectfully, *Steve Bartlett*

Pete Lien & Sons Quality Control Department
SBartlett@petelien.com – L.Klippenstein@petelien.com

AGENDA ITEM FORM

SUBJECT: Request Authorization for CEO and General Manager to Execute Agreement for Outsourcing the Printing and Inserting of Des Moines Water Works' Customer Bills, Notices, and Letters

SUMMARY:

- In August 2023, staff issued a request for proposal to outsource the printing and inserting of customer bills, letters, and notices.
- The request for proposal was sent to seven prospective respondents. It was also advertised on our website.
- The RFP included information on DMWW's current process and estimated monthly volume of processed mail pieces. Detailed questions were asked about how respondents would handle the following:
 - Receiving data
 - Handling bill inserts and hold bills
 - Supply forms, envelopes, and inserts
 - Timing and visibility of data receipt to entering the mail stream
 - Capabilities of changing bill layout
- Each proposal was evaluated by an internal review team consisting of Finance, Information Technology, and Customer Service staff. Interviews and demonstrations were conducted with the top three respondents, along with reference checks.
- The internal review team evaluated proposals on experience, technical ability, customer experience, implementation, mail processing time, and cost. Based on this, staff recommend an agreement to be executed with InfoSend.
- Annual costs at current mail volumes are estimated at \$135,600 per year. There are no implementation costs.
- Staff recommends the Board authorize staff to execute a Master Service Agreement with InfoSend with the fee structure shown in Exhibit B of the Master Service Agreement.

FISCAL IMPACT:

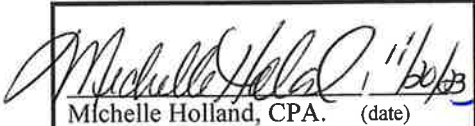
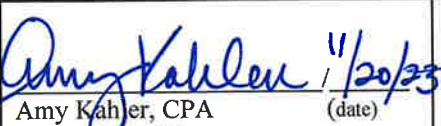

Funds for these services will come from the 2024 Finance operating budget.

RECOMMENDED ACTION:

Authorize the CEO and General Manager to execute a Master Service Agreement with InfoSend for implementation and ongoing printing and inserting services, contingent upon negotiation of final terms and conditions acceptable to staff and subsequent review by legal counsel.

BOARD REQUIRED ACTION:

Motion to authorize the CEO and General Manager to execute a Master Service Agreement with InfoSend for implementation and ongoing printing and inserting services, contingent upon negotiation of final terms and conditions acceptable to staff and subsequent review by legal counsel.

 Michelle Holland, CPA. (date) <u>11/20/23</u> Controller	 Amy Kahler, CPA (date) <u>11/20/23</u> Chief Financial Officer	 Ted Corrigan, P.E. (date) <u>11/22/23</u> CEO and General Manager
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Attachment: Outsource Memo, InfoSend Master Service Agreement with Exhibits

MEMORANDUM

DATE: November 19, 2023

TO: Ted Corrigan, CEO and General Manager

FROM: Michelle Holland, Controller
Patrick Bruner, Director of Information Technology

SUBJECT: Outsourcing the Printing & Inserting of DMWW Customer Bills, Notices, and Letters

Currently, Des Moines Water Works prints and inserts customer bills, notices, and letters. Nearly 1 million mail pieces are processed annually from our facility.

In November 2020, DMWW introduced a new customer billing system (CIS). With this system, the process of bill printing has undergone significant changes and is a rather complex process. Our software provider, Advanced Utility Systems (AUS), has indicated that we are among only a handful of clients who still handle the in-house printing and insertion of our bills.

Due to the recent retirement of a key mailroom employee, staff began exploring options for printing and inserting DMWW customer bills, notices, and letters.

Aside from the staff retirement, the other factors that were considered in deciding whether to keep the function internal or to outsource include:

- The expertise of vendors whose primary focus is processing and handling of critical documents.
- Internal handling of heavy boxes of materials creates employee safety concerns. Currently there are multiple touchpoints for handling large boxes of envelopes, bill paper, and inserts.
- Managing printing and inserting equipment, including maintenance and downtime.

DMWW Finance and IT staff issued an RFP in August to outsource the printing and inserting functions to an outside vendor. We received seven responses. A cross-functional team, made up of Finance, IT, and Customer Service staff, reviewed and ranked those initial responses. The top three scoring vendors were invited to describe their process, provide a demonstration of their

online portals, offer additional information and answer questions on how their organization would handle processing DMWW's customer bills, notices, and letters.

The three finalist vendors were InfoSend, Mail Services, and Kubra. The more in-depth demonstrations were scored for project components including: overall experience as well as experience with AUS billing systems, customer experience, including ability to assist with bill redesign, implementation approach, mail processing time, and cost.

DMWW asked for a pricing model from all three finalist vendors using approximate mail processing volumes.

The overall team scoring and estimated cost for the three vendors is shown in the table below.

	Ranking Score	Annual Cost to DMWW
InfoSend	195.0	\$135,600
KUBRA	183.5	\$178,160
Mail Services	165.0	\$204,800

Based on the ranking scores and annual cost, DMWW staff recommends InfoSend.

InfoSend has been in business since 1996 and has over 800 customers, of which approximately 650 are utility clients. More than 50 of the utility clients are using AUS's customer billing software. InfoSend's customer portal allows for visibility into print files that have been uploaded which can then be reviewed by DMWW employees prior to releasing them for processing. Special handling of bills – such as billing inserts, hold bills, and suppressing return envelopes – can be handled. Finally, InfoSend will allow DMWW to implement their solution quickly by accepting pdf files to print. The longer-term goal is to send InfoSend raw data to print on a bill template. By sending the data, changes to bill design will become a much easier task. Additionally, we will be able to use InfoSend's familiarity with AUS bills to make changes to the layout and data elements on our bills.

InfoSend was the lowest-cost provider at an estimated \$135,000 per year. DMWW's internal cost is estimated at \$200,000 for 2023. Postage is not included in these estimates and the overall cost of postage will remain relatively the same, whether the function is outsourced versus keeping it in-house. Additionally, there are no implementation costs.

Staff recommends outsourcing the printing and inserting of customer bills, notices, and letters with InfoSend. If outsourcing is approved, we expect to begin the implementation process in early 2024.

Exhibit A - Scope of InfoSend Primary Services

This Exhibit A is an integral part of and is subject to the terms and conditions of the Master Service Agreement (the “**Agreement**”) between InfoSend, Inc. (“**InfoSend**”) and Des Moines Water Works (“**Client**”). This Exhibit A provides the Services which InfoSend, and/or its Affiliate(s), shall deliver to Client to permit Client’s customers (“**Users**”) to use the products and services to view and pay their bills. To the extent that any term is not expressly defined herein, it shall have the meaning set forth in the Agreement.

Client will select one or more of InfoSend’s Primary Services from the list below by checking the box next to the Primary Service name. Any Primary Services not selected prior to the execution of this Agreement can be added at a later date via an Agreement Amendment.

<input checked="" type="checkbox"/>	Data Processing, Printing and Mailing Service (“DPPM Service”): During the term of this Agreement, InfoSend will provide data processing, printing and mailing services. The Service consists of processing data, printing documents, mail preparation, applying postage (where applicable) and sending via the United States Postal Service. Document types include but are not limited to bills, postcards and letters.
<input type="checkbox"/>	eBusiness Services (the “eBusiness Services”): During the term of this Agreement InfoSend will provide eBusiness Services. These services can include presenting bills online and/or accepting and reporting payment transaction information to facilitate ACH and/or credit card payments via web, Interactive-Voice-Response (IVR), SMS, or Bank Billpay (e-Lockbox).

Section 1. Data Processing, Printing and Mailing (DPPM) Service Description

A. Data Transfer and Processing

- Client to transmit data to InfoSend in an agreed upon format. Should Client make changes to data file format after initial setup is complete, it agrees to pay for the professional services required to accommodate the new file format. See Exhibit C – Professional Services – for information on initial setup and ongoing programming changes.
- Client will monitor transfer confirmation emails to ensure InfoSend is in receipt of the data. Client acknowledges that InfoSend will not be responsible or liable for any transferred data which does not result in a confirmation receipt to Client.
- A File Transfer Report will be emailed to the Client representatives who have opted-in to this email. A copy of this report is also available to download from the InfoSend website.
- Client will have access to an online Job Tracking application that shows the progress of each file as it is processed and becomes a batch of documents to be printed and mailed. Client can see both the original input file name and the InfoSend-assigned “Job Code”.
- InfoSend will process the mailing addresses and perform the following functions:
 - Apply CASS-certified address validation
 - Comply with USPS requirements to obtain pre-sort automation rates for qualified client mail pieces
 - Stay current with all USPS regulations required to mail presorted first-class mail
- InfoSend will optionally provide proofs of the final print-ready PDF files to Client to be reviewed and approved before printing begins (if requested).

B. Document Printing and Mailing

- Batches are printed by InfoSend using a high-speed production process onto the agreed upon forms.
- Printed documents are put through a quality control process and then released to the mailing department to be inserted into outgoing envelope. A return envelope and any applicable inserts are included as defined by client workflow.
- After a batch of mail is completed in InfoSend’s system it will be marked as such in the online Job Tracker and a Process Confirmation Report will be emailed to the Client representatives who have opted-in to this email. A copy of this report is also available to download from the InfoSend website.

Section 2. eBusiness Service Description

A. General System Description

- Mobile-Ready Customer Engagement: all products are mobile compatible out of the box, with no app store downloads required of customers. Powered by InfoSend's CCM platform, customer specific messaging and payment reminders are delivered electronically.

- Multi-Channel Payment Collection: InfoSend's payment platform will consolidate web, telephone, SMS, CSR, in-person EMV and bank payments into a single lockbox file.
- One-Time and Automatic Payments: allow customers to quickly make a one-time payment, as well as sign up to have their payment account auto debited with each billing cycle.
- Bill Notification and Presentment: notify customers via email when a new bill is available, and securely deliver exact replica of printed document to customers inbox or show online via the secure portal.
- Interactive Voice Response (IVR): accept customer payments via automated phone service with InfoSend-hosted phone number, enabling client phone systems to redirect customers with ease.
- SMS Text-to-Pay: enrolled customers may opt in to receive text notifications of new bills, and reply to have the registered payment method drafted for the amount due, speeding up the time to payment.
- Bank Payments (MasterCard RPPS): InfoSend can collect payments made via the customer bank and include them within the lockbox file.
- PCI-Compliant Cloud Based Solution: electronic billing and payment related products hosted in the cloud by InfoSend in a secure PCI-Level 1 compliant environment.

B. Data Transfer and Processing

- Client to transmit data to InfoSend in an agreed upon format, using the Data Transfer and Processing workflow described in Section 1.
- Client acknowledges that InfoSend will not be responsible or liable for any transferred data which does not result in a confirmation receipt to Client.
- If the Client is not using InfoSend's DPPM Service, USPS address workflow will not be applied.
- Data loaded into the eBusiness system is used to facilitate accurate payments via Web, IVR, SMS or Bank BillPay.

C. Customer Enrollment and Bill Notification

- Data loaded into the system will be used to facilitate customer enrollment, using two pieces of information specific to the customer bill.
- For enrolled customers, system will send a notification of the new bill available via email.
- For enrolled customers who have opted in, system will send an SMS alert.
- For customers using the IVR system, bill information will be dictated by text to voice.
- For customers paying via Bank BillPay, the account number can be validated by the system prior to accepting payment.
- The system may optionally be configured to display a PDF replica of the bill image.

D. Customer Payment and Reporting

- Customers can make payment via Web, SMS, IVR or Bank BillPay, depending on channels which Client has requested InfoSend setup.
- Payments can be configured to allow Users to pay by bank account and/or credit/debit card.
- All payments will be reported in a standard daily "lockbox" file.

Exhibit B - InfoSend Fees

This Exhibit B is an integral part of and is subject to the terms and conditions of the Master Service Agreement (the “**Agreement**”) between InfoSend, Inc. (“**InfoSend**”) and Des Moines Water Works (“**Client**”). This Exhibit B provides the Fees which InfoSend shall bill to Client in exchange for Services. To the extent that any term is not expressly defined herein, it shall have the meaning set forth in the Agreement.

Section 1. Price Escalations to InfoSend Fees

InfoSend reserves the right to increase InfoSend Fees on an annual basis starting with the first anniversary of the Effective Date to account for increases in the cost of materials, labor, and other overhead. The Client will be notified, in writing, at least thirty (30) days prior to such price increase. An amendment to the Agreement will not be required if the Fees are changed, unless other terms or conditions of the Agreement have changed. Postage fees can change at any time per USPS regulations and do not require an amendment to the Agreement.

Additionally, if Client uses DPPM Services, InfoSend reserves the right to increase paper, form, and envelope fees as needed, with thirty (30) days’ written notice to Client, in the event of extraordinary increases to the cost of paper.

InfoSend pricing is predicated on Client representations of Client and Client User transactional usage. Should Client’s actual continuous volume and/or recurring frequency deviate by more than thirty percent (30%) from what Client has represented to InfoSend in Section 2 below, then InfoSend reserves the right to invalidate the Fees listed in this Agreement. Should this situation arise then InfoSend will notify Client immediately and negotiate with Client in good faith to pass on any increased costs to Client, in accordance with actual Client and Client User transactional usage. Should InfoSend and Client fail to agree upon updated Fees, InfoSend reserves the right to terminate this Agreement with one hundred and eighty (180) days’ notice.

Section 2. Client Representations

Client Volume Representations
<u>Customers Contacted or Billed Monthly</u> Approximately 75,000 including statements and notices
<u>Number of Batches Monthly</u> Daily

Section 3. DPPM Fees

Document Production Summary	
Statements and Notices Package includes: One printed 8.5 x 11 page up to 3/1 ink, InfoSend outgoing #10 envelope, InfoSend #9 return envelope	\$0.101 per document
Statements and Notices (Custom Envelopes) Package includes: One printed 8.5 x 11 page up to 3/1 ink, Custom outgoing #10 envelope, Custom #9 return envelope	\$0.1092 per document

Finished mail pieces are delivered to the USPS **within one (1) business day**. If electronic PDF samples (proofs) are requested then the mailing will be completed within one day of sample approval. File upload deadline for next-day mailing is 1:00PM local time at the production facility designated for your account. If samples are required then they must be approved by 3:00PM local time for the file to be mailed by the next business day.

The below provides the components of the summary price given above. All pricing is based on “Client Volume Assumptions” listed and excludes applicable sales tax.

Data Processing	
Setup Fee - Express PDF Input Files	\$0.00 (Waived Install)
Setup Fee – Data Only Input Files	\$0.00 (Waived Install)
Document Re-Design Fee	\$0.00 (Included during initial Install)
Data Processing Fee (per document)	\$0.006

Printing and Mailing Service	
Statement and Notices - Printing & Mailing Fee with up to 2/2 Ink	\$0.037
USPS Postage	Pass-through A postage deposit will be required prior to starting service.
Print Color Options (colors per side) *	\$0.037 for up to 3/1 printing \$0.041 for up to 4/1 printing \$0.047 for 4/4 printing
Inline Insert Print Fee*	\$0.037 Black printing \$0.047 Color printing
Batch Fee (per mailing batch under 150 mail pieces)	\$5.00
Excess Pages Handwork Surcharge (per mail piece)	\$0.35
Address Updates – per “hit” (address that gets updated)	\$0.30 NCOA \$0.30 ACS
*Prices assume normal ink/toner coverage for business documents. Flood coating the entire page in color or other types of extremely high coverage designs may cost more or not be technically feasible. Extremely high coverage designs can cause content to bleed through to the other side of the page or to cause the page to curl too much to work properly with high-speed mail inserting equipment.	
The postage deposit is subject to ongoing review and may be adjusted at any time to account for changes to Client average mailing volume or changes to USPS postage rates with at least thirty (30) days’ written notice to Client.	

Materials	
Standard 8.5” x 11” Paper Stock (per sheet)	\$0.015
Standard Double Window Outgoing #10 Envelope	\$0.023
Standard Single Window Return #9 Envelope	\$0.020
Custom single window #10 envelope (per sample)	\$0.0272
Custom non window #9 envelope (per sample)	\$0.0240
Outgoing Flat Envelope – used for mail pieces with excess pages	\$0.17

Insert Services	
InfoSend Produced	Quoted based on specification
Envelope Messaging (Snipes)	Quoted based on specification
Electronic Inserts	\$0.008
Inserting Fee	\$0.008 per insert

Optional Document Services	
Print Image Archiving (Per Document Image), with included USPS mail tracking	\$0.010 - For 12 Months of Retention \$0.015 - For 18 Months of Retention \$0.018 - For 24 Months of Retention \$0.023 - For 36 Months of Retention
Print Image Archive API Monthly Support Fee	\$100.00
Final Doc Transfer (FDT)	\$0.01 per image InfoSend Batch File \$0.013 per image Custom File Format
Professional Services Rate (per hour)	\$150.00
Returned Mail Handling	\$0.35 per reported returned mail piece
Remit Tracking	\$50 monthly support fee

Pricing is subject to annual review and may be adjusted to reflect actual CPI-U increases for the Midwest Region as well as extraordinary increases in labor and material.

Section 3.1. Custom Forms/Envelopes

If Client has selected the Printing and Mailing Service and at any time requests that InfoSend Fees include the cost of custom Client-specific materials (either in this Agreement or since its execution), then Client understands and accepts that these materials will be purchased in bulk to achieve the lowest possible per-unit cost. Client agrees to purchase any remaining supplies of requested custom materials (normally forms or envelopes) if Client stops using InfoSend's Service for any reason. Client agrees to purchase the remaining supply of custom forms/envelopes upon Client's request to change the custom forms/envelopes before the supply has been depleted.

Section 3.2. USPS Postage Rates

Postage rates are determined by the United States Postal Service. All postage rate changes are determined directly by USPS and are independent of any InfoSend service or materials fees. In no event shall any change in the postage rates affect the InfoSend service or materials fees. The Client will be invoiced the amount of excess for overweight and foreign mail.

Section 3.3. Postage Deposit

InfoSend purchases the postage needed to mail Client documents on the day of mailing. The postage charges are later invoiced to Client based on the Client's payment terms. InfoSend requires Client to submit a postage deposit prior to the first mailing to facilitate the payment terms. This amount will remain in deposit for the duration of the Agreement. Upon Agreement expiration or termination Client must pay in full any outstanding invoices from InfoSend for payables created under this Agreement; the postage deposit will be refunded within fifteen (15) days of the date that the last open invoice is paid.

The postage deposit amount is calculated by multiplying the estimated number of mail pieces per month by the current 5-Digit pre-sorted first class postage rate. The postage deposit amount due for your account is:

75,000 mail pieces per month x \$0.507 x 2 = \$76,050.00.

The postage deposit is subject to ongoing review and may be adjusted at any time to account for changes to Client average mailing volume or changes to USPS postage rates with at least thirty (30) days' written notice to Client.

Section 4. eBusiness Service Fees:

Not Applicable

Section 5. Client Go-Live and Fees

InfoSend will provide Client with a Demo instance of the System to approve configuration and simulation of Services. Upon Client approval of the Demo instance of the System and sample outputs from Services, InfoSend will create a copy of Demo System in Production for completion of final User Acceptance Testing (UAT). Client will be given the UAT Period to complete internal testing prior to initiating Go-Live. All Setup and recurring Monthly Fees will become due upon the sooner of (a) Client Go-Live with the application or (b) 60 days from InfoSend delivery of Production System for UAT.

Section 6. Implementation Project Cost Subsidization

InfoSend's internal costs to complete the project is higher than the Setup fees given. InfoSend has subsidized these fees by factoring in years of service given the term of the Agreement. Should Client cancel the project or terminate the Agreement at its convenience less than one (1) year from the Effective Date then it must pay according to the below:

- **DPPM Setup Fee:** No charge for Express PDF Setup Input files or \$2,500 for Data-Only Input Files
- **EBPP Setup Fee:** 100% of Setup fees quoted or listed as "Waived" in the pricing exhibit.

Exhibit C – Professional Services

This Exhibit C is an integral part of and is subject to the terms and conditions of the Master Service Agreement (the “**Agreement**”) between InfoSend, Inc. (“**InfoSend**”) and Des Moines Water Works (“**Client**”). This Exhibit C provides InfoSend’s Professional Services Fees which InfoSend shall bill to Client in exchange for Professional Services. To the extent that any term is not expressly defined herein, it shall have the meaning set forth in the Agreement.

Section 1. Price Escalations to InfoSend Professional Services Fees

InfoSend Professional Services Fees can be adjusted once every twelve (12) months to account for increases to the cost of providing these services. InfoSend reserves the right to increase Professional Services Fees on an annual basis, starting with the first anniversary of the Agreement date, if needed. The Client will be notified, in writing, at least thirty (30) days prior to such price increase. An amendment to the Agreement will not be required if the Professional Services Fees are changed, unless the terms or conditions of the Agreement have changed.

Section 2. Definition of Professional Services

InfoSend Professional Services are the technical services that are required to perform the initial setup of the InfoSend Primary Services defined in Exhibit A and the technical services required to make changes to these Primary Services after the initial setup is complete. Once any Primary Service is live and operational Professional Services will not be required unless Client requests a change or makes changes to its data file format or business rules which necessitates a change to InfoSend’s system configuration or programming. Examples of InfoSend Professional Services:

- Project requirements gathering and analysis hours
- Project management and/or consulting hours
- Software development and system configuration hours related to the processing of Client’s data
- Software development and system configuration hours related to document design, web portal setup, business rule configuration, or any other applicable technical services
- Application testing and deployment hours

Section 3. Professional Services Fee and Process for Approval and Payment of Fee

The current Professional Services Fee is \$150.00 per hour. In the event that a project will incur billable Professional Services hours, Client will be informed before work begins. InfoSend and Client will execute a Statement of Work for the project that Client wants InfoSend to undertake. The payment terms for the project depend on the size and scope of the project. The Statement of Work can include payment terms that are different than the terms listed in this Agreement for InfoSend Fees, otherwise these terms will apply and the project fees will be invoiced upon project completion. Small projects that incur less than five (5) hours of Professional Services can be initiated without a Statement of Work if Client accepts and executes a Programming Quote for this work.

Any project that will take more than five (5) hours of Professional Services work will require both parties to execute a formal Statement of Work. Depending on the nature of the work required, InfoSend will provide one of the following quotation methods:

- **Fixed Quote** – a fixed project cost will be set. InfoSend may elect to waive this cost in some circumstances. Client understands and accepts that it must accept the terms and conditions of the Statement of Work for the project and that changes made to the project requirements, data file structure, etc., after the Statement of Work and any amendments to it have been finalized will require Client to pay for these changes on a Time and Materials basis. Client will be notified immediately if this scenario arises and will be given an option to keep the original project specifications to keep the fixed quote in place.
- **Time and Materials Quote** – should it not be possible to provide a fixed quote due to the nature of a Client’s requested project, then InfoSend will provide an estimated number of hours to complete the project and bill the hours on a Time and Materials basis. The Statement of Work will include the terms and conditions for these project types and Client will be invoiced weekly for the hours spent on the project.

Section 4. Initial Setup Cost: InfoSend Primary Services

The Initial Setup cost for the InfoSend Primary Services selected in Exhibit A are listed in Exhibit B. These costs have been provided using a Fixed Quote process, explained in Section 3 above. Client understands and agrees to these terms, and to the project-specific terms and conditions that will be provided in the Statement of Work that will be created to capture Client’s specific requirements and data types.

InfoSend Master Service Agreement

This Master Service Agreement (“**Agreement**”) is entered into on _____ (the “**Effective Date**”) by and between **Des Moines Water Works**, a municipal utility, having its main office at 2201 George Flagg Parkway, Des Moines, IA 50321 (“**Client**”) and **InfoSend, Inc.**, a California Corporation, having its main office at 4240 E. La Palma Avenue, Anaheim, California 92807 (“**InfoSend**”). Client and InfoSend are collectively referred to herein as the “parties” and individually as a “party.”

In consideration of the mutual promises and upon the terms and conditions set forth below, the parties agree as follows:

1 Definitions

For the purposes of this Agreement, the following terms and words shall have the meaning ascribed to them, unless the context clearly indicates otherwise.

1.1 “Affiliate” means, with respect to a party, any entity or person that, directly or indirectly, owns or is owned by (whether in whole or in part), controls or is controlled by, or is under common control with, such party.

1.2 “Agreement” shall refer to this Agreement, as amended from time to time, which shall constitute an authorization for the term of this Agreement for InfoSend to provide the Services, described herein, to the Client.

1.3 “User(s)” shall mean a customer or employee of Client accessing InfoSend hosted applications via the Internet. Users of the System will agree to accept all the terms and conditions herein, and may be issued a unique User ID and/or password by InfoSend or Client.

1.4 “Services” shall include the performance of the Services outlined in Section 2 and detailed in Exhibits A and C of this Agreement.

1.5 “System” shall include all InfoSend hosted data and software applications.

1.6 “Client Data” shall refer to all Client-supplied computer data files that contain personally identifiable information.

2 Services Provided by InfoSend

2.1 Scope of Services

Subject to the terms and conditions of this Agreement, InfoSend, itself and/or through its Affiliate(s), shall provide to Client, and Client shall purchase from InfoSend, the services listed in Exhibit A (“Scope of Primary Services”) to this Agreement at the price set forth in Exhibit B (“InfoSend Fees”). In the event Client requires other consulting, installation, development and/or customization services, InfoSend shall perform and Client

shall purchase such services in accordance with the provisions of Exhibit C (“Professional Services”) of this Agreement.

2.2 Professionalism

InfoSend and Client shall operate in a professional manner under this Agreement: in providing and receiving Services under this Agreement, the parties will perform in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession under similar circumstances.

2.3 Time of Performance of Services

InfoSend and Client acknowledge and agree that each party will use reasonable diligence to perform their respective obligations under this Agreement in a timely manner.

3 License Grant and Restrictions

3.1 Grant of License

InfoSend agrees to provide to Users the right to use software and the provision of Services, but in all cases only in full and complete compliance with all of the terms and conditions of this Agreement. Subject to the terms of this Agreement, InfoSend hereby grants, and Client hereby accepts, for the Term (as defined herein) of this Agreement, a non-exclusive, non-transferable license to access and use and to permit its Users to access and use the System via the Internet (the “License”).

3.2 License Restrictions

Client hereby agrees not to: (i) reproduce, download, modify, create derivative works from, distribute, or attempt to reverse engineer, decompile, disassemble, or access the source or object code for, the System; (ii) use the System, or any component thereof, in any manner contrary to applicable laws or government regulations; or (iii) otherwise affect or attempt to enable the unauthorized use (with or without User ID and/or password) of the System.

4 Privacy and Security

4.1 Regulatory Compliance

InfoSend will maintain compliance with required Payment Card Industry (PCI) Data Security Standards and Cardholder Information Security Standards, applicable rules and regulations of the Health Insurance Portability and Accountability Act (HIPAA), and applicable sections of the Gramm-Leach-Bliley Act of 1999.

5 Term & Termination

5.1 Term

The initial term of this Agreement shall commence on the effective date of this Agreement and continue for a period of three (3) years ("Initial Term") from the Effective Date. This Agreement will automatically renew for successive two (2) year periods ("Renewal Terms") unless either Client or InfoSend provides the other party with at least sixty (60) days' written notice prior to the end of the current term indicating that such party elects not to automatically renew the term of this Agreement. The party giving non-renewal notice may indicate if it prefers for the contract to be terminated at the end of the current term or to continue on a month-to-month basis, if mutually agreeable to both parties.

5.2 Termination for Cause

This Agreement may be terminated for cause as follows:

(i) Material Breach

A material breach of this Agreement by either party shall be cured within thirty (30) days after a party notifies the other of such breach. For those breaches which cannot reasonably be cured within thirty (30) days, the breaching party shall promptly commence curing such breach and thereafter proceed with reasonable due diligence to substantially cure such breach (the "Cure Period"). In the event that such material breach has not been cured within the Cure Period, the non-breaching party may terminate this Agreement in its entirety, or as it pertains to a particular Product, Deliverable, Service or Professional Service, by providing the other party with thirty (30) days' written notice as of a date specified in such notice.

(ii) Failure to Pay

After sixty (60) days of nonpayment on undisputed invoices, InfoSend may, at InfoSend's option, terminate this Agreement in its entirety or as it pertains to a particular Product, Deliverable, Service or Professional Service, by giving written notice to

Client, as of a date specified in such termination notice, pursuant to Section 6.3.

(iii) Insolvency or Bankruptcy

In the event that either party becomes or is declared insolvent or bankrupt, is the subject of any proceedings related to its liquidation, insolvency or for the appointment of a receiver or similar officer for it, makes an assignment for the benefit of all or substantially all of its creditors, or enters into an agreement for the composition, extension or readjustment of all or substantially all of its obligations, then the other party hereto may, by giving written notice thereof to such party, terminate this Agreement as of the date specified in such notice of termination.

5.3 Upon Termination

Upon termination of this Agreement, the parties agree to cooperate with one another to ensure that all accounts receivable are accounted for. Upon termination, InfoSend shall cease all Services provided hereunder, unless otherwise directed by the Client in writing and assuming all client fees remain current. Upon termination, Client will promptly pay to InfoSend any and all charges due, without offset, including but not limited to payables that are due pursuant to this Agreement, accrued finance charges, and the Discontinuance Fee set forth below, where applicable.

5.4 Discontinuance Fee

The parties have mutually agreed upon the Fees for the Services to be provided hereunder based upon volumes Client has represented in Exhibit B, Section 2 and the Term of this Agreement. Because of the impracticable or extreme difficulty in ascertaining the actual damages to InfoSend that would result from a termination of the Agreement prior to the expiration of the then-current term, Client agrees to pay a discontinuance fee to InfoSend in the event that (i) Client terminates the Agreement without cause prior to the expiration of the then-current term; or (ii) the Agreement is terminated due to a breach by Client prior to the expiration of the then-current term.

The discontinuance fee will be equal to two (2) months of the Client's average monthly billing for the previous six (6) months of Service (excluding any postage charges and professional services fees that were invoiced in that time period). Client agrees to pay the discontinuance fee prior to the effective date of such termination and in addition to all other payables then due and owing to InfoSend. The

parties agree that the amount of the discontinuance fee is a reasonable forecast of the just compensation for the harm to InfoSend caused by an early termination of this Agreement, and not a penalty.

5.5 Force Majeure

Neither party shall be liable, or deemed to be in default, to the other for any failure or delay in performing an obligation under this Agreement to the extent that its performance is delayed, impaired or rendered impossible by an event beyond its control (“Force Majeure Event”) such as natural disasters, war, terrorist acts, riots, labor strikes or shortages, civil disturbances, extra-ordinary losses of utilities (including telecommunications services), computer “hacker” attacks on internet infrastructure, regulatory restrictions, change in law or regulation or other acts of government authority, including civil and military authorities and courts, fuel or energy shortages, transportation stoppages or slowdowns, the inability to procure parts or raw materials, pandemics, supply-chain issues which causes a substantial increase in costs or decrease in availability of materials necessary for InfoSend and/or its Affiliate(s) to perform services under this Agreement, and/or acts or omissions of common carrier. These causes will not excuse Client from paying previously accrued payables due to InfoSend through any available lawful means acceptable to InfoSend.

6 Invoicing and Payments

6.1 Invoicing

InfoSend will invoice Client monthly and Client will pay InfoSend the fees described in and/or computed in accordance with **Exhibit B (InfoSend Fees)**. Client payment of these invoices is due upon receipt in U.S. dollars and shall be paid NET 30 unless expressly agreed to by InfoSend.

6.2 Dispute of Invoice

Should Client dispute any invoices, it must do so in writing within sixty (60) days of the invoice date with specific details as to the matters in dispute or any dispute shall be deemed waived.

6.3 Late Payments

InfoSend may elect to assess finance charges on any or all undisputed invoices that become past due at a rate of 1.5% per month.

The recurring nature of InfoSend’s Services result in a rapid rise in financial loss to InfoSend if a Client’s accounts payable process is delayed, particularly when InfoSend is

invoicing Client for postage charges. Therefore, InfoSend reserves the right to suspend Services until payments are brought current if past due account balances cannot be collected from Client. InfoSend’s Accounting staff will notify Client in writing before Services are suspended and give Client an opportunity to bring the account current before Services are put on hold. Should a hold be instigated, it will immediately be removed once the account is brought current.

7 Communications

7.1 Notices

Any notice hereunder must be in writing and sent by overnight courier service (such as FedEx or UPS), or USPS certified mail, all with delivery signature requested, to the other party hereto at the respective address set forth below:

To Client:
C/O (Department): _____
Address: _____

To InfoSend:
C/O: President
Address: 4240 E. La Palma Avenue
Anaheim, CA 92807

Notice shall be deemed to have been given and received one (1) business day after being sent via overnight courier service, or three (3) business days after being mailed by USPS certified mail. Each party may update its address or email address by providing written notice to the other party of such change in accordance with this section.

8 Confidentiality & Intellectual Property

8.1 Confidentiality

All information and data relating to Client’s business, as well as all User information, submitted by Client to InfoSend and/or its Affiliate(s) under this Agreement shall be treated as confidential by InfoSend and shall not, except as required to perform the Services under this Agreement or otherwise required by law, be disclosed to any third party by InfoSend without Client’s written consent. Notwithstanding anything to the contrary, the following shall not be deemed confidential: (a) information that is in the public domain through no fault of InfoSend or its Affiliate(s); (b) information that was known to InfoSend or its Affiliate(s) prior to disclosure by Client; or (c) information that is independently developed

by InfoSend or its Affiliate(s) without use of or reference to Confidential Information. InfoSend shall promptly notify Client should InfoSend be served with a summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, requests for admission, or other discovery request or court order (a "Request to Disclose") from any third party regarding this Agreement, the Services performed under this Agreement, and/or seeking such information or data. Client shall be responsible to timely make appropriate objections to any Request to Disclose.

Client will not disclose to any third party or use for any purpose inconsistent with this Agreement any confidential or proprietary non-public information it obtains from InfoSend during the term of this Agreement about InfoSend's business (the "Confidential Information"), which Confidential Information shall include InfoSend's operations, financial condition, technology, systems, suppliers, clients or prospective clients, marketing data, plans, pricing, and models, or personnel, unless required by applicable law. Client will ensure that its employees and agents similarly abide by the requirements hereof. Client will promptly notify InfoSend of its receipt of a Request to Disclose and Confidential Information, and InfoSend shall be responsible to timely make appropriate objections thereto.

InfoSend, and its licensors, where applicable, owns all rights, title and interest, including all related Intellectual Property Rights, in and to InfoSend technology, the content and the Services. The InfoSend name, the InfoSend logo, and the product names associated with the Service are trademarks of InfoSend or third parties, and no right or license is granted to use them.

9 Representations & Warranties

9.1 InfoSend Representations and Warranties

InfoSend represents and warrants that it has the legal power and authority to enter into this Agreement and that Services will be provided in a professional and workmanlike manner.

InfoSend warrants that the Services will materially perform the functions that the Client has selected under normal use and circumstances and that InfoSend shall use commercially reasonable measures to protect Client Data to the extent that it retains such data in the operation of the Services. Provided that Client gives InfoSend written notice of failure to meet the foregoing warranty within

sixty (60) days following delivery of any Services, or as otherwise specified in a Statement of Work ("SOW"), InfoSend warrants that it will use commercially reasonable efforts to correct any Services that fail to comply with the foregoing warranty. If there is no notice by Client within sixty (60) days following delivery of any Services, or as otherwise specified in a Statement of Work ("SOW"), it shall be deemed Client has accepted the Services and waived any claims to the otherwise.

9.2 Client Representations and Warranties

Client represents and warrants that it has the legal power and authority to enter into this Agreement and provide to InfoSend all information and data necessary for InfoSend to perform the Services. Client further warrants that it will comply with all laws, regulations, and compliance requirements applicable to Client's and User's activities covered by this Agreement.

9.3 Warranty Disclaimer

Except as expressly set forth in Section 9.1 above, InfoSend disclaims all other representations or warranties, express or implied, made to Client or any other party, including without limitation, any warranties regarding quality, suitability, merchantability, fitness, for a particular purpose or otherwise of any services or any good provided incidental to the Services provided under this Agreement, to the extent permitted by applicable law.

InfoSend and its licensors and payment processors do not represent or warrant that (i) the use of the Services will be uninterrupted or error-free, or operate in combination with any other hardware, software, system or data; or (ii) the Services will not delay in processing or paying to the extent such delay is caused by things outside the control of InfoSend. Services may be subject to the limitations, delays, and other problems inherent in the use of the Internet and electronic communications. InfoSend is not responsible for any delays, delivery failures, or other damage resulting from such problems.

In performing the Services, InfoSend is responsible for producing for print or online display the content that Client provides to InfoSend. InfoSend is not responsible for reviewing the content for spelling or typos, nor is InfoSend responsible for verifying the accuracy or legality of the content. It is Client's sole responsibility to verify that the content that InfoSend's applications will produce on Client's behalf is appropriate for distribution.

9.4 Inbound Communication Services Disclaimer

InfoSend Inbound Communication services are intended to receive communications and data from clients to facilitate the performance of InfoSend Services. While the inbound services have been created with certain available tools and practices, they are dependent on infrastructure that is inherently not fail-proof, including but not limited to infrastructure such as United States Postal Service (“USPS”) delivery standards, software, computer hardware, network services, telephone and SMS services, and email. Examples of situations that could cause failure include but are not limited to: USPS failure to deliver, down phone lines, all lines busy, equipment failure, email address changes, and Internet service disruptions. Client acknowledges that it is aware of the potential hazards associated with using such infrastructure and will be responsible for ensuring InfoSend is in receipt of any communication or data destined for InfoSend. Client releases InfoSend from any and all liability that results from an unsuccessful communication or data transfer to InfoSend, one which does not produce a confirmation receipt from InfoSend.

9.5 Outbound Services Disclaimer

InfoSend Outbound Communication services are intended to create additional methods of communication for clients in support of existing processes. These services are not intended to replace all interaction with clients’ end users or employees. While the outbound services have been created with certain available tools and practices, they are dependent on infrastructure that is inherently not fail-proof, including but not limited to infrastructure such as United States Postal Service (“USPS”) delivery standards, software, computer hardware, network services, telephone and SMS services, and email. Examples of situations that could cause failure include but are not limited to: USPS failure to deliver, down phone lines, all lines busy, equipment failure, email address changes, and Internet service disruptions. For this reason, while outbound services are valuable in providing enhanced communication, they are specifically not designed to be used as the sole method to deliver critical messages. Client acknowledges that Client is aware of the potential hazards associated with relying on an automated outbound service feature when using InfoSend services. Client agrees that it is giving up in advance any right to make any claim against InfoSend, and that Client forever releases InfoSend from any and all liability caused by (a) any failed USPS delivery; (b) any failed email delivery; (c) any failed SMS or call attempts (including excess of calls over and above network or system capacity), incomplete calls, or any busy-outs; or (d) any failure to transmit, obtain or collect data from callers or for human and

machine errors, faulty or erroneous input, inarticulate caller communication, caller delays or call lengths exceeding estimated call lengths or omissions, delays and losses in connection with the Services provided hereunder. Such release shall include instances where Client, Client’s employees, or Client’s end user suffer injury or damage due to the failure of outbound services to operate, even though InfoSend may know or suspect what or how extensive those injuries or damages might be, unless such losses were directly attributable to InfoSend’s gross negligence or willful misconduct.

10 Insurance

10.1 InfoSend’s Insurance Provisions

InfoSend will maintain the following minimum insurance levels during the Initial Term of this Agreement and any Renewal Terms:

- Commercial General Liability coverage in the amount of \$1,000,000.00 per occurrence and \$2,000,000.00 in aggregate.
- Automobile Liability Insurance coverage in the amount \$1,000,000.00 per occurrence.
- Umbrella Liability Insurance in the amount of \$5,000,000.00 per occurrence and in aggregate.
- Worker’s Compensation Insurance with at least the minimum coverage amounts required by law.
- Errors & Omissions Insurance with a \$5,000,000.00 coverage limit.

11. Indemnification & Limitation of Liability

11.1 Indemnification

InfoSend agrees to the fullest extent permitted by law, to indemnify and hold harmless the Client and its governing officials, agents, employees, and attorneys (collectively, the “Client Indemnitees”) from and against all liabilities, demands, losses, direct damages, costs or expenses (including reasonable attorney’s fees), incurred by any Client Indemnitee as a result or arising out of (i) the willful misconduct or negligence of InfoSend in performing the Services; or (ii) a material breach by InfoSend of its covenants.

This indemnification does not apply to any claim arising from any errors, actions, omissions, delays or losses resulting from erroneous, incomplete or otherwise problematic data or instructions provided by Client to InfoSend. No damages shall be assessed against InfoSend when any delay or breach on InfoSend’s part is caused by

failure of Client to perform Clients' responsibilities or any other reason beyond the reasonable control of InfoSend.

This Section 11.1 states the entire liability of InfoSend with respect to infringement by any deliverable of InfoSend or resulting from the performance of services by InfoSend.

11.2 Limitation of Liability

In no event shall either party be liable to the other for any indirect, punitive, special, exemplary, incidental, or consequential (including loss of data, revenue, profits, use or other economic advantage) damages arising out of, or in any way connected with this service, even if the party from which damages are being sought or such party's licensors have been previously advised of the possibility of such damages.

The aggregate liability of InfoSend and its Affiliate(s) arising from or relating to this Agreement for any claim shall be limited to the fees that were paid by and/or due from Client in the preceding twelve (12) months prior to the accrual of the claim.

12 General

12.1 Independent Contractor

Client and InfoSend agree and understand that the relationship between both parties is that of an independent contractor. No joint venture, partnership, employment or agency relationship exists between Client and InfoSend as a result of this Agreement or use of the Service.

12.2 Governing Law

This Agreement shall be governed by the substantive laws of the state of Iowa without regard to the choice or conflicts of law provisions of any jurisdiction.

12.3 Entire Contract; Amendment

This Agreement (including its Exhibits) contains the entire agreement between the Parties with respect to its subject matter and supersedes all other prior and contemporaneous contracts and understandings between the Parties, whether oral or written. Modifications or changes to this Agreement, other than as specified at Exhibit B, must be in writing and executed by the parties.

12.4 Severability

If a word, sentence or paragraph herein shall be declared illegal, unenforceable, or unconstitutional, the said word,

sentence or paragraph shall be severed from this Agreement, and this Agreement shall be read as if said word, sentence or paragraph did not exist.

12.5 Assignment

This Agreement may not be assigned by either party without the prior written approval of the other party, unless it is being assigned to (i) a parent or wholly owned subsidiary, (ii) an acquirer of assets, or (iii) a successor by merger. Any purported assignment in violation of this section shall be void.

12.6 Survival

All of the terms of this Agreement which by their nature extend beyond the expiration or termination of the Agreement, including but not limited to indemnification obligations, payment obligations, confidentiality obligations and limitations of liability, shall survive expiration or termination of the Agreement and remain in full force and effect.

12.7 Attachments

The following documents are attached hereto as Exhibits, and are incorporated by reference in their entirety:

Exhibit A: Scope of Primary Services

Exhibit B: InfoSend Fees

Exhibit C: Professional Services

12.8 Cooperative Agreement ("Piggybacking")

This Agreement is the result of an open, competitive procurement process conducted in accordance with applicable law. The provisions of this Agreement may be extended to other government agencies within the same jurisdiction, at InfoSend's discretion.

A government agency wishing to utilize the provisions of this Agreement by entering into a cooperative purchasing agreement will be responsible for issuing its own purchase documents and making any and all payments relative to its agreement. Any participating government agency is responsible for obtaining its own certificates of insurance and any required performance bonds. Pricing for a cooperative purchase agreement will be determined by InfoSend and the government agency and will not automatically carry over from this Agreement.

[SIGNATURE PAGE FOLLOWS]

Agreement is entered into by and between:

Client:

By: _____
Name: _____
Title: _____
Date: _____

InfoSend:

By: _____
Name: _____
Title: _____
Date: _____

InfoSend Master Service Agreement

This Master Service Agreement (“**Agreement**”) is entered into on _____ (the “**Effective Date**”) by and between **Des Moines Water Works**, a municipal utility, having its main office at 2201 George Flagg Parkway, Des Moines, IA 50321 (“**Client**”) and **InfoSend, Inc.**, a California Corporation, having its main office at 4240 E. La Palma Avenue, Anaheim, California 92807 (“**InfoSend**”). Client and InfoSend are collectively referred to herein as the “parties” and individually as a “party.”

In consideration of the mutual promises and upon the terms and conditions set forth below, the parties agree as follows:

1 Definitions

For the purposes of this Agreement, the following terms and words shall have the meaning ascribed to them, unless the context clearly indicates otherwise.

1.1 “Affiliate” means, with respect to a party, any entity or person that, directly or indirectly, owns or is owned by (whether in whole or in part), controls or is controlled by, or is under common control with, such party.

1.2 “Agreement” shall refer to this Agreement, as amended from time to time, which shall constitute an authorization for the term of this Agreement for InfoSend to provide the Services, described herein, to the Client.

1.3 “User(s)” shall mean a customer or employee of Client accessing InfoSend hosted applications via the Internet. Users of the System will agree to accept all the terms and conditions herein, and may be issued a unique User ID and/or password by InfoSend or Client.

1.4 “Services” shall include the performance of the Services outlined in Section 2 and detailed in Exhibits A and C of this Agreement.

1.5 “System” shall include all InfoSend hosted data and software applications.

1.6 “Client Data” shall refer to all Client-supplied computer data files that contain personally identifiable information.

2 Services Provided by InfoSend

2.1 Scope of Services

Subject to the terms and conditions of this Agreement, InfoSend, itself and/or through its Affiliate(s), shall provide to Client, and Client shall purchase from InfoSend, the services listed in Exhibit A (“Scope of Primary Services”) to this Agreement at the price set forth in Exhibit B (“InfoSend Fees”). In the event Client requires other consulting, installation, development and/or customization services, InfoSend shall perform and Client

shall purchase such services in accordance with the provisions of Exhibit C (“Professional Services”) of this Agreement.

2.2 Professionalism

InfoSend and Client shall operate in a professional manner under this Agreement: in providing and receiving Services under this Agreement, the parties will perform in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession under similar circumstances.

2.3 Time of Performance of Services

InfoSend and Client acknowledge and agree that each party will use reasonable diligence to perform their respective obligations under this Agreement in a timely manner.

3 License Grant and Restrictions

3.1 Grant of License

InfoSend agrees to provide to Users the right to use software and the provision of Services, but in all cases only in full and complete compliance with all of the terms and conditions of this Agreement. Subject to the terms of this Agreement, InfoSend hereby grants, and Client hereby accepts, for the Term (as defined herein) of this Agreement, a non-exclusive, non-transferable license to access and use and to permit its Users to access and use the System via the Internet (the “License”).

3.2 License Restrictions

Client hereby agrees not to: (i) reproduce, download, modify, create derivative works from, distribute, or attempt to reverse engineer, decompile, disassemble, or access the source or object code for, the System; (ii) use the System, or any component thereof, in any manner contrary to applicable laws or government regulations; or (iii) otherwise affect or attempt to enable the unauthorized use (with or without User ID and/or password) of the System.

4 Privacy and Security

4.1 Regulatory Compliance

InfoSend will maintain compliance with required Payment Card Industry (PCI) Data Security Standards and Cardholder Information Security Standards, applicable rules and regulations of the Health Insurance Portability and Accountability Act (HIPAA), and applicable sections of the Gramm-Leach-Bliley Act of 1999.

5 Term & Termination

5.1 Term

The initial term of this Agreement shall commence on the effective date of this Agreement and continue for a period of three (3) years ("Initial Term") from the Effective Date. This Agreement will automatically renew for successive two (2) year periods ("Renewal Terms") unless either Client or InfoSend provides the other party with at least sixty (60) days' written notice prior to the end of the current term indicating that such party elects not to automatically renew the term of this Agreement. The party giving non-renewal notice may indicate if it prefers for the contract to be terminated at the end of the current term or to continue on a month-to-month basis, if mutually agreeable to both parties.

5.2 Termination for Cause

This Agreement may be terminated for cause as follows:

(i) Material Breach

A material breach of this Agreement by either party shall be cured within thirty (30) days after a party notifies the other of such breach. For those breaches which cannot reasonably be cured within thirty (30) days, the breaching party shall promptly commence curing such breach and thereafter proceed with reasonable due diligence to substantially cure such breach (the "Cure Period"). In the event that such material breach has not been cured within the Cure Period, the non-breaching party may terminate this Agreement in its entirety, or as it pertains to a particular Product, Deliverable, Service or Professional Service, by providing the other party with thirty (30) days' written notice as of a date specified in such notice.

(ii) Failure to Pay

After sixty (60) days of nonpayment on undisputed invoices, InfoSend may, at InfoSend's option, terminate this Agreement in its entirety or as it pertains to a particular Product, Deliverable, Service or Professional Service, by giving written notice to

Client, as of a date specified in such termination notice, pursuant to Section 6.3.

(iii) Insolvency or Bankruptcy

In the event that either party becomes or is declared insolvent or bankrupt, is the subject of any proceedings related to its liquidation, insolvency or for the appointment of a receiver or similar officer for it, makes an assignment for the benefit of all or substantially all of its creditors, or enters into an agreement for the composition, extension or readjustment of all or substantially all of its obligations, then the other party hereto may, by giving written notice thereof to such party, terminate this Agreement as of the date specified in such notice of termination.

5.3 Upon Termination

Upon termination of this Agreement, the parties agree to cooperate with one another to ensure that all accounts receivable are accounted for. Upon termination, InfoSend shall cease all Services provided hereunder, unless otherwise directed by the Client in writing and assuming all client fees remain current. Upon termination, Client will promptly pay to InfoSend any and all charges due, without offset, including but not limited to payables that are due pursuant to this Agreement, accrued finance charges, and the Discontinuance Fee set forth below, where applicable.

5.4 Discontinuance Fee

The parties have mutually agreed upon the Fees for the Services to be provided hereunder based upon volumes Client has represented in Exhibit B, Section 2 and the Term of this Agreement. Because of the impracticable or extreme difficulty in ascertaining the actual damages to InfoSend that would result from a termination of the Agreement prior to the expiration of the then-current term, Client agrees to pay a discontinuance fee to InfoSend in the event that (i) Client terminates the Agreement without cause prior to the expiration of the then-current term; or (ii) the Agreement is terminated due to a breach by Client prior to the expiration of the then-current term.

The discontinuance fee will be equal to two (2) months of the Client's average monthly billing for the previous six (6) months of Service (excluding any postage charges and professional services fees that were invoiced in that time period). Client agrees to pay the discontinuance fee prior to the effective date of such termination and in addition to all other payables then due and owing to InfoSend. The

parties agree that the amount of the discontinuance fee is a reasonable forecast of the just compensation for the harm to InfoSend caused by an early termination of this Agreement, and not a penalty.

5.5 Force Majeure

Neither party shall be liable, or deemed to be in default, to the other for any failure or delay in performing an obligation under this Agreement to the extent that its performance is delayed, impaired or rendered impossible by an event beyond its control (“Force Majeure Event”) such as natural disasters, war, terrorist acts, riots, labor strikes or shortages, civil disturbances, extra-ordinary losses of utilities (including telecommunications services), computer “hacker” attacks on internet infrastructure, regulatory restrictions, change in law or regulation or other acts of government authority, including civil and military authorities and courts, fuel or energy shortages, transportation stoppages or slowdowns, the inability to procure parts or raw materials, pandemics, supply-chain issues which causes a substantial increase in costs or decrease in availability of materials necessary for InfoSend and/or its Affiliate(s) to perform services under this Agreement, and/or acts or omissions of common carrier. These causes will not excuse Client from paying previously accrued payables due to InfoSend through any available lawful means acceptable to InfoSend.

6 Invoicing and Payments

6.1 Invoicing

InfoSend will invoice Client monthly and Client will pay InfoSend the fees described in and/or computed in accordance with **Exhibit B (InfoSend Fees)**. Client payment of these invoices is due upon receipt in U.S. dollars and shall be paid NET 30 unless expressly agreed to by InfoSend.

6.2 Dispute of Invoice

Should Client dispute any invoices, it must do so in writing within sixty (60) days of the invoice date with specific details as to the matters in dispute or any dispute shall be deemed waived.

6.3 Late Payments

InfoSend may elect to assess finance charges on any or all undisputed invoices that become past due at a rate of 1.5% per month.

The recurring nature of InfoSend’s Services result in a rapid rise in financial loss to InfoSend if a Client’s accounts payable process is delayed, particularly when InfoSend is

invoicing Client for postage charges. Therefore, InfoSend reserves the right to suspend Services until payments are brought current if past due account balances cannot be collected from Client. InfoSend’s Accounting staff will notify Client in writing before Services are suspended and give Client an opportunity to bring the account current before Services are put on hold. Should a hold be instigated, it will immediately be removed once the account is brought current.

7 Communications

7.1 Notices

Any notice hereunder must be in writing and sent by overnight courier service (such as FedEx or UPS), or USPS certified mail, all with delivery signature requested, to the other party hereto at the respective address set forth below:

To Client:
C/O (Department): _____
Address: _____

To InfoSend:
C/O: President
Address: 4240 E. La Palma Avenue
Anaheim, CA 92807

Notice shall be deemed to have been given and received one (1) business day after being sent via overnight courier service, or three (3) business days after being mailed by USPS certified mail. Each party may update its address or email address by providing written notice to the other party of such change in accordance with this section.

8 Confidentiality & Intellectual Property

8.1 Confidentiality

All information and data relating to Client’s business, as well as all User information, submitted by Client to InfoSend and/or its Affiliate(s) under this Agreement shall be treated as confidential by InfoSend and shall not, except as required to perform the Services under this Agreement or otherwise required by law, be disclosed to any third party by InfoSend without Client’s written consent. Notwithstanding anything to the contrary, the following shall not be deemed confidential: (a) information that is in the public domain through no fault of InfoSend or its Affiliate(s); (b) information that was known to InfoSend or its Affiliate(s) prior to disclosure by Client; or (c) information that is independently developed

by InfoSend or its Affiliate(s) without use of or reference to Confidential Information. InfoSend shall promptly notify Client should InfoSend be served with a summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, requests for admission, or other discovery request or court order (a "Request to Disclose") from any third party regarding this Agreement, the Services performed under this Agreement, and/or seeking such information or data. Client shall be responsible to timely make appropriate objections to any Request to Disclose.

Client will not disclose to any third party or use for any purpose inconsistent with this Agreement any confidential or proprietary non-public information it obtains from InfoSend during the term of this Agreement about InfoSend's business (the "Confidential Information"), which Confidential Information shall include InfoSend's operations, financial condition, technology, systems, suppliers, clients or prospective clients, marketing data, plans, pricing, and models, or personnel, unless required by applicable law. Client will ensure that its employees and agents similarly abide by the requirements hereof. Client will promptly notify InfoSend of its receipt of a Request to Disclose and Confidential Information, and InfoSend shall be responsible to timely make appropriate objections thereto.

InfoSend, and its licensors, where applicable, owns all rights, title and interest, including all related Intellectual Property Rights, in and to InfoSend technology, the content and the Services. The InfoSend name, the InfoSend logo, and the product names associated with the Service are trademarks of InfoSend or third parties, and no right or license is granted to use them.

9 Representations & Warranties

9.1 InfoSend Representations and Warranties

InfoSend represents and warrants that it has the legal power and authority to enter into this Agreement and that Services will be provided in a professional and workmanlike manner.

InfoSend warrants that the Services will materially perform the functions that the Client has selected under normal use and circumstances and that InfoSend shall use commercially reasonable measures to protect Client Data to the extent that it retains such data in the operation of the Services. Provided that Client gives InfoSend written notice of failure to meet the foregoing warranty within

sixty (60) days following delivery of any Services, or as otherwise specified in a Statement of Work ("SOW"), InfoSend warrants that it will use commercially reasonable efforts to correct any Services that fail to comply with the foregoing warranty. If there is no notice by Client within sixty (60) days following delivery of any Services, or as otherwise specified in a Statement of Work ("SOW"), it shall be deemed Client has accepted the Services and waived any claims to the otherwise.

9.2 Client Representations and Warranties

Client represents and warrants that it has the legal power and authority to enter into this Agreement and provide to InfoSend all information and data necessary for InfoSend to perform the Services. Client further warrants that it will comply with all laws, regulations, and compliance requirements applicable to Client's and User's activities covered by this Agreement.

9.3 Warranty Disclaimer

Except as expressly set forth in Section 9.1 above, InfoSend disclaims all other representations or warranties, express or implied, made to Client or any other party, including without limitation, any warranties regarding quality, suitability, merchantability, fitness, for a particular purpose or otherwise of any services or any good provided incidental to the Services provided under this Agreement, to the extent permitted by applicable law.

InfoSend and its licensors and payment processors do not represent or warrant that (i) the use of the Services will be uninterrupted or error-free, or operate in combination with any other hardware, software, system or data; or (ii) the Services will not delay in processing or paying to the extent such delay is caused by things outside the control of InfoSend. Services may be subject to the limitations, delays, and other problems inherent in the use of the Internet and electronic communications. InfoSend is not responsible for any delays, delivery failures, or other damage resulting from such problems.

In performing the Services, InfoSend is responsible for producing for print or online display the content that Client provides to InfoSend. InfoSend is not responsible for reviewing the content for spelling or typos, nor is InfoSend responsible for verifying the accuracy or legality of the content. It is Client's sole responsibility to verify that the content that InfoSend's applications will produce on Client's behalf is appropriate for distribution.

9.4 Inbound Communication Services Disclaimer

InfoSend Inbound Communication services are intended to receive communications and data from clients to facilitate the performance of InfoSend Services. While the inbound services have been created with certain available tools and practices, they are dependent on infrastructure that is inherently not fail-proof, including but not limited to infrastructure such as United States Postal Service (“USPS”) delivery standards, software, computer hardware, network services, telephone and SMS services, and email. Examples of situations that could cause failure include but are not limited to: USPS failure to deliver, down phone lines, all lines busy, equipment failure, email address changes, and Internet service disruptions. Client acknowledges that it is aware of the potential hazards associated with using such infrastructure and will be responsible for ensuring InfoSend is in receipt of any communication or data destined for InfoSend. Client releases InfoSend from any and all liability that results from an unsuccessful communication or data transfer to InfoSend, one which does not produce a confirmation receipt from InfoSend.

9.5 Outbound Services Disclaimer

InfoSend Outbound Communication services are intended to create additional methods of communication for clients in support of existing processes. These services are not intended to replace all interaction with clients’ end users or employees. While the outbound services have been created with certain available tools and practices, they are dependent on infrastructure that is inherently not fail-proof, including but not limited to infrastructure such as United States Postal Service (“USPS”) delivery standards, software, computer hardware, network services, telephone and SMS services, and email. Examples of situations that could cause failure include but are not limited to: USPS failure to deliver, down phone lines, all lines busy, equipment failure, email address changes, and Internet service disruptions. For this reason, while outbound services are valuable in providing enhanced communication, they are specifically not designed to be used as the sole method to deliver critical messages. Client acknowledges that Client is aware of the potential hazards associated with relying on an automated outbound service feature when using InfoSend services. Client agrees that it is giving up in advance any right to make any claim against InfoSend, and that Client forever releases InfoSend from any and all liability caused by (a) any failed USPS delivery; (b) any failed email delivery; (c) any failed SMS or call attempts (including excess of calls over and above network or system capacity), incomplete calls, or any busy-outs; or (d) any failure to transmit, obtain or collect data from callers or for human and

machine errors, faulty or erroneous input, inarticulate caller communication, caller delays or call lengths exceeding estimated call lengths or omissions, delays and losses in connection with the Services provided hereunder. Such release shall include instances where Client, Client’s employees, or Client’s end user suffer injury or damage due to the failure of outbound services to operate, even though InfoSend may know or suspect what or how extensive those injuries or damages might be, unless such losses were directly attributable to InfoSend’s gross negligence or willful misconduct.

10 Insurance

10.1 InfoSend’s Insurance Provisions

InfoSend will maintain the following minimum insurance levels during the Initial Term of this Agreement and any Renewal Terms:

- Commercial General Liability coverage in the amount of \$1,000,000.00 per occurrence and \$2,000,000.00 in aggregate.
- Automobile Liability Insurance coverage in the amount \$1,000,000.00 per occurrence.
- Umbrella Liability Insurance in the amount of \$5,000,000.00 per occurrence and in aggregate.
- Worker’s Compensation Insurance with at least the minimum coverage amounts required by law.
- Errors & Omissions Insurance with a \$5,000,000.00 coverage limit.

11. Indemnification & Limitation of Liability

11.1 Indemnification

InfoSend agrees to the fullest extent permitted by law, to indemnify and hold harmless the Client and its governing officials, agents, employees, and attorneys (collectively, the “Client Indemnitees”) from and against all liabilities, demands, losses, direct damages, costs or expenses (including reasonable attorney’s fees), incurred by any Client Indemnitee as a result or arising out of (i) the willful misconduct or negligence of InfoSend in performing the Services; or (ii) a material breach by InfoSend of its covenants.

This indemnification does not apply to any claim arising from any errors, actions, omissions, delays or losses resulting from erroneous, incomplete or otherwise problematic data or instructions provided by Client to InfoSend. No damages shall be assessed against InfoSend when any delay or breach on InfoSend’s part is caused by

failure of Client to perform Clients' responsibilities or any other reason beyond the reasonable control of InfoSend.

This Section 11.1 states the entire liability of InfoSend with respect to infringement by any deliverable of InfoSend or resulting from the performance of services by InfoSend.

11.2 Limitation of Liability

In no event shall either party be liable to the other for any indirect, punitive, special, exemplary, incidental, or consequential (including loss of data, revenue, profits, use or other economic advantage) damages arising out of, or in any way connected with this service, even if the party from which damages are being sought or such party's licensors have been previously advised of the possibility of such damages.

The aggregate liability of InfoSend and its Affiliate(s) arising from or relating to this Agreement for any claim shall be limited to the fees that were paid by and/or due from Client in the preceding twelve (12) months prior to the accrual of the claim.

12 General

12.1 Independent Contractor

Client and InfoSend agree and understand that the relationship between both parties is that of an independent contractor. No joint venture, partnership, employment or agency relationship exists between Client and InfoSend as a result of this Agreement or use of the Service.

12.2 Governing Law

This Agreement shall be governed by the substantive laws of the state of Iowa without regard to the choice or conflicts of law provisions of any jurisdiction.

12.3 Entire Contract; Amendment

This Agreement (including its Exhibits) contains the entire agreement between the Parties with respect to its subject matter and supersedes all other prior and contemporaneous contracts and understandings between the Parties, whether oral or written. Modifications or changes to this Agreement, other than as specified at Exhibit B, must be in writing and executed by the parties.

12.4 Severability

If a word, sentence or paragraph herein shall be declared illegal, unenforceable, or unconstitutional, the said word,

sentence or paragraph shall be severed from this Agreement, and this Agreement shall be read as if said word, sentence or paragraph did not exist.

12.5 Assignment

This Agreement may not be assigned by either party without the prior written approval of the other party, unless it is being assigned to (i) a parent or wholly owned subsidiary, (ii) an acquirer of assets, or (iii) a successor by merger. Any purported assignment in violation of this section shall be void.

12.6 Survival

All of the terms of this Agreement which by their nature extend beyond the expiration or termination of the Agreement, including but not limited to indemnification obligations, payment obligations, confidentiality obligations and limitations of liability, shall survive expiration or termination of the Agreement and remain in full force and effect.

12.7 Attachments

The following documents are attached hereto as Exhibits, and are incorporated by reference in their entirety:

Exhibit A: Scope of Primary Services

Exhibit B: InfoSend Fees

Exhibit C: Professional Services

12.8 Cooperative Agreement ("Piggybacking")

This Agreement is the result of an open, competitive procurement process conducted in accordance with applicable law. The provisions of this Agreement may be extended to other government agencies within the same jurisdiction, at InfoSend's discretion.

A government agency wishing to utilize the provisions of this Agreement by entering into a cooperative purchasing agreement will be responsible for issuing its own purchase documents and making any and all payments relative to its agreement. Any participating government agency is responsible for obtaining its own certificates of insurance and any required performance bonds. Pricing for a cooperative purchase agreement will be determined by InfoSend and the government agency and will not automatically carry over from this Agreement.

[SIGNATURE PAGE FOLLOWS]

Agreement is entered into by and between:

Client:

By: _____
Name: _____
Title: _____
Date: _____

InfoSend:

By: _____
Name: _____
Title: _____
Date: _____



DES MOINES WATER WORKS
Board of Water Works Trustees

Agenda Item No. III-D
Meeting Date: November 28, 2023
Chairperson's Signature ☐ Yes ☒ No

AGENDA ITEM FORM

SUBJECT: Des Moines Water Works' Rules and Regulations Update

SUMMARY:

Each year Des Moines Water Works' Rules and Regulations document, including the Schedule of Charges, is updated to clarify existing requirements, establish new requirements, and revise fees to cover Des Moines Water Works' cost for providing various services. A document titled "Outline of Proposed Changes to Des Moines Water Works' Rules and Regulations for 2024" is attached to this memo. This outline gives a brief description of each change by section number.

Some of the more significant changes being recommended include:

- Stating that materials for water service installation must conform with Iowa Department of Natural Resources requirements if located within 200' of a Leaking Underground Storage Tank (LUST).
- Rewriting the conditions when a public water main will be allowed to be installed on private property.
- Adding language regarding properties that have a non-testable backflow device on boilers.
- Editing language to state that service termination will result for failure to submit a passing backflow test.
- Adding an inspection fee for large taps.
- Updating the Water Shortage Plan to allow a minimum domestic quantity to be applied for billing to meet basic human water consumption needs.

Fee schedules have been updated to reflect increases in labor and material costs based on The Engineering News Record Construction Cost Index for the month of August 2023.

It is proposed that these revisions, including the revised fees, become effective on January 1, 2024.

FISCAL IMPACT:


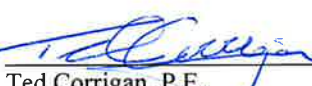
Adjusted fees will cover Des Moines Water Works' costs for services provided.

RECOMMENDED ACTION:

Approve the proposed revisions to the Rules and Regulations with an implementation date of January 1, 2024, and direct publication of the changes as required by statute.

BOARD REQUIRED ACTION:

Motion to approve the proposed revisions to the Rules and Regulations with an implementation date of January 1, 2024, and direct publication of the changes as required by statute.

 _____ Jennifer Puffer, P.E. Director of Water Distribution	 _____ Ted Corrigan, P.E. CEO and General Manager
(date)	(date)

Attachments: Outline of Proposed Changes to Des Moines Water Works' Rules and Regulations for 2024
Proposed 2024 Rules and Regulations document showing red-lined changes

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WATER SERVICE RULES AND REGULATIONS

ADMINISTRATIVE PROCEDURES

OF THE

DES MOINES WATER WORKS

DES MOINES, IOWA

PREFACE

1. The Des Moines Water Works is a municipal utility which is governed by, and officially title as, The Board of Water Works Trustees of the City of Des Moines, Iowa (“Des Moines Water Works” or “DMWW”). These Water Service Rules and Regulations (“Rules and Regulations”) have been developed in accordance with the Policy Manual of the Board of Water Works Trustees of the City of Des Moines, Iowa, Section 5, Water Service. These Rules and Regulations provide for implementation of the Section 5 policies.

2. The Des Moines Water Works delivers water to customers through water mains installed in public right-of-way and occasionally on easements on private property. The mains are either owned or maintained by the Des Moines Water Works and are under its exclusive control. The property owner is responsible for the maintenance and care of all piping, appurtenances and fixtures (including corporations) other than the water main. The water meter, automated meter reading devices and related wiring are installed and owned by the Des Moines Water Works, but the customer remains responsible for protecting them from frost and other external forces. Normal meter repair is made by the Des Moines Water Works, without charge.

3. All water service is subject to these Rules and Regulations and shall be provided on terms of a water service agreement as provided to all new customers and to existing customers from time to time. No installation of a water service (the pipe and fixture from the main in the street to the meter), nor repair thereof, shall be made which does not conform to these Rules and Regulations and the applicable plumbing code. All installations or repairs shall be made by a Licensed Plumber. Inspection for conformance by the Des Moines Water Works or the appropriate jurisdictional plumbing inspector is required for all installations and repairs of water service facilities.

500 RULES FOR PROVIDING WATER SERVICE

Deleted: (Revised January 2022)

- 500.1 These rules shall govern water service provided by the Des Moines Water Works. Compliance with these rules is a condition of service. Failure to conform to these Rules and Regulations may result in termination of water service.
- 500.2 Except to the extent a different right of appeal is specified in any section of these Rules and Regulations with respect to a particular matter, any person aggrieved by the application of these Rules and Regulations, shall within 90 days of the decision or action complained of be required to request a hearing before an appeals committee consisting of: (1) the CEO and General Manager or the CEO and General Manager's duly appointed representative; (2) the Director of Customer Service; and (3) the Chief Operating Officer ("Appeals Committee") before commencing any action in court. After hearing, a written decision shall be issued by the Appeals Committee, which shall be final as to all matters considered. Prior to commencing any action in court, the persons making the appeal must file a written request to appear before the Board of Trustees with the CEO and General Manager within ten days of the date of the Appeals Committee decision. Such issue will then be considered by the Board of Trustees as provided in Section 206.8 of Board Policy Manual at the next scheduled meeting.

501 GENERAL

501.1 WATER PRESSURE

Water pressure varies throughout the distribution system depending upon the ground elevation. Information on pressure at a specific location may be obtained upon request to the Des Moines Water Works.

501.2 INTERRUPTIONS OF SERVICE

The Des Moines Water Works may interrupt a customer's water supply in order to make repairs to the system or for other operational reasons. An effort will be made to provide 24-hour advance notification of any interruption for scheduled repairs. In case of unanticipated interruptions and emergencies such as main breaks, mains or services may be shut down and water service interrupted without notification. Des Moines Water Works makes no guarantee of uninterrupted service and will have no liability for direct, indirect, incidental or consequential damages arising from any interruption of water service for any reason.

501.3 LOCATION OF WATER FACILITIES

501.3.1 Water mains and facilities owned or maintained by the Des Moines Water Works:

The Des Moines Water Works will furnish information, as available from its records, regarding locations of mains, hydrants, valves, and other fixtures owned by the Des Moines Water Works. The Des Moines Water Works will use its employees and tools in this effort at no cost to the person assisted. The Des Moines Water Works will assume responsibility for the location of its mains, pipes, valves, or other fixtures. It should be understood that after the location of the facility is established, the Des Moines Water Works shall expect the facility to be protected from damage or harm.

501.3.2 Water mains, valves, services, and fixtures not owned or maintained by the Des Moines Water Works:

This section references private water mains and valves, benefited water district mains, rural water district mains, etc. On such mains and facilities, the Des Moines Water Works will make available to persons who have a reasonable need, information concerning these mains and facilities from records on file with the Des Moines Water Works.

Records on private mains and facilities and similar installations are furnished to the Des Moines Water Works on behalf of the owners of these mains and facilities and may not be current or reflect as-built conditions. It should be understood that these facilities are not owned or maintained by the Des Moines Water Works.

The Des Moines Water Works makes no assurances of the accuracy or validity of the records or information. Persons shall use their own discretion when making use of these records of private facilities. The Des Moines Water Works will, upon request, provide assistance, at its convenience, in an effort to locate a private pipe, valve, or fixture. If, in the Des Moines Water Works judgment, an exceptional amount of time has been spent in this effort, the Des Moines Water Works reserves the right to bill for the costs involved.

501.4 WATER AVAILABILITY

All requests for water service will be evaluated on whether adequate capacity is available at the desired location. If adequate service is not available, alternatives may be provided to the owner to obtain the desired service. In some locations, a connection fee may be charged and applied in addition to the tap charges.

502 APPLICATIONS FOR THE USE OF WATER

502.1 APPLICATIONS

Deleted: (Revised January 2023)

502.1.1 Applications for the use of water shall be made via phone or by means of electronic forms available on the internet at www.dmww.com. If a customer has an unpaid balance for water service at a previous location, this balance must be paid, or arrangements made for payment, before service can be started in customer's name. If an existing or former customer receives water at a new location and DMWW becomes aware of an unpaid delinquent balance of such customer at a previous property, payments made by the customer to settle charges on their current account will be first applied to satisfy the oldest charges at the previous property. DMWW's customary collection procedures as outlined in 502.3 of these Rules and Regulations will apply to unsatisfied charges at the customer's new property.

502.1.2 Customers who are tenants of a property will be charged a deposit equal to the usual cost of 90 days of water service based on an average household consumption of 7,500 gallons per thirty-day period. Such deposit will be added to the customer's account and will be reflected on the customer's first statement. Deposits are subject to Des Moines Water Works' collection rules, and as such, service may be terminated for non-payment of a deposit. The deposit will be applied to the balance of the account at the date of final service. Any amounts remaining after application of the deposit to the final balance will be refunded to the customer within a reasonable period of time subsequent to the customer's final service date. See Section 511-Schedule of Charges.

502.1.3 If there is no water service into the premise, see Section 503.

502.2 BILLING

Deleted: (revised January 2019)

502.2.1 Meters will be read periodically and bills will be mailed or delivered electronically monthly. All bills for water service shall be due and payable on or before the due date.

- 502.2.2 Payment may be made by mail or at the Des Moines Water Works' office located at 2201 George Flagg Parkway, or at other designated pay stations. A list of the pay stations and addresses is available online at www.dmww.com. Payment may also be made by automatic debit to a checking account. Payment may also be made by means of credit card or check card at the Des Moines Water Works office, by telephone, or online at www.dmww.com.
- 502.2.3 All customers shall make it possible for the Des Moines Water Works representatives to obtain valid readings of any water meter(s) attached to the water service serving the premises. Water service may be discontinued if the Des Moines Water Works is unable to read the meter(s) or make repairs to the meter(s) or to any meter reading equipment.
- 502.2.4 In the event of errors in the amount billed for water service, the amounts due to or from customers shall be subject to retroactive adjustment for a period of not more than five (5) years prior to the date of discovery of the error.
- 502.2.5 During any period which Des Moines Water Works is unable to obtain a good meter read, whether by meter reading equipment malfunction or other cause, the customer's bill will be estimated based on previous consumption used at the property until such time that a good read is obtained. If no consumption history exists for the property, the estimated consumption will be based on such other information, including typical use for similar customers as Des Moines Water Works may determine to be applicable. At such time that a good read is obtained, Des Moines Water Works will calculate the amount of actual consumption used during the estimating period and will compare that to the estimated consumption as billed. A true up will be calculated, and the customer will receive a credit on their next billing statement for any consumption overestimated and amounts overpaid, or an increase adjustment to their bill for any consumption underestimated and amounts underpaid.

- 502.2.6 Residential customers who experience a leak after the meter (e.g., as a result of running toilet, burst pipes, etc.) may request a leak adjustment. Any leak adjustment granted shall be based on monthly consumption during the period during which the leak has been shown to have occurred and shall be limited to 50% of the excess consumption as measured against the account's next highest month's consumption in the immediate 12 months prior to the leak. The leak adjustment will be applied to not more than three monthly bills, absent a showing of highly compelling or extraordinary circumstances. Leak adjustments are a one-time reduction in charges and will be granted only after the leak is verified to have been remedied.

502.3 DEFAULT IN PAYMENT

Deleted: (Revised January 2021)

- 502.3.1 When a customer is in default of payment of an account for water supplied to his/her premises, or for fire service, the customer shall be charged a delayed payment (i.e., late) fee equal to 5% of the new charges not collected by the due date stated on the customer's billing statement, and water service may be terminated in accordance with the Turn Off and Collection Procedures then in effect.

The Des Moines Water Works may cause a lien to be placed against property under Section 384.84 of the Code of Iowa as amended unless such property has been exempted from lien under Section 384.84 of the Code of Iowa. Any lien filing shall be in accordance with applicable provisions, including notice provisions of Section 384.84 of the Iowa Code of Iowa.

- 502.3.2 Where a water service has been turned off because of violation of the Rules and Regulations, or non-payment of bills due, a charge shall be collected for terminating service as provided in Section 511 of these Rules and Regulations.

502.4 UNAUTHORIZED USE OF UNMETERED WATER

- 502.4.1 Where a water service has been turned off at the stop box or water main for any reason, and is subsequently found turned on without proper authority, Des Moines Water Works may discontinue the water service. The water service shall not be reactivated until the customer pays an amount equal to or greater than the termination amount, plus applicable penalties.

502.4.2 The discovery of piping bypassing the meter, or tampering with the meter that would allow unauthorized water to be used on the premises of a customer, is in violation of Chapter 714.4, Code of Iowa. The following charges will be made against the customer in such cases:

502.4.2.1 Cost for removal of piping and all other incidental costs.

502.4.2.2 A penalty as established by the Board and as provided in Section 511 of these Rules and Regulations.

Des Moines Water Works also reserves the right to charge for estimated water consumption in addition to the above charges.

502.4.3 In addition to the above charges, the Code of Iowa provides for the punishment for each offense by a fine of not less than one hundred dollars (\$100.00), or by imprisonment in the county jail for a period of not more than 30 days, or by both fine and imprisonment.

502.5 CUSTOMER/OWNER RESPONSIBILITY

Deleted: (Revised January 2022)

502.5.1 The customer shall be liable for water consumed as metered until provisions are made for the Des Moines Water Works to turn off water service or remove the meter.

502.5.2 When a customer is moving out of a premise and orders the water meter read on a certain day, the water must be turned off when the meter is read, unless there is an application already on file from a prospective customer, or a written request form the property owner in the case of a rental property, to keep the water on and transfer responsibility for service to the prospective customer or property owner's name.

502.5.3 The owner of the premises served shall be the owner of, and responsible for all water service pipes and fixtures of every kind from the point of incorporation of the customer's service line at the water main. Water service pipes and fixtures shall include, but not be limited to, water service lines, stop boxes, valves, and interior plumbing. The owner, at his/her expense, shall protect, safeguard, and keep all of his/her water service pipes and fixtures in good working order. The Des Moines Water Works is not responsible for maintaining, repairing or replacing water service pipes and fixtures or for any damages arising from the use or failure of any water service pipes and fixtures.

Des Moines Water Works shall not be liable for damages due to the breakage or failure of any water service pipes or fixtures, even if such breakage or failure occurs during, or arises from, work performed by Des Moines Water Works. The damages for which Des Moines Water Works shall not be liable include any damages for breakage of any stop box during operation of the stop box by Des Moines Water Works and any damages for accidental or temporary failure in the supply of water.

502.5.4 Whenever it shall come to the attention of the Des Moines Water Works that a water service, stop box, valve, or meter pit (including its cover) is broken, inoperable, or otherwise in a dangerous or unsafe condition, the Des Moines Water Works will make reasonable efforts to notify the customer and the owner of the premises, if different. Such notification will require the immediate repair and restoration of the facility. The obligation to cause or make required repairs is a condition of continued service to all affected premises. The Des Moines Water Works may terminate water service to the premises until such repairs are made or in case such condition poses a hazard to the public or adjoining property or requires repair to an inoperable stop box, it may make or cause to be made, all such repairs as are necessary. The costs of such termination and repairs, if any, shall be included in the next water bill and, if not paid, may result in termination of service to the premises or the certification of such amount as a lien against the property as with other unpaid water bills. Responsibility for the costs of repair shall be assessed to the owner of the property as shown in the applicable county real estate records as of the date that the Des Moines Water Works discovers or is otherwise informed of the condition requiring the repair. Notwithstanding the foregoing, the failure of the responsible person to pay charges for repairs as defined above shall not be grounds for termination of service or imposition of a lien against a subsequent transferee of the premises or a subsequent customer account holder.

Deleted: (Revised January 2019)

502.5.5 The customer and owner shall operate valves and other appurtenances of their water piping system in such a manner that pressure surges are not transmitted to the Des Moines Water Works' water distribution system.

502.5.6 The property owner or customer shall provide a proper address that is visible from the street.

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502.6 SERVICE LINE OWNERSHIP IN THE FORMER SE POLK SYSTEM

Service lines installed in the area of the former SE Polk System after April 1, 2007 shall be owned by the property owner, and shall be subject in all respects to these Rules and Regulations, including but not limited to Rule 502.5.

For service lines installed prior to April 1, 2007 the Des Moines Water Works will be responsible for the maintenance and repair of the service line from the point of connection, to the water main up to and including the meter pit, as an exception to Rule 502.5, but only until ownership of the property that is serviced is transferred of record. The owner will be responsible for the remainder of the water service. Ownership and responsibility for repair and maintenance of the entire service line from the water main under Rule 502.5 will transfer to the new property owner at such time as the property changes ownership as shown in the applicable county real estate records. The new property owner will become responsible for all maintenance and repair of the service line as provided in Rule 502.5 after the date of transfer as shown in the applicable county real estate records.

503.1 APPLICATION FOR WATER SERVICE PERMIT

- 503.1.1 The Des Moines Water Works will assign a permit number for installation of a water service from the main up to and including the water meter. Each service must have its own tap in the water main. No work of any nature shall be done in connection with the tapping of any water main, or the introduction of water into the premises (public or private) between the water main and meter, unless a permit has been obtained from the Des Moines Water Works for such work. If a water service tap has not been installed at an address within 6 months of the date of the application, the permit will expire and the applicant must reapply. Each residence or premise requiring water shall have an individual service, which does not take water from another domestic service or building, with the exception of Private Water Mains. (Figures 1-2 & 5-10 and Section 505.9)
- 503.1.2 In cooperation with the City of Des Moines or other political subdivisions, the Des Moines Water Works will not issue a permit to tap its water mains without a ROW opening or plumbing permit.
- 503.1.3 The Des Moines Water Works must be provided with the legal description of the property to be served.
- 503.1.4 Application for water service in unincorporated areas and other areas with small diameter mains will initiate an evaluation of the distribution system in the area to determine if capacity is available to provide the requested service. These applications will be evaluated by Des Moines Water Works before a permit is issued.
- 503.1.5 Des Moines Water Works retains final discretion for approval of any application for water service, which it will approve in its sole discretion. The applicant, or party in control of the applicant, shall have paid all system development fees, tap charges, and any other fee owed to Des Moines Water Works prior to approval of any new water service. Des Moines Water Works may consider other factors in its sole discretion before approving new water service.

503-1

503.2 APPLICATION REQUIREMENTS FOR FIRE SERVICES AND

DOMESTIC SERVICES 2" IN DIAMETER AND LARGER

503.2.1 GENERAL REQUIREMENTS

The following items shall be submitted to the Des Moines Water Works for review prior to installation of any fire service or any domestic service 2" in diameter or larger.

503.2.1.1 A site plan showing buildings, pavement, right-of-way lines, existing water mains, valves, hydrants, and the proposed service line.

503.2.1.2 Plumbing plans which show water meter and backflow preventer locations as well as all water-using fixtures in the building.

503.2.1.3 Fire sprinkler system plans or a written description of the system and a detail of the riser piping.

503.2.1.4 A fire department review form showing maximum required fire flow and approved fire service layout.

503.2.1.5 An estimate of peak domestic demand to assist in selecting and sizing the water meter. If large flow fluctuations are anticipated, a load profile may be required. A load profile is defined as a written or graphical estimate of the lowest measurable flow, average, and peak gallon consumptions for each hour of a 24-hour period. (See Figure 28) Peak flows felt to be unrealistic will be checked using the fixture unit method.

503.2.2 The tap may be scheduled with the Des Moines Water Works after the submittal has been reviewed and approved by Des Moines Water Works, after Des Moines Water Works determines if the applicant has satisfied the requirements of 503.

503.2.3 The Plumbing Contractor who signs for the tap will be billed for the tap based on current rates as established by the Board and stated in the Schedule of Charges.

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503.2.4 A connection fee shall be charged and collected for all

connections made to the Des Moines Water Works Distribution System. Such fees shall be based on tap size for fire and domestic service as stated in the Schedule of Charges.

503.3 OBLIGATIONS OF PLUMBING CONTRACTORS

Deleted: (Revised January 2022)

- 503.3.1 Any Plumbing Contractor performing work on the Des Moines Water Works distribution system must have a State of Iowa Plumbing License and provide an annual \$20,000 bond to the Board, with approved surety, conditioned upon no loss, damage, or injury, including failure to pay fees, being incurred by the Des Moines Water Works by reason of the work of such Plumbing Contractor.
- 503.3.2 The Plumbing Contractor, as a licensed individual, has full personal responsibility for all obligations to Des Moines Water Works even if doing business under an entity or company name or bond. The Des Moines Water Works may refuse to allow taps to be made by a Plumbing Contractor with a delinquent balance owing to Des Moines Water Works for prior work performed by the Plumbing Contractor either in such person's own name or under a company or entity name. The Des Moines Water Works may refuse to recognize any Plumbing Contractor who fails to comply with these Rules and Regulations or meet such Plumbing Contractor's financial responsibility to Des Moines Water Works.
- 503.3.3. Should Plumbing Contractor's creditworthiness, financial responsibility, or performance become unsatisfactory to DMWW in DMWW's reasonably exercised discretion, DMWW may require the Plumbing Contractor to provide, at the Plumbing Contractor's option (but subject to DMWW's acceptance based upon reasonably exercised discretion), one or more of the following (i) the posting of a letter of credit, (ii) a cash prepayment, (iii) the posting of other acceptable collateral or security by the Plumbing Contractor, or (iv) some other mutually agreeable method of satisfying DMWW.

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In evaluating the creditworthiness of the Plumbing Contractor, DMWW will consider the payment and

delinquency history of the Plumbing Contractor and the number of permits requested by the Plumbing Contractor. DMWW will also include in its evaluation of Plumbing Contractor's financial responsibility the Plumbing Contractor's payment history, whether under the Plumbing Contractor's own name or any corporate name, and whether Plumbing Contractor employs individuals who have unpaid obligations owed to DMWW from prior work that the employed individual performed as a separate Plumbing Contractor.

503.4 PLUMBING INSPECTION

The Des Moines Water Works will make inspections to verify compliance with these Rules and Regulations at the time that the water service is activated.

503.5 WATER FOR BUILDING OR OTHER CONSTRUCTION

Water may be used for building or other construction purposes only after application has been made to the Des Moines Water Works for a temporary construction meter. Temporary meters will not be allowed after building or construction has been completed.

503.6 REUSING EXISTING WATER SERVICE LINES

Any existing unused water service may be utilized provided it is in compliance with these Rules and Regulations and permission is obtained from the Des Moines Water Works in advance. In order to obtain permission lot lines must be clearly identifiable by Des Moines Water Works staff. If not clear, lot pins must be exposed or property corners shall be staked by a licensed land surveyor in the State of Iowa.

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503.7 SPECIAL CASES

503.7.1 FIRE SERVICES

Any Plumbing Contractor or other contractor desiring a permit to extend a water service to a premise to supply water for fire protection must complete all items listed under Section 503.2.1.

Additionally, the applicant must provide fire flow requirements and a fire service proposal, reviewed by the Des Moines Fire Marshal or the jurisdictional authority. A copy of this form is included as Figure 29 of these Rules and Regulations.

504.1 GENERAL

- 504.1.1 All taps and/or connections to water mains, public and private, shall be made by the Des Moines Water Works or its authorized contractors. This includes the installation of the corporation cock, tee, or tapping sleeve and gate valve at the main. Taps will be made only after application is completed by a Plumbing Contractor and the property owner as outlined in Section 503 of these Rules and Regulations.
- 504.1.2 All corporations and tapping valves will be considered to be in good operating condition after installation unless the contractor notifies the Des Moines Water Works of any defects within 1 year of installation.
- 504.1.3 The Des Moines Water Works will assess charges for more than one trip to the same tap location unless notification is given that the Plumbing Contractor is not ready for the tap to be made prior to the arrival of the tapping crew.
- 504.1.4 No new tap shall be installed where a water service or stub already exists unless prior approval has been obtained from the Des Moines Water Works. If there are water service stubs serving the property which will not be used these stubs must be disconnected from the main before a new tap will be made.
- 504.1.5 A minimum of 24-hour advance notification is requested for taps. Before a tap request is made, the appropriate paperwork must have been completed in accordance with Section 503 of these Rules and Regulations.
- 504.1.6 Lot lines must be clearly identifiable by Des Moines Water Works staff prior to any new taps. If not clear, lot pins must be exposed or property corners shall be staked by a licensed land surveyor in the State of Iowa upon request by Des Moines Water Works.
- 504.1.7 Mains 16" and larger cannot be tapped without prior approval from the Des Moines Water Works.

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504.2 LOCATION OF TAP [\(Revised January 2024\)](#)

- 504.2.1 Generally, taps will be made for 1" services at 45° angles on the main in front of and within the projected lot lines of the property to be served. Plumbing Contractor shall install a 90° elbow facing downward off the corporation, 45° elbows may be permissible in some instances where a 90° elbow will not allow sufficient space to bend the pipe. Taps 2" and larger will be made at a 90° angle.
- 504.2.2 Taps on the backside of the main will be made only after the proper side of the main has been exposed and the Des Moines Water Works has verified that obstacles make it impossible to tap the house side of the main.
- 504.2.3 Taps shall not be located:
- (1) On hydrant branches; or
 - (2) Within an intersection.
- 504.2.4 Taps 1" in size shall not be located closer than 18" from another tap, joint, or pipe fitting.
- 504.2.5 Taps 2" in size shall not be located closer than 2' from another tap, joint, or pipe fitting.
- 504.2.6 Tapping sleeve & valve (TS&V) or tee service connection shall not be located closer than 3' from another TS&V, pipe, joint, or fitting.

504.3 SIZE OF TAP

- 504.3.1 Minimum size tap allowed is 1".
- 504.3.2 Maximum size corporation allowed is as follows:
- a. 1" on 2" main
 - b. 1" on 3" main
 - c. 1" on 4" main
 - d. 2" on 6" main

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- 504.3.3 Taps 2" and larger must have prior approval from the Des Moines Water Works.

504.3.4 Taps larger than 2" will be made by the installation of a tapping sleeve and valve at the main, or in a similar manner, as prescribed by the Des Moines Water Works.

504.3.5 Taps of a size equal to the main may be allowed.

504.4 EXCAVATION FOR TAP

504.4.1 The Plumbing Contractor shall make the excavation required for the tapping of a water main. The top and bottom of the excavation for a 1" tap shall be a minimum of 3' by 5'. When shoring is required, the minimum work area shall be 3' x 5'. Floor of excavation shall be level leaving a clearance of at least 12" around the main. (Figure 1). For larger taps see Figures 2 & 22.

504.4.2 The excavation shall be shored in accordance with OSHA and the Iowa Occupational Safety & Health Standards for the Construction Industry (IOSH) rules. Des Moines Water Works will not enter an excavation or trench which does not conform to OSHA and IOSH requirements. Plumbers and contractors shall be solely responsible for compliance with OSHA and IOSH excavation and trench protection regulations.

504.4.3 Tapping of a main with structures or obstructions overhead will be permitted only if IOSHA standards are met.

504.5 REMOVAL OF TAP OR CONNECTION

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504.5.1 Services having a ½", ¾", or 1" corporation tap are to be disconnected from the corporation stop and the stop box removed in accordance with these Rules and Regulations (Figure 3). This work shall be performed at the owner's expense by a Plumbing Contractor and inspected by Des Moines Water Works.

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504.5.2 The Des Moines Water Works will assess charges for more than one trip to the same location for a tap cut inspection if the

work is not ready for inspection when the water works representative arrives for the inspection unless notification is given that the work is not ready for the inspection prior to the arrival of Des Moines Water Works.

- 504.5.3 When services are connected to the main by a 2" corporation, a tee, or a tapping sleeve and valve, Des Moines Water Works shall permanently disconnect the service from the water main by an appropriate method determined by Des Moines Water Works, at the owner's expense. (see Uniform Tap Retirement Charges, Section 511.8)
- 504.5.4 The excavation shall be prepared by the plumber or contractor and shored in accordance with OSHA and the Iowa Occupational Safety & Health Standards for the Construction Industry (IOSH) rules. Des Moines Water Works will not enter an excavation or trench which does not conform to OSHA and IOSH requirements. Plumbers and contractors shall be solely responsible for compliance with OSHA and IOSH excavation and trench protection regulations.
- 504.5.5 Removal of taps or connections through a tunnel, with dirt or concrete overhead, will not be permitted due to the hazard incurred by workers.
- 504.5.6 Upon proper application by customer, approved by Des Moines Water Works, an existing $\frac{3}{4}$ ", 1", or 2" service connection may be temporarily plugged at the stop box with the understanding that the service connection so stubbed must be reused in one year. Such service lines may be stubbed only if the service line is copper and the curb valve meets current curb valve requirements. A new curb stop shall be installed at the time the service line is stubbed if the existing curb stop does not meet these standards. (see required application, Figure 31).

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- 504.5.7 Upon proper application by customer, approved by Des Moines Water Works, an existing service connection 4"

and larger may be temporarily plugged with the understanding that the service connection so stubbed must be reused in one year. Such service lines may be stubbed only if the service connection was made using an O-ring style gate valve. Split services shall be plugged in public right-of-way upstream of the tee. Service connections 3" in diameter shall not be stubbed.

- 504.5.8 For removal of a service from a private main, see Figure 4.
- 504.5.9 Water service lines that have been removed may not reuse the corporation tap for a future water service.

505.1 DEFINITION

A service line is comprised of the piping and related appurtenances including the connection installed from the Des Moines Water Works water main to the outlet connection of the first shut off device within the building to be served.

505.2 APPLICATION

Refer to Section 503.

505.3 GENERAL LOCATION REQUIREMENTS [\(Revised January 2024\)](#)

All service lines shall conform to the following requirements:

- 505.3.1 The water service shall normally be installed perpendicular to the main from the tap to the right-of-way line and shall tap in front of and within the projected lot lines of the property to be serviced. (Figures 1-2 & 5-12)
- 505.3.2 A clearance of not less than 12" shall be maintained between the service line and any pipe, cable, or conduit in the same trench.
- 505.3.3 Service lines shall have a cover, wherever feasible, of not less than 5'. Whenever the local plumbing code conflicts with this section, the plumbing code shall be followed.
- 505.3.4 The water service shall extend through and beyond the outer wall of the building (see Section 509 for meter setting). Where the building has a rear basement or rear cellar only, the service may extend underground beyond the inner foundation wall a maximum of 2' and then may go vertically through the rear basement floor or wall, or extend around the building and enter through the side of the basement wall. (Figure 8)
- 505.3.5 In a building with a poured floor that has no basement, the service shall extend inside the outer wall of the building and into the building at which point it shall go vertical through the floor and a meter setting made. (Figure 9)

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- 505.3.6 For a building with a crawl space, see Figure 10.

For a building with a standard basement, see Figure 7.

- 505.3.7 Materials will conform with Iowa Department of Natural Resources requirements if located within 200' of a Leaking Underground Storage Tank (LUST), see Figure 36.

505.4 SIZE OF WATER SERVICE LINES

- 505.4.1 New or replacement residential service lines shall not be less than 1" inside diameter. Reconnection of existing 3/4" type K copper water service lines from an existing main to a new main shall be allowed. Use of existing 3/4" type K copper water service stubs shall be allowed provided they meet the requirements of these Rules and Regulations.
- 505.4.2 Commercial, industrial, and fire service lines shall be properly sized for the required demand but shall be no smaller than that specified for a residential service.

505.5 MATERIAL FOR SERVICE PIPING 2" AND SMALLER

- 505.5.1 All water service pipes through 2" shall be type K copper, red brass or PEX pipe as specified in section 505.5.2

- 505.5.2 PEX A 200 psi. pipe can be used for 1" – 2" water service installations as follows:

- a. From the tap to the meter inside the premise on water service replacements. If PEX pipe is used PEX shall be installed all the way from the stop box to meter, from the tap to the stop box, or from the tap to the meter. PEX shall not be used for repairs or partial replacements.
- b. New water service installations from the tap to the meter inside the premise provided that the entire service line is installed as one installation.
- c. PEX pipe can be used between the main and the meter pit or stop box in rural areas of the former SE Polk system.

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Type K copper is required for all service lines which run parallel to the street before entering the property. Type K copper is required

from the tap to the stop box for all new water service stubs in new developments and all other instances where the water service is stubbed to the stop box. Copper can also be used from the stop box to the meter inside the premise on any service line through 2”.

- 505.5.2.1 This section has been eliminated.
- 505.5.2.2 PEX pipe shall be blue in color for all 1-inch installations.
- 505.5.2.3 PEX pipe shall be installed as one continuous piece from the tap to the stop box. Splicing of PEX pipe between stop box and meter inside the building is discouraged and will only be approved under special circumstances.
- 505.5.2.4 PEX pipe shall not be used within 200’ of a Leaking Underground Storage Tank or in other areas where the soil may be contaminated. A copy of the assessment report from the IDNR indicating there is no potential health risk will be required for use of PEX pipe when working within a 500’ radius of a LUST site. Information on the location of Leaking Underground Storage Tanks may be obtained from the Iowa Department of Natural Resources by following the instructions in Figure 36.
- 505.5.2.5 Tracer wire shall be installed when PEX pipe is used. The tracer wire shall be installed according to Des Moines Water Works’ specifications (Figure 1A, 1B, 1C, 16B). Tracer wire shall be installed with all water service lines except when the water service line is type K copper or red brass. Tracer wire specifications shall be as follows:
- a. For open cut installations, the tracer wire shall be No.12 AWG solid single copper conductor with a minimum tensile strength of 150 pounds. Insulation shall be 45 mil, high-density, high molecular weight polyethylene (HDPE) and rated for direct burial, 30 volts, and blue in color.
- 505-3
- b. When directional drilling/boring the tracer wire shall be No. 12 AWG, extra-high

strength copper clad steel conductor (EHS-CCS) with a minimum 1,150 pounds break load. Insulation shall be 45 mil, high-density, high molecular weight polyethylene (HDPE) and rated for direct burial, 30 volts, and blue in color.

- c. When conduit is used the tracer wire shall be placed inside the conduit. When conduit is not used tracer wire shall be installed alongside the pipe and shall be fastened to pipe with zip ties a minimum of every 5 feet.
- d. Anode Ground Rod shall be 3/8 inch minimum diameter, 8 foot minimum length, steel rod uniformly coated with metallurgically bonded electrolytic copper. Anode Ground Rod shall be spliced to tracer wire using a high-strength, corrosion resistant copper alloy ground rod clamp.
- e. Splice Kits, when approved, shall be DryConn Direct Bury Lug Aqua (SKU 90220)
- f. Tracer wire connectors shall be Rhino TriView, TracerPed, or approved equal. Wire connectors shall contain three internal terminals with two shunts, be 5 feet in length, white in color, and triangular in shape. Removable top cap, three 2-7/8-inch by 14-inch custom vinyl decals No. SD-5594K, and tri-grip anchor.

505.5.2.6 PEX pipe shall be stored in a way that prevents damage as a result of crushing or piercing, excessive heat, harmful chemicals, or exposure to sunlight for prolonged periods.

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505.5.2.7 Joint methods for attaching PEX pipe to fittings shall meet AWWA C 904 Standards and ASTM

F1960, F2080, or F1807 Specifications. Fittings shall be installed in accordance with PEX Pipe Manufactures Installation Guidelines and related plumbing codes.

- 505.5.2.8 A tracer wire inspection is required for all PEX service line installations. Contact Des Moines Water Works at 283-8772 when the installation is ready for inspection.

505.6 SERVICE LINE APPURTENANCES [\(Revised January 2024\)](#)

All water service lines shall include a curb stop or valve between the water main and the property line as follows:

505.6.1 WATER SERVICES 2" IN DIAMETER OR LESS

Service lines 2" in diameter or less shall have a curb stop installed within a stop box located 1' to 6' out from the property line. (Pleasant Hill stop boxes will be 1' to 8' out from property line.) Stop boxes installed in rural areas shall be installed within these guidelines outside of the drainage ditch areas whenever possible. Where the water main is located in a frontage easement on the same side of the road as the property to be served, the curb stop shall be placed 5' from the water main towards the property to be served. (See Figure 37). If an alternate location for the curb stop is necessary, approval of the alternate location shall be received from Des Moines Water Works prior to installation. When the main that the water service is connected to is a private or public water main in an easement, the stop box shall be installed 5' from curb of street. Where unusual circumstances prevent this location, the curb stop and stop box may be placed in the street but in such event must be installed within a roadway box. The curb stop shall be installed in the water service pipe so that the tee head is parallel with the curb when the water is turned off. The curb stop shall not have a waste opening.

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505.6.1.1 CURB STOP/VALVE STANDARD

An unobstructed main shut-off on the water supply line for each customer shall be provided on public property, private property where public access is provided, or another location approved by the Des Moines Water Works. The shut-off shall be located as shown. (Figures 1, 2, and 34)

The shut-off for existing 3/4" service lines and new or existing 1" through 2" services shall consist of a curb stop (Type: "T" handle, quarter-turn, ball valve conforming to AWWA C800 and a stainless steel self-centering rod with a stainless-steel pin installed within a stop box housing with a 1" upper section and an Erie style lid. (See DMWW Specifications) The curb stop shall have valve head checks that limit rotation to 90 degrees and operate clockwise to shut off. The "T" handle on the curb stop will be parallel with the curb when the water is turned off. When installed, the curb stop shall not be less than 5' or more than 7' below the surface of the ground.

If the water service connection taps the water main outside of the property line, a general box will be required at a location specified by Des Moines Water Works.

505.6.1.2 STOP BOX STANDARD (CURB BOX)

Stop boxes for 1" through 2" water service lines shall be of the extension type, 1" upper section, stainless steel self-centering rod, stainless steel pin, and Erie style lid. All stop box installations shall be completed in such a manner that the top of the rod is between 12" and 24" below the surface, the lid is level with the surrounding surface, and the stop box does not present a hazard to the public. Stop boxes installed in paved areas shall be installed in a manner that prevents the lid of the stop box from being cast into the concrete. (Figures 1-2 & 14-15)

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The design of all valves, curb stop boxes and valve boxes must meet the standards of the

Des Moines Water Works.

New copper service lines 2" or less in diameter shall be one continuous piece of pipe from the corporation stop to the curb stop and one continuous piece of pipe from the curb stop to the inlet valve at the meter with no fittings when these distances are less than 100' in length. Only one fitting shall be allowed per 100' of pipe. On 2" service lines, only one fitting shall be allowed per 60' of pipe.

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505.6.2 WATER SERVICES LARGER THAN 2"

For the water services larger than 2" the valve shall be installed on the water service line adjacent to the water main. (Figure 22) The valve shall be installed in a roadway box.

505.6.3 Any valves, roadway boxes and precast concrete manhole vaults must have the approval of the Des Moines Water Works.

505.6.4 Curb stop boxes, roadway boxes and precast concrete manhole vaults shall be installed so that they will function properly and so that an access to the shut-off device is maintained. All shall be set vertically so the top is flush with the surrounding surface so as not to be a hazard to the public.

505.6.5 All service lines shall have a shut-off device or valve inside the building where the service enters the building. There shall be no appurtenances between this valve and the main, other than the curb stop or valve as previously described, or when an outside meter is approved. (Figures 1-2)

505.6.6 Tracer wire shall be installed with all water service lines except when the water service line is type K copper or red brass. The tracer wire shall be installed according to Des Moines Water Works' specifications (see figures 17, 18, 20, 20A, 24, 26, and 35). Tracer wire specifications shall be as follows:

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- a. For open cut installations the tracer wire shall be No. 12 AWG solid single copper conductor with a minimum

tensile strength of 150 pounds. Insulation shall be 45 mil, high-density, high molecular weight polyethylene (HDPE) and rated for direct burial, 30 volts, and blue in color.

- b. When Directional Drilling/Boring the tracer wire shall be No. 12 AWG, extra-high strength copper clad steel conductor (EHS-CCS) with a minimum 1,150 pounds break load. Insulation shall be 45 mil, high-density, high molecular weight polyethylene (HDPE) and rated for direct burial, 30 volts, and blue in color.
- c. When conduit is used the tracer wire shall be placed inside the conduit. When conduit is not used tracer wire shall be installed alongside the pipe and shall be fastened to pipe with zip ties a minimum of every 5 feet.
- d. Anode Ground Rod shall be 3/8 inch minimum diameter, 8 foot minimum length steel rod uniformly coated with metallicity bonded electrolytic copper. Anode Ground Rod shall be spliced to tracer wire using a high-strength, corrosion resistant copper alloy ground rod clamp.
- e. Splice Kits, when approved, shall be DryConn Direct Bury Lug Aqua (SKU 90220)
- f. Tracer wire connectors shall be Rhino TriView, TracerPed, or approved equal. Wire connectors shall contain three internal terminals with two shunts, be 5 feet in length, white in color, and triangular in shape. Removable top cap, three 2-7/8-inch by 14-inch custom vinyl decals No. SD-5594K, and tri-grip anchor.

A property requiring a domestic service line and a fire protection service line may be served from a single tap. When a single tap is used, the fire protection service line shall extend straight from the main into the property to a “tee” located outside the property line with valves on the fire and domestic lines in public right-of-way or the service may split immediately inside the building. The fire service shall run straight through the “tee” to a gate valve immediately following the “tee”. The domestic shall “tee” off the fire service immediately outside the property line or immediately inside the building and have a shut off valve following the “tee”. (Figures 20 & 33)

505.8 MAINTENANCE OF WATER SERVICES

- 505.8.1 If an existing water service is to be repaired, the materials used for the repair shall be of the type and size specified for new services. If it is determined that half or more of either section of the service, between the main and the curb stop or the curb stop and the building, must be replaced, then that entire section must be replaced with materials as approved for new services and a new stop box complete with stainless steel self-centering rod, stainless steel pin, and Erie style lid must be installed. (See DMWW Specifications) Dissimilar metals may not be used in the repair of a service unless insulators are used.
- 505.8.2 If an existing 2” or smaller curb stop does not meet Section 505.6.1 of these Rules and Regulations, it does not need to be upgraded unless more than half of the service line from the main to the curb stop or from the curb stop to the building is being replaced.
- 505.8.3 If an existing arch pattern stop box, or the rod in an existing arch pattern stop box, must be replaced and the curb stop meets the requirements of Section 505.6.1, a rod and an arch pattern stop box which meet current requirements can be used with the existing curb stop. The rod can be attached to the curb stop using a stainless-steel pin or an approved self-attaching coupling.

A private water main is a privately owned and maintained water line used to provide service to multiple service line connections on a single qualifying property. Private water mains may provide fire service, domestic service, or a combination of fire and domestic service to properties such as apartment complexes, shopping centers, and town homes.

Public water mains will be installed in public Right-of-Way (ROW) or in easements on private property where necessary, and private water mains will be installed on private property.

Installation of a public water main on private property will only be considered by the Des Moines Water Works where:

- a) The installation is deemed by the Des Moines Water Works to be necessary or beneficial to the distribution system of the Des Moines Water Works and an easement can be obtained.

OR

Deleted: Installation of a private water main will only be allowed if all three of the following conditions apply.¶

¶ No public water main is available to effectively serve the property.¶

¶ A public water main cannot be installed in public right-of-way to effectively serve the property.¶

¶ Space is not available to install a public water main centered within in a 40-foot-wide water main easement to effectively serve the property.¶

¶

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- b) All of the following conditions are met:

- a. No public water main is available to effectively serve the property.
- b. A public water main cannot be installed in public ROW to effectively serve the property.
- c. The proposed water main is installed in a residential development in a street-like setting.
- d. There are no fences, walls, structures, or similar obstacle impeding access to the water main and Des Moines Water Works staff have unrestricted access to the water main.
- e. A 40-foot-wide water main easement, centered on the new water main is provided by the owner of the real property and reviewed by Des Moines Water Works staff.
- f. The water main should be spaced 5 ft. from any parallel utilities.

- g. No structure or projection thereof, such as balconies, decks, or similar structures, will be built within 20 ft. of the water main.
- h. The water main is installed at a depth of 5-6 feet. Exceptions to the depth, subject to the approval of DMWW, may be made for utility crossings and other special circumstances.
- i. Des Moines Water Works has reviewed plans and approved of the proposed public water main.

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Qualifying properties must be a single property owned by a single owner, entity, or association and must not be divided by public right-of-way.

For requirements related to jointly owned private water mains serving multiple qualifying properties see Section 505.9.2.

505.9.1 GENERAL

505.9.1.1 The design and location of new private water mains and alterations to existing private water mains must be reviewed by the Des Moines Water Works prior to construction to insure all Des Moines Water Works requirements are met. Additionally, the requirements of the applicable plumbing codes must also be met.

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505.9.1.2 Private water mains must be constructed and maintained in accordance with minimum specification prescribed by the Des Moines Water Works Department of Engineering generally consistent with the applicable specification of Des Moines Water Works for its own mains. All private water main materials shall also comply with applicable plumbing code requirements.

505.9.1.3 The owner of a private water main shall be solely responsible for all costs of installing, operating, and maintaining the private water main in good condition and shall be solely liable for any and all loss, damage or injury to persons or property arising from the installation, ownership,

maintenance, or use of the private water main.

- 505.9.1.4 Des Moines Water Works shall have no responsibility for any costs of installing, operating, and maintaining any private water main and shall not be liable for any and all loss, damage or injury to persons or property arising from the installation, ownership, maintenance, or use of the private water main.
- 505.9.1.5 System development fees for private water mains will be assessed based on the size of the connection to a Des Moines Water Works owned water main unless individual metered service connections are made off of the private water main in which case fees will be assessed as if the individual metered connections were made to a Des Moines Water Works owned water main.
- 505.9.1.6 Private water mains must be located within public access way, pursuant to an easement in a form approved by Des Moines Water Works and filed of record for the benefit of all property served by the main and for the benefit of Des Moines Water Works.

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505.9.2 JOINTLY OWNED PRIVATE WATER MAINS

- 505.9.2.1 A jointly owned private water main is a privately owned and maintained water line used to provide service to multiple service line connections on multiple qualifying properties. Jointly owned private water mains may provide fire service, domestic service, or a combination of fire and domestic service to properties not more than one of which has frontage on public right-of-way.
- 505.9.2.2 Qualifying properties must be adjoining, must not be separated by public right-of-way, and not more than one of the properties can have frontage on

public right-of-way.

505.9.2.3 In addition to the General Requirements set forth in 505.9.1 above the following conditions shall be met for jointly owned private water mains:

505.9.2.3.1 An Iowa Department of Natural Resources Construction Permit must be obtained through Des Moines Water Works for construction of new or alterations to existing jointly owned private water mains prior to the start of construction.

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505.9.2.3.2 Maintenance and repair responsibilities and liabilities for jointly owned private water mains serving multiple properties shall be shared among all property owners who own properties which receive service from the main. The liability of such owners shall be joint and several, except to the extent otherwise approved by Des Moines Water Works for good cause. The owners shall jointly and severally indemnify and hold harmless, Des

Moines Water Works, and its respective officers, employees, trustees, and agents from any and all loss, damage or injury to persons or property arising from the installation, ownership, maintenance, or use of the jointly owned private water main.

505.9.2.3.3 An easement document containing provisions covering maintenance, repair and ownership responsibilities consistent with the provisions of this Rule 505.9, in a form approved by Des Moines Water Works must be executed, must contain a legal description of the affected properties, must run with the land, must be filed of record with the County Recorder, and a copy of the easement must be provided to Des Moines Water Works before the jointly owned private water main connection or a new connection to an existing jointly owned private water main will be made.

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505.9.2.3.4 System development fees for connections made to jointly owned private water mains serving multiple properties will be assessed as if the connections were made to a Des Moines Water Works owned water main.

505.9.3 TRANSMISSION MAINS

Private water mains shall not tap Des Moines Water Works owned transmission mains without permission from

Des Moines Water Works. Such permission may be contingent upon the requirement to provide redundant connections to the transmission main.

505.9.4 SERVICE LINES SERVED FROM PRIVATE WATER MAINS

505.9.4.1 Buildings, business units or town homes which do not front a public water main shall be served from a private water main meeting the requirements of Section 505.9.

505.9.4.2 Buildings, business units or town homes that front public right-of-way may tap an available public water main or a private main.

505.9.4.3 Individual service lines connected to a private water main shall meet all requirements of Des Moines Water Works Rules and Regulations and applicable plumbing codes.

505.9.4.4 Ownership of individual service lines from a private water main to the building, business unit or town home, including maintenance responsibility, shall be defined in the lease or association agreement.

505.9.4.5 Individual service lines in manufactured home complexes connected to a private water main shall be installed, owned, and maintained by the complex owner.

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505.9.5 DUPLEX/FLAT

Duplexes/flats shall not be served through a private water main.

505.9.5.1 Duplexes/flats shall install water service in one of the following ways:

- a. Install individual taps, individual stop boxes, and individual meters for each living unit.
- b. Install one tap, one stop box, and one meter

to supply both living units. (See 509.5
Metering of Duplexes/Flats)

For the purpose of this section, multiple duplexes/flats owned by one common owner will be considered an apartment complex and can be served from a private water main.

505.9.6 METERING OPTIONS

Multiple metering options are available for buildings, business units and town homes served from private water mains. In general, only one meter will be installed for each individual service line connected to a private water main. See metering requirements in Section 509.

505.9.7 SUBMITTAL PROCEDURES

505.9.7.1 The following must be submitted, reviewed, and approved before a private water main connection to a Des Moines Water Works owned water main can be approved:

505.9.7.1.1 Site plan including the following minimum information:

- a. Existing Des Moines Water Works owned water mains with main size and relative location with respect to right-of-way lines and existing curb lines.

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- b. Location of the proposed taps, valves, hydrants, and fittings.
- c. Routing of proposed private water main within public right-of-way and on private property. In general, valves located on private property for the individual fire and domestic service(s) must be located in paved, non-parking areas such as driveways and sidewalks.

Valves must be located in such a manner as to permit operation by the Des Moines Water Works 24 hours a day.

- d. Location of existing and proposed building(s) on property to be served by the private water main.
- e. Legal description of property to be served.
- f. Proposed paved areas including parking lots, driveways, and sidewalks.
- g. North arrow and any dimensions required for clarity.
- h. Include statement that all private water main work shall be completed in accordance with Des Moines Water Works Standard Specifications.

505.9.7.1.2 Fire flow requirements and the riser detail (if applicable for the project).

505.9.7.1.3 Load profile for any domestic or process service line 2" or larger in diameter. (See Section 503.2.1.5)

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505.9.7.1.4 City of Des Moines Fire Marshall review form granting approval for the fire service, where applicable.

505.9.7.1.5 "System Development Fee" payment (See Schedule of Charges, Section 511).

505.9.7.1.6 Mechanical details showing the location and type of backflow prevention device to be installed, if required.

505.9.7.2 Once items 1-6 above have been received and approved by Des Moines Water Works the owner's representative may contact Des Moines Water Works to enter a tap request.

505.9.7.3 One (1) "as-built record drawing" of the private water main shall be submitted to the Des Moines Water Works within 30 days of its construction and before the meter is set, unless otherwise approved by the Des Moines Water Works

505.9.8 PRESSURE TESTING

505.9.8.1 All private water mains and appurtenances shall be tested for leakage in compliance with applicable plumbing code requirements.

505.9.8.2 The Plumbing Contractor shall notify Des Moines Water Works when the private water main is installed and ready to be filled for pressure testing and disinfection.

505.9.8.3 The pressure test, when applied to private water mains, may or may not be witnessed by Des Moines Water Works personnel since these services are under the jurisdiction of the Building Inspection Department. Therefore, a certificate of compliance shall be submitted to Des Moines Water Works stating the test pressure has been performed and listing duration of test, total leakage, allowable leakage, and stating that the test met all requirements.

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505.9.9 DISINFECTION

505.9.9.1 Following satisfactory pressure tests all private water mains shall be disinfected, sampled, and tested as follows:

505.9.9.1.1 The form of chlorine used and the procedures for disinfection shall be as outlined in AWWA Standard C-651. A minimum free residual chlorine concentration of 10 mg/l shall be maintained for the 24-hour

disinfection period.

505.9.9.1.2 After the 24-hour disinfection period, the private water main shall be flushed to remove all free chlorine.

505.9.9.1.3 Immediately following flushing of the private water main and again at least 24 hours after flushing, samples of water from the private water main shall be taken to be tested by Des Moines Water Works. Approximately one sample will be taken for each 1,200 feet of private water main. Test results will be available 24 hours from the time when the samples were submitted for testing. Samples must show the absence of coliform organisms and other contaminants and must meet requirements of the Iowa Department of Natural Resources to be considered acceptable. Water used for flushing and sampling shall be provided by the Des Moines Water Works for up to 2 flushing and sampling procedures, if required, to pass laboratory tests.

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If either of the first two sets of samples do not pass laboratory tests, the piping represented by those samples must be flushed and rechlorinated by the Contractor at the discretion of, and as directed by Des Moines Water Works. Any labor and equipment costs incurred by the Des Moines Water Works for further disinfection, flushing, or sampling shall be billed to the Plumbing Contractor.

505.9.10

WATER MAIN EXTENSIONS FOR BENEFIT OF SPECIFIC PROPERTIES

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Each water service must tap in front of the property to be served. Not all properties have access to existing water mains. In cases where service is desired and there is no water main, a new water main must be installed at the expense owner or owners requesting service. The need for a water main extension will be evaluated during the water service application process. The property owner or owners will be advised of the need for a water main extension and given the option to proceed with installation at their expense.

If the property owner or owners chooses to proceed with installation of a water main extension the new water main will be installed by a Des Moines Water Works' contracted installer and the cost of the installation, including inspection and administration costs must be paid in full in advance by the property owner or owners.

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505-20 CROSS CONNECTIONS AND BACKFLOW PREVENTION (revised January 2024.)

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506.1 GENERAL

- 506.1.1 Cross connections from any well or other source of water to any piping system connected to the Des Moines Water Works distribution mains are prohibited.
- 506.1.2 The customer shall be responsible for ensuring that no cross connections exist within their premises starting at the water service entrance unless approved backflow prevention is installed.

- 506.1.3 The customer shall prevent pollutants and contaminants from entering their facility's potable water supply system or the Des Moines Water Works distribution mains by all means necessary to prevent backflow.
- 506.1.4 All water-using devices must be so designed that backflow to the distribution system cannot occur.
- 506.1.5 Where harmful contaminants or pollutants are used with any device or process connected to the water system, the customer must install and maintain an approved testable reduced pressure backflow prevention assembly in accordance with these Rules and Regulations and any applicable plumbing code requirements.
- 506.1.6 All permanently installed underground irrigation systems shall contain an approved testable backflow prevention assembly at the water service entrance designed to prevent backflow to the Des Moines Water Works distribution system.
- 506.1.7 Decommissioning an irrigation system must be done in a manner that does not create a potential future cross connection. Capping an irrigation system outside the building does not meet the requirements. The system must be permanently terminated in the basement at the tee that serves the irrigation line by removing the tee or permanently capping the tee, not by just installing a threaded fitting or push on SharkBite fittings. All notices and late fees will continue until either the backflow device is tested or correct termination can be confirmed by Des Moines Water Works. See Figures 13-D, 13-E.
- 506-1
- 506.1.8 All newly constructed fire suppression systems shall contain an approved testable backflow prevention assembly at the water service entrance designed to prevent backflow to the Des Moines Water Works distribution system.

Wet pipe fire systems without chemical require a minimum of a double check assembly. Wet pipe that contains chemicals such as anti-freeze, fire extinguishing foams, any hazardous substance, or any similar substance, is a contamination hazard and should be protected with a reduced pressure principle assembly.

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506.2 BACKFLOW PREVENTION (Revised January 2024)

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- 506.2.1 All new and existing service lines are subject to the requirements of the State of Iowa and any applicable local Plumbing Codes respecting backflow prevention and in addition are also subject to the specific requirements set forth in these Rules and Regulations. State of Iowa requirements are set forth in the Rules of the Public Health Department, Chapter 25 State Plumbing Code, Rule 25.1, 641 I.A.C 25.5. City of Des Moines requirements are set forth in Section 26-614 of the Des Moines Municipal Code. The Des Moines Water Works acts as an administrative authority under the State of Iowa, City of Des Moines, and other municipal and county plumbing codes, and also under its own authority under Chapter 388, Code of Iowa. The backflow protection requirements of these Rules and Regulations are in addition to any applicable Plumbing Code.
- 506.2.2 An approved backflow prevention assembly for containment as defined in applicable State and local plumbing codes shall be installed at the domestic water service entrance as a condition of service to all newly constructed or remodeled commercial buildings. For the purposes of these Rules and Regulations, any upgrade to an existing service line is deemed a new service.
- 506.2.3 An approved backflow prevention assembly for containment shall be installed at the water service entrance in any existing service where an actual or potential cross connection to non-potable or hazardous substances exists, is created, or is identified by the Des Moines Water Works. All commercial, multi-tenant properties are deemed to have a potential for cross connections to non-potable or hazardous substances.
- 506-2
- 506.2.4 Properties using non-testable Backflow devices on boilers will be required to have a Reduced Pressure Zone device installed immediately after the water meter on the incoming water service.
- 506.2.5 Private wells and any piping served by a private well shall be physically disconnected from any plumbing pipes and fixtures that will be connected to Des Moines Water Works' distribution system. If a well will be left in service, no well equipment or piping shall be allowed to remain in the building even if it is physically separated or isolated with a valve. An approved reduced pressure zone backflow prevention assembly will be required at the service entrance.

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506.3 INTERCONNECTED SERVICES AND/OR FIRE LINES

Where a customer is served by two or more inter-connected services and/or fire lines connected to different Des Moines Water Works distribution mains or different sections of distribution mains, the customer shall install and maintain, at customer's expense, on each service and/or fire line, an approved check valve according to the latest edition of the AWWA Standard C508.

This check valve shall be installed in an access manhole and shall be located on private property just inside the property line. Even though the check valve is located on private property, Des Moines Water Works personnel shall at all times have the right of access to it and the installation of such check valve shall be deemed to grant a license for such access.

506.4 ADMINISTRATION & ANNUAL TESTING (Revised January 2024)

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506.4.1 Backflow protection requirements shall be administered by the Utility Incident Manager of the Des Moines Water Works (the "Backflow Program Manager").

506.4.2 The Backflow Program Manager may withhold approval to commence water service to a new service line until all backflow requirements are met.

506-3

506.4.3 The Backflow Program Manager shall investigate service provided to existing service lines to determine the degree of cross contamination hazard that may exist or potentially exist and may require customers to provide a Water Usage Inventory to allow evaluation of degree of hazard at any existing service line or may request access to the location served for purposes of inspection of water usage. If a customer fails to timely and fully complete a Water Usage Inventory, or fails to provide access upon request, a high hazard condition shall be deemed to exist.

506.4.4 If the Backflow Program Manager finds a high hazard condition or other cause to require installation of backflow

protection, the Backflow Program Manager shall order installation of the required backflow protection device or devices and shall give written notice by mail or hand delivery to the customer of such order (the "Installation Notice").

- 506.4.5 If the customer fails to complete installation pursuant to an Installation Notice, or to notify the Backflow Manager of appeal pursuant to Rule 500.2 within fifteen (15) days of the date the Installation Notice is mailed or delivered, then the water service at the affected service line shall be terminated until such time as the required installation is made.
- 506.4.6 The customer shall cause each backflow prevention assembly installed in his, her or its facility to be tested annually by a backflow prevention assembly technician registered with the Iowa Department of Public Health. Such test shall be due on an annual testing date for such premises specified by the Backflow Program Manager to the customer (the "Annual Backflow Test Date"). A report of each such annual test shall be submitted to the Backflow Program Manager using the method prescribed by the Backflow Program Manager. The required test and report shall be past due if the test is not performed and the report of the test received by the Backflow Program Manager by the Annual Backflow Test Due Date.

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- 506.4.7 An administration fee will be applied to the customer's account annually for each backflow prevention assembly installed at the property as provided in the Schedule of Charges.
- 506.4.8 Any failure to have backflow devices that are categorized as containment backflow prevention assemblies to be tested and a report thereof to be received by the Backflow Program Manager by the Annual Backflow Test Due Date will result in the imposition of late fees as provided in the Schedule of Charges. [If there is continued non-compliance with the rules,](#)

then water service may be terminated due to failure to submit passing backflow test.

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- 506.4.9 DMWW may refuse to accept backflow test reports from certain technicians or companies even if the technicians are registered with the Iowa Department of Public Health when, in the experience of the Backflow Program Manager, the technician or company that employs the technician has established a pattern of failing to provide timely, complete, legible, consistent, or accurate test reports to DMWW on behalf of DMWW customers. The Backflow Program Manager may also refuse to accept backflow test reports from certain technicians or companies if it becomes apparent to DMWW that the technician or company are not actually performing backflow tests or are otherwise improperly reporting the results of testing or repairs made to backflow prevention assemblies. DMWW will only disallow test reports from a particular technician or company that employs technicians after DMWW provides notice to the company or the technician, and DMWW provides the company or technician a reasonable opportunity to correct the deficient test procedures.

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If the customer, or a company or technician on behalf of a customer, provides a test report from a technician or company that DMWW has determined does not provide acceptable backflow test reports, DMWW will provide the customer with written notice that the test report submitted for the customer is insufficient, and the customer must obtain a backflow test report from another technician or company. DMWW will give the customer an extension of 30 days from the date the customer receives the notice specified in this section, or 30 days from the Annual Backflow Test Date, whichever is later, to provide a backflow test report from another technician or company. The deadline for providing a complete and accurate test report may be extended in the discretion of the Backflow

Program Manager for good cause.

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507 PUBLIC FIRE PROTECTION

507.1 OPERATION OF FIRE HYDRANTS

- 507.1.1 Public fire hydrants are installed primarily for fire protection. They may also be used by the Des Moines Water Works to flush water mains and by other governmental agencies for street and sewer flushing.
- 507.1.2 Others may use hydrants by license agreement with the Des Moines Water Works under the conditions and rates established by the Board for such services. Hydrants shall not be used for any other purpose without express permission of

the Des Moines Water Works.

507.2 PENALTY FOR UNAUTHORIZED USE

Anyone who shall operate or attempt to operate a fire hydrant without permission of the Des Moines Water Works may be prosecuted as provided by law and outlined in Section 511-Schedule of Charges.

507.3 RELOCATION OF PUBLIC FIRE HYDRANTS

- 507.3.1 Where an existing public fire hydrant interferes with a property owner's use or proposed use of his property, the hydrant may be relocated at the property owner's expense. Approval from the Fire Protection Authority and the Des Moines Water Works must be obtained prior to any work being done.
- 507.3.2 Where the grade of an existing street or property is changed at the request of the property owner, such that an existing public fire hydrant will not be at the proper elevation with respect to the ground, the hydrant will be raised or lowered at the expense of the property owner.

507.4 OBSTRUCTION OF HYDRANTS

- 507.4.1 Nothing shall be erected or planted which shall interfere with the use of a fire hydrant. Sufficient clearance shall be maintained around the hydrant to permit easy connection of hoses and full circle operation of the hydrant using regular hydrant wrenches and hose spanners.
- 507-1
- 507.4.2 Shrubs, trees, flowers, or weeds shall not be planted nor permitted to grow so as to prevent full view of a fire hydrant from the street.

507.5 PAINTING OF PUBLIC FIRE HYDRANTS

Painting of fire hydrants will be done by the Des Moines Water Works only. The hydrant bonnets are color coded in accordance with National Fire Protection Association (NFPA) standards to show the amount of water that can be discharged out of them.

BONNET COLOR

GPM

Green	1,000 or greater
Orange	500 - 1,000
Red	less than 500

In addition, hydrants on feeder mains shall have caps painted the same color as the bonnet.

507.6 Red banding on hydrants will be done by Des Moines Water Works personnel only. This will show that these are out of service.

507.7 All fire hydrants shall meet Des Moines Water Works specifications with the exception of specifications that conflict with local fire districts for direction open, nozzle / barrel sizes, operating nut size etc. Local fire district specifications take priority. (See table below). (Revised January 2024)

Fire Hydrants		DMWW Winnebago Heights Polk County PCRWDe1	Pleasant Hill Ruralco	Alleman	Ankeny	Cumming	Johnston	Berwick
Open Direction		Clockwise (right)	Counterclockwise (left)	Counterclockwise (left)	Counterclockwise (Left)	Counterclockwise (left)	Counterclockwise (left)	Counterclockwise (left)
Hose Nozzle Diameter		2-1/2 inch	2-1/2 inch	2-1/2 inch	2-1/2 inch	2-1/2 inch	2-1/2 inch	2-1/2 inch
Outside diameter of male thread		3-1/16	National Standard	National Standard	National Standard	National Standard	National Standard	National Standard
Diameter at root of male thread		2-7/8	Nozzle Threads	Nozzle Threads	Nozzle Threads	Nozzle Threads	Nozzle Threads	Nozzle Threads
Threads per inch		7-1/2						7-1/2
Length of nozzle threads		1 inch						
Cut off at top of threads		1/4 inch						
Pumper Nozzle Diameter		4-inch	5-inch Storz Adapter	4-1/2 inch	4-1/2 inch	4-1/2 inch	4-1/2 inch	4 - 1/2 inch
Outside diameter of male thread		4-31/32		National Standard	National Standard	National Standard	National Standard	National Standard
Diameter at root of male thread		4-19/32		Nozzle Threads	Nozzle Threads	Nozzle Threads	Nozzle Threads	Nozzle Threads
Threads per inch		4						4
Length of nozzle threads		1-1/2 inches						
Cut off at top of threads		1/4 inch						
Point to flat on operating nut		1-3/16	1-3/16	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2
Shoe diameter		6-inch	6-inch	6-inch	6-inch	6-inch	6-inch	6-inch
Main valve diameter		4-1/2 inch	4-1/2 inch	5-1/4 inch	5-1/4 inch	5-1/4 inch	5-1/4 inch	5-1/4 inch
Hydrant Isolation Valves								
Open Direction		Clockwise (right)	Counterclockwise (left)	Counterclockwise (left)	Counterclockwise (left)	Counterclockwise (left)	Counterclockwise (left)	Counterclockwise (left)

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508 PRIVATE FIRE PROTECTION

508.1 DEFINITION OF PRIVATE FIRE PROTECTION SYSTEM

Private fire protection systems consist of a fire service connection to the Des Moines Water Works main and any or all of the following: standpipe(s), automatic sprinkler system(s), fire pump(s), or fire hydrant(s).

508.2 OPERATION OF PRIVATE FIRE PROTECTION SYSTEMS

Private fire protection systems are installed primarily for fire protection for the property on which they are installed and are not to be used for any other purpose without the express written permission of the Des Moines Water

Works.

508.3 PERMIT FOR INSTALLATION OF PRIVATE FIRE PROTECTION SYSTEM

See Section 503.7.1.

508.4 DESIGN OF PRIVATE FIRE PROTECTION SYSTEMS

Fire service connections and fire lines shall comply with applicable portions of Sections 505.3, 505.4, and 505.5 of these Rules and Regulations.

508.5 COMBINATION SERVICE FROM FIRE LINE

A combination domestic and fire line as outlined in Section 505.7 of these Rules and Regulations may be installed if approved by the owner's fire underwriter. Domestic service branches and residential fire sprinkler branches shall be metered in accordance with Section 509 of these Rules and Regulations.

508.6 ALTERATIONS TO PRIVATE FIRE PROTECTION

When requested by the owner and approved by the Des Moines Water Works, a private fire system can be altered by a building owner who shall be responsible for any fees charged by the Des Moines Water Works.

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508.7 PRIVATE FIRE HYDRANTS (revised January, 2024)

Deleted: 2020

508.7.1 Fire hydrants located on privately owned property, or on streets not dedicated to public use, are the responsibility of the owner and are to be used for fire protection only. These hydrants are designated "private fire hydrants".

Where it is the owner's intention that these hydrants be used by the public fire department, these hydrants shall conform to the requirements of Section 507 of these Rules and Regulations and also to the Des Moines Water Works specifications with the exception of color. Private fire hydrants shall be red in color. Copies of the Des Moines

Water Works hydrant specifications are on file at Des Moines Water Works, 2201 George Flagg Parkway, Des Moines, Iowa. (Figure 24)

- 508.7.2 Private hydrants installed at the owner's expense, in accordance with these Rules and Regulations, for use by public fire departments, must be reviewed by the Des Moines Water Works and the Fire Department. Replacement of obsolete hydrants and repair or replacement of hydrants, broken parts, or damage caused by physical abuse or improper operation will be done at the owner's expense. Standards are available upon request to Des Moines Water Works.
- 508.7.3 Each fire service connected to the Des Moines Water Works' owned and/or operated distribution system shall be charged at the rate established by the Board. For looped systems, an annual charge shall be collected for each connection to the Des Moines Water Works' owned and operated distribution system. (See Section 511.5)

508.8 PENALTIES FOR IMPROPER USE

When the owners or occupants of any premises are found to be using water from a private fire protection system for purposes other than fire protection, the Des Moines Water Works may discontinue fire service. The Des Moines Water Works also reserves the right to require the installation of an approved fire line meter, or an additional line and meter, at the owner's expense. A penalty may also be imposed against the property owner at a rate as established by the Board.

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508.9 RESIDENTIAL FIRE SERVICES

- 508.9.1 No fire service shall be allowed on a water service line smaller than 1" in diameter.
- 508.9.2 A backflow device is required on all residential fire services except web fire sprinkler systems.
- 508.9.3 Unmetered residential fire services shall be subject to annual fire protection charges at a rate established by the Board (See Section 511.5)
- 508.9.4 Web fire sprinkler systems require a single UL listed and/or FM

approved fire service/domestic meter for the combined domestic and fire sprinkler system (Figure 33B). The Web fire sprinkler system does not require a backflow device because the sprinkler system is intermingled with the home's cold-water plumbing system to provide water to the both the water fixtures and fire sprinklers.

Web fire services can only be used on 1" through 2" diameter service lines. A web fire sprinkler system cannot be used if the fire service/domestic meter cannot accommodate the maximum required fire flow of the designed fire sprinkler system.

- 508.9.5 Dedicated fire services (Fire service only) are required to be metered with a UL listed and/or FM approved fire service meter, unless the fire service meter cannot accommodate the maximum required fire flow of the designed fire sprinkler system (Figure 33A). Unmetered residential fire services shall be subject to annual fire protection charges.
- 508.9.6 Combination fire & domestic services are required to be metered with a UL listed and/or FM approved fire service meter unless the fire service meter cannot accommodate the maximum required fire flow of the designed fire sprinkler system. Unmetered residential fire services shall be subject to annual fire protection charges. A combination fire and domestic service shall split before the domestic meter (Figure 33).
- 508.9.7 Irrigation systems are not allowed to tap a residential fire sprinkler system.

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508.10 COMMERCIAL FIRE SERVICES (Inside Building)

- 508.10.1 No fire service shall be allowed on a water service line smaller than 1" in diameter. Des Moines Water Works retains the discretion to approve any connection for commercial fire service based on the water pressure available at the location. Des Moines Water Works may refuse to permit a connection for commercial fire service if it determines that the available water pressure is insufficient. If available pressure is close to the threshold deemed advisable for commercial fire service, Des Moines Water Works may permit the installation of the fire service if the applicant executes a release and waiver of claims against Des Moines Water Works.

- 508.10.2 A combination fire and domestic service shall split before the domestic meter (Figures 20 & 20A).
- 508.10.3 A backflow device is required on all commercial fire services whether potable pipe or black iron pipe is used.
- 508.10.4 Each fire service connected to the Des Moines Water Works' owned and/or operated distribution system shall be charged at the rate established by the Board. For looped systems, an annual charge shall be collected for each connection to the Des Moines Water Works' owned and operated distribution system. (See Section 511.5)
- 508.10.5 Web fire sprinkler systems are not allowed for commercial properties.
- 508.10.6 Irrigation systems are not allowed to tap a commercial fire sprinkler system.

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509 WATER METERS

509.1 GENERAL

Deleted: (Revised January 2021)

All connections to DMWW's water mains must be metered except:

- 509.1.1 Water authorized by the Des Moines Water Works for the use of other governmental subdivisions for the purpose of firefighting or street and sewer flushing.
- 509.1.2 Water used in flushing or maintaining new and existing mains under the supervision of the Des Moines Water Works.

- 509.1.3 Water for special purposes or demonstrations when approved by the CEO and General Manager, or designated representative.
- 509.1.4 If a straight connection is used in place of a meter for testing the plumbing, the straight connection must be removed before the Plumbing Contractor leaves the premises. If it is necessary to leave the straight connection in for any reason, it is the Plumbing Contractor's responsibility to call the Supervisor of Field Customer Service at Des Moines Water Works and request permission to do so. Failure to do so may result in a penalty levied against the customer.
- 509.1.5 Once a building is framed and sheeted the contractor is required to call Des Moines Water Works to have a construction meter set. This meter will be in place prior to any water being used. Once this meter is in place it may be used to settle ditches and foundations as well as being used for general purpose needs. Failure to do so may result in a penalty levied against the customer.

509.2 RESIDENTIAL

- 509.2.1 Each single-family dwelling must have its own meter.
- 509.2.2 Residential fire sprinkler lines must be metered using a UL listed, FM approved water meter accepted for use on fire services and domestic water lines.

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509.3 MULTI-UNIT METERING (TOWNHOMES, CONDOMINIUMS, APARTMENTS, AND SHOPPING CENTERS)

There are four options for metering multi-unit properties, such as townhomes, condominiums, apartments, and shopping centers as follows:

- 509.3.1 Option 1. Install meters on each individual water service to each individual unit. When the individual water service option is utilized, no master meter will be installed. Each water service must comply with these Rules and Regulations for water service installation and Des Moines Water Works must be given legal access to the stop box and meter.

509.3.2 Option 2. Where only one stop box exists for multiple units, a meter manifold serving multiple units may be installed in a common room when all of the following conditions exist (Figures 12A & 12B):

509.3.2.1 Meters must be installed in a restricted, permanently heated common room at ground level or in the basement with an outside wall and outside keypad access. Des Moines Water Works must be given and will retain on file the code to gain access. Keys and key cards will not be allowed.

509.3.2.2 Each service must be permanently marked with its corresponding unit.

509.3.2.3 If the property is a rental property when a tenant or customer finalizes their account, the unit will go back in the landlord, association, or property manager's name.

509.3.2.4 If the property is a rental property the landlord or property manager must have on file with Des Moines Water Works a permanent indemnity and waiver agreement for water restoration covering all units. This agreement will allow Water Works to restore water at the tenant's request without verifying the tenant is home, and would further specify the owner assumes all liability for damages in conjunction with a potential burst pipe, open faucets, etc.

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509.3.2.5 Individually metered accounts in multi-unit buildings will follow regular Des Moines Water Works collections policies, including the potential for service termination at the meter, or a lien on the property as allowed by Iowa law or both.

509.3.2.6 All meter settings in a multi-unit building are required to have a swinging check valve installed after the outlet valve. This will prevent the water meters from running backwards. Thermal expansion must also be addressed and installed if needed.

509.3.3 Option 3. Master meter the private water main, with the property owner responsible for all water charges on the master meter.

509.3.4 Option 4. Master meter the private water main and contracting with Des Moines Water Works to provide individualized unit billing and collecting of the rates and charges associated with that water main. Terms and conditions of such service shall be subject to negotiation, execution, and delivery of a mutually acceptable agreement. This arrangement requires that submeters are installed after the master meter. The Des Moines Water Works totals the water usage from those individual meters and subtracts it from the master meter. If a difference exists, the resulting balance will be billed to the owner of the private main. In addition, any unpaid balances on the submeters remaining at fifty (50) days after their rendering, including but not limited to bills for surcharges, shall be transferred to the master or owner's account and shall be paid by the owner in accordance with DMWW's normal collection terms. Any collection efforts with respect to individual units thereafter shall be made solely by the service main owner.

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509.4 MANUFACTURED HOME COMPLEXES

Deleted: (revised January 2023)

There are two options to metering manufactured home complexes as follows.

509.4.1 Option 1. Install meters on each individual water service to each individual unit. Individual meters shall be installed in individual pits (Figure 16A or 16C). When the individual water service option is utilized, no master meter will be installed. Each water service must comply with these Rules and Regulations for water service installation and Des Moines Water Works must be given legal access to the stop box and meter.

- 509.4.2 Option 2. Master meter the private water main serving the complex.

509.5 METERING OF DUPLEXES/FLATS

- 509.5.1 Metering of duplexes/flats with two separate water service lines shall be done with two separate water meters and the property owner may pay both bills; (Figure 5) or a tenant may have an individual account and pay his/her respective bill. If only one water service is installed, the property owner will be responsible for the water bill. (Figure 6)

509.6 TYPES OF METERS

The type and make of meter used will be specified by the Des Moines Water Works. With the exception of irrigation only meters, when a compound, turbine, fire, or special metering device is required for proper metering, special piping will be required to facilitate annual meter testing. (Figures 17 & 18)

509.7 SIZE OF METERS

- 509.7.1 Meter sizing shall be based on flow requirements only and not on pressure loss through the meter. The prospective user or his/her agent shall supply the following information before a meter can be sized.

- a. Maximum rate of flow
- b. Average rate of flow
- c. Minimum rate of flow

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Meters, 5/8" through 1 1/2" will be sized by the Des Moines Water Works based on the recommended applications listed below.

Meter Size	Recommended Applications
5/8"	Demand flow rates 1/8 to 20 gpm Maximum continuous demand 10 gpm
3/4"	Demand flow rates 1/4 to 30 gpm Maximum continuous demand 15 gpm
1"	Demand flow rates 3/8 to 50 gpm Maximum continuous demand 25 gpm
1 1/2"	Demand flow rate 3/4 to 100 gpm

Maximum continuous demand 80 gpm

- 509.7.2 Fire service meters and meters 2" or larger must be sized by the Des Moines Water Works based on information provided by the owner.

509.8 OWNERSHIP

All water meters to be used for billing purposes must be provided by the Des Moines Water Works. The Des Moines Water Works reserves the right to read, inspect, or test the meter at any reasonable time or with such frequency as deemed necessary. Failure by the customer to allow reasonable access to the meter may result in termination of water service. For sewer deduct/irrigation meters see section 509.15.

509.9 INSTALLATION

- 509.9.1 Water meters will be installed by the Des Moines Water Works without charge, except as otherwise provided in these rules or as otherwise provided under specific water or other service agreements. On all meter settings, a properly bonded ground consisting of a copper cable or wire not less than 1/8" diameter shall be installed across the meter setting to avoid electrical shock when the meter is removed. (Figure 13)

- 509.9.2 Meters will be installed on a properly drained concrete or dirt floor allowing water to escape or drain at the time of a meter change or from leakage without causing damage to finished areas.

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- 509.9.3 All water meters will be sealed using an approved cable and locking device. Any meter found to have the sealing device altered or removed will be subject to penalty as outlined in the schedule of charges Section 511.12. "Charges for Unauthorized Use of Water/Meter Tampering".

509.10 METER VALVES

Water meters shall be equipped with a shut-off at each end. Water meters larger than 3" shall have gate valves attached at each end. Spacing required between the inlet and outlet shut-offs for meter installation is as follows: (Figures 1 & 2)

Deleted: (revised January 2020)

<u>Size of Meter</u>	<u>Distance face to face of stops</u>
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5/8"	11 3/4"
3/4"	13 3/4"
1"	15 3/4"
1 1/2" or 2" screw type	30"
1 1/2" flanged type	13 1/4"
2" flanged type	17 1/4"

509.10.1 When 1/4-turn ball valves or quick closing valves are used, they shall be operated in such a manner that pressure surges will not be transmitted to the Des Moines Water Works' distribution system.

509.10.2 Not more than 1 shut-off will be allowed between where the service enters the building and the meter. (Figures 1 & 2)

509.11 METER LOCATION

Deleted: (revised January 2022)

509.11.1 All water meters installed within buildings shall be in a horizontal position, at a height where they may be easily maintained and as near as possible to the point where the water service enters the building.

509.11.2 Meters shall not be exposed to damage by freezing. After a meter has been removed due to freezing, the customer is responsible for making corrections to prevent freezing before a replacement meter will be installed.

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509.11.3 Water meters shall be accessible at all times. No appliances or other fixtures can be built over or in front of the meter setting. If obstructions exist which interfere with meter reading or maintenance of the meter, water service may be terminated until the obstructions are removed.

509.11.4 Installation of a 5/8" through 1" meter shall be as follows:

A 3/4" Pex tubing conduit with pull string shall be installed from the meter to a location deemed appropriate for meter reading equipment, as determined by DMWW. It is the owner/contractor responsibility to ensure a wire can be run to the outside using the 3/4" Pex.

The inlet valve for the meter setting shall not be more than 18" from the point where the service enters the building. (Figures 1-2 & 7-10)

509.11.5 Installation of 1 1/2" to 2" meters shall be as follows:

The inlet valve for the meter setting shall not be more than 36" from the point where the service enters the building.

509.11.6 Meter pits for 5/8" to 2" meters may be required if unusual circumstances exist. If required, the meter pit must meet the following requirements and be installed and maintained at the owner's expense.

Before an existing meter pit is re-used or a new one installed, the Des Moines Water Works shall inspect the proposed installation and determine if the meter pit is necessary to service the customer. Existing meter pits to be reused must meet current meter pit requirements and must be safe to enter.

509.11.6.1 A meter pit is required:

- a. Where a location satisfactory to the Des Moines Water Works is not available inside of the building
- b. When the length of the water service on private property exceeds 250 feet. This does not apply to private water mains (see Section 505.9) or

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- c. When the water service is installed within an easement and crosses property lines.
- d. In rural areas, where the roadway is constructed with a rural cross section (ditches on either side of the road with no curb), subject to the following provisions. A meter pit will not be required in rural areas where the roadway is constructed with an urban cross section. In these areas the meter must be set inside the building (provided the setback limit of 250' is not exceeded, in which case a meter pit will be required). (moved from previous Section 514).

509.11.6.2 Location of pit:

a. Inside City Limits in Des Moines Metro Area:

Meter pits shall be located on private property as near as practical to the property line.

b. Location of pit Outside City Limits in Des Moines Metro Area :

The meter pit shall be located 10' from the water main when the water main is in easement and the property to be served is on the same side of the road as the water main. The meter pit shall be located 10' into private property when the water main is in the ROW or the property to be served is on the opposite side of the road as the water main. (See Figure 37). (moved from previous section 514).

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509.11.6.3 Pit Requirements:

Deleted: (revised January 2020)

a. Inside City Limits in Des Moines Metro Area:

5/8" through 1" meters can utilize a standard meter pit see figure 16 or a Mueller/Hunt Thermal-Coil meter pit see figure 16 C.

1 1/2" and 2" meters will require a standard meter pit see figure 16.

Under no circumstance will a Mueller/Hunt

Thermal Coil meter pit be installed within 5 feet of a driveway, in a sidewalk or any portion of a roadway.

- b. Outside City Limits in Des Moines Metro Area (moved from previous section 514):

Meter pits shall be Mueller / Hunt Thermal-Coil Meter Box, tandem set design for a water meter in position one and a pressure-reducing valve in position two. Provide 66" deep pit 15" diameter for 5/8" meters or 18" diameter for 3/4" or 1" meters. Provide meter pit with lock-wing angle ball valve inlet, Watts 5M3-Z6 or approved equal 3/4" pressure reducing valve, dual check valve meter outlet, 4" insulation pad, flat non-locking metal lid, and a second flat non-locking metal lid as the base.

See detail of Mueller/Hunt Thermal-Coil Meter Pit at Figure 16A.

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509.11.6.4 Pit abandonment:

When a meter is removed from a meter pit and the pit is not to be re-used, it is the responsibility of the property owner to see that the rim and lid are removed, the valves are removed from the service line and the pit filled in to grade with an appropriate substance. Before the pit is filled in, the property owner must notify the Des Moines Water Works so that it may verify that the valves have been removed from the service line.

509.11.6 For meters set inside of buildings, meters 3" and larger shall

be set level and in a horizontal position on a solid floor or solid base not more than 24" high. There must be at least 6' clearance above and not less than 12" behind the meter. Meters may be suspended or supported by the piping. There shall be an adequate floor drain or pit within 5' of the meter setting for disposal of water. An outside test header will be installed in a suitable location so that the meter can be tested annually, with the exception of irrigation only meters. (See Bypass and Test Header Specifications, Figure 21)

- 509.11.8 No devices or connections of any kind, such as regulators or check valves, shall be installed between the meter outlet and the test tee.

509.12 METER PITS FOR 3" METERS AND LARGER (Revised January 2024)

Where unusual circumstances exist, or the length of the water service on private property exceeds 250 feet, an outside meter will be required. If required, the meter must be installed in a pit constructed at the owner's expense to meet the following requirements. See figures 17-18.

- 509.12.1 The pit shall be of reinforced concrete, pre-cast concrete or concrete block construction. See Figures 17 – 18.

- 509.12.2 The pit shall be not less than six, or more than eight, feet in depth.

- 509.12.3 The pit shall have concrete roof and floor slabs.

- 509.12.4 The pit shall have a 48" X 48" square hatch with compression spring operators. If meter pit is in the Right of Way, a traffic rated lid is required instead of a hatch. 509-10

- 509.12.5 The pit roof slab shall be removable for meter installation or a secondary access large enough to allow the meter to be removed shall be provided directly over the meter setting.

- 509.12.6 There shall be a minimum distance of 10' between the meter pit and any hydrant or standpipe.

- 509.12.7 A 3/4" Pex tubing conduit with pull string shall be installed from the meter to a location deemed appropriate for meter reading equipment, as determined by DMWW. It is the owner/contractor responsibility to ensure a wire can be run to the outside using the 3/4" Pex.

509.13 METER BY-PASS

- 509.13.1 By-pass lines for emergency service will not be permitted

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around meters 2" in diameter or less except in cases where the customer also provides a meter in the by-pass line or when a turbine or compound meter is used.

509.13.2 By-pass lines around meters 3" and larger must be locked and sealed to prevent accidental usage.

509.13.3 By-pass lines must be designed, valved, and installed in accordance with these Rules and Regulations. (Figures 17-18 & 21). No by-pass will be required on a 3" or larger meter if it is an irrigation only meter.

509.14 MAINTENANCE

The Des Moines Water Works will provide the following maintenance on the meter:

509.14.1 Residential:

509.14.1.1 Repair or replace the meter with a new or rebuilt meter of the same size if the meter becomes inoperative through no fault of the customer. If there is evidence of physical damage externally or to the interior of the meter from hot water, freezing, or other casualties, through carelessness or neglect by the customer, the customer will be billed for the cost of repairs.

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509.14.1.2 The Des Moines Water Works may test or exchange the meter periodically to ascertain its accuracy.

509.14.1.3 The Des Moines Water Works will test any meter upon application by the customer. If the meter testing results fall within American Water Works Association (AWWA) standards, the customer will be billed a fee equal to one (1) hour of labor at the labor rate as established by the Board and provided in Section 511 of these Rules and Regulations.

509.14.2 Industrial and Commercial:

509.14.2.1 Positive displacement meters 2" and smaller will be maintained in the same manner as residential meters.

509.14.2.2 Compound and Turbine meters 3" and larger will be repaired at no cost to the property owner providing there is no evidence of physical damage as described above.

509.14.2.3 Water meters shall be equipped with shut-off valves at each end. Water meters larger than 2" shall have shut-off valves attached at each end and the outlet end of the meter shall be provided with a 4" tee fitting for testing purposes. The branch of the tee shall face upwards and be provided with a 4" valve threaded cap and plug. (Figures 17, 18 & 21)

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509.15 SEWER DEDUCT/WATER ONLY METERS

Deleted: (revised January 2023)

509.15.1 Sewer deduct meters are meters that measure a portion of the water which has already been metered by another meter for deduct billing purposes. The installation of these meters will be performed as permitted by the appropriate local ordinance for the purpose of measuring water not returning to the sewer system. Meters need not be located at or near the service entrance. Property owners are responsible to provide and install sewer deduct meters, but meters must be approved (manufacturer, make, and model) by DMWW in order to ensure they are readily compatible with DMWW's reading and billing systems. All maintenance, repairs, and testing of sewer deduct meters will be by the Des Moines Water Works, at the owner's expense. Sewer deduct meters apply to DMWW's service areas of City of Des Moines, City of Windsor Heights, City of Cumming, City of Runnells, and unincorporated Polk County. Sewer deduct meters that are connected to the same service line

as the domestic meter, shall be billed to the same account as the domestic meter.

509.15.2 Water only meters are meters that have not had the water previously registered by another meter. The amount of water measured by the water only meter is added to the bill but is not charged sewer rates. Such meters are installed on a tee off the inlet service line right after the inlet valve. Water only meters must be approved (manufacturer, make, and model) by DMWW in order to ensure they are readily compatible with DMWW's reading and billing systems. Water only meters that are connected to the same service line as the domestic meter, shall be billed to the same account as the domestic meter. Water only meters are permitted only in the City of Pleasant Hill.

509.15.3 In cases where there is not a master meter, for multi-unit development, there must be a sperate tap and service line for irrigation that meet specifications in DMWW's Rules and Regulations.

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509.16 SUB-METERS

Deleted: (revised January 2019)

Sub-meters are meters installed by the customer to measure water usage downstream of Des Moines Water Works' meter. Sub-meters are not read or billed by the Des Moines Water Works unless under contracted services. Sub-meters may be repaired by Des Moines Water Works at the owner's expense, provided they are delivered to Des Moines Water Works. All meter settings are required to have a swinging check valve installed after the outlet valve. This will prevent the water meters from running backwards. Thermal expansion must also be addressed and installed if needed.

509.17 CHANGES IN LOAD

In cases where changes in water consumption result in a meter being substantially undersized or oversized, Des Moines Water Works may need to install a larger or smaller meter. Any alterations required in the meter setting will be at the owner's expense.

509.18 HYDRANT METERS

509.18.1 ELIGIBILITY AND REQUIREMENTS

The Des Moines Water Works may issue hydrant meters to qualified contractors or civic organizations when alternate methods of water supply are not available. The Water Board reserves the right to decline hydrant meter service to any applicant not deemed qualified to meet the requirements of this rule. Meters shall be issued for a specified time period not to exceed eight (8) months. At the time of application, the applicant shall state the location and purpose for which the meter will be used, the name and telephone number of a contact person, and why water is not available from another source.

As used in this rule, “hydrant meter” shall mean and include a hydrant meter together with valves, fittings, and operational tools.

All hydrant meters will be handled on a first-come/first-serve basis. City, County, and State projects will be given higher priority.

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Des Moines Water Works reserves the right to determine the proper size of the hydrant meter based upon the use and location of the hydrant meter.

Des Moines Water Works reserves the right to determine the use of a hydrant meter to serve a concrete batch plant. If a concrete batch plant is going to be in service for three (3) months or longer it will not qualify for a hydrant meter. It will be required to install an individual service line in accordance with section 503.1 of the Des Moines Water Works Rules and Regulations.

All hydrant meters issued from Des Moines Water Works shall be used only in the areas served directly by Des Moines Water Works. Des Moines Water Works’ hydrant meters may NOT be used in other suburbs or areas that provide their own hydrant meters.

Des Moines Water Works reserves the right to inspect and test hydrant meters at its discretion. The applicant must make the hydrant meter available within 48 hours of any inspection request.

It is the responsibility of the applicant to use the hydrant meter in a safe and proper manner and to keep the hydrant meter secured at all times, even when it is not in use. Unsecured hydrant meters may be repossessed by Des Moines Water Works.

509.18.2 DEPOSIT AND AGREEMENT

A deposit, as established by the Board, must be paid at the time a hydrant application is made with Des Moines Water Works at 2201 George Flagg Parkway. Des Moines Water Works will hold this deposit as security for the full performance of the applicant's obligations until the applicant returns the hydrant meter to Des Moines Water Works. Upon return of the hydrant meter, and payment of the final bill, the deposit will be mailed to the applicant upon request, less any outstanding charges due to Des Moines Water Works.

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A hydrant meter shall at all times remain the property of the Des Moines Water Works and shall be issued to the applicant under the terms of a bailment and temporary water service agreement, which must be signed by the applicant before the hydrant meter is issued.

509.18.3 OBTAINING HYDRANT METER

To reserve a hydrant meter, arrangements should be made by calling Des Moines Water Works at 515-283-8700. It will be the responsibility of the applicant to pick up the meter according to the instructions provided by Des Moines Water Works. Meters can be obtained from 8:00 a.m. to 3:00 p.m., Monday through Friday, except holidays.

509.18.4 DAMAGE TO DES MOINES WATER WORKS PROPERTY

It will be the obligation of the applicant to protect the hydrant meter, hydrant, and other Des Moines Water Works' property from damage due to weather or use of the facility. The repair of any damaged property will be completed by Des Moines Water Works and charged to the applicant.

509.18.5 METER READING

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The applicant shall report a monthly hydrant meter read to DMWW according to the instructions provided.

509.18.6 HYDRANT METER TESTING

After 8 months of use or at the request of the Des Moines Water Works, whichever is first, the meter shall be returned to Des Moines Water Works according to the instructions provided. The applicant will be notified when the testing has been completed and whether the hydrant meter can be picked up.

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509.18.7 CHARGES AND FEES

Deleted: (revised January 2019)

The following charges and fees will apply as outlined in Section 511, Schedule of Charges:

- a. A monthly hydrant meter availability fee will be charged based on the size of the hydrant meter.
- b. If the applicant fails to call in a monthly meter read, a daily fee will be assessed for each a read is not called in.
- c. If the applicant fails to return the assigned hydrant meter on or before the agreed date, a daily late fee will be assessed.

Rates for water consumption will be applied according to the Inside City of Des Moines water rate structure as defined by the Des Moines Water Works Board of Trustees.

509-18.8 FILLING OF SWIMMING POOLS

Hydrant meters will not be provided to individuals or businesses for the purpose of filling swimming pools.

If a customer wants their pool filled, Des Moines Water Works will supply the materials and labor to fill a swimming pool at the current hourly rate (labor, vehicle, and water) as specified in the Schedule of Charges section of the Des Moines Water Works Rules and Regulations. A 24-hour advance notice will be required to allow for proper staffing for this task.

509.18.9 DISQUALIFICATION

Failure to comply with Section 509.18 of these Rules and Regulations shall be grounds for the applicant to be immediately disqualified from continued use of a hydrant meter. Future use of a hydrant meter may also be forfeited. Upon disqualification, the meter will be surrendered to the Des Moines Water Works and deposit retained as liquidated damages.

509-17

509.19 REMOTE METER INSTALLATION/REPAIR

- 509.19.1 If a customer does not permit the installation or repair of our meter reading equipment upon request, then the customer shall be notified that water service will be discontinued in accordance with the procedures then in effect.

509-18

510 SERVICE MAIN EXTENSION

Eliminated and incorporated in Section 505.9 effective November 2013.

511 SCHEDULE OF CHARGES 510-1

511.1 CHARGES

The Board of Trustees, from time to time, may establish, abolish, or change charges for services and/or equipment provided to its customers. These charges shall be reviewed periodically and based as much as possible on costs of service.

511.2 ADJUSTMENTS TO CHARGES

The Board of Trustees grants the CEO and General Manager, or his designee, authority to adjust charges on a case-by-case basis where in his or her judgment the case warrants an adjustment.

511.3 ESCALATION OF CHARGES

Charges and fees listed in the Schedule of Charges, will be escalated

annually based on the increase in the Engineering News Record Construction Cost Index.

511.4 METERED WATER AND WATER AVAILABILITY

Deleted: (Revised January 2021)

All water shall be supplied to customers by meter measurement, except as herein otherwise provided, at the rates established by the Board. Rates shall be structured and established to recover the cost of service to a customer or class of customers, and may be multi-factor, including one or more variable components, and one or more fixed components. Prevailing rate schedules may be obtained from Des Moines Water Works or by visiting www.dmww.com, clicking on "Customer Service, Rates & Service Areas" and then selecting the service area in question.

Water availability is charged based on the size of the meter approved for the property and is charged regardless if water service is active or inactive.

511-1 511.5 FIRE PROTECTION CHARGES

Table 511.5 Fire Protection Charges (effective January 1, ~~2023~~ 2024)

Deleted: 2023

DES MOINES WATER WORKS FIRE PROTECTION CHARGES

Annual charges for all unmetered fire protection connections shall be as follows:

Size of <u>Connection</u>	<u>Inside City</u>	<u>Outside City</u>
1"	\$5.00	\$8.00
2"	\$19.00	\$30.00
3"	\$45.00	\$65.00
4"	\$75.00	\$120.00
6"	\$170.00	\$260.00
8"	\$300.00	\$470.00
10"	\$490.00	\$730.00

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12” \$ ~~700.00~~ \$ ~~1,050.00~~

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511.5.1 Annual charges for all unmetered fire protection connections shall be at rates established by the Board.

511.5.2 Fire protection service charges will be determined as follows:

511.5.2.1 One tenant + one building + one connection to Des Moines Water Works owned and/or operated distribution system = one charge according to size.

511.5.2.2 One tenant + one building + more than one connection to Des Moines Water Works owned and/or operated distribution system = each connection charged by size.

511.5.2.3 Shopping centers, industrial, and apartment complexes shall be charged for each fire service connection to the Des Moines Water Works owned and/or operated distribution system by size.

511.5.3

511-2

An additional charge shall be made for filling gravity or pressure storage tanks based on the total storage capacity of such tanks at the prevailing rate charged for water at the location.

511.5.4 The annual stand-by charge for fire service to a private property shall be paid by the owner of the property which is served. If such property is owned by a public agency or it is a part of a public thoroughfare, the responsible agency or government desiring to establish and maintain the service must agree in writing to make the payments and show evidence of their ability to make proper levy to obtain funds for such purpose.

511.6 SYSTEM DEVELOPMENT FEES

Table 511.6 System Development Fee Structure (effective ~~January 1, 2024~~)

Deleted: July 1, 2023

System development fees are required for all new water services in the City of Des Moines, Pleasant Hill, Cumming, Alleman, and other areas as defined below. System development fees are charged to aid in covering the costs associated with production, distribution, pumping, and storage facilities that have been or will be constructed to support new and additional demands on the water system that arise with new customers and connections. System Development Fees will be based on the tap size and are as follows:

Des Moines

	1 inch	2 inch	3 inch*	4 inch	6 inch	8 inch	12 inch
Metered Connections:	\$560	\$1,400	\$4,450	\$12,800	\$33,600	**	**
Fire Service Connections:	\$180	\$ 470	n/a	\$ 4,325	\$11,200	\$23,400	\$ 37,400

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511-3

Pleasant Hill

	1 inch	2 inch	3 inch*	4 inch	6 inch	8 inch	12 inch
Metered Connections:	\$1,675	\$1,675	\$4,450	\$12,800	\$33,600	**	**
Fire Service Connections:	\$ 560	\$ 560	n/a	\$ 4,325	\$11,200	\$23,400	\$ 37,400

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Cumming

	1 inch	2 inch	3 inch*	4 inch	6 inch	8 inch	12 inch
Metered Connections:	\$1,025	\$1,900	\$1,900	\$9,000	\$27,700	**	n/a
Fire Service Connections:	\$1,200	\$1,500	n/a	\$3,900	\$10,100	\$21,100	n/a

Alleman

	1 inch	2 inch	3 inch*	4 inch	6 inch	8 inch	12 inch
Metered Connections:	\$ <u>2,800</u>	\$ <u>4,525</u>	\$ <u>4,525</u>	\$ <u>12,800</u>	\$ <u>33,600</u>	**	n/a
Fire Service Connections:	\$ <u>930</u>	\$ <u>1,500</u>	n/a	\$ <u>4,325</u>	\$ <u>11,200</u>	\$ <u>23,400</u>	n/a

All Other Service Areas (Outside City DM, Berwick, PCRWD #1, Runnells, Unincorporated Polk County, Unincorporated Warren County, etc.)

	1 inch	2 inch	3 inch*	4 inch	6 inch	8 inch	12 inch
Metered Connections:	\$ <u>2,100</u>	\$ <u>4,750</u>	\$ <u>4,750</u>	\$ <u>12,800</u>	\$ <u>33,600</u>	**	n/a
Fire Service Connections:	\$ <u>700</u>	\$ <u>1,600</u>	n/a	\$ <u>4,325</u>	\$ <u>11,200</u>	\$ <u>23,400</u>	n/a

- 511.6.1 *DMWW does not make 3" taps but 3" domestic connections can be teed off of the fire service for the building or property.
- 511.6.2 511-4
**Metered Connections 8 inches and larger will be calculated on a case-by-case basis.
- 511.6.3 System Development Fees for projects with both fire and domestic services, or any combination of multiple services, will be the total of all of the System Development Fees added together.
- 511.6.4 System Development Fees for projects with metered combination fire and domestic services (master metered) shall be considered domestic services with fees being charged accordingly.
- 511.6.5 System Development Fees for subdivisions will be based upon the number and size of service stubs to be installed within the subdivision. All service stubs within subdivision will be considered domestic stubs unless sufficient evidence is provided to indicate otherwise.
- 511.6.6 If DMWW has record that a tap previously existed at a property, System Development Fees will not be required for

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replacement taps of equal size. Existing taps that are less than one inch in diameter and are being replaced with new one-inch taps will not require System Development Fees. Any replacement tap that is to be a larger size than the original tap, other than upsizing to a one-inch diameter tap, will require a fee that will be the difference between the fee for the new tap size and the fee for the original tap size.

511-5

511.7 UNIFORM TAP CHARGES

Table 511.7 Uniform Tap Charges (effective January 1, 2024)

Tap Size	1" *	2" **	3"***	4"	6"	8"
2" Main	\$ <u>410</u>					
4" Main	\$ <u>410</u>	\$ <u>1,525</u>		\$ <u>2,400</u>		
6" Main	\$ <u>410</u>	\$ <u>1,525</u>		\$ <u>2,700</u>	\$ <u>3,125</u>	
8" Main	\$ <u>410</u>	\$ <u>1,525</u>		\$ <u>2,750</u>	\$ <u>3,125</u>	\$ <u>4,050</u>
10" Main	\$ <u>410</u>	\$ <u>1,625</u>		\$ <u>2,900</u>	\$ <u>3,250</u>	\$ <u>4,050</u>
12" Main	\$ <u>410</u>	\$ <u>1,725</u>		\$ <u>2,900</u>	\$ <u>3,250</u>	\$ <u>4,150</u>
14" Main	\$ <u>410</u>	\$ <u>2,025</u>		\$ <u>2,900</u>	\$ <u>3,300</u>	\$ <u>4,150</u>
16" Main	\$ <u>410</u>	\$ <u>2,025</u>		\$ <u>2,900</u>	\$ <u>3,300</u>	\$ <u>4,150</u>

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		<u>410</u>	<u>2,225</u>		<u>3,300</u>	<u>3,300</u>	<u>4,150</u>	<u>6,800</u>	
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511.7.1 All taps larger than 12" and all mains larger than 16" to be tapped for any size will be done on a labor-and-materials basis. Price estimates may be quoted on request.

511.7.2 *The fee for 1" taps on ASTM D2241 pipe in the former SE Polk system which require a tapping saddle will be \$470.

511.7.3 **The fee for 2" taps made on 16" PVC, which will require a tapping saddle, will be \$3,475.

511.7.4 ***DMWW does not make 3" taps but 3" domestic connections can be teed off of the fire service for the building or property. See 511.6 above for System Development Fees related to 3" domestic connections.

511-6
511.7.5 City of Des Moines projects funded with expenditures from the City of Des Moines general fund are not required by these rules to pay system development fees. Any projects funded by expenditures from a City of Des Moines enterprise fund must still pay system development fees.

511.8 UNIFORM TAP RETIREMENT CHARGES

Table 511.8 Uniform Tap Retirement Charges (effective January 1, 2024)

Tap retirement charges are based on the size of the main that is tapped, rather than the size of the tap.

Main Size	Fee	
2"	<u>\$1,225</u>	Deleted: 1,200
3"	<u>\$1,375</u>	Deleted: 1,350
4"	<u>\$1,525</u>	Deleted: 1,500
6"	<u>\$1,650</u>	Deleted: 1,600
8"	<u>\$1,750</u>	Deleted: 1,725
10"	<u>\$2,150</u>	Deleted: 2,100

12"	\$ 2,750
14"	\$ 3,125

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Charges for retirements on concrete mains or mains larger than 14" will be the current prices for materials and labor.

511.8.1 Tap retirement charges for other than corporations are based on the size of the main that is tapped, rather than the size of the tap. Charges for retirements on concrete mains and mains larger than 14" will be the current prices of materials and labor.

511.9 METERS

Deleted: (revised January 1, 2020)

511.9.1 Damaged or lost meters will be replaced by Des Moines Water Works and charged to the owner at current market value, plus necessary labor for repair or replacement.

511.9.2 Charges for damaged meters larger than those priced on the Schedule of Charges will be the actual costs of materials and labor for repair or replacement.

511-7

511.9.3 Des Moines Water Works will test any meter upon application by the customer. If the meter testing results fall within American Water Works Association (AWWA) standards, the customer will be billed a fee equal to one (1) hour of labor at the labor rate stated in 511.20.

Table 511.9.1 Coupling Fees (effective January 1, ~~2024~~)

Deleted: 2023

Size	Fee	
5/8"	\$15.00 each	<u>16.00</u>
5/8" x 3/4"	\$19.00 each	<u>20.00</u>
3/4"	\$18.00 each	<u>19.00</u>
1"	\$26.00 each	<u>28.00</u>
1 1/2"	\$110.00 each	<u>115.00</u>
2"	\$160.00 each	<u>165.00</u>

Table 511.9.2 Meter Measuring Chamber Fees (effective January 1, 2023)

Size	Fee	
5/8"	\$39.00	<u>41.00</u>
3/4"	\$45.00	<u>47.00</u>

1"	\$88.00	<u>92.00</u>
1 ½"	\$200.00	<u>210.00</u>
2"	\$267.00	<u>280.00</u>

Table 511.9.3 Meter Fees (effective January 1, 2023)

Size	Fee	
5/8"	\$133.00	<u>139.00</u>
¾"	\$171.00	<u>179.00</u>
1"	\$235.00	<u>246.00</u>
1 ½"	\$470.00	<u>493.00</u>
2"	\$634.00	<u>665.00</u>

511-8

511.10 DAMAGED OR LOST METER READING SYSTEM EQUIPMENT

Table 511.10 Damaged or Lost Meter Reading System Equipment
(effective January ~~2024~~)

3-pair cable	\$2.00/foot	
Underground cable	\$1.00/foot	
	<u>2.00/feet</u>	
Meter head 5/8", ¾"	\$106.00	<u>111.00</u>
Meter head 1", 1 ½", 2"	\$106.00	<u>111.00</u>
Single port MTU	\$178.00	<u>185.00</u>
Dual port MTU	\$215.00	
Upcharge for dual port MTU for secondary meter	\$42.00	
Pressure regulator valve	\$135.00	<u>141.00</u>

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511.11 EQUIPMENT

Deleted: (effective January 1, 2023)

Table 511.11 Equipment Fees

Standard Vehicle	\$20.00/hour
Valve Operation Truck	\$30.00/hour
Distribution Repair/Maintenance Equipment	
• Crew Van	\$40.00/hour

- Tapping Truck \$40.00/hour
- Dump Truck \$65.00/hour

Heavy Construction Equipment

- Rubber Tire Backhoe \$65.00/hour
- Loader \$60.00/hour
- Track Backhoe \$100.00/hour

511.12 CHARGES FOR UNAUTHORIZED USE OF WATER/METERING TAMPERING

Deleted: (effective January 1, 2020)

First unauthorized use \$250.00, plus estimated water usage at the applicable rate structure

Second and Subsequent unauthorized use

\$500.00, plus estimated water usage at the applicable rate structure

Third unauthorized use Will terminate water service up to and including cutting water service at main at owner's expense.

511-9

511.13 CHARGES FOR UNAUTHORIZED TAP

511.13.1 If an unauthorized tap is made, DMWW will excavate and inspect the tap. The property owner will be charged for time and materials spent completing this task including backfill and restoration. Labor and equipment will be charged at the current rates documented in these Rules and Regulations. If the tap passes our inspection, the property owner will be charged any applicable system development fees and taps fees. The property owner will also be subject to charges for the unauthorized use of water/metering tampering (See 502.4 Unauthorized Use of Unmetered Water).

511.13.2 If the unauthorized tap does not meet current Des Moines Water Works Rules and Regulations and/or material standards, DMWW will cut the water service at main at the property owner's expense. The property owner will be charged for time and materials spent completing this task including backfill and restoration. Labor and equipment will be charged at the current rates documented in these Rules and Regulations. The property owner will also be subject to charges for the unauthorized use of

water/metering tampering (See 502.4 Unauthorized Use of Unmetered Water).

511.14 CHARGES FOR UNAUTHORIZED USE OF FIRE HYDRANT

First unauthorized use	\$570 plus service inspection cost and cost of repairs, if applicable
Second unauthorized use	\$1,125 plus service inspection cost and cost of repairs, if applicable
Third unauthorized use	\$1,700 plus service inspection cost and cost of repairs, if applicable

511.15 DEPOSIT FOR HYDRANT METER (effective January 1, 2024)

Deleted: (effective January 1, 2023)

3/4"	\$750.00
1"	\$950.00
2"	\$1800.00
3"	\$2250.00 <u>\$2,500.00</u>

511-10

511.16 CHARGES FOR THE USE OF HYDRANT METERS

Deleted: (effective January 1, 2019)

Monthly Availability Charge:

3/4" Garden Meter	\$30.00
1" Hydrant Meter	\$55.00
2" Hydrant Meter	\$115.00
3" Hydrant Meter	\$225.00

Late Fee: \$20.00 per day if Hydrant Meter is not returned by agreed upon date.

Failure to Report a Monthly Hydrant Meter Read: \$20.00 per day until read is submitted according to instructions provided at the time of rental.

511.17 TERMINATION FEE FOR COLLECTIONS (effective January 1, 2024)

Deleted: (effective January 1, 2020)

511.17.1 A termination fee of \$70.00 will be applied to all accounts when a water service is terminated or attempted to be terminated due to non-payment of charges. This fee includes the restoration of water service once the termination amount is paid.

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511.17.2 An additional after-hours service restoration fee will be applied when restoration of water service is requested according to the hours shown below.

511-11

Table 511.17 After Hours Service Restoration Fees

Service Area	Definition	After Hour Fee
Des Moines, Windsor Heights, Pleasant Hill, Unincorporated Polk County	During normal field hours: Monday – Friday 7:30 am – 6:00 pm Saturday 7:30 am – 3:30 pm After hours: Monday – Friday 6:00 pm – 9:30 pm	None (included in the termination fee) \$35 after hour fee
Area formerly known as SE Polk Rural Water District, Runnells, Cumming, Alleman	During normal field hours: Monday – Friday 7:30 am– 3:30 pm After hours: Monday – Friday 3:30 – 9:30 pm Saturday 7:30 am – 3:30 pm	None (included in the termination fee) \$75 after hour fee
All Areas - Other hours	Turn-on will be deferred to the next business day (unless deemed an emergency)	Not applicable

511.18 MISSED APPOINTMENT FEES

- 511.18.1 When a service appointment has been made with Des Moines Water Works by a customer, and the customer or owner fails to meet this appointment without reasonable advance notice, Des Moines Water Works will assess a \$40 missed appointment fee, plus any after-hour fee, if applicable. This charge applies to any scheduled appointment, including water service restoration appointments. No more than one missed appointment fee will be charged per day.

511-12

- 511.18.2 When an appointment has been made for tap cut inspections, taps, tap removals or other work by a contractor requiring inspection assistance or approval by Des Moines Water Works, and the contractor fails to meet this appointment without reasonable advance notice, Des Moines Water Works will assess a trip charge fee to the contractor. The assessed trip charge fee will be calculated based on travel time to and from the job site and include time incurred loading and unloading materials and equipment required for the job, if applicable. Labor and equipment will be charged at the current rates documented in these Rules and Regulations.

511.19 STOP BOX VERIFICATION

- 511.19.1 If a property owner or their designated agent desire for Des Moines Water Works to verify the property's stop box is in good working condition prior to a potential property transfer, Des Moines Water Works will assess a fee of \$40 to the current property owner at the time of the request. As provided in Rule 502.5.3 herein, Des Moines Water Works will not be responsible for stop boxes found in the process of verification to be in inoperable condition or for stop boxes that may become

inoperable when DMWW staff operates them during verification.

511.20 LABOR

Deleted: (effective January 1, 2023)

Standard Hourly Labor Rate \$ 75.00/hour
Overtime Hourly Labor Rate \$110.00/hour

511.20.1 Other labor charges for work completed by Des Moines Water Works may be calculated based upon specific wage rates with the appropriate multiplier in lieu of the standard hourly rate.

511.21 COMPUTERIZED LEAK PINPOINTING

~~\$200.00 hour~~ \$250.00 hour

511.22 RETURNED CHECK \$30.00

511.23 DEPOSIT FOR TENANTS (effective January 1, 2024) \$,110.00

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511.24 FIRE HYDRANT FLOW TEST (effective January 1, ~~2024~~) ~~\$,~~ 300.00

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511-13

511.25 CREDIT CARD CONVENIENCE (via website or telephone only, charged by third-party processor) \$2.95

511.26 PUBLIC RECORDS REQUEST FEES

511.26.1 Fees for public records requests as outlined in Section 516 shall be actual costs incurred for search, retrieval, compilation and examination, excluding overhead. Costs for copying shall be \$1.00 for first page and \$0.25 per page thereafter, or actual costs incurred if an outside printing vendor is utilized.

511.27 LAB FEES

Deleted: (effective January 1, 2022)

Table 511.27.1 Microbiological Fees

Sample	Analysis	Cost
Private wells	Coliform	\$35.00
Distributions	Coliform	\$15.00
HPC	HPC	\$15.00
New Mains	Coliform	\$15.00
Pool	Coliform	\$15.00
Spa	Coliform/Pseudomona	\$25.00
Quantitray	Coliform	\$25.00
Raw Water	Algal ID	\$30.00

511-14

Table 511.27.2 Chemical Fees

Sample	Analysis	Cost
Anions	Bromide	\$18.00
	Chloride	\$18.00
	Fluoride	\$18.00
	Nitrate	\$18.00
	Nitrite	\$18.00
	Phosphate (ortho)	\$18.00
	Sulfate	\$18.00
	All	\$60.00
Solids	TSS	\$18.00
	TDS Grav	\$18.00
Metals	Aluminum	\$18.00
	Arsenic	\$18.00
	Cadmium	\$18.00
	Calcium	\$18.00
	Chromium	\$18.00
	Copper	\$18.00
	Iron	\$18.00
	Lead	\$18.00
	Magnesium	\$18.00
	Nickel	\$18.00

	Potassium	\$18.00
	Selenium	\$18.00
	Silver	\$18.00
	Sodium	\$18.00
	Zinc	\$18.00
Softening	Calcium Hardness	\$18.00
	Magnesium Hardness	\$18.00
	Chlorine Residual	\$12.00
	Conductivity	\$12.00
	Alkalinity	\$15.00
	pH	\$12.00
	Total Hardness	\$25.00
	Turbidity	\$12.00
DBP's	TTHM	\$75.00
	HAA	\$100.00
Algal Toxins ELISA	Microcystin	\$75.00
	Cylindrospermopsin	\$75.00
	Saxitoxin	\$75.00
	Anatoxin	\$75.00

511-15

511.28 INSPECTION FEES FOR NEW WATER MAIN EXTENSIONS (Revised January 2024)

Fees shall be charged for construction inspection and related as built drawings for installation of all new water main extensions.

Base Inspection Fee	\$,600.00
Inspection Fee Unit Cost – first 1,000 ft.	\$,4.50/ft.
Inspection Fee Unit Cost – all additional footage	\$,3.00/ft.

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Inspection fees of water main extensions shall be paid prior to issuance or approval of IDNR Construction Permit.

Illustrative Example: Installation of 1500 feet of eight-inch water main for Hawkeye Development on Cyclone Avenue.

Base Inspection	\$, 600
First 1,000 feet (1000 x 4.50)	\$,4,500
Additional 500 feet (500 x 3.00)	\$,1,500
Total	\$,6,600

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511.29 PLAN REVIEW FEE FOR NEW WATER MAIN EXTENSIONS (Revised January 2024)

Fees shall be charged for plan review of all new main extensions.

Base Plan Review Fee	\$ 600.00
Unit Cost Plan Review Fee	\$ 30/ft.
Construction Permit Fee (DMWW issued IDNR Permits)	\$ 30/ft.

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Plan review fees for water main extensions are to be paid at the time materials are submitted for review.

Illustrative Example: Installation of 1500 feet of eight-inch water main for Hawkeye Development on Cyclone Avenue.

Base Plan Review	\$ 600.00
Unit Cost Review (1,500 x \$ 30)	\$ 450.00
DMWW issued IDNR Permit (1,500 x \$ 30)	\$ 450.00
Total	\$ 1,500.00

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511-16

511.30 INSPECTION FEES FOR LARGE TAPS (Revised January 2024)

Fees shall be charged for construction inspection and related as built drawings for installation of all new large taps.

<u>Base Inspection Fee</u>	<u>\$150.00</u>
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511.31 TWO-INCH AND LARGER WATER SERVICE PLAN REVIEW FEE (Revised January 2024)

Des Moines Water Works Engineering Department shall review all two-inch and larger water service connections. Payment for plan review will be required at the time the formal request is issued to Des Moines Water Works.

Plan Review Fee – One Tap	\$ 450.00
Plan Review Fee – Two or More Taps	\$ 750.00

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Plan review fees for large water services are to be paid at the time materials are submitted for review.

511.32 ADMINISTRATION FEE FOR CONTRACTED STOP BOX REPAIR \$90.00

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511.32.1 Fee charged to customers when stop box repairs are completed by DMWW's contracted plumber.

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511.33 SUBMETERING FEES

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Fees for submetering contracts as outlined in Section 509.3.4 are charged to the property owner and are as follows:

- \$500 one-time administrative fee
- \$50 per submetered account for billing system set up
- Meter, MTU, and labor charges as outlined in these Rules & Regulations

In addition, a monthly meter reading fee of \$2.75 will be charged to the customer of each submeter on their monthly bill.

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511.34 S.E. POLK ANNEXATION ASSET/SERVICE TERRITORY

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TRANSFER (moved from previous Section 514) (Revised January 1, 2024)

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Des Moines Water Works purchased SE Polk Rural Water District in April 2004. The purchase of this district was completed to provide a more economical way to stimulate the growth of cities into the SE Polk District. As annexation occurs in these areas, it is intended that these customers become customers of the city that annexes such area of the district.

The city annexing the area into its service territory shall pay Des Moines Water Works for the service territory acquired based on the number of existing customers connected to the water system.

For annexing cities that receive their water supply from DMWW, the buy-out shall be \$4,100 per existing residential customer.

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For annexing cities who do not receive their water supply from DMWW, the buy-out shall be \$6,400 per existing residential customer.

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The buy-out of existing commercial and industrial customers will be determined on a case-by-case basis.

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511.35 BACKFLOW FEES (Revised January 2024)

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511.35.1 An administration fee of \$15.00 per backflow prevention

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assembly shall be applied to the customers' account annually.

~~511.35.2~~ A \$100.00 late fee will be applied to the customer's account if the report of annual test of a containment backflow prevention assembly as required by Rule 506.4.7 is not received by the Backflow Program Manager within fifteen (15) days of the Annual Backflow Test Date.

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An additional \$200.00 late fee will be applied to the customer's account if such report is not received within thirty (30) days of the Annual Backflow Test Date.

~~511.36~~ PRIVATE FIRE HYDRANT MAINTENANCE FEE,
\$120.00/hydrant

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Deleted: (Effective January 1, 2021)

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~~511.37~~ ADMINISTRATION FEE FOR BILLED SERVICES,
\$25.00

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Deleted: (Effective January 1, 2021)

511.36.1 Fee charged to customers when DMWW completes a billed service.

~~511.38~~ A customer may appeal the adoption of a new or increased rate or charge applicable to such customer by filing notice of appeal to the Board of Trustees. Such notice of appeal shall be submitted in writing to the CEO and General Manager of DMWW within 30 days of the date of publication of such new or increased rate. No appeal shall stay application of the rate or charge to customer, or stay collection of any water service charges or other charges, pending appeal.

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Such issue will then be considered by the Board of Trustees as provided in Section 206.8 of Board Policy Manual at the next scheduled meeting of the Board of Trustees.

If the appeal is successful the customer will be entitled to such prospective or retrospective adjustment as the Board of Trustees shall allow in its sole discretion. Appeals concerning the application of a rate or charge to a specific case or specific customer shall be submitted and governed by section 500.2 of these Rules & Regulations. The CEO and General Manager shall have the authority to determine if any appeal is concerning the adoption of rates and charges or the application of rates and charges, and shall apply the process under these rules that is thus applicable under this provision.

~~511.39~~ CHARGES FOR UNAUTHORIZED OPERATION OF A VALVE,

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Deleted: (effective January 1, 2022)

First unauthorized use	\$570 plus service inspection cost and cost of repairs, if applicable
Second unauthorized use	\$1,125 plus service inspection cost and cost of repairs, if applicable
Third unauthorized use	\$1,700 plus service inspection cost and cost of repairs, if applicable

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GLOSSARY OF TERMS

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Apartment. A multi-family living unit with one owner of all of the units and the property that the units set upon.

Applicant. Any person association, corporation, entity or governmental agency requesting water service.

(The) Board. The Board of Water Works Trustees, of the City of Des Moines, is the governing body as constituted under the laws of the State of Iowa.

(The) City. The City of Des Moines, Iowa, a municipal corporation acting through the City Council or its duly authorized representatives.

Combination General Service Line. Domestic service line and fire protection line served from a single tap.

Condominium. A multi-family living unit with individual owners for each unit. The property that each unit sets upon is normally owned by one common owner (a homeowner's association).

Connection Fee. A calculated charge assessed to a property owner who will utilize increased flow capacity of the distribution system for which the Des Moines Water Works has made a capital cost investment.

Cross Connection. Any connection or structural arrangement between a public or a consumer's potable water system and any non-potable source or system through which backflow can occur.

Des Moines Water Works or DMWW. The Des Moines Water Works or DMWW is the utility, which is governed by, and officially titled as the Board of Water Works Trustees of the City of Des Moines, Iowa.

Distribution Main. The water pipe, located in a street or approved easement area, from which domestic water supply is delivered to the service pipe leading to specific premises; usually not larger than 12" in diameter.

CEO and General Manager. The duly appointed chief executive officer of the Des Moines Water Works.

Duplex/Flat. A two family living unit with one owner of the two living units. The owner of the units also owns the property that the two units set upon (side-by-side or stacked).

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Implied Public Access. Areas on private property that are accessible to the general public, and will remain accessible in the future. Examples of such areas are driveways and parking lots for shopping malls and apartment complexes.

Manufactured Home Complexes. Two or more manufactured homes adjacent to each other, located on a property owned by one common owner. (Ewing trace)

Master Plumber. A plumber who has satisfactorily completed the Master Plumber Certificate of competency examination administered by the City of Des Moines.

Master Service. A water supply line to a group of buildings or planned units, usually metered in one location to indicate total consumption for the development.

Owner. The agency or individual in possession of a property being serviced by the Des Moines Water Works.

Plumbing Contractor. An individual who holds a certificate of competency as a Master Plumber and posts the appropriate surety and cash bonds to the City of Des Moines Building Inspection Department and supplies a plumber's license bond to the Des Moines Water Works.

Private Fire Protection System. Consists of a fire service connection to the Des Moines Water Works main and any or all of the following: standpipe(s), automatic sprinkler system(s), fire pump(s), or fire hydrant(s).

Private Water Main. Water pipe, which supplies water to a specific premise or premises, owned and maintained by people or organizations other than the Des Moines Water Works.

Process Service. A water supply line used for providing a consistent, high-volume demand for water over a period of time for industrial or cooling purposes.

Service Line. All piping and appurtenances installed from the water main to the outlet connection of the first shut-off device within a building.

Service Main. A privately owned and maintained water service to a single property, which provides fire and domestic service connections with the individual valves located in implied public access way.

Street, Road, or Alley. The whole area within the right-of-way limits.

Tap. The physical connection to a water main through which the water supply is carried.

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Townhome. A multi-family living unit with individual owners for each unit. The owner of the living unit normally owns the property that each unit sets upon.

Transmission Main. Large diameter water pipe, usually 16" or larger in diameter, which delivers water from treatment plants or pumping stations to the Distribution Mains. Transmission Mains cannot be tapped directly for water service without special permission from Des Moines Water Works.

Water Service. The provision of municipal water supply to a property, or all piping and appurtenances installed from the water main to the outlet connection of the first shut-off device within a building, as context requires

(The) Des Moines Water Works. The Des Moines Water Works is the utility, which is governed by, and officially titled as the Board of Water Works Trustees of the City of Des Moines, Iowa.

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- 514 SUPPLEMENTAL REQUIREMENTS FOR THE FORMER SOUTHEAST
POLK RURAL DISTRICT (eliminated and incorporated into existing sections,
January 2019)

515 WATER SHORTAGE PLAN

515.1 INTRODUCTION

Deleted: (revised January 1, 2023)

This plan will apply to all direct retail customers of Des Moines Water Works. Municipal water systems and rural water systems that purchase water for resale are not subject to this plan, however, it is anticipated that all such municipal and rural systems will implement parallel water shortage plans which will result in reductions in demand similar to those described in this plan.

The intent of Des Moines Water Works' Water Shortage Plan is to manage system demand so customers do not experience pressure, quality, or availability issues during periods of extreme water demand or during other times when water availability may be limited due to other events, such as raw water shortage, water quality events, or mechanical failures.

The goal at each stage in the plan is to reduce system demands to 85% or less of the "Current Capacity" to produce safe drinking water, as defined in this plan.

Nominal capacity of the Des Moines Water Works system is 100 MGD. Winter demand in a typical year averages approximately 40 MGD as shown in Figure A. Seasonal outdoor water use including moderate lawn watering, increases demand to an average of approximately 60 MGD during the summer months as shown in Figure A. The majority of demand above 60 MGD is attributed to be lawn watering. Heavy lawn watering causes spikes in demand which can reach more than 95 MGD.

Based on historic consumption patterns, lawn watering accounts for as much as 40 MGD of demand during heavy lawn watering periods. Thus, a 25% reduction in lawn watering should result in a 10 MGD reduction in

total demand to approximately 85 MGD, a reduction of more than 10% compared to peak demand otherwise expected. This is the premise of Stage I. Stage I may be skipped if a water shortage occurs during a time of year when lawn watering demand is not significant.

Based on historic consumption patterns, total outdoor water use accounts for as much as 50 MGD of demand during heavy lawn watering events. Thus, a 50% reduction in outdoor water use should result in a 25 MGD reduction in total demand to 70 MGD, a reduction of more than 25% compared to peak demand otherwise expected. This is the premise of Stage II. Stage II may be skipped if a water shortage occurs during a time of year when lawn watering demand is not significant.

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Based on the foregoing analysis, that lawn watering accounts for as much as 40 MGD of the demand during heavy lawn watering periods and understanding that the vast majority of this is lawn watering, prohibiting lawn watering should result in a 40 MGD reduction in total demand to approximately 55 MGD, a reduction of more than 40% compared to peak demand otherwise expected. This is the premise of Stage III. Stage III may be skipped if a water shortage occurs during a time of year when lawn watering demand is not significant.

Limiting consumption to a representative average of off peak months, plus or minus a small allowance, will result in a demand of approximately 40 MGD, a reduction of nearly 60% compared to peak consumption. This is the premise of Stage IV.

The stages of this plan are not necessarily consecutive. When a water shortage occurs the stage deemed most appropriate for the conditions will be implemented.

515.2 CURRENT CAPACITY TO PRODUCE SAFE DRINKING WATER AND EXPECTED PEAK DEMAND

515.2.1 CURRENT CAPACITY

The current capacity to produce safe drinking water on any day is referred to “Current Capacity” or C_{Total} . Current Capacity is defined as the amount of water Des Moines Water Works can produce and deliver on any day taking into consideration raw water availability and quality, seasonal treatment efficacy, and any mechanical or operational issues on that given day. The number will vary seasonally and may vary day to day depending on specific water quality and operational conditions. Current Capacity is computed as the

sum of the daily capacities of the individual Des Moines Water Works treatment plants and may be expressed in the following formula:

$$C_{\text{Total}} = C_{\text{Fleur}} + C_{\text{McMullen}} + C_{\text{Saylorville}}$$

Current Capacity will be evaluated on a daily basis when there is potential for a water shortage. Des Moines Water Works Water Production staff will perform the daily evaluation and report the Current Capacity in Million Gallons per Day.

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515.2.2 EXPECTED PEAK DEMAND

“Expected Peak Demand” is defined as the peak daily demand that is expected by the Des Moines Water Works without implementation of water shortage measures under this plan.

515.3 STAGE I: VOLUNTARY 25% REDUCTION IN LAWN WATERING

Deleted: (revised January 1, 2023)

515.3.1 TRIGGER

During a period of substantial lawn watering demand, when Expected Peak Demand reaches 90% of Current Capacity or system demand is generating a high number of areas with low pressure, or there are other indications that without wise usage of water, a shortage could occur.

515.3.2 ANTICIPATED IMPACT

It is anticipated that Stage I will most likely be triggered during peak lawn watering season. In a typical year lawn watering can account for as much as 40 MGD of demand on a peak day. If this is the case, a 25% reduction in lawn watering will result in a 10 MGD reduction in total demand. At peak demand 10 MGD would be more than a 10% reduction.

515.3.3 GOAL

A 10% reduction in system demands as compared to Expected Peak Demand.

515.3.4 ACTION

515.3.4.1 Request a **metro wide** 25% reduction in lawn watering.

515.3.4.2 Encourage residential and business customers to optimize their lawn watering systems so water is not directed onto impervious surfaces and turf is not overwatered.

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515.3.4.3 Continued reinforcement that residential and business customers water on alternate days and excluding Mondays (historically a peak demand day), by a system under which even numbered addresses water only on Wednesday, Friday and Sunday, and odd-numbered addresses water only Tuesday, Thursday, and Saturday.

515.3.4.4 Suspend Des Moines Water Works' hydrant flushing program except for water quality purposes.

515.3.4.5 Request that City officials minimize high water use activities such as street sweeping and watering golf course fairways.

515.3.4.6 Coordinate with wholesale customers to ensure they are relaying the same message.

515.3.5 ENFORCEMENT

There will be no enforcement at this stage.

515.4 STAGE II: VOLUNTARY 50% REDUCTION IN LAWN WATERING

Deleted: (revised January 1, 2023)

515.4.1 TRIGGER

During a period of substantial lawn watering demand, after Stage I has been implemented and failed to achieve an adequate reduction in consumption, when Expected Peak Demand exceeds 90% of Current Capacity, or system demand continues to generate areas of low pressure, or there

are other indications that without further reductions in demand, a shortage could occur.

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515.4.2 ANTICIPATED IMPACT

It is anticipated that Stage II will most likely be triggered during the peak outdoor water use season. In a typical year lawn watering use can account for as much as 50 MGD of demand on a peak day. If this is the case, a 50% reduction in outdoor water use will result in a 25 MGD reduction in total demand. At peak demand 25 MGD would be more than a 25% reduction.

515.4.3 GOAL

A 25% reduction in system demands as compared to Expected Peak Demand.

515.4.4 ACTION

515.4.4.1 Request customers further reduce water consumption by taking the following measures in addition to those implemented in Stage I:

515.4.4.1.1 Request a metro wide 50% reduction in outdoor water use.

515.4.4.1.2 Remind residential and business customers to optimize their lawn watering systems so water is not directed onto impervious surfaces and turf is not overwatered.

515.4.4.1.3 Reinforce the recommendation for customers to lawn water on

alternate days and excluding Mondays.

515.4.4.1.4 Encourage wise use of water during outdoor activities including washing cars, playing in the sprinkler, playing with water toys, and filling swimming pools.

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515.4.4.1.5 Encourage wise use of water indoors including identifying and repairing leaking fixtures, washing only full loads in dishwashers and washing machines, shorter showers, etc.

515.4.4.2 Coordinate with wholesale customers to ensure they are relaying the same message.

515.4.4.3 Request that public agencies (City, County, or State) set an example by:

515.4.4.3.1 Closing recreational facilities with known water inefficiencies.

515.4.4.3.2 Suspend the operation of decorative fountains.

515.4.5 ENFORCEMENT

There will be no enforcement at this stage.

515.5 STAGE III: LAWN WATERING PROHIBITED AND NO USE OF AUTOMATIC LAWN WATERING SYSTEMS.

Deleted: (revised January 2023)

515.5.1 TRIGGER

During a period of substantial lawn watering demand, after Stage I and Stage II have been implemented and failed to achieve an adequate reduction in consumption, when Expected Peak Demand exceeds 90% of Current Capacity, or system demand continues to generate areas of low pressure,

or there are other indications that without further reductions in demand, a shortage could occur.

515.5.2 ANTICIPATED IMPACT

It is anticipated that Stage III will most likely be triggered during peak lawn watering season. In a typical year lawn watering can account for as much as 40 MGD of demand on a peak day. If this is the case, prohibiting lawn watering will result in a 40 MGD reduction in total demand. At peak demand 40 MGD would be almost a 40% reduction.

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515.5.3 GOAL

A 40% reduction in system demands as compared to Expected Peak Demand.

515.5.4 ACTION

Require residential and business customers to further reduce water consumption by suspending **all** lawn watering and the use of **all** automatic lawn watering systems. This reduction is in addition to all steps implemented in Stage I and Stage II.

515.5.5 ENFORCEMENT

Customers observed by DMWW irrigating in violation of this policy will be notified by a tag left at the property. If lawn watering is not suspended within 48 hours, water service will be terminated and the published termination fee will apply. Water service will be restored only upon receipt, by the Des Moines Water Works, of an undertaking by the customer that the customer understands and will comply with the mandatory conservation measures. Any subsequent violation will result in further termination of service. In addition, the use of water for lawn watering in violation of this plan shall be deemed an unauthorized use of water and Section 511.12 "Charges for the Unauthorized Use of Water/Metering Tampering", of these Rules and Regulations shall apply and must be paid before water service will be restored.

515.6 STAGE IV: WATER RATIONING

515.6.1 TRIGGER

During periods of substantial lawn watering demand or other potential shortage, after Stage I, Stage II, and Stage III have been implemented and failed to achieve an adequate reduction in consumption, when Expected Peak Demand exceeds 90% of Current Capacity, or system demand is generating a high number of areas with low pressure, limited source water supply, or there are other indications that without wise usage of water, a shortage could occur.

Stage IV may also be invoked, without resort to Stages I through III, if Expected Peak Demand exceeds 90% of Current Capacity for any reason that cannot be addressed by the measures contemplated by Stages I through III.

515.6.2 ANTICIPATED IMPACT

It is anticipated that Stage IV will only be triggered in the event of a significant and severe water shortage, or other event, which severely reduces capacity relative to demand. In this case a reduction in demand to the lowest level which will meet public health and safety standards will be sought.

515.6.3 GOAL

A reduction in system demands as compared to Expected Peak Demand sufficient to allow the Des Moines Water Works to meet public health and safety standards

515.6.4 ACTION

Water rationing measures will be implemented and enforced by application of an Emergency Water Shortage Rate. In order to implement such rate the Des Moines Water Works shall set a target level for demand consistent with its Current Capacity and shall use such target to establish a “Rationing Factor” as defined in this Plan. All customers will be asked to reduce their consumption to a level at or below a “Stage IV Monthly Water Ration”, and consumption above such level will be charged at the Emergency Water Shortage Rate intended to strongly discourage consumption above such level.

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515.6.5 ENFORCEMENT [\(Revised January 2024\)](#)

Deleted: (Revised January 2022)

“Stage IV Monthly Water Ration” means for each customer the Typical Off-Peak Consumption of such customer multiplied by an announced Rationing Factor. “Typical Off-Peak Consumption” shall be computed as of the date that Stage IV is invoked as the mean monthly consumption of the customer for the immediately preceding months of March, April, and May. In lieu of a mean monthly consumption, a minimum domestic quantity may be applied for billing to meet basic human water consumption needs. The Rationing Factor shall be a percentage, which may be above or below 100%, as announced by the Des Moines Water Works and designed to effectively reduce consumption to the level as required by the prevailing circumstances.

While Stage IV is in effect each customer will be billed for all water at published rates. Additionally, all water used beyond the Stage IV Monthly Water Ration for each customer will be billed at the “Emergency Water Shortage Rate”. The Emergency Water Shortage Rate shall be four times the rate otherwise applicable to such customer. In the event stepped rates apply, the Emergency Water Shortage Rate shall be four times the Step 1 rate. Customers may appeal the Typical Off-Peak Consumption level determined for the customer as the basis for the customer’s bill as inaccurate or inequitable under the circumstances applicable to the customer. Appeals must be submitted in writing and will be considered on a case-by-case basis as provided under these Rules and Regulations.

516 PUBLIC RECORDS

516.1 POLICY

It is the policy of the Board of Trustees that the Des Moines Water Works shall comply fully with the open records requirements of applicable law. Public records of or belonging to the Water Works are available for public examination and reproduction as of right, except those records that are exempt from disclosure by law.

516.2 DEFINITION OF PUBLIC RECORDS

The term “public record” is defined in Section 22.1(3) Code of Iowa.

516.3 EXEMPT RECORDS

Exempt Records are those records required or permitted by law to be kept confidential, including records defined as confidential or exempt in Section 22.7, Code of Iowa, Section 388.9, Code of Iowa, Section 388.9A, Code of Iowa, and Section 622.10, Code of Iowa. Records which include information, such as health information, required by federal law to be kept confidential shall be deemed Exempt Records. Security matters as set out in Rule 618.2 are Exempt Records. Attorney client communications and attorney work product are confidential Exempt Records.

516.4 EXEMPTION AND WAIVER OF EXEMPTION

Exempt Records are not available for examination or copying by the public. Water Works may, in its discretion, make Exempt Records available when such disclosure is not prohibited by law and disclosure is deemed in the best interests of Water Works.

516.5 COPYRIGHT

Except as permitted by law, materials subject to third party copyright, and which Water Works does not have the rights to copy, may be examined,

Deleted: (revised January 2023)

but shall not be copied unless the requesting party secures and provides permission to copy to Water Works, provided by the holder of the copyright.

516-1

516.6 REQUESTS FOR EXAMINATION OF RECORDS

Deleted: (revised January 2023)

Any person may make a request to examine or copy a public record. A request may be made in writing, orally in person, by telephone, or by electronic means. Requests for public records should be directed to the Chair, the CEO and General Manager, or the Director of Customer Service. Any request received by any other staff member shall be referred to the Director of Customer Service, and the request shall be deemed made upon receipt of the Director of Customer Service. To assure a consistent application of fees, and to document responses provided, the Director of Customer Service is the person designated by the Water Works to respond to all requests. If public records that are requested are available online, the requesting party may be advised of such availability and requested to obtain access by such means. Authority to make decisions as to the proper response to a request is delegated to the Director of Customer Service. If the Director of Customer Service is uncertain if a records request seeks records that are exempt from disclosure, a written opinion of counsel to the Water Works may be obtained, and records may be withheld from examination and copying in accordance with such opinion. The Director of Customer Service, or counsel to the Water Works are also authorized to request informal advice or a formal opinion from the Iowa Public Information Board with respect to any issue arising from a public records request.

516.7 COSTS

Deleted: (revised January 2023)

The Water Works may charge a reasonable fee for the services of a Water Works employee(s) to supervise the examination and copying of the records, or to identify, review, and produce requested records. All expenses of the examination and copying shall be paid by the person desiring to examine or copy a public record.

516-2

If the requested records take less than 30 minutes to identify, review, and produce, then there will be no charge for producing records. If, after reviewing the request, the Director of Customer Service determines that it will take more than 30 minutes to identify, review, and produce records, then the Director of Customer Service will communicate to the requester an estimate of the number of Water Works staff hours it will take to identify, review, and produce the requested records. The Director of Customer Service will communicate to the requester the hourly rate of each staff member and time required of each staff member to respond to the request. The hourly cost for Water Works staff time to fulfill a records request is limited to the staff's hourly rate, and does not include employment benefits, depreciation, maintenance, electric, or insurance costs associated with the administration of the Water Works' office. In addition to the cost of staff time to identify, review, and produce records, the Director of Customer Service will disclose any other actual costs Water Works will incur to identify, review, and produce the requested records.

The estimate of costs may include attorney fees if the request will require that the requested records be reviewed by an attorney to determine whether portions of the records are confidential attorney-client privilege or attorney work product, are otherwise protected confidential information.

516.8 PREPAYMENT OF COSTS

When the estimated costs to fulfill a request to examine or copy a public record will exceed \$50.00, fulfillment of the request may be contingent on the Water Works receiving prepayment in advance of the expenses to be incurred in fulfilling the request.

516.9 EXAMINATION OF RECORDS

Public records are available for public examination during office hours at the main office of the Des Moines Water Works at 2201 George Flagg Parkway, Des Moines, Iowa 50321, or at such other location in Des Moines, Iowa, as the Director of Customer Service shall

specify. Examination includes, but is not limited to, the right of an examining party to make copies on site by means which do not require unreasonable accommodation by the Water Works. Examination of records shall be done under the supervision of a Water Works employee, at the cost of the requesting party.

516-3

516.10 TIMING

Deleted: (revised January 2023)

Most requests to examine and copy public records will be granted or denied within twenty days of the request, and ordinarily within ten business days of the request. However, depending on the size and nature of the request, Water Works may require additional time to respond to a request. If the request is to be fulfilled by providing copies of records, Water Works will make reasonable efforts to provide such copies within twenty days of the request, and ordinarily within ten business days of the request, unless additional time is necessary due to the size and nature of the request. Water Works will determine whether records should be withheld to protect confidentiality within a reasonable time, not to exceed twenty days of the request.

516.11 COPIES OF RECORDS

Paper copies of public records will be made available during office hours upon request. A Water Works employee shall perform any copying using Water Works copying facilities or copying services of an outside vendor will be engaged in the discretion of the Director of Customer Service. The cost of paper copies will be actual costs incurred. If an outside copy vendor is utilized such cost shall be the amount paid to the vendor, without markup for overhead. If the Des Moines Water Works makes the copies using its own facilities the cost shall be deemed to be \$1.00 for the first page and \$0.25 per page thereafter unless special circumstances indicate a different actual cost.

516.12 ELECTRONIC RECORDS AND COPIES

Deleted: (revised January 2023)

Public records maintained in electronic format may be provided in an electronic format useable with commonly available data processing or database management software. Copies of other public records may also be provided in electronic form. The amount charged for access to electronically maintained public records, and for copies provided in electronic form shall be the costs required for electronic search and retrieval of the information and direct publication or reproduction costs,

including but not limited to editing, compilation, and media production costs incurred by the Water Works for transfer to the requestor. No person is permitted to access the data processing software Water Works uses to access or store public records. If a person requests a record that is combined with the data processing software then Water Works will separate the record from the data processing software prior to providing the record to the person requesting the record. Water Works will bear the cost of separating a record from the data processing software.

516-4

516.13 INCIDENTAL COPIES

Staff of the Water Works may provide copies of public records to any person, including a customer, without charge in their discretion when incidental to the conduct of business.

516.14 COURTESY COPIES

To the extent public records are not available online, copies of requested public records may be provided without charge to accredited representatives of news organizations and to bona fide interest groups, non-profit entities and government agencies having an interest in the matters set forth in the public records. The Director of Customer Service shall have the right to limit the number of courtesy copies provided without charge to any recipient if providing requested copies without charge would impose an undue financial burden on the Water Works.

516-5

Outline of Proposed Changes to Des Moines Water Works' Rules and Regulations for 2024

Section 500 – Preface

No Changes

Section 501 – General

No Changes

Section 502 – Applications for Use of Water

No Changes

Section 503 – Application for Installation of Water Service

No Changes

Section 504 – Taps and Connections

504.2.1 has been edited to state that 90° elbows are preferred coming off of the corporation.

Section 505 – Water Service Installation

505.3.7 has been added to state that materials must conform with Iowa Department of Natural Resources requirements if located within 200' of a Leaking Underground Storage Tank (LUST).

505.6.1 has been edited to specify stop boxes in Pleasant Hill can be 1' to 8' out from the property line and to clarify only one fitting shall be allowed per 60' of pipe for 2" service lines.

505.9 has been rewritten to specify the conditions when a public water main will be allowed to be installed on private property.

Section 506 – Cross Connection and Backflow Prevention

506.1.7 has been edited to clarify that decommissioning an irrigation system cannot be done by installing a threaded fitting or a push on SharkBite fitting on the irrigation line.

506.1.8 has had language added about wet pipe fire systems.

506.2.4 has been added regarding properties that have a non-testable backflow device on boilers.

506.4.8 has been edited to state that service termination will result for failure to submit a passing backflow test.

Section 507 – Public Fire Protection

507.7 has been added to show local fire district hydrant specifications.

Section 508 – Private Fire Protection

508.7.1 has been edited to clarify that private fire hydrants must meet DMWW specifications, with the exception of color.

Section 509 – Water Meters

509.12 has been edited to clarify an outside meter pit will be required when unusual circumstances exist or the length of the water service on private property exceeds 250 feet.

Section 510 Service Main Extensions

Section 510 was eliminated in 2013.

Section 511 Schedule of Charges

1. FIRE PROTECTION CHARGES

Fire protection fee charts have been updated to account for construction cost increases.

2. SYSTEM DEVELOPMENT FEE STRUCTURE

The system development fee charts have been updated to account for increases in construction cost.

3. UNIFORM TAP CHARGES

Uniform tap charges have been updated to account for changes in labor and material costs.

4. UNIFORM TAP RETIREMENT CHARGES

Uniform tap retirement charges have been updated to account for changes in labor and material costs.

5. METERS

Coupling fees and meter fees have been updated to account for changes in labor and material costs.

6. MISCELLANEOUS CHARGES

A. Other fees and activities have been updated to account for changes in labor and material costs.

B. Inspection Fees for Large Taps – New fee established.

Section 512 Figures

Multiple figures have been edited to match the language in the Rules & Regulations sections.

Section 513 Glossary of Terms

No Changes

Section 514 Supplemental Requirements for the former Southeast Polk Rural District

Section 514 was eliminated in 2019.

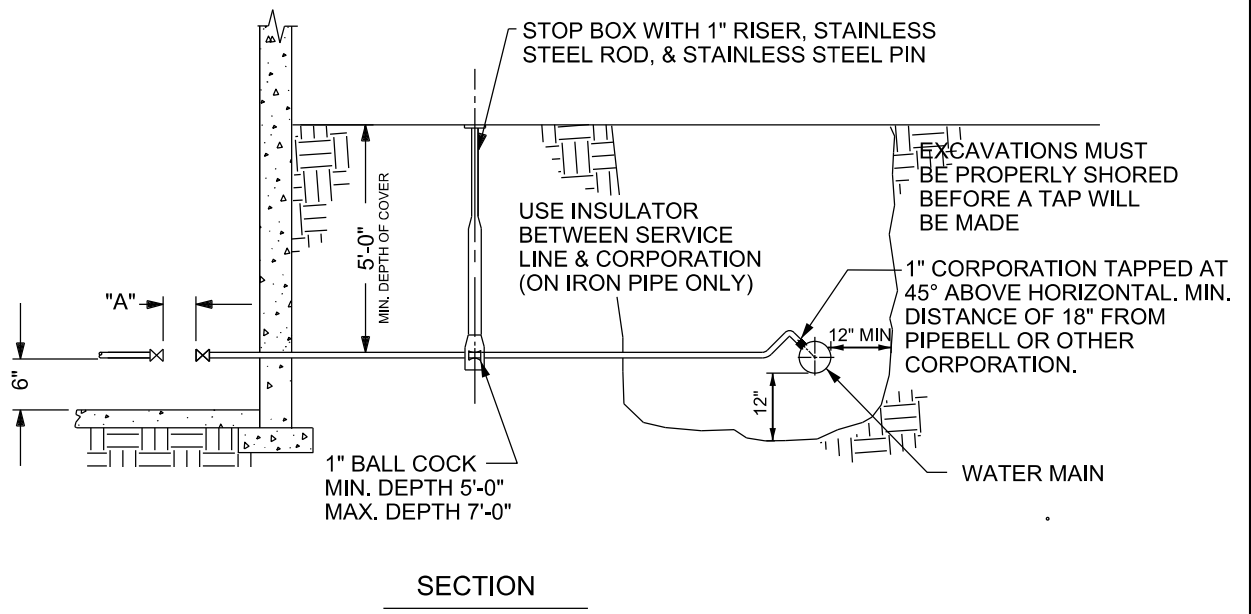
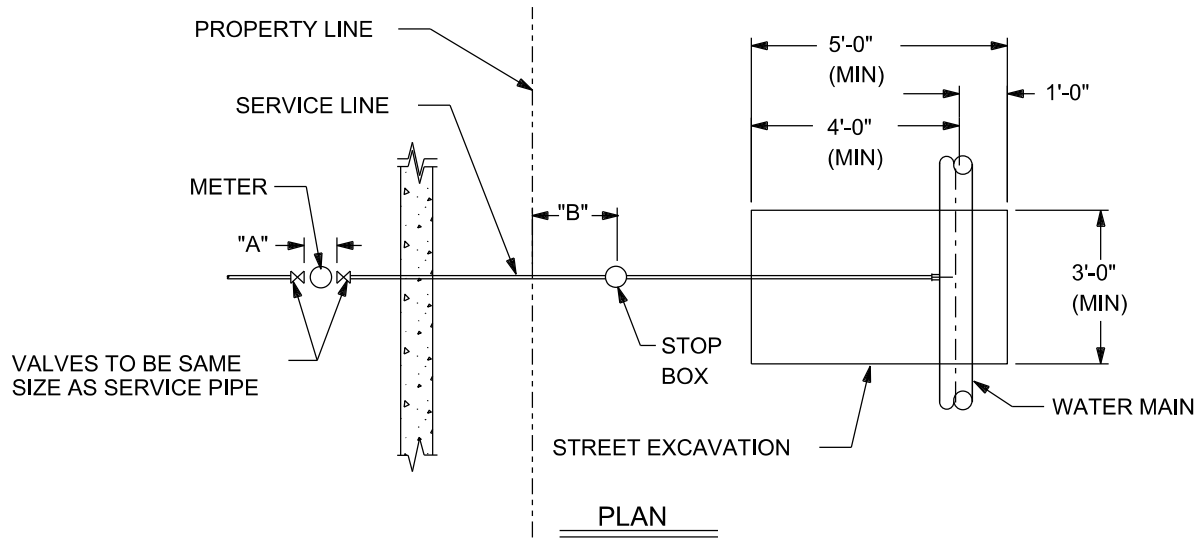
Section 515 Water Shortage Plan

515.6.5 has been edited to allow a minimum domestic quantity to be applied for billing to meet basic human water consumption needs.

Section 516 Public Records

No Changes

DISTANCE "B"
 INSIDE CITY OF D.M. = 1'-0" TO 6'-0"
 OUTSIDE CITY OF D.M. = 1'-0" TO 6'-0"
 INSIDE CITY OF PLEASANT HILL = 1'-0" TO 8'-0"



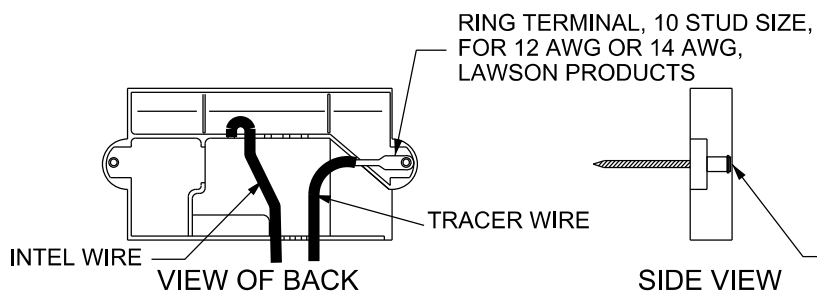
METER SPACING

SIZE OF METER	"A" - FACE TO FACE OF VALVES
5/8"	11-3/4"
3/4"	13-3/4"
1"	15-3/4"

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 Des Moines, Iowa

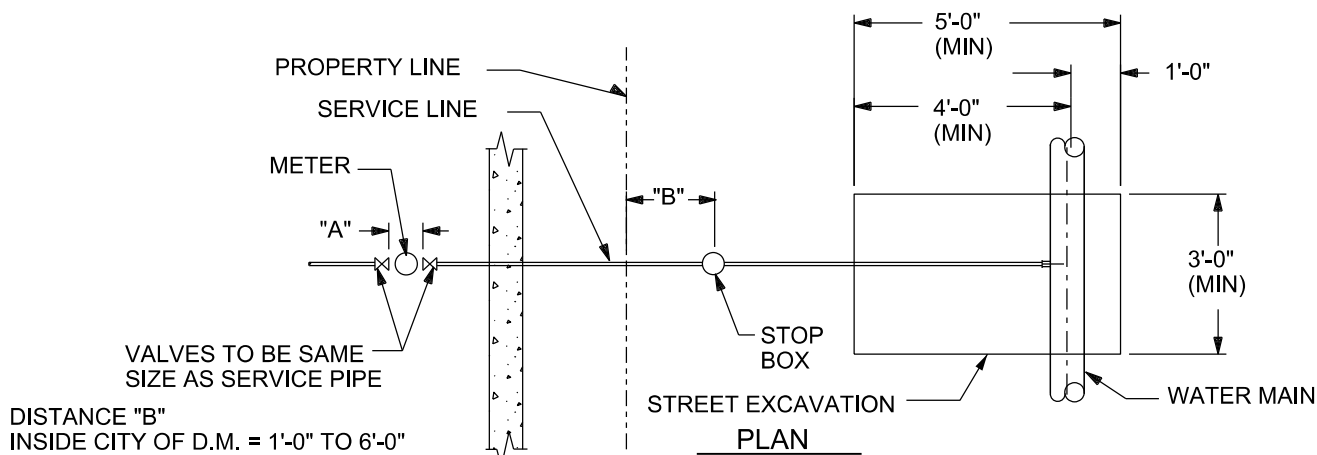
DETAIL OF 1" COPPER SERVICE INSTALLATION

SCALE: NONE DATE: 5-10-96
 DRAWN BY: DLH APPROVED BY: TPC
 REVISED: 08/15/2023 DLH



METER SPACING	
SIZE OF METER	"A" - FACE TO FACE OF VALVES
5/8"	11-3/4"
3/4"	13-3/4"
1"	15-3/4"

MTU UNIT DETAIL



DISTANCE "B"
 INSIDE CITY OF D.M. = 1'-0" TO 6'-0"
 OUTSIDE CITY OF D.M. = 1'-0" TO 6'-0"
 INSIDE CITY OF PLEASANT HILL = 1'-0" TO 8'-0"

TRACER WIRE REQUIRED WITH PEX PIPE
 (SEE 505.5.2.5 FOR TRACER SYSTEM
 SPECIFICATIONS). FASTEN TRACER WIRE
 WITH ZIP TIES EVERY 5 FEET.

MTU--INSTALLED W/INTEL WIRING
 AND TRACER WIRE TERMINATION
 (SEE DETAIL ABOVE)

STOP BOX WITH 1" RISER, STAINLESS
 STEEL ROD, & STAINLESS STEEL PIN

USE INSULATOR
 BETWEEN SERVICE
 LINE & CORPORATION
 (ON IRON PIPE ONLY)

1" TYPE "K"
 COPPER PIPE
 MAIN TO STOPBOX

EXCAVATIONS MUST
 BE PROPERLY SHORED
 BEFORE A TAP WILL
 BE MADE

SPLICE
 "A"
 6"
 PROTECT WIRE
 PASSING THROUGH
 WALL OR SLAB

1" SDR 9 PEX PIPE
 STOPBOX TO HOUSE
 1" BALL COCK
 MIN. DEPTH 5'-0"
 MAX. DEPTH 7'-0"

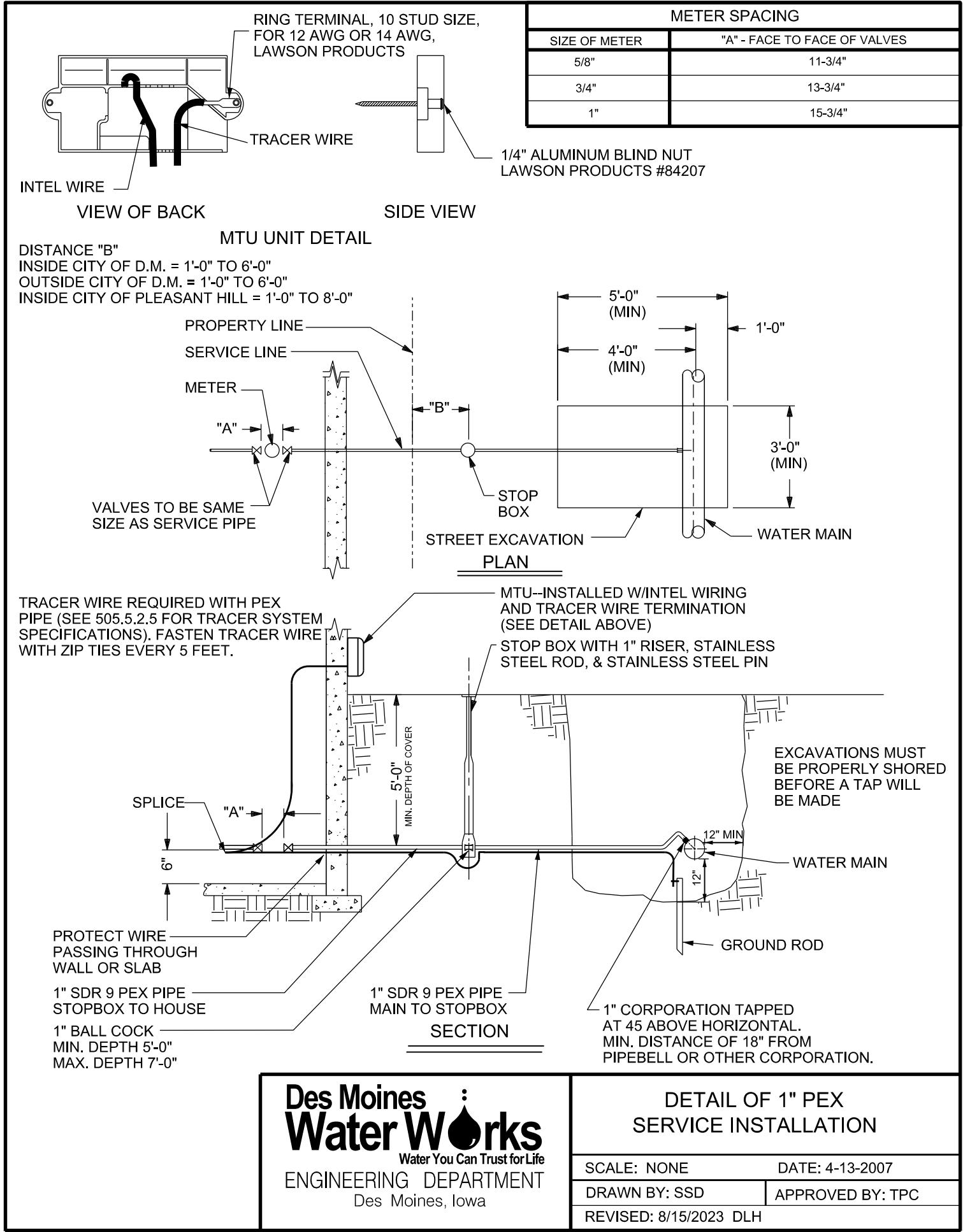
SECTION

1" CORPORATION TAPPED
 AT 45 ABOVE HORIZONTAL.
 MIN. DISTANCE OF 18" FROM
 PIPEBELL OR OTHER CORPORATION.
 1/2" TO 1" GROUND CLAMP (DIRECT BURY)
 BURNDY C11D

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DETAIL OF 1" SERVICE
 COPPER TO BOX/PEX TO HOUSE
 (REPAIR OPTION ONLY)

SCALE: NONE DATE: 5-19-96
 DRAWN BY: DLH APPROVED BY: TPC
 REVISED: 8/14/2023 DLH

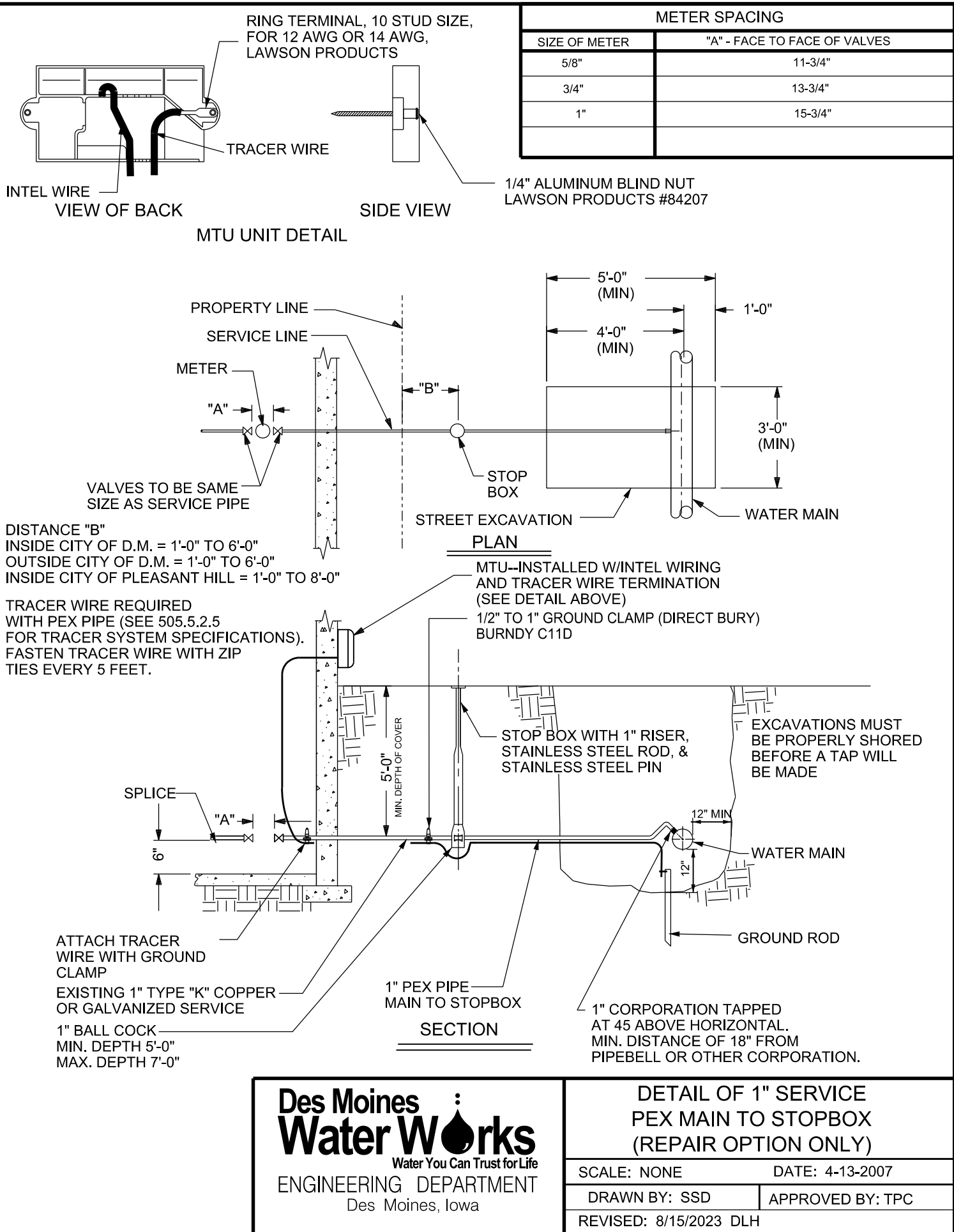


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 Des Moines, Iowa

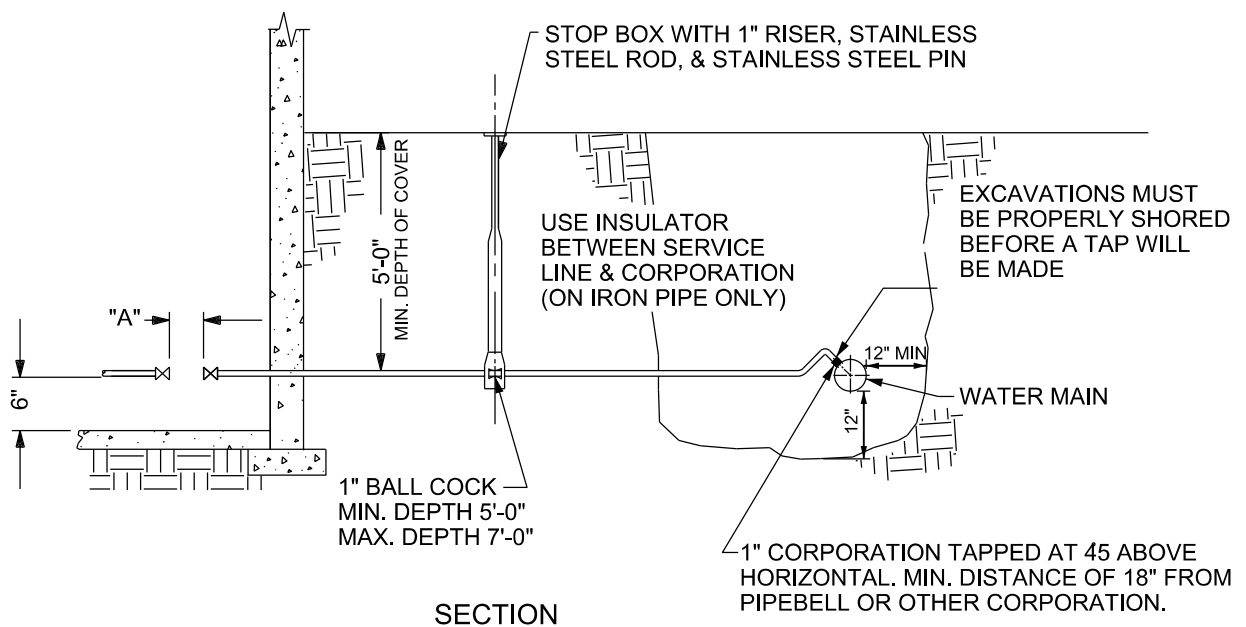
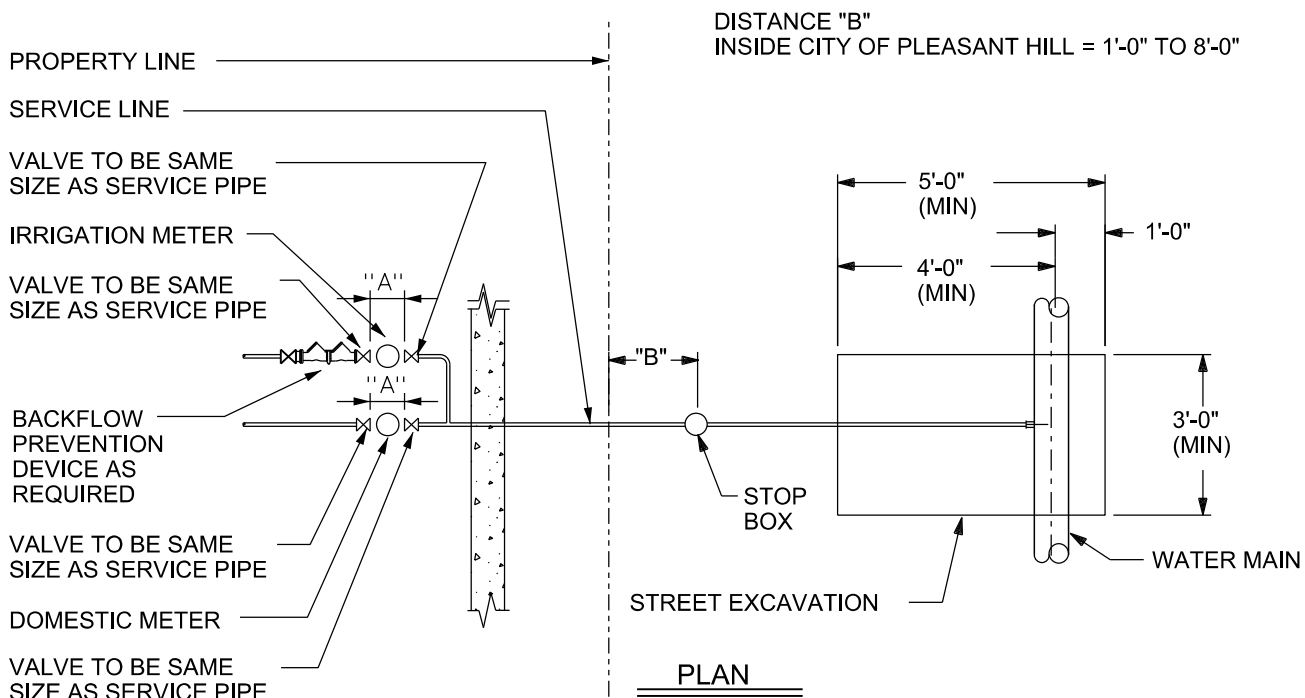
DETAIL OF 1" PEX SERVICE INSTALLATION

SCALE: NONE	DATE: 4-13-2007
DRAWN BY: SSD	APPROVED BY: TPC
REVISED: 8/15/2023	DLH

512-1B
 FIGURE 1B

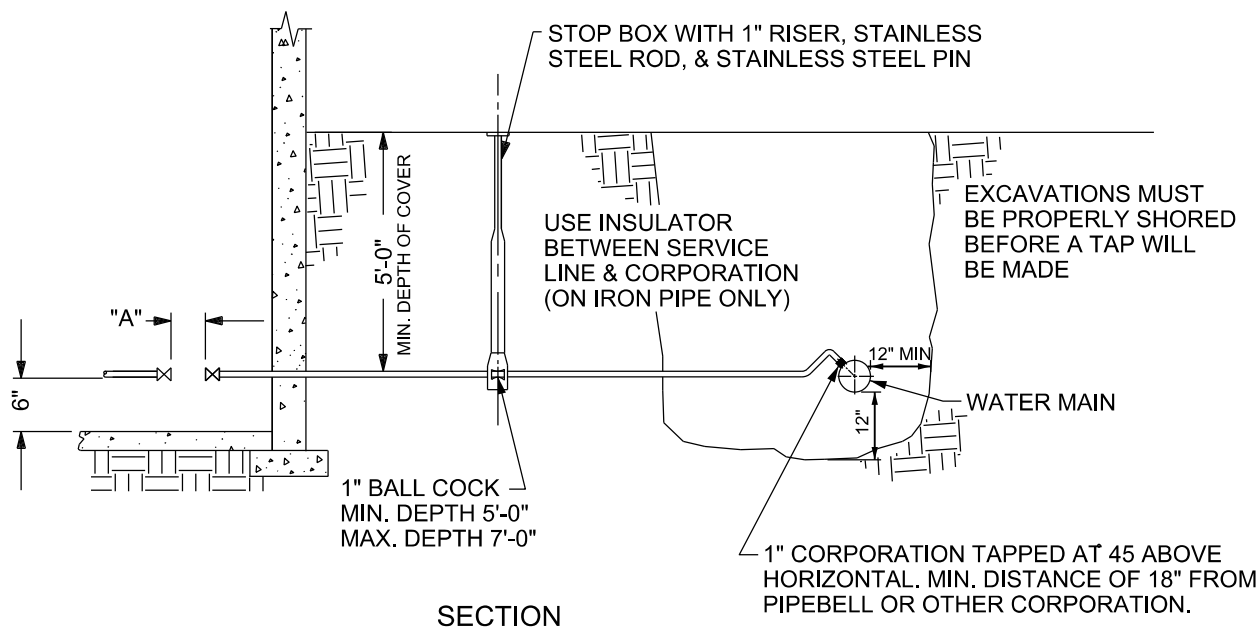
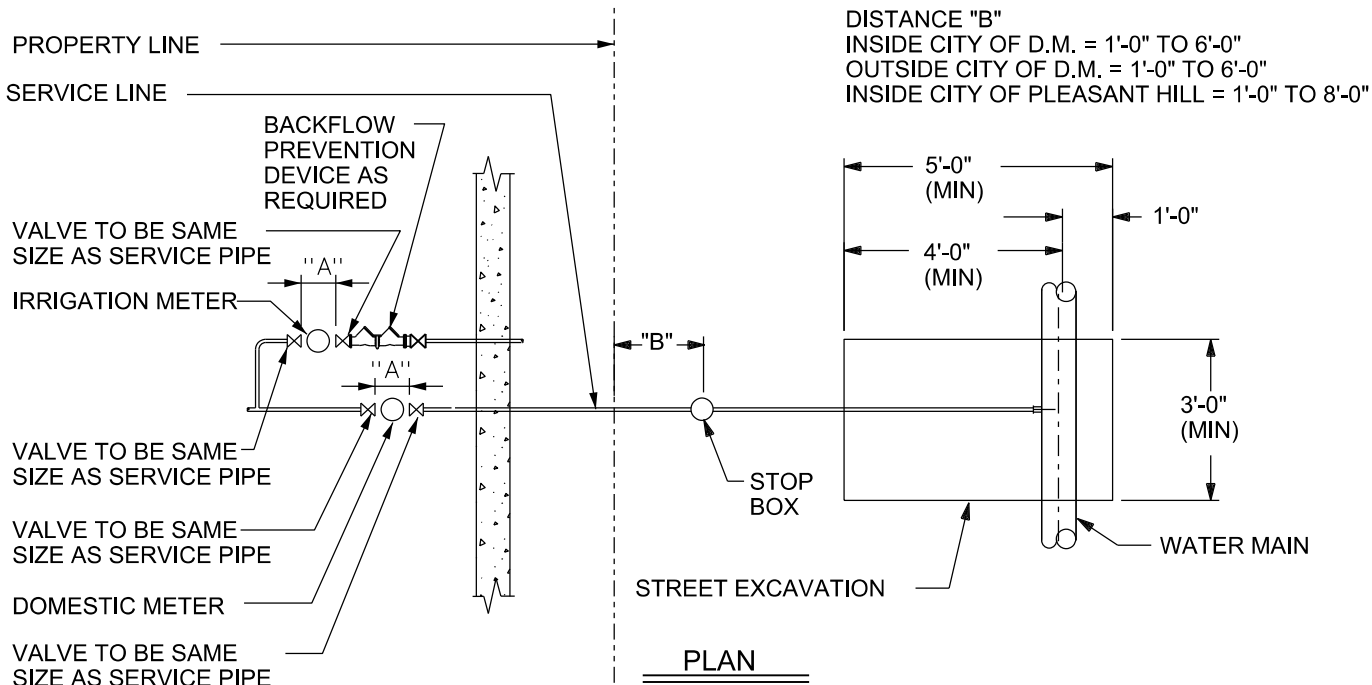


512-1C
FIGURE 1C



METER SPACING

SIZE OF METER	"A" - FACE TO FACE OF VALVES	
5/8"	11-3/4"	
3/4"	13-3/4"	
1"	15-3/4"	
	Des Moines Water Works <small>Water You Can Trust for Life</small> ENGINEERING DEPARTMENT Des Moines, Iowa	
	DETAIL OF 1" SERVICE INSTALLATION IN PLEASANT HILL ONLY	
	SCALE: NONE	DATE: 4-13-2007
	DRAWN BY: SSD	APPROVED BY: TPC
REVISED: 8/15/2023 DLH		



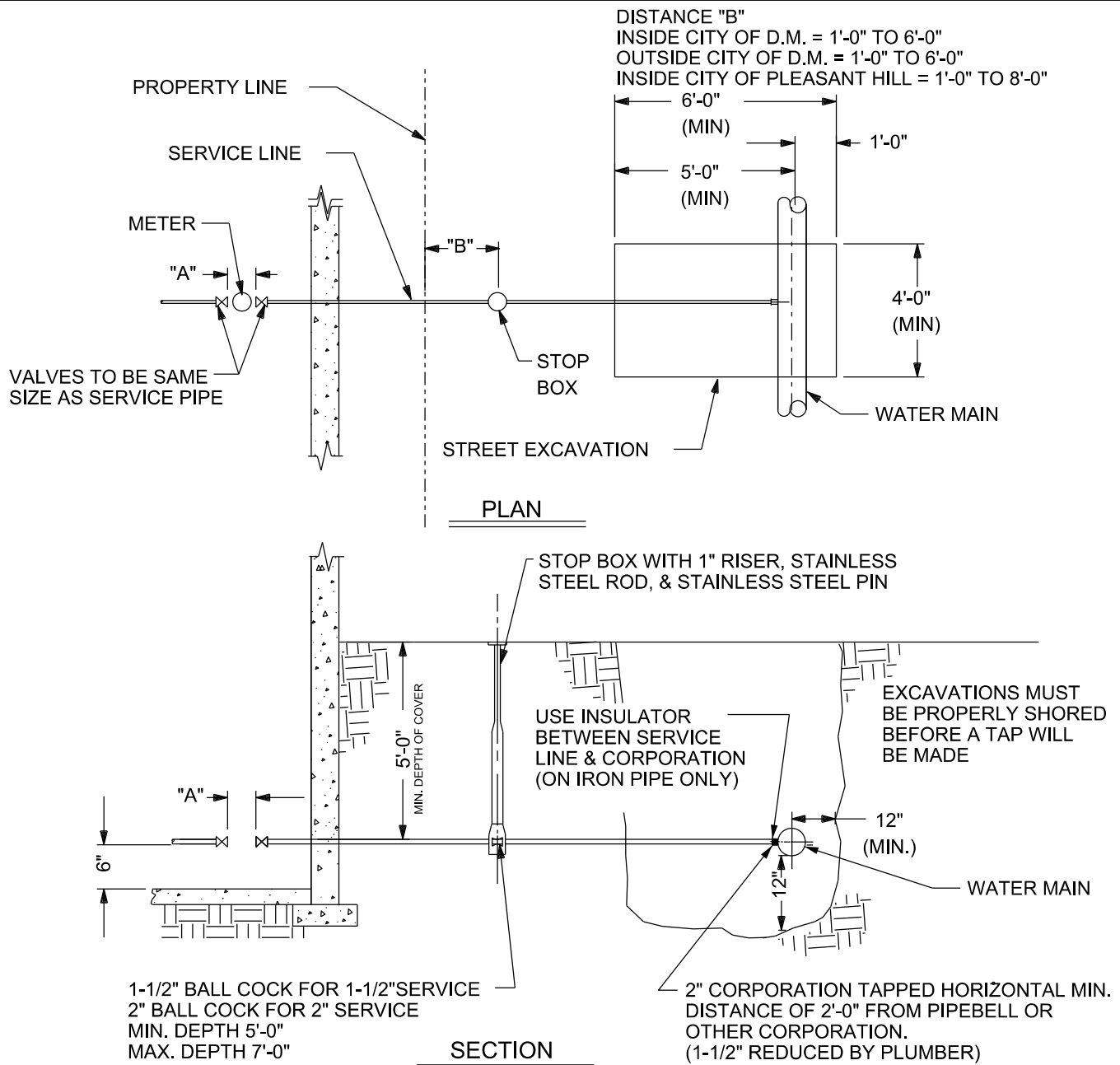
METER SPACING

SIZE OF METER	"A" - FACE TO FACE OF VALVES
5/8"	11-3/4"
3/4"	13-3/4"
1"	15-3/4"

Des Moines Water Works
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 ENGINEERING DEPARTMENT
 Des Moines, Iowa

DETAIL OF 1" SERVICE INSTALLATION FOR DEDUCT METER

SCALE: NONE	DATE: 5-10-1996
DRAWN BY: DLH	APPROVED BY: TPC
REVISED: 8/15/2023 DLH	



METER SPACING

SIZE OF METER	"A" DIMENSIONS
5/8"	11-3/4" (FACE TO FACE OF VALVES)
3/4"	13-3/4" (FACE TO FACE OF VALVES)
1"	15-3/4" (FACE TO FACE OF VALVES)
1-1/2" SCREW TYPE	30" (FACE TO FACE OF VALVES)
2" SCREW TYPE	30" (FACE TO FACE OF VALVES)
1-1/2" FLANGE TYPE	13-1/4" (FACE TO FACE OF FLANGES)
2" FLANGE TYPE	17-1/4" (FACE TO FACE OF FLANGES)

Des Moines Water Works
Water You Can Trust for Life
ENGINEERING DEPARTMENT
Des Moines, Iowa

DETAIL OF 1-1/2" OR 2" SERVICE INSTALLATION

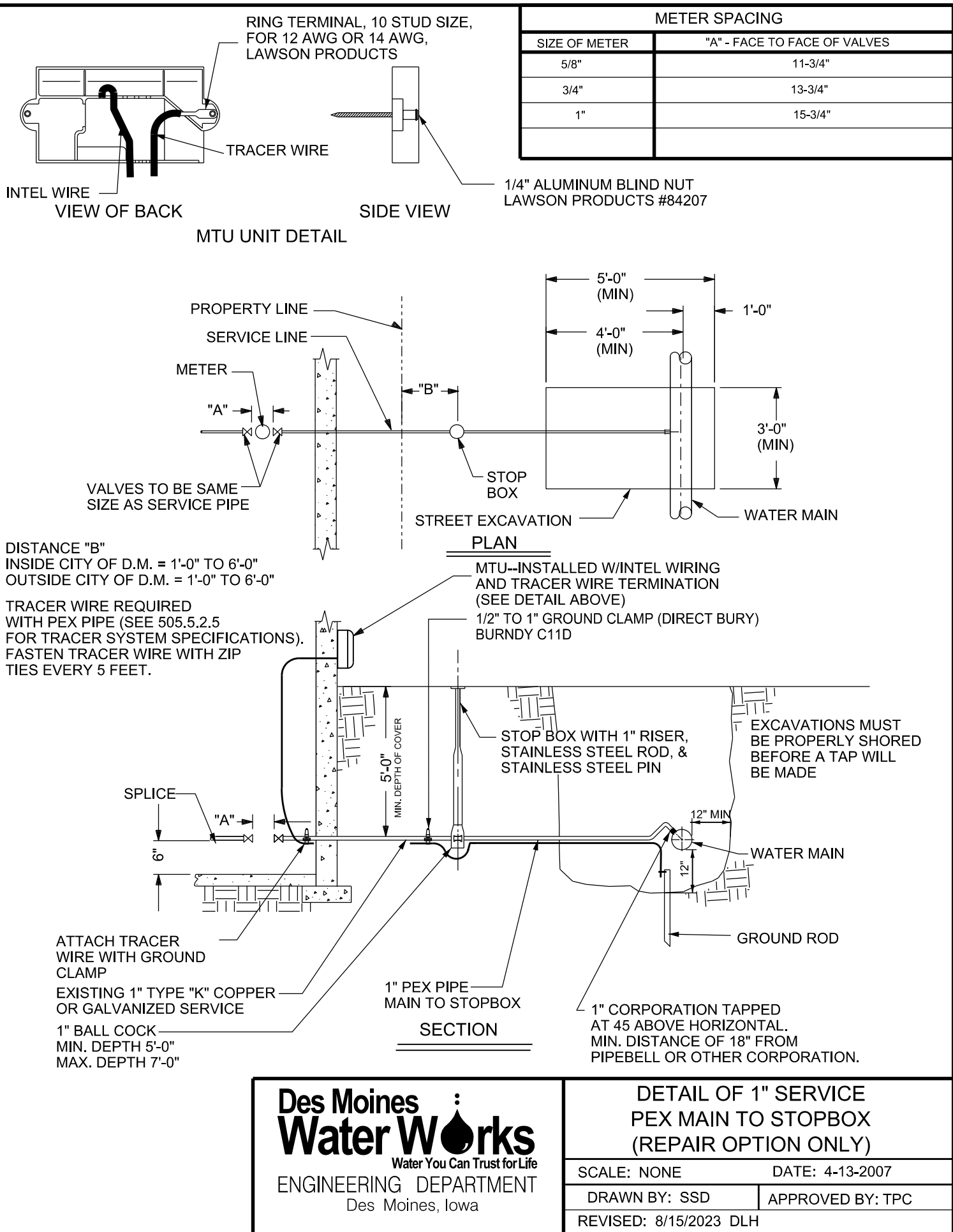
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DATE: 5-10-96

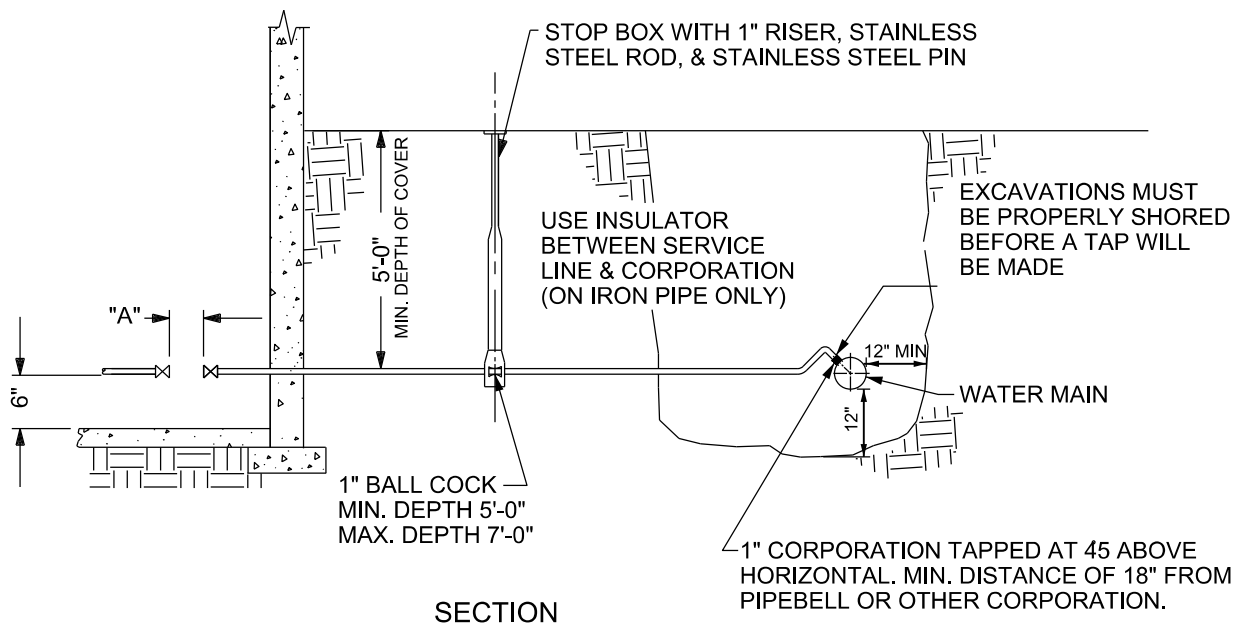
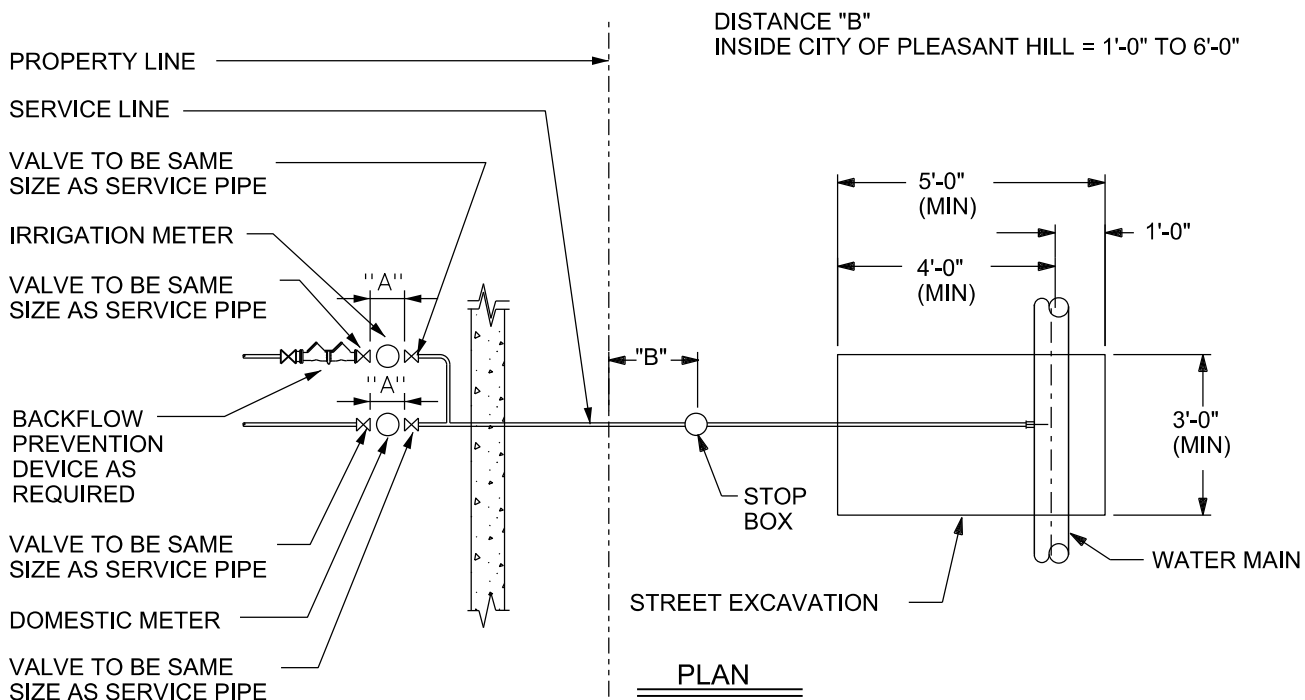
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APPROVED BY: TPC

REVISED: 10/26/2023 DLH

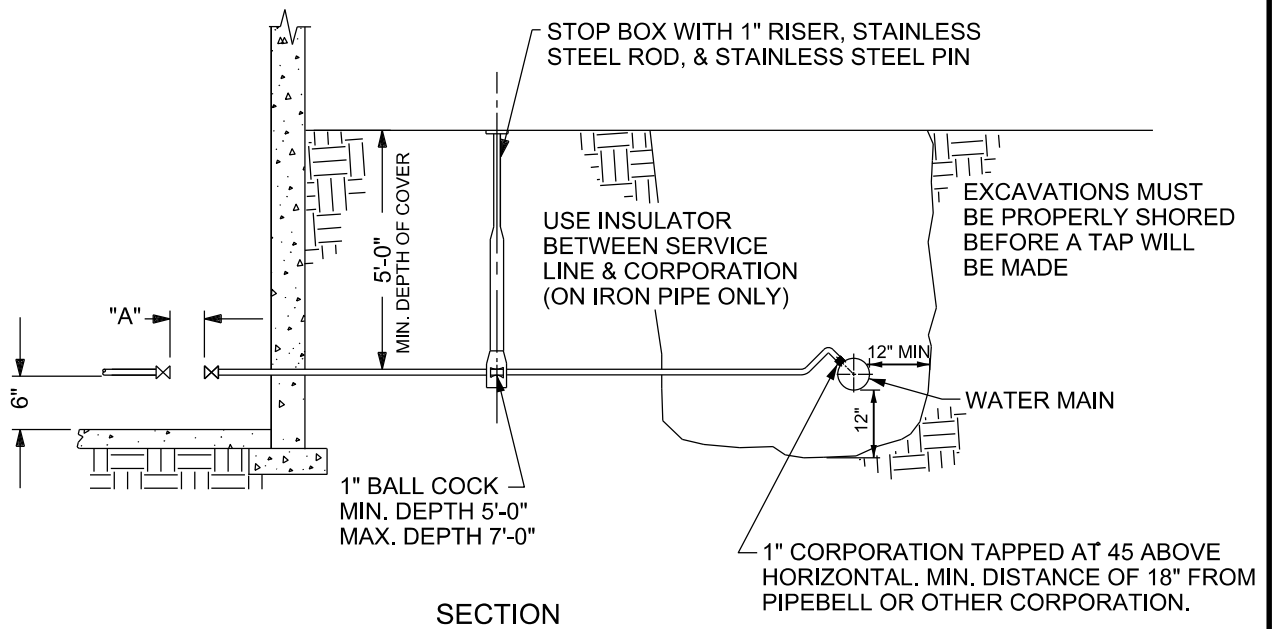
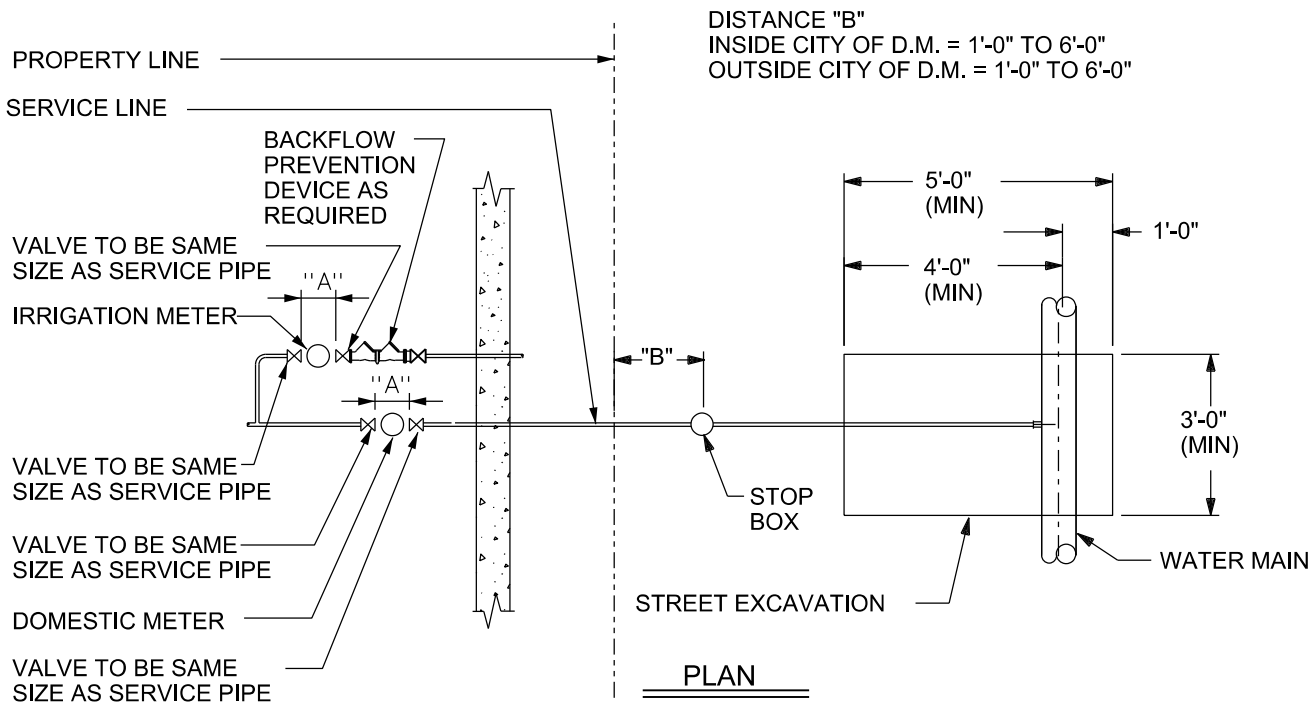


512-1C
FIGURE 1C



METER SPACING

SIZE OF METER	"A" - FACE TO FACE OF VALVES	
5/8"	11-3/4"	
3/4"	13-3/4"	
1"	15-3/4"	
Des Moines Water Works <small>Water You Can Trust for Life</small> ENGINEERING DEPARTMENT Des Moines, Iowa	DETAIL OF 1" SERVICE INSTALLATION IN PLEASANT HILL ONLY	
	SCALE: NONE	DATE: 4-13-2007
	DRAWN BY: SSD	APPROVED BY: TPC
	REVISED: 8/15/2023 DLH	



METER SPACING

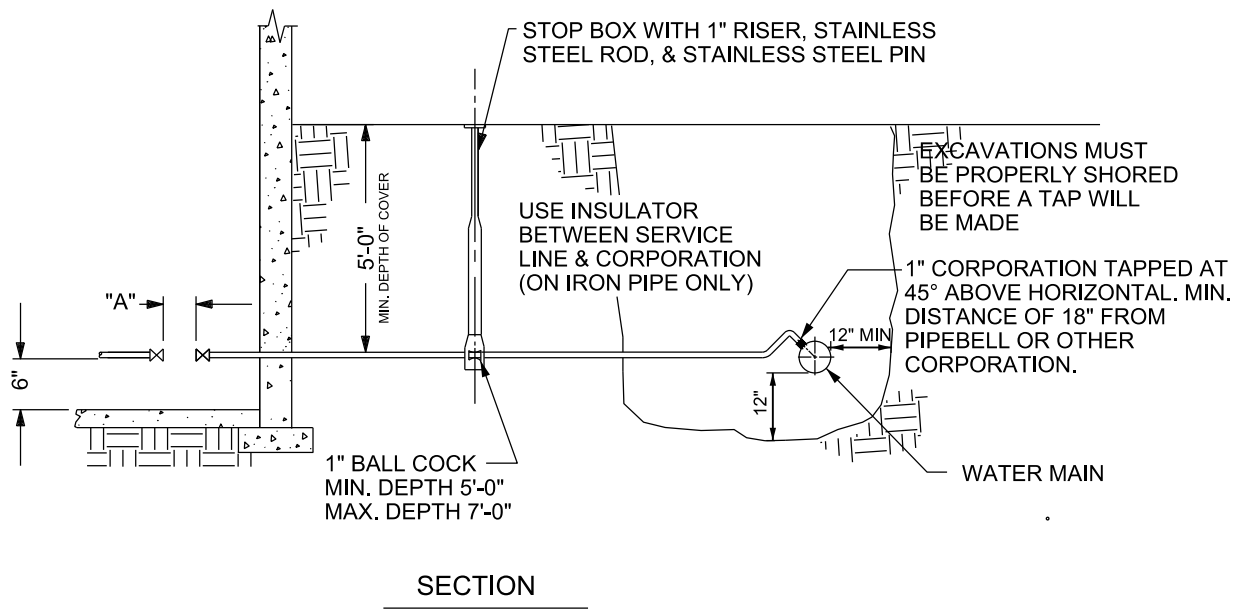
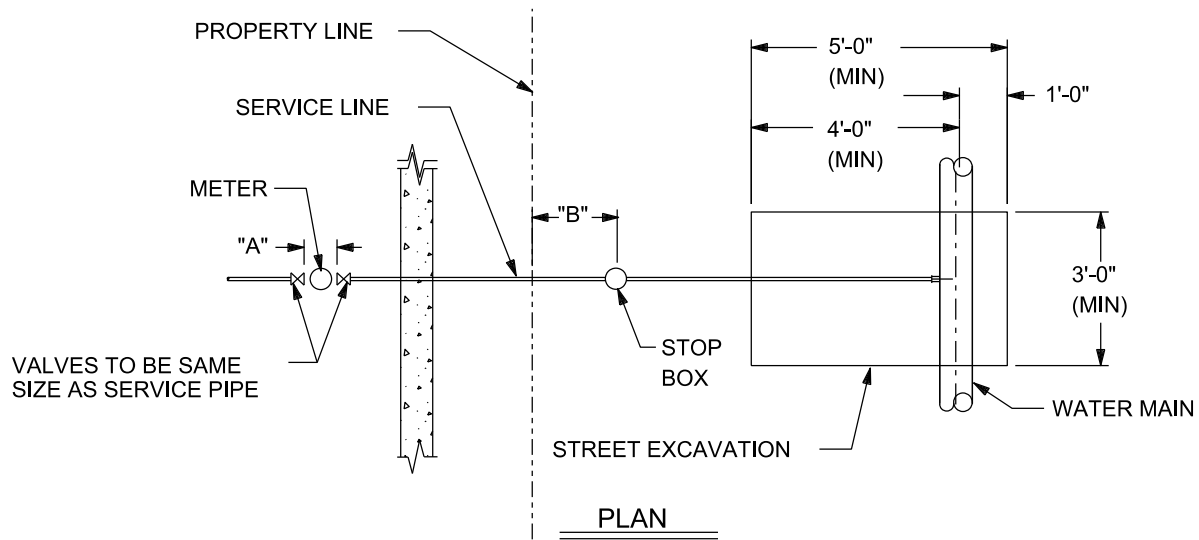
SIZE OF METER	"A" - FACE TO FACE OF VALVES
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Des Moines Water Works
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ENGINEERING DEPARTMENT
Des Moines, Iowa

DETAIL OF 1" SERVICE INSTALLATION FOR DEDUCT METER

SCALE: NONE	DATE: 5-10-1996
DRAWN BY: DLH	APPROVED BY: TPC
REVISED: 8/15/2023 DLH	

DISTANCE "B"
 INSIDE CITY OF D.M. = 1'-0" TO 6'-0"
 OUTSIDE CITY OF D.M. = 1'-0" TO 6'-0"



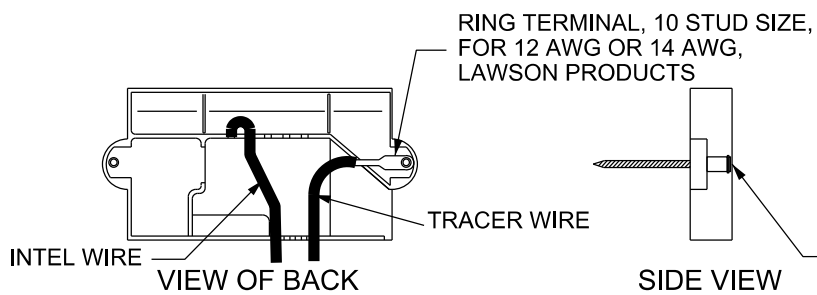
METER SPACING

SIZE OF METER	"A" - FACE TO FACE OF VALVES
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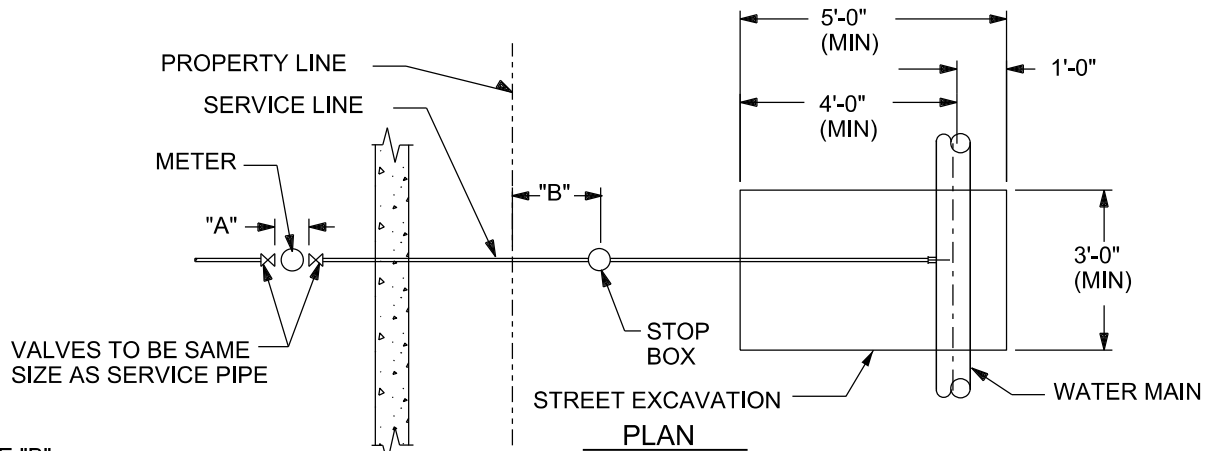
DETAIL OF 1" COPPER SERVICE INSTALLATION

SCALE: NONE	DATE: 5-10-96
DRAWN BY: DLH	APPROVED BY: TPC
REVISED: 08/15/2023 DLH	



MTU UNIT DETAIL

METER SPACING	
SIZE OF METER	"A" - FACE TO FACE OF VALVES
5/8"	11-3/4"
3/4"	13-3/4"
1"	15-3/4"



DISTANCE "B"
INSIDE CITY OF D.M. = 1'-0" TO 6'-0"
OUTSIDE CITY OF D.M. = 1'-0" TO 6'-0"

TRACER WIRE REQUIRED WITH PEX PIPE (SEE 505.5.2.5 FOR TRACER SYSTEM SPECIFICATIONS). FASTEN TRACER WIRE WITH ZIP TIES EVERY 5 FEET.

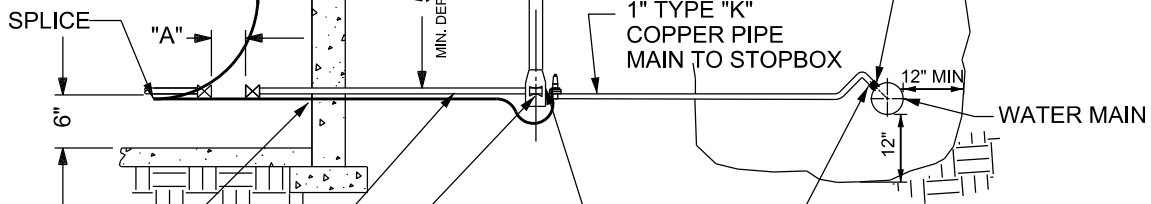
MTU--INSTALLED W/INTEL WIRING AND TRACER WIRE TERMINATION (SEE DETAIL ABOVE)

STOP BOX WITH 1" RISER, STAINLESS STEEL ROD, & STAINLESS STEEL PIN

USE INSULATOR BETWEEN SERVICE LINE & CORPORATION (ON IRON PIPE ONLY)

1" TYPE "K" COPPER PIPE MAIN TO STOPBOX

EXCAVATIONS MUST BE PROPERLY SHORED BEFORE A TAP WILL BE MADE



PROTECT WIRE PASSING THROUGH WALL OR SLAB

1" SDR 9 PEX PIPE STOPBOX TO HOUSE

1" BALL COCK
MIN. DEPTH 5'-0"
MAX. DEPTH 7'-0"

SECTION

Des Moines Water Works
Water You Can Trust for Life
ENGINEERING DEPARTMENT
Des Moines, Iowa

DETAIL OF 1" SERVICE
COPPER TO BOX/PEX TO HOUSE
(REPAIR OPTION ONLY)

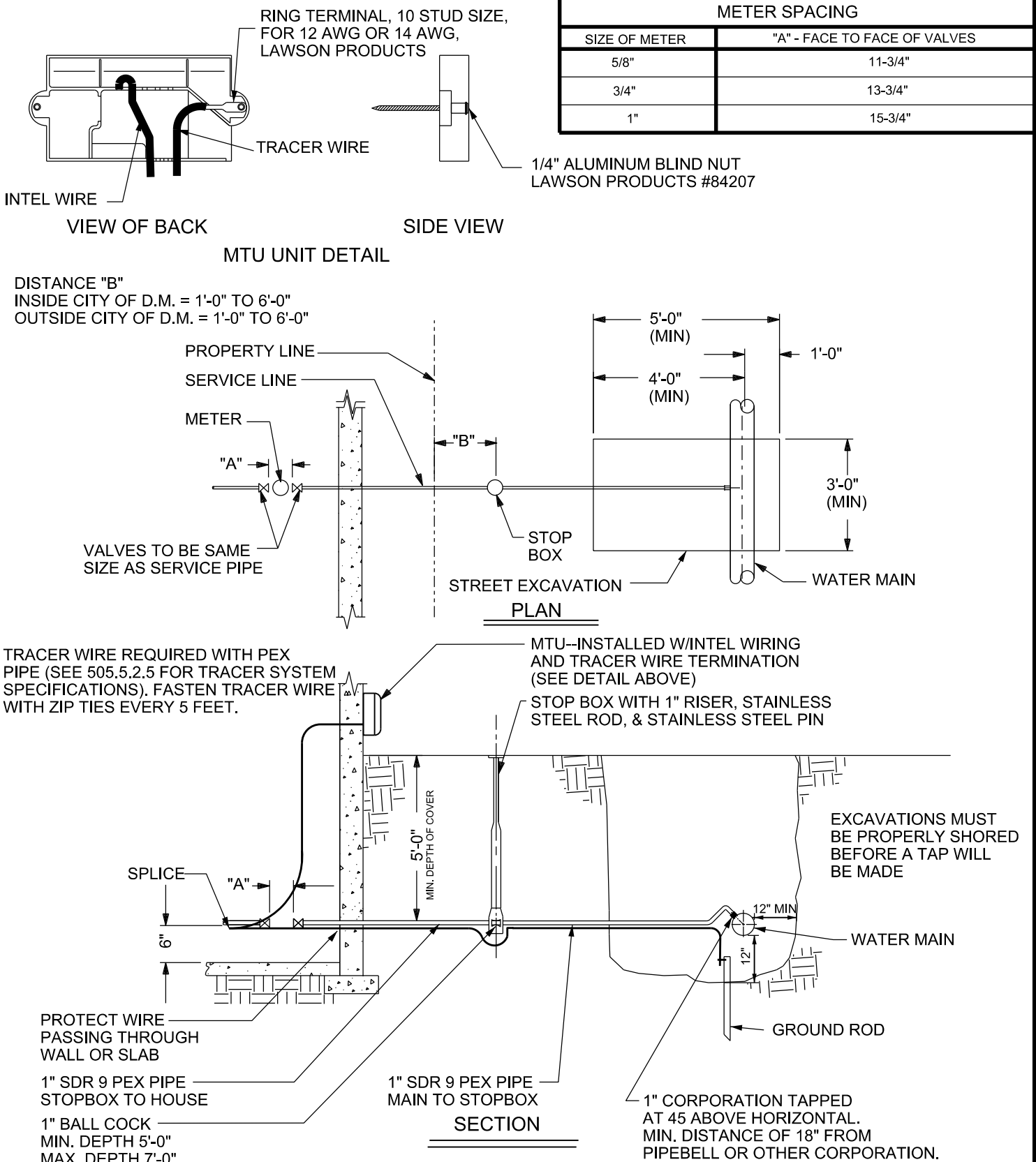
SCALE: NONE

DATE: 5-19-96

DRAWN BY: DLH

APPROVED BY: TPC

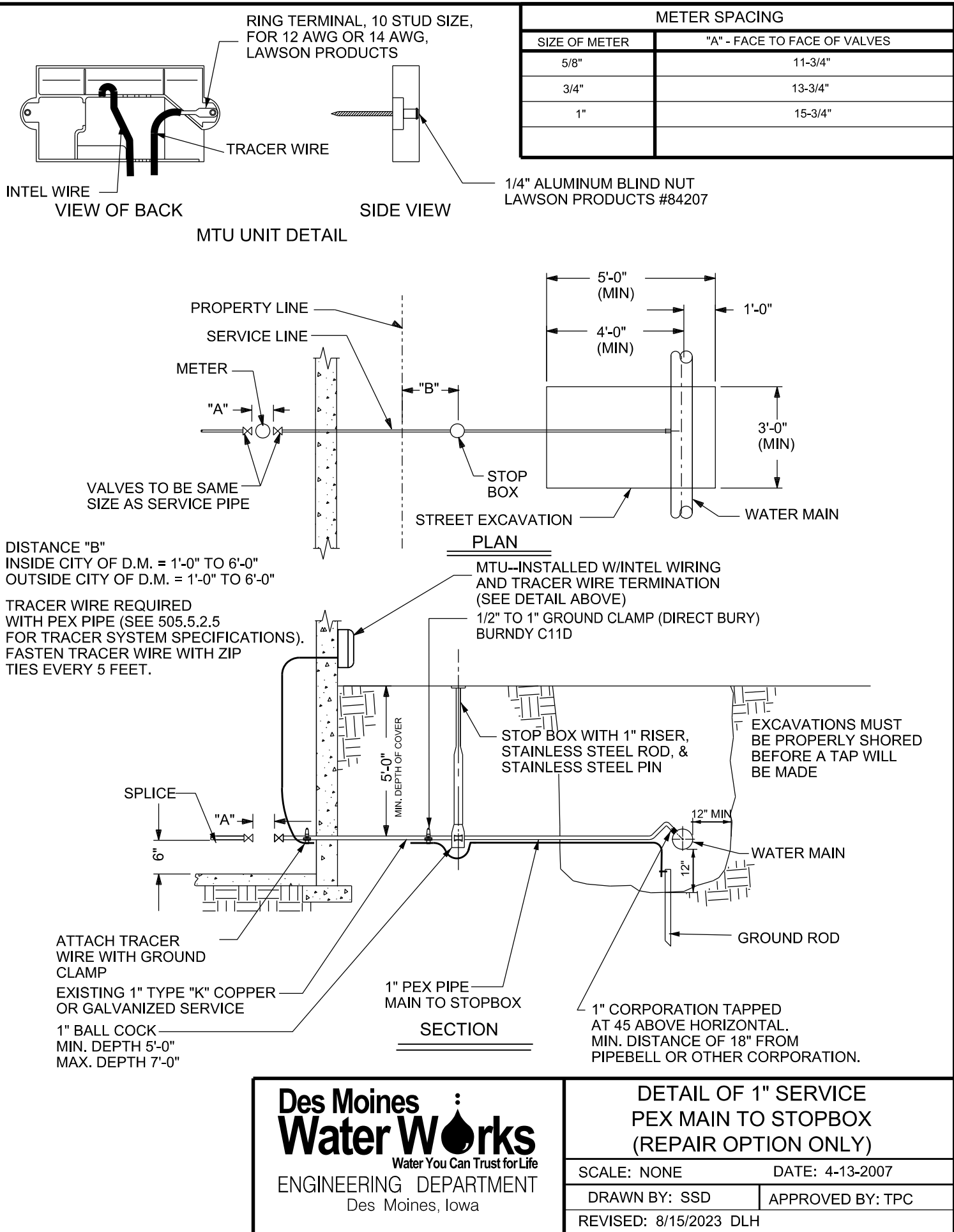
REVISED: 8/14/2023 DLH



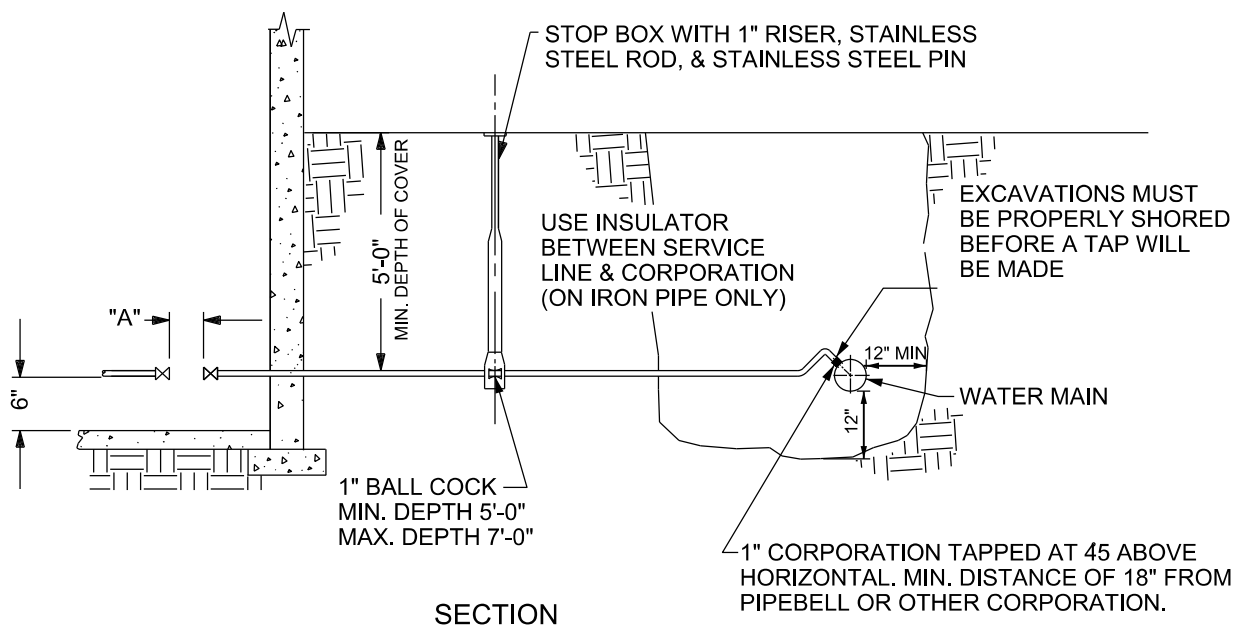
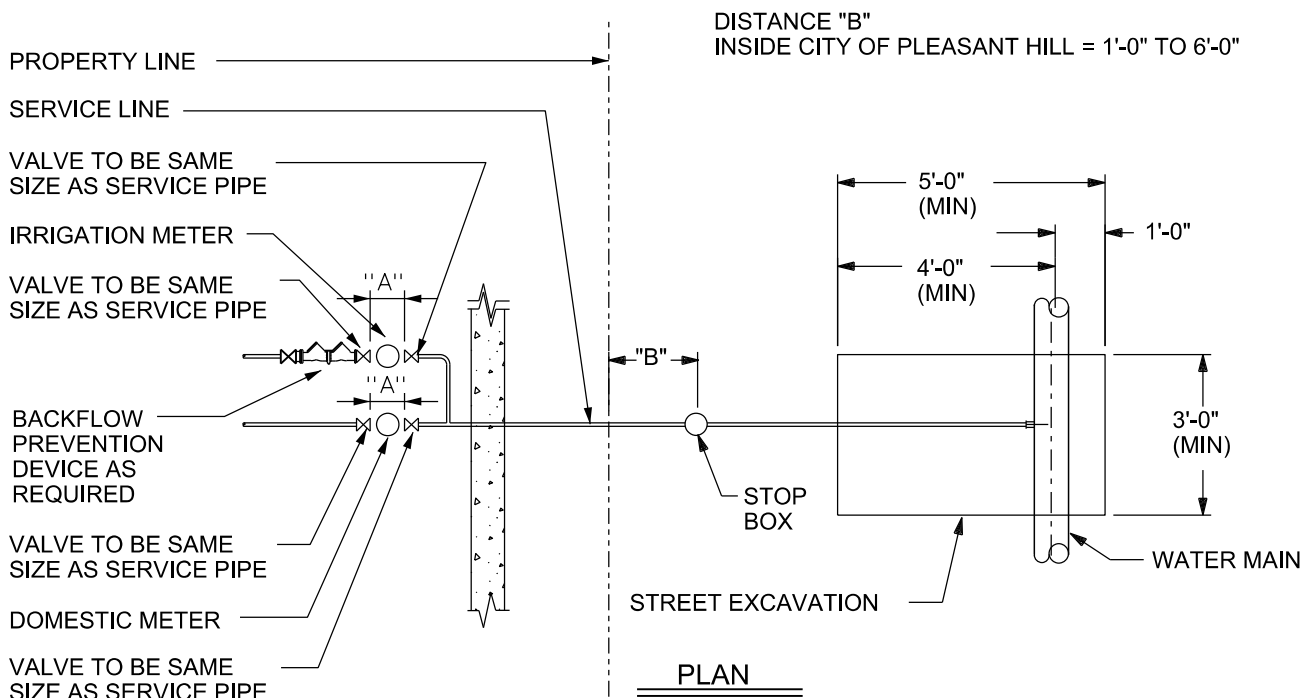
Des Moines
Water Works
 Water You Can Trust for Life
 ENGINEERING DEPARTMENT
 Des Moines, Iowa

**DETAIL OF 1" PEX
 SERVICE INSTALLATION**

SCALE: NONE DATE: 4-13-2007
 DRAWN BY: SSD APPROVED BY: TPC
 REVISED: 8/15/2023 DLH

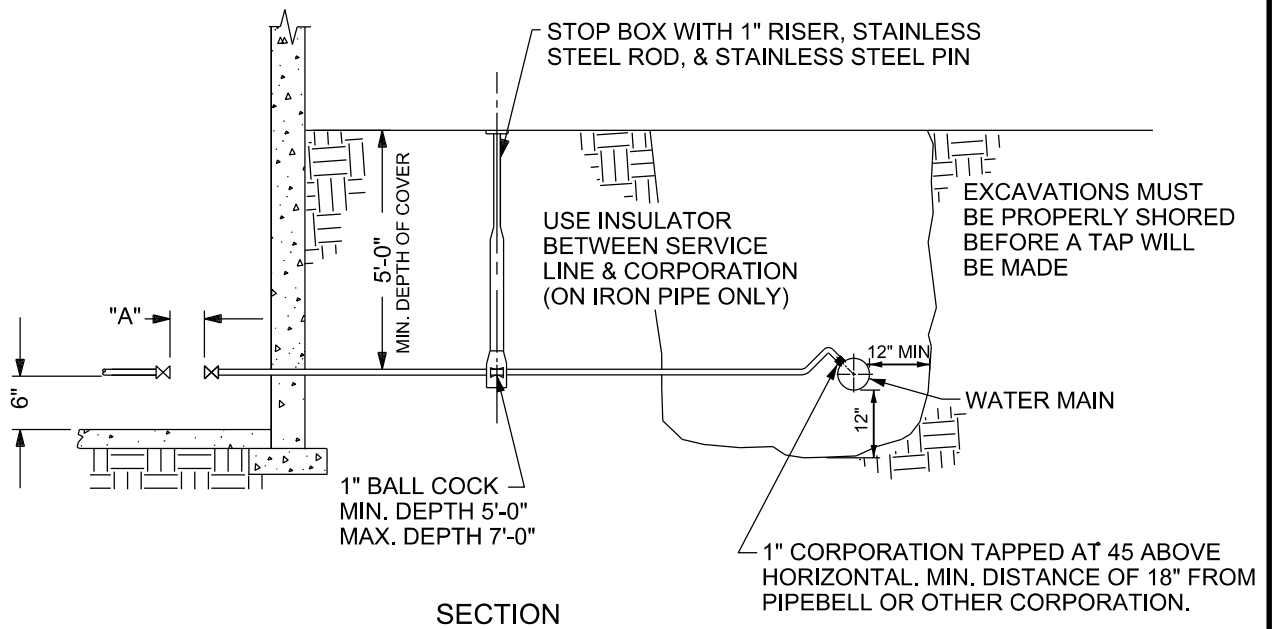
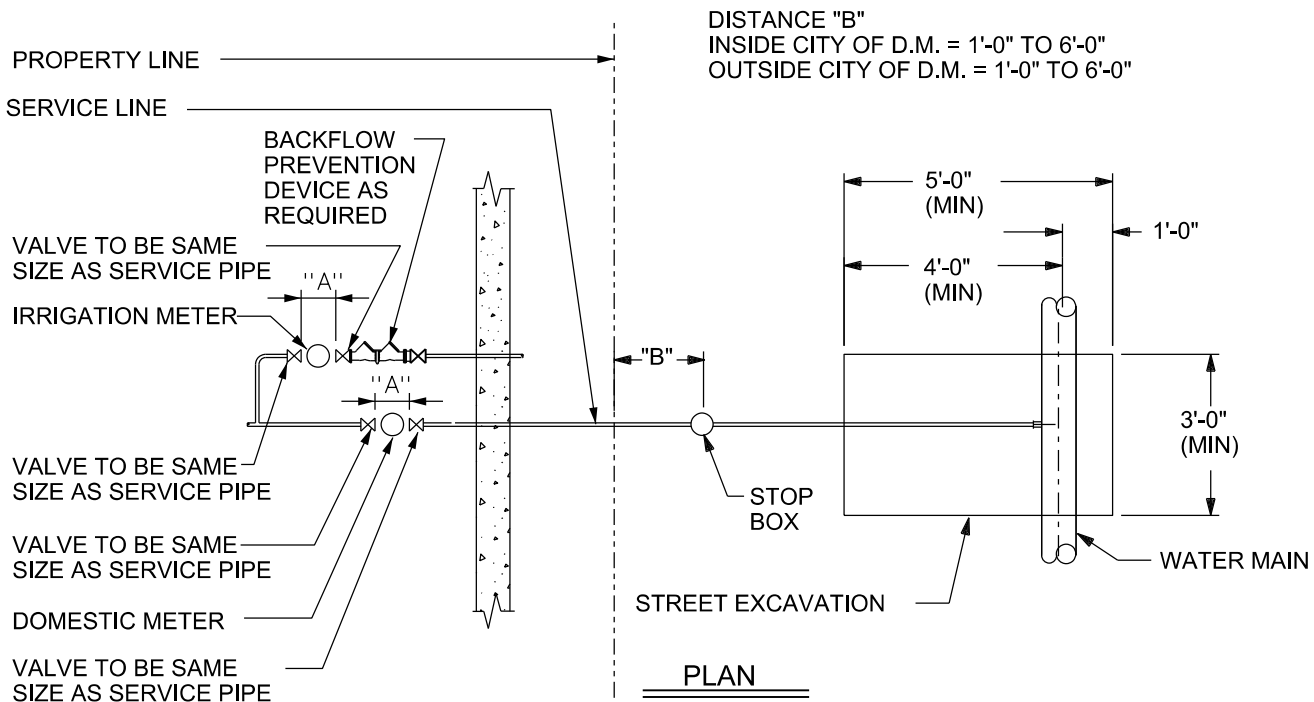


512-1C
FIGURE 1C



METER SPACING

SIZE OF METER	"A" - FACE TO FACE OF VALVES	
5/8"	11-3/4"	
3/4"	13-3/4"	
1"	15-3/4"	
	Des Moines Water Works <small>Water You Can Trust for Life</small> ENGINEERING DEPARTMENT Des Moines, Iowa	
	DETAIL OF 1" SERVICE INSTALLATION IN PLEASANT HILL ONLY	
	SCALE: NONE	DATE: 4-13-2007
	DRAWN BY: SSD	APPROVED BY: TPC
REVISED: 8/15/2023 DLH		



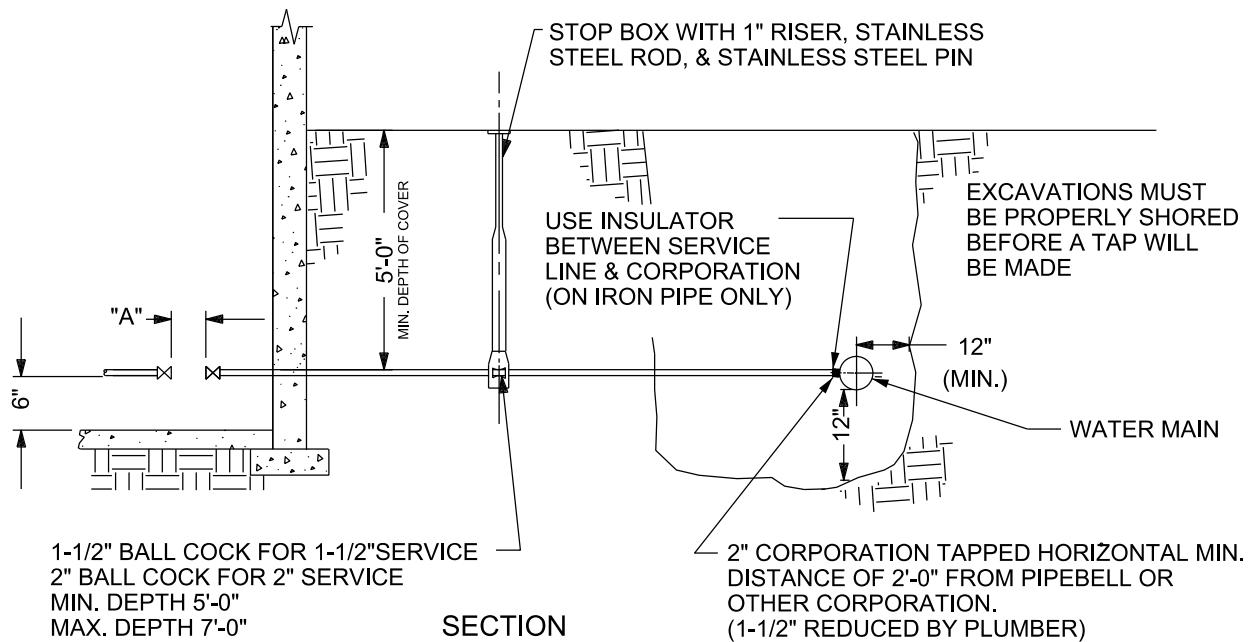
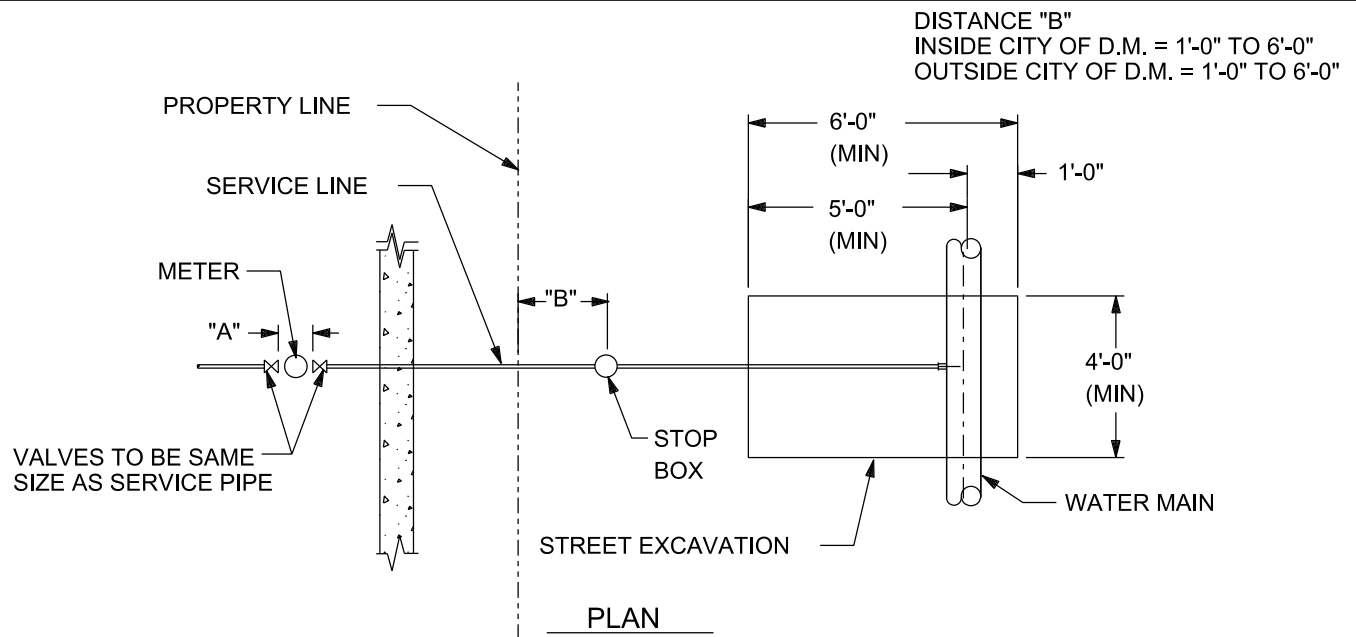
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Des Moines Water Works
Water You Can Trust for Life
ENGINEERING DEPARTMENT
Des Moines, Iowa

DETAIL OF 1" SERVICE INSTALLATION FOR DEDUCT METER

SCALE: NONE	DATE: 5-10-1996
DRAWN BY: DLH	APPROVED BY: TPC
REVISED: 8/15/2023 DLH	



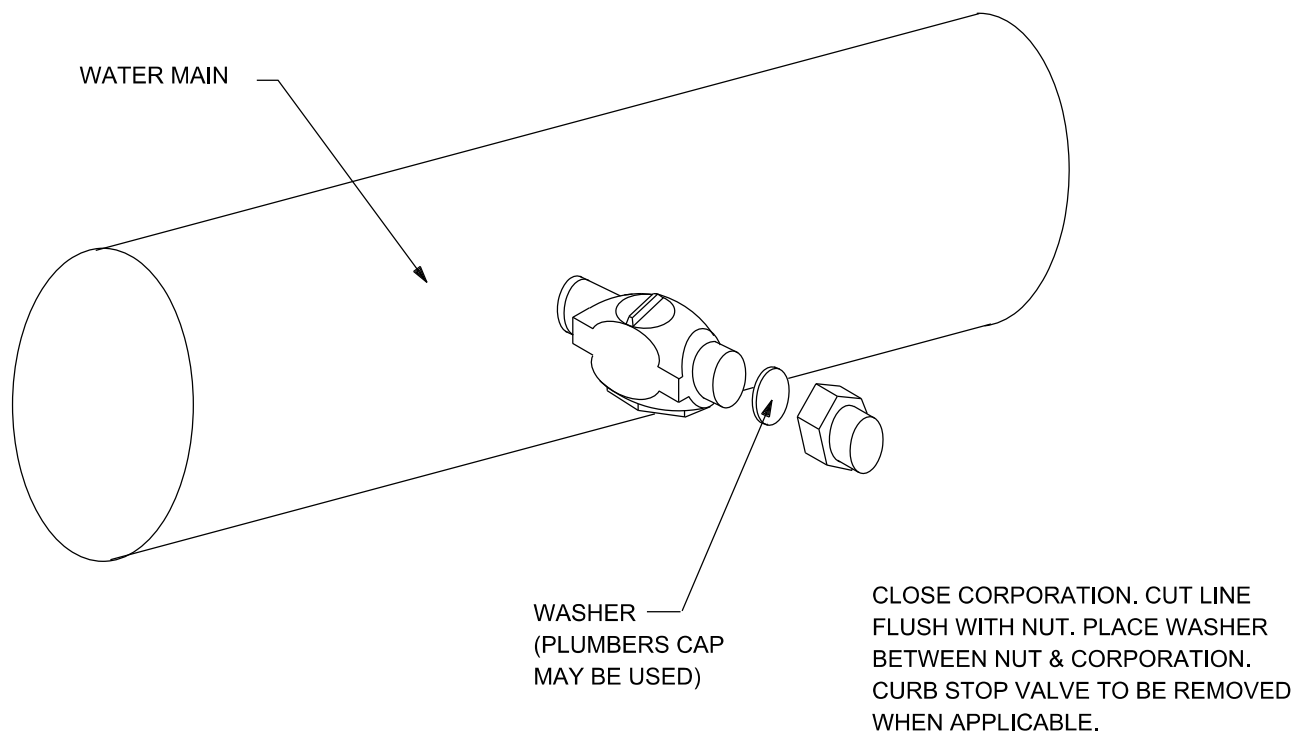
METER SPACING

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1"	15-3/4" (FACE TO FACE OF VALVES)
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2" SCREW TYPE	30" (FACE TO FACE OF VALVES)
1-1/2" FLANGE TYPE	13-1/4" (FACE TO FACE OF FLANGES)
2" FLANGE TYPE	17-1/4" (FACE TO FACE OF FLANGES)

Des Moines Water Works
Water You Can Trust for Life
ENGINEERING DEPARTMENT
Des Moines, Iowa

DETAIL OF 1-1/2" OR 2" SERVICE INSTALLATION

SCALE: NONE DATE: 5-10-96
DRAWN BY: DLH APPROVED BY: TPC
REVISED: 10/26/2023 DLH



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TAP CUT AT MAIN PROCEDURES
 1/2" TO 1" DIRECT TAPS ONLY

SCALE: NONE

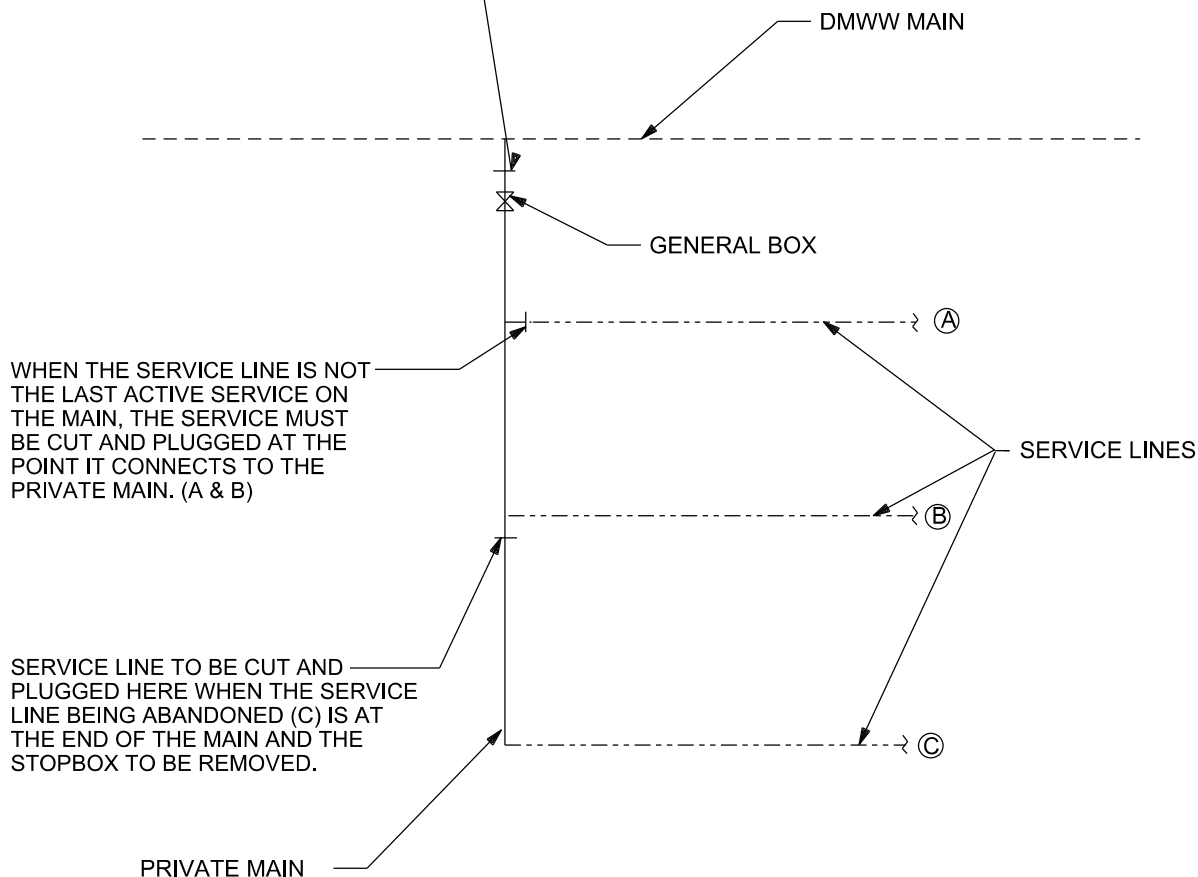
DATE: 5-10-96

DRAWN BY: DLH

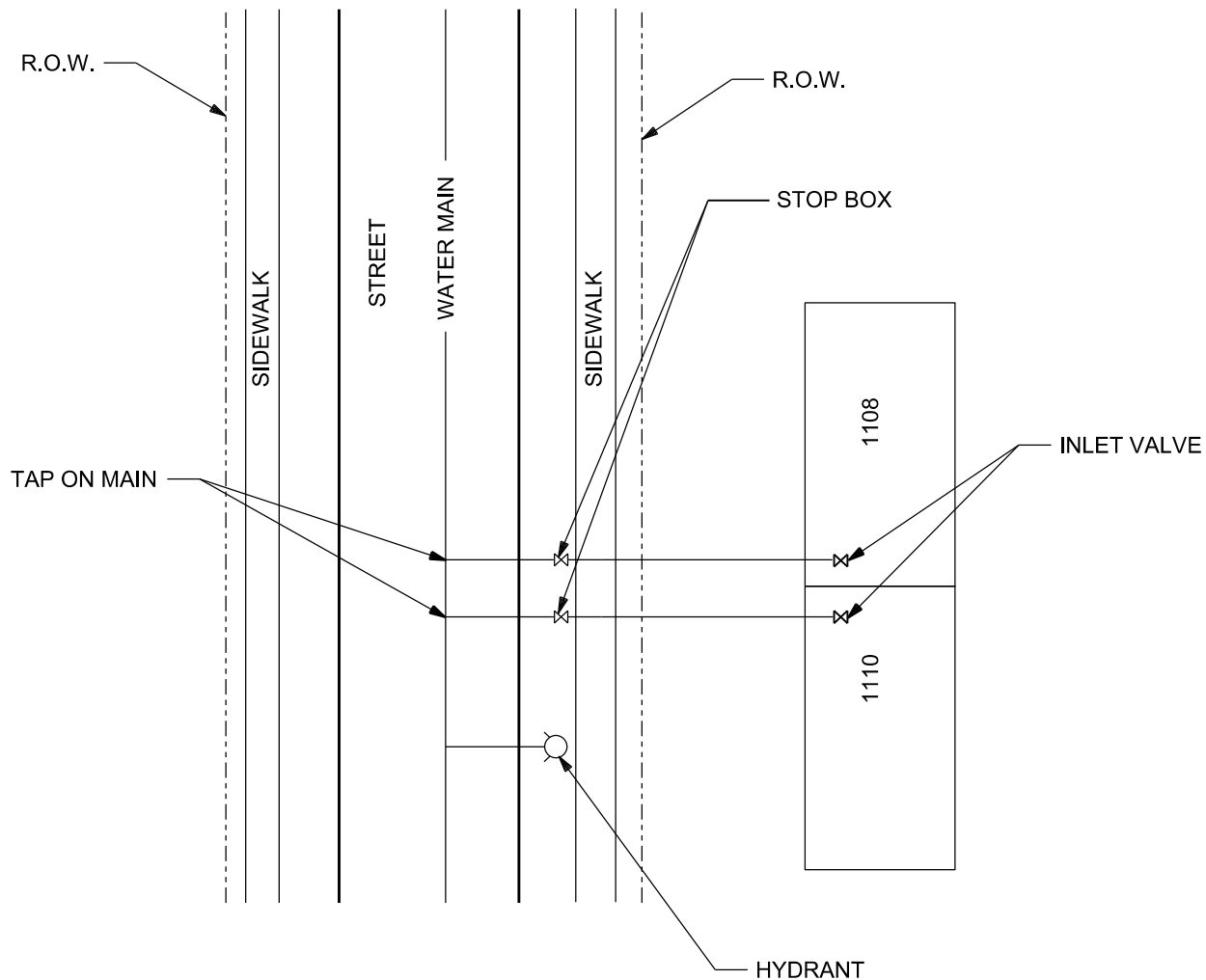
APPROVED BY: TPC

REVISED: 04/29/2013 JLH

PRIVATE MAIN TO BE CUT AND ABANDONED ACCORDING TO DMWW STANDARDS WHEN THE SERVICE LINE BEING ABANDONED IS THE LAST ACTIVE SERVICE ON THE MAIN AND THE GENERAL BOX REMOVED.



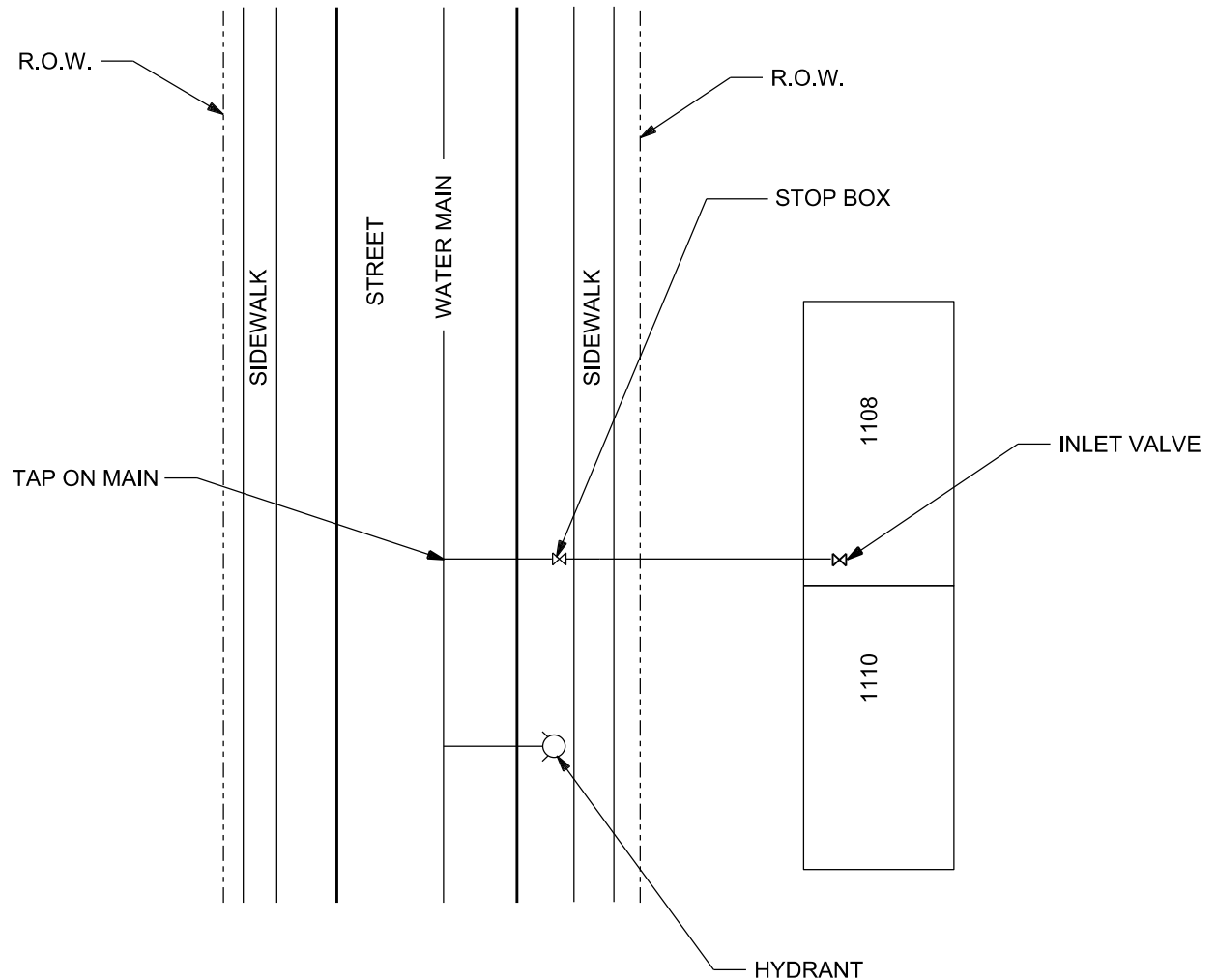
PRIVATE MAIN ABANDONMENT
 DETAILS



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**INSTALLATION OF SERVICE
 INTO A DUPLEX (OPTION #1)**

SCALE: NONE	DATE: 9-3-92
DRAWN BY: DLH	APPROVED BY: TPC
REVISED: 04/29/2013 JLH	



NOTE: ONLY ONE METER WITH
ONE SERVICE LINE

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INSTALLATION OF SERVICE INTO A DUPLEX (OPTION #2)

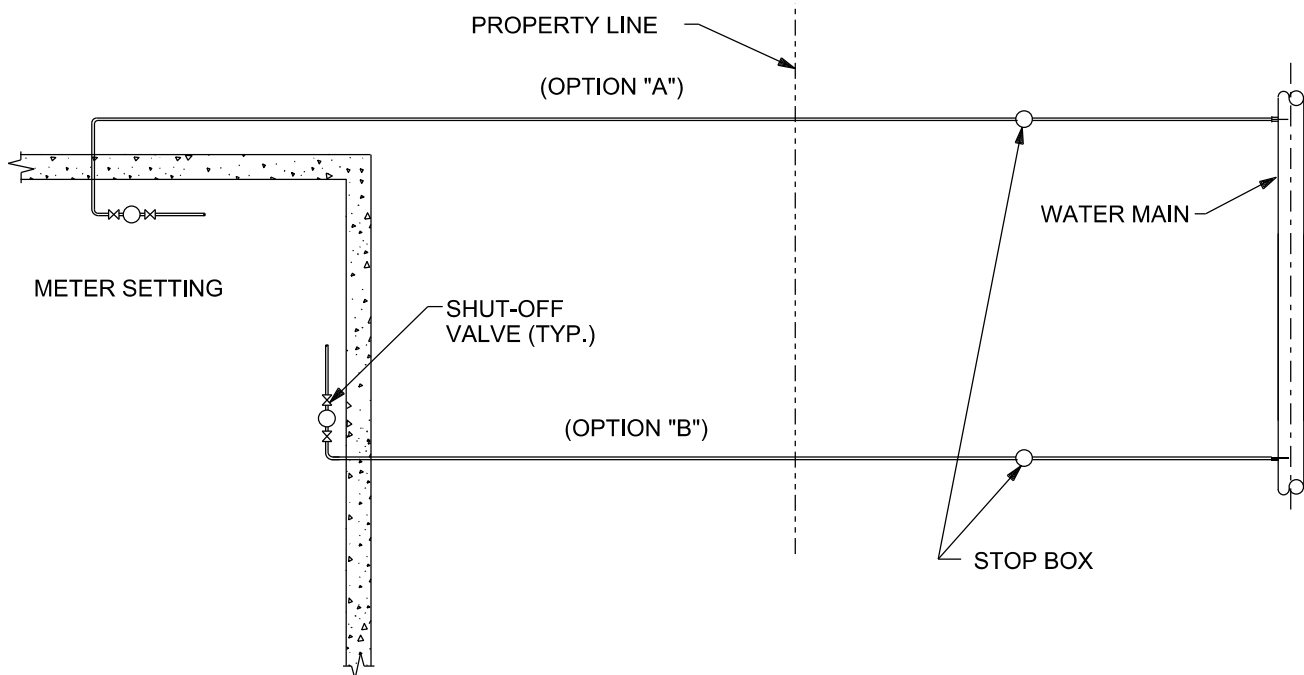
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DATE: 9-3-92

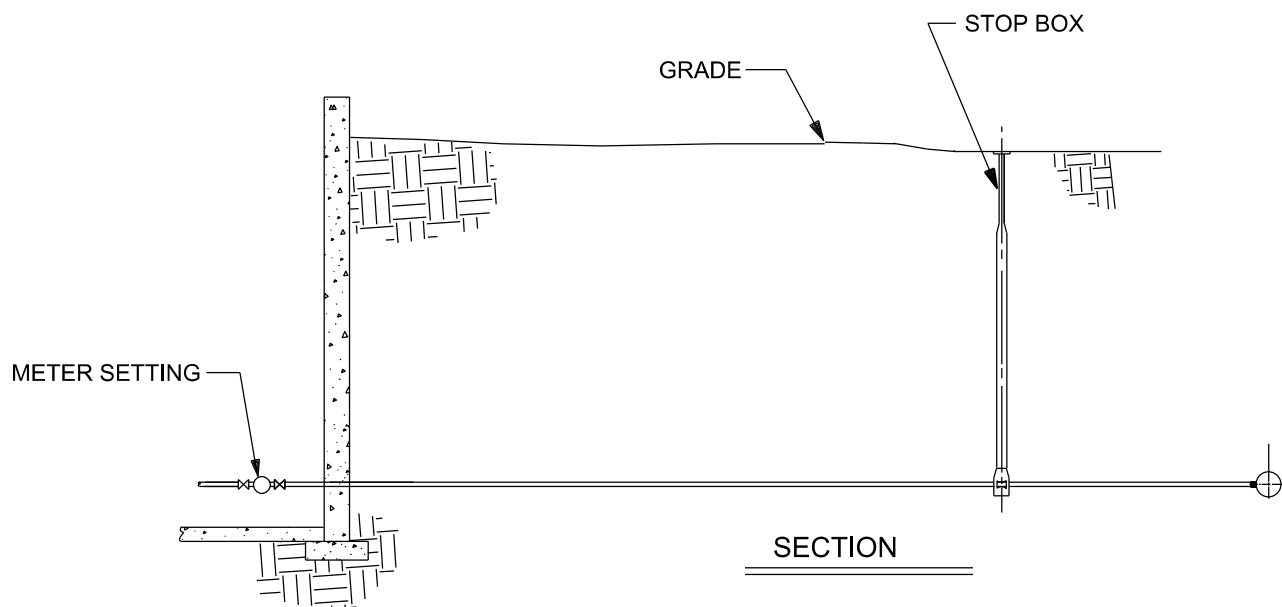
DRAWN BY: DLH

APPROVED BY: TPC

REVISED: 04/29/2013 JLH



PLAN



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**BUILDING WITH STANDARD
 BASEMENT**

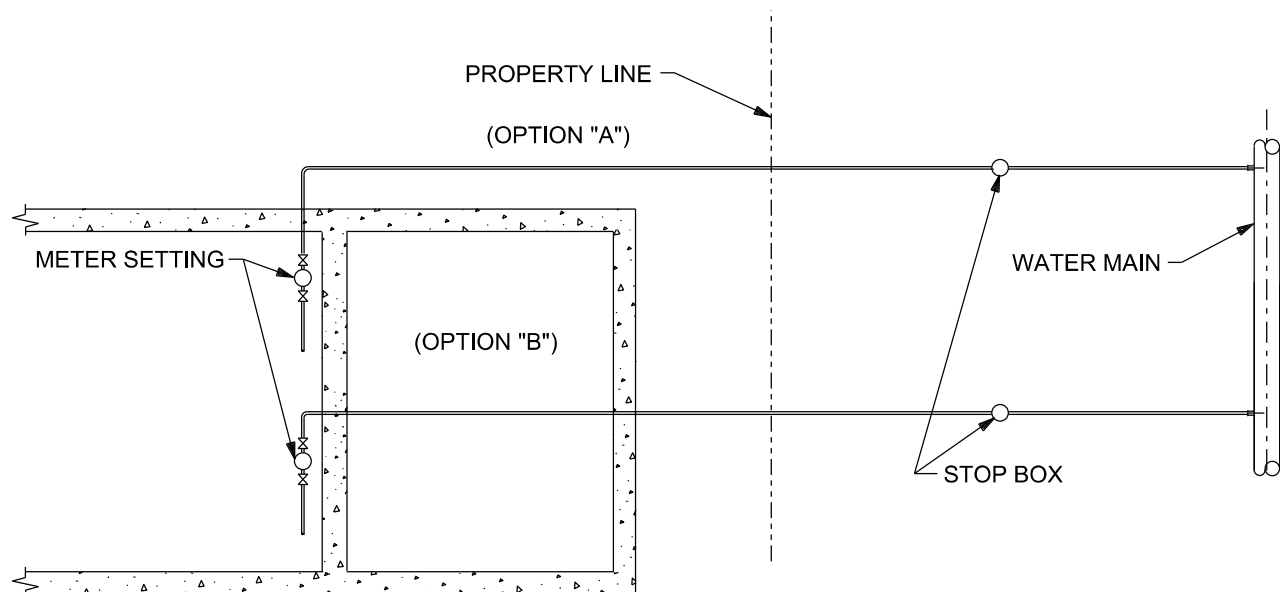
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DATE: 9-3-92

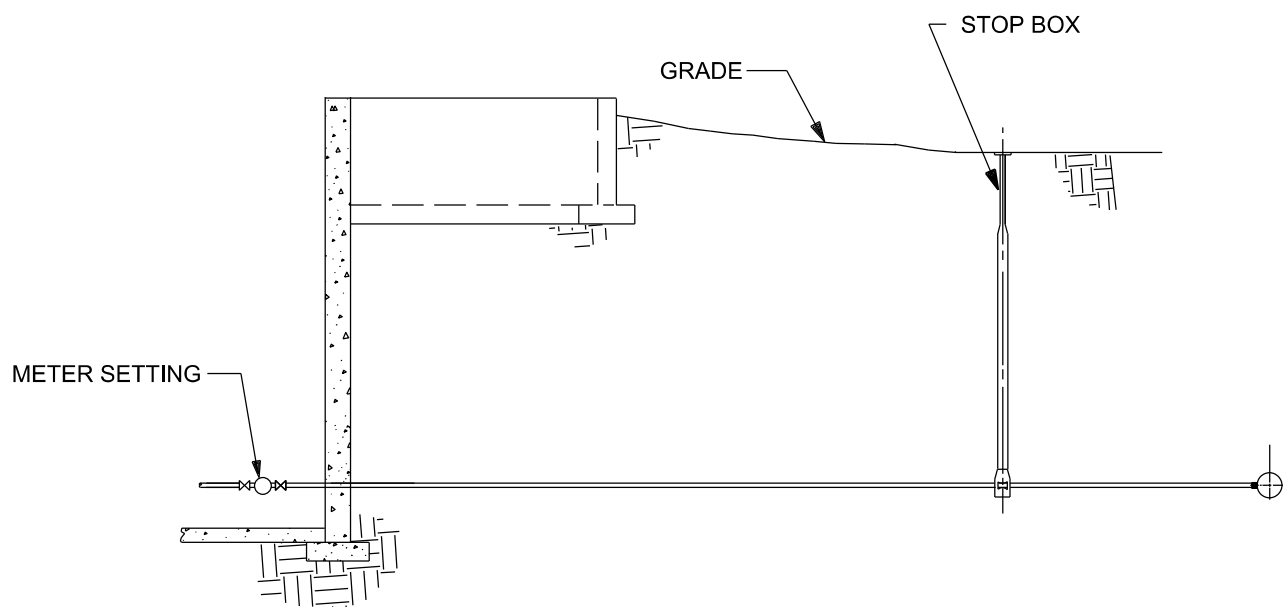
DRAWN BY: DLH

APPROVED BY: TPC

REVISED: 04/29/2013 JLH



PLAN



SECTION

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**BUILDING WITH BASEMENT
 IN REAR**

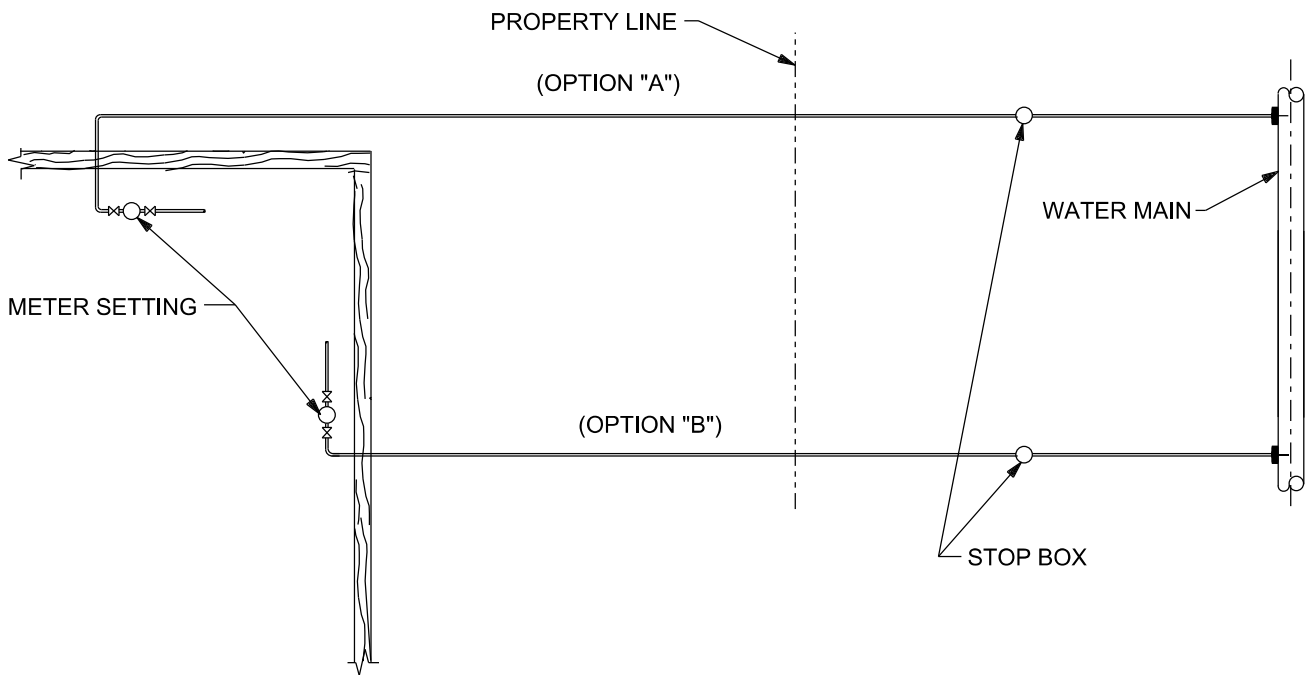
SCALE: NONE

DATE: 9-3-92

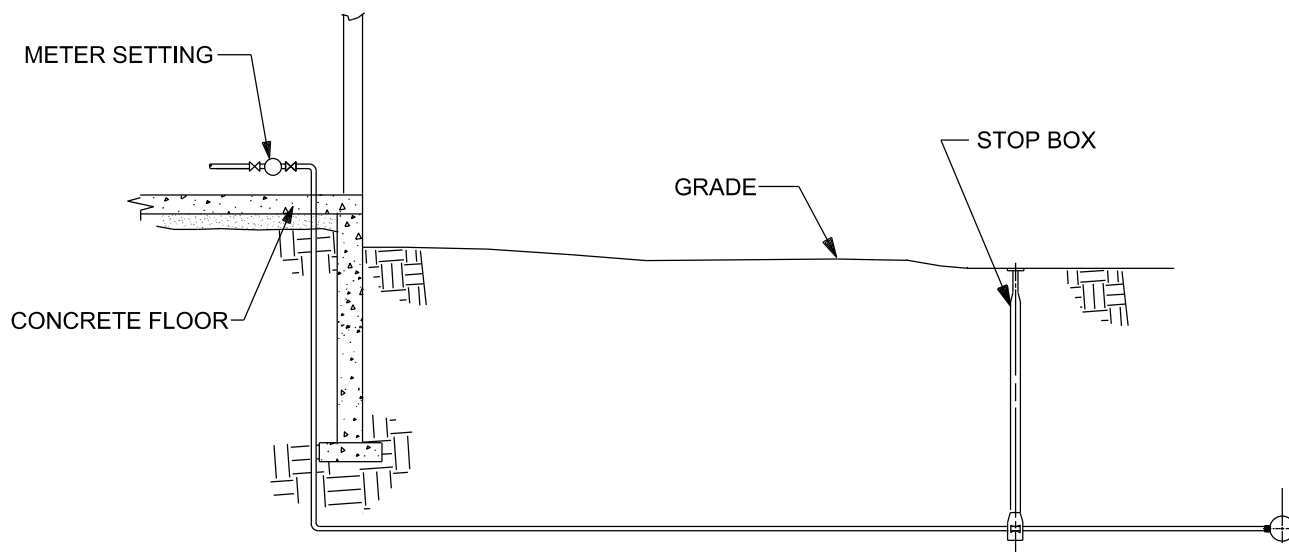
DRAWN BY: DLH

APPROVED BY: TPC

REVISED: 04/29/2013 JLH



PLAN

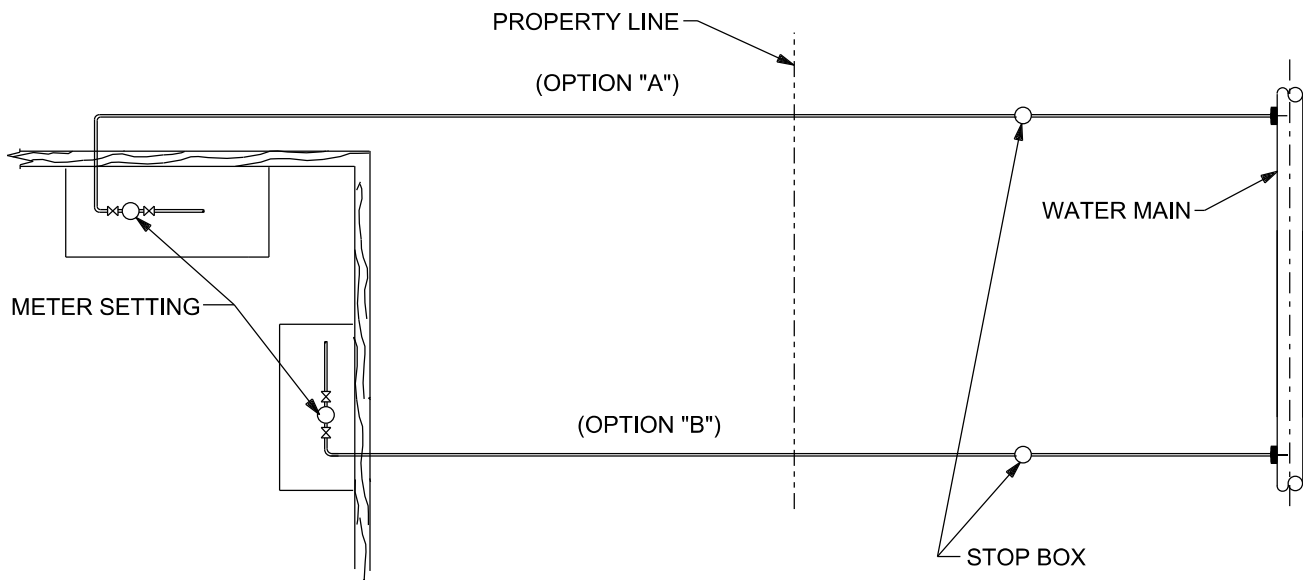


SECTION

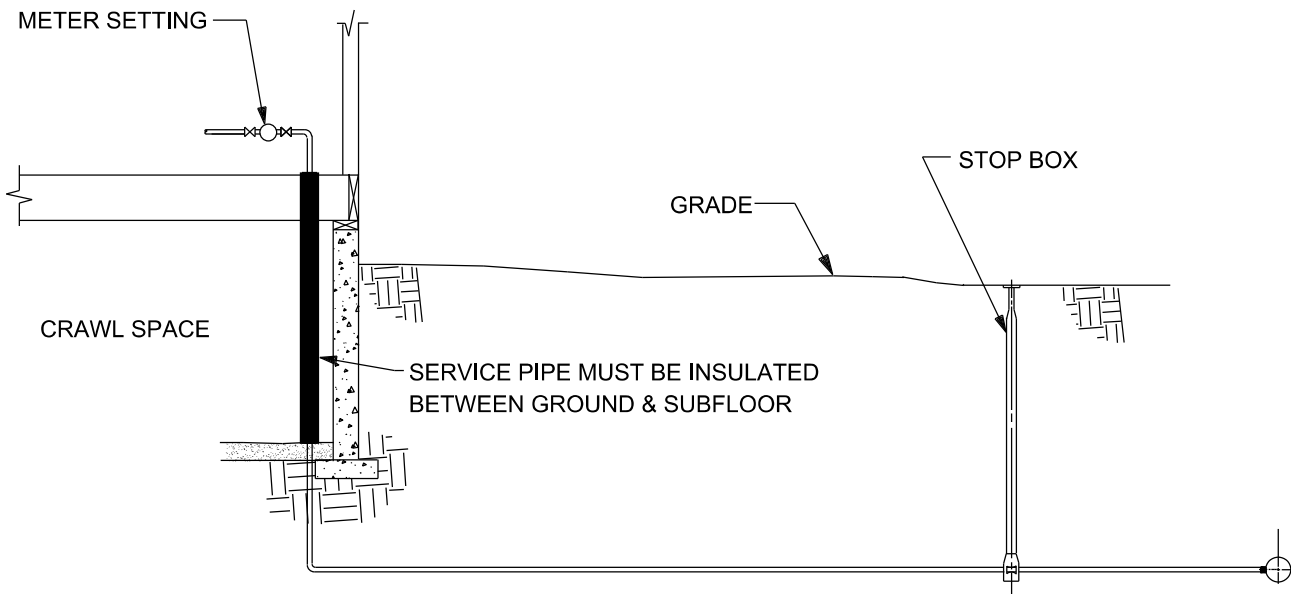
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**1ST FLOOR SETTING WITH
 CONCRETE FLOOR**

SCALE: NONE	DATE: 9-3-92
DRAWN BY: DLH	APPROVED BY: TPC
REVISED: 04/29/2013 JLH	



PLAN

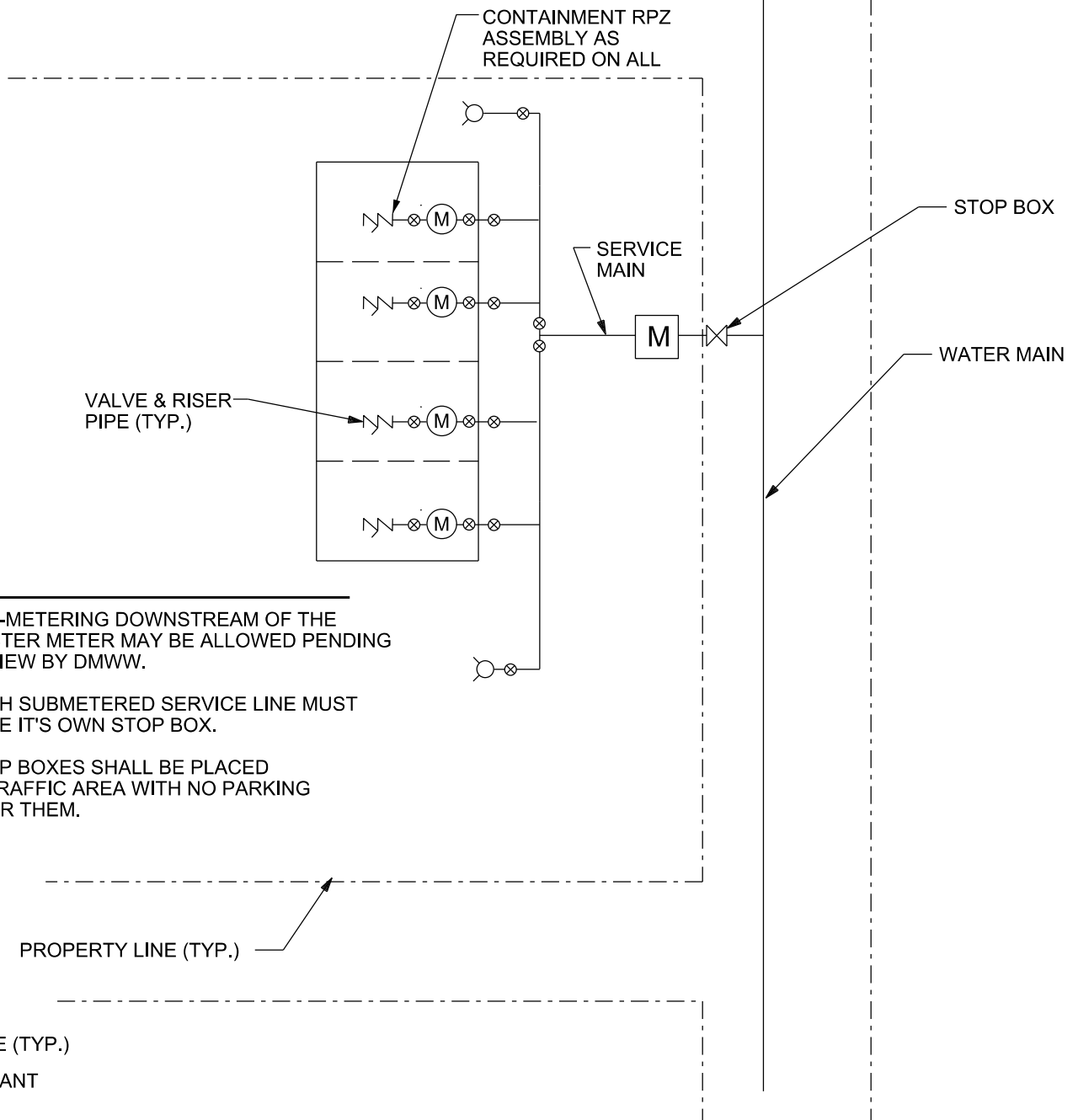


SECTION

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**1ST FLOOR SETTING WITH
 CRAWL SPACE BELOW**

SCALE: NONE	DATE: 9-4-92
DRAWN BY: DLH	APPROVED BY: TPC
REVISED: 04/29/2013 JLH	



NOTES:

1. SUB-METERING DOWNSTREAM OF THE MASTER METER MAY BE ALLOWED PENDING REVIEW BY DMWW.
2. EACH SUBMETERED SERVICE LINE MUST HAVE IT'S OWN STOP BOX.
3. STOP BOXES SHALL BE PLACED IN TRAFFIC AREA WITH NO PARKING OVER THEM.

LEGEND

⊗ — VALVE (TYP.)

○ — HYDRANT

Ⓜ — SUB-METER. RESPONSIBILITY OF BUILDING OWNER/TENANT

Ⓜ — MASTER METER PIT WITH U.L. LISTED FIRE SERVICE METER.

⌵ — CONTAINMENT RPZ

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WATER SERVICE TO SHOPPING CENTER (CASE 1)
 MULTIPLE DOMESTIC METERS WITH FIRE SERVICE

SCALE: NONE

DATE: 08/19/2014

DRAWN BY: DLH

APPROVED BY: TPC

REVISED: 08/14/2023 DLH

FIRE SERVICE ONLY
DOUBLE CHECK VALVE FOR WATER ONLY
RPZ FOR FOAM OR CHEMICAL

CONTAINMENT RPZ
ASSEMBLY AS
REQUIRED ON ALL

VALVE & RISER
PIPE (TYP.)

SERVICE
MAIN

STOP BOX

WATER MAIN

NOTES:

1. SUB-METERING DOWNSTREAM OF THE MASTER METER MAY BE ALLOWED PENDING REVIEW BY DMWW.
2. EACH SUBMETERED SERVICE LINE MUST HAVE IT'S OWN STOP BOX.
3. STOP BOXES SHALL BE PLACED IN TRAFFIC AREA WITH NO PARKING OVER THEM.
4. ONLY ONE METER ALLOWED PER DOMESTIC LINE

PROPERTY LINE (TYP.)

LEGEND

⊗ — VALVE (TYP.)

⊙ — HYDRANT

Ⓜ — SUB-METER. RESPONSIBILITY
OF BUILDING OWNER/TENANT

Ⓜ — MASTER METER PIT WITH U.L.
LISTED FIRE SERVICE METER.

↯ — DOUBLE CHECK VALE

↯ — CONTAINMENT RPZ

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WATER SERVICE TO SHOPPING CENTER (CASE 2)
MULTIPLE DOMESTIC METERS & INDIVIDUAL
FIRE SERVICES

SCALE: NONE

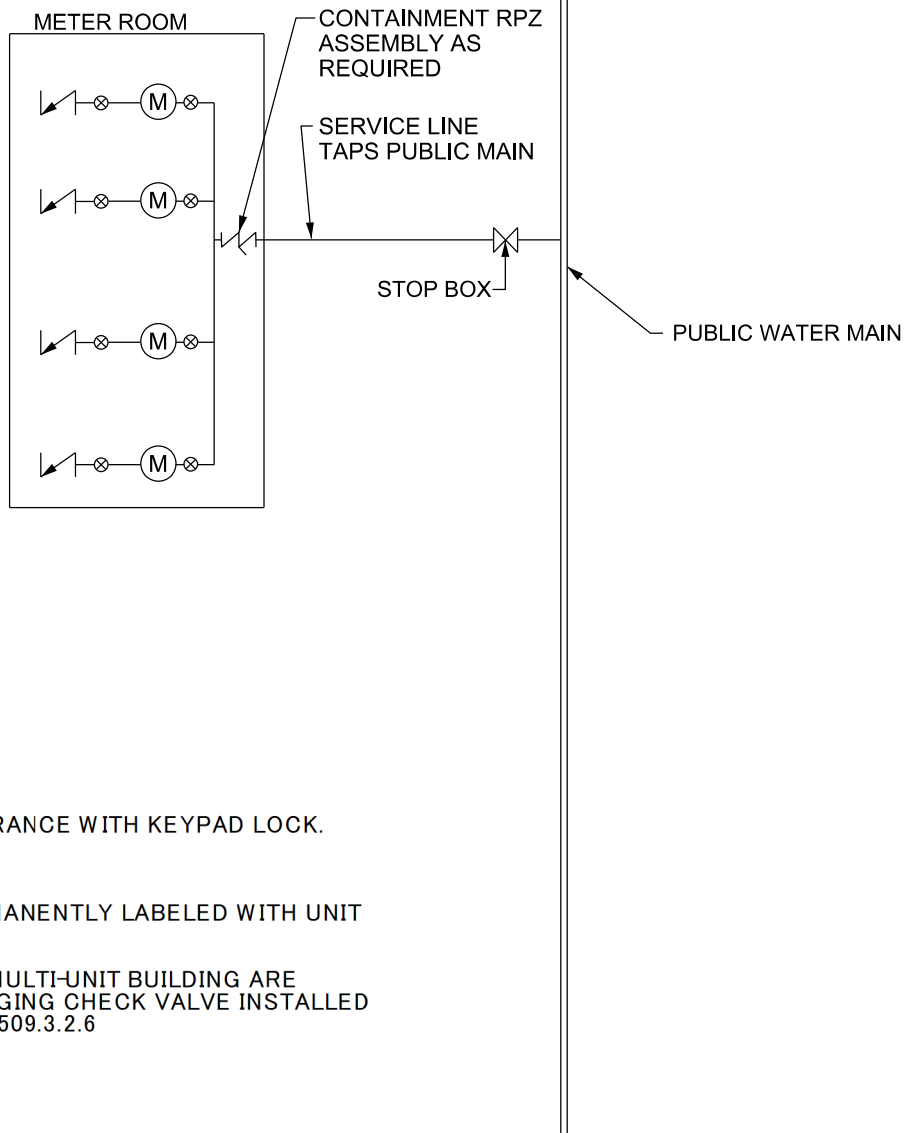
DATE: 08/19/2014

DRAWN BY: DLH

APPROVED BY: TPC

REVISED: 8/23/2023 DLH

- ⊗ VALVE
- Ⓜ METER
- ↘ SWING CHECK VALVE



NOTES:

1. MUST HAVE EXTERIOR ENTRANCE WITH KEYPAD LOCK.
2. MUST BE A HEATED ROOM
3. ALL METERS MUST BE PERMANENTLY LABELED WITH UNIT IDENTIFICATION
4. ALL METER SETTINGS IN A MULTI-UNIT BUILDING ARE REQUIRED TO HAVE A SWINGING CHECK VALVE INSTALLED AFTER THE OUTLET VALVE. 509.3.2.6

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MULTIPLE UNIT METERING
 (TOWNHOMES, CONDOMINIUMS, APARTMENTS
 AND SHOPPING CENTERS)

SCALE: NONE

DATE: 08/19/2014

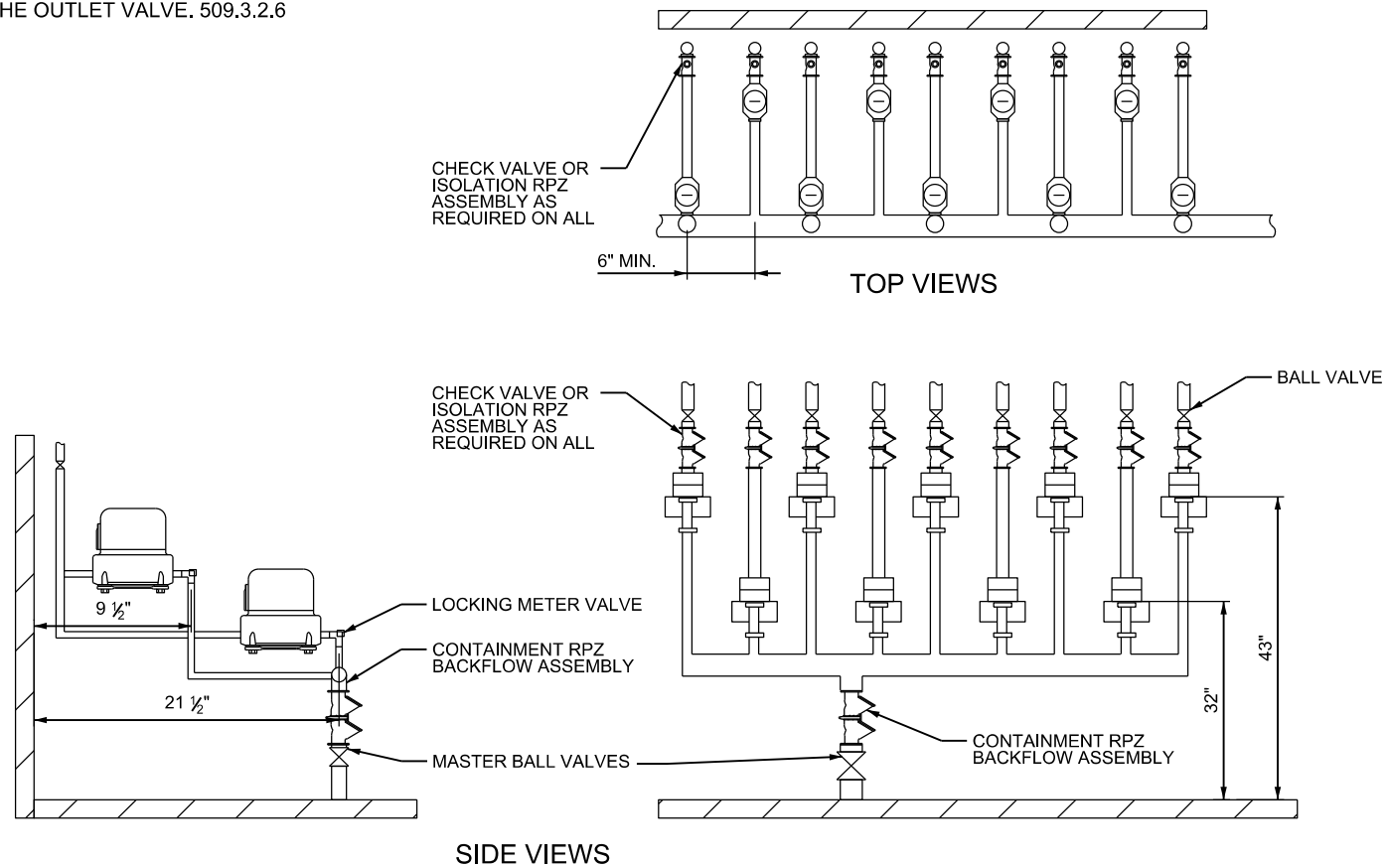
DRAWN BY: JLH

APPROVED BY: TPC

REVISED: 08/14/2023 DLH

NOTES:

1. MUST HAVE EXTERIOR ENTRANCE WITH KEYPAD LOCK.
2. MUST BE A HEATED ROOM
3. ALL METERS MUST BE PERMANENTLY LABELED WITH UNIT IDENTIFICATION
4. ALL METER SETTINGS IN A MULTI-UNIT BUILDING ARE REQUIRED TO HAVE A SWINGING CHECK VALVE INSTALLED AFTER THE OUTLET VALVE. 509.3.2.6



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TYPICAL METER MANIFOLD
 MULTIPLE UNIT METERING
 (TOWNHOMES, CONDOMINIUMS, APARTMENTS
 AND SHOPPING CENTERS)

SCALE: NONE

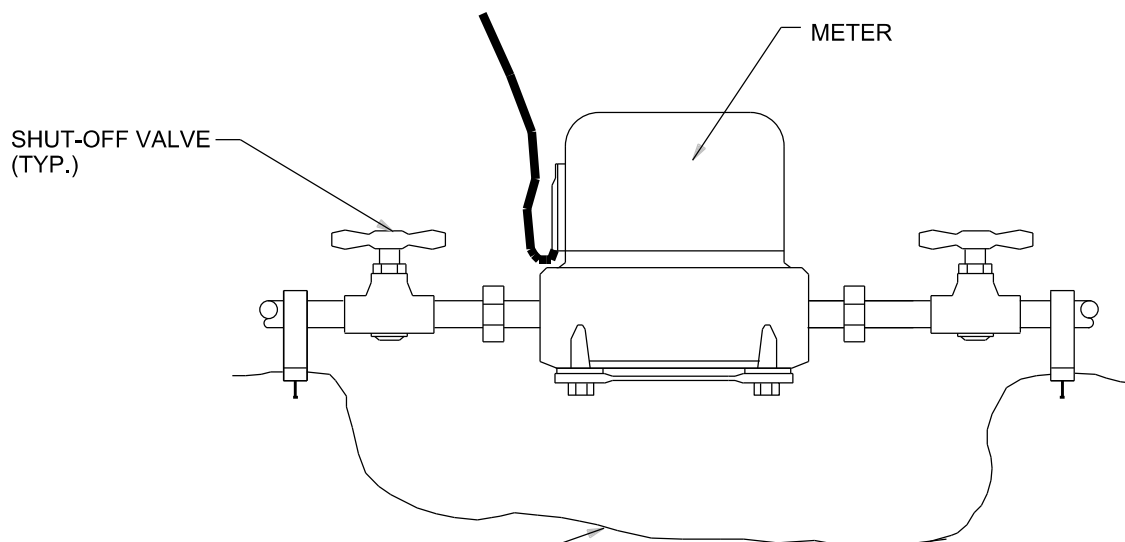
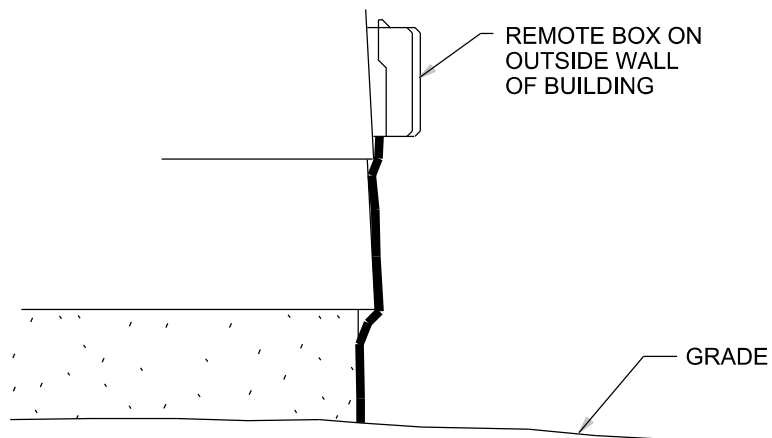
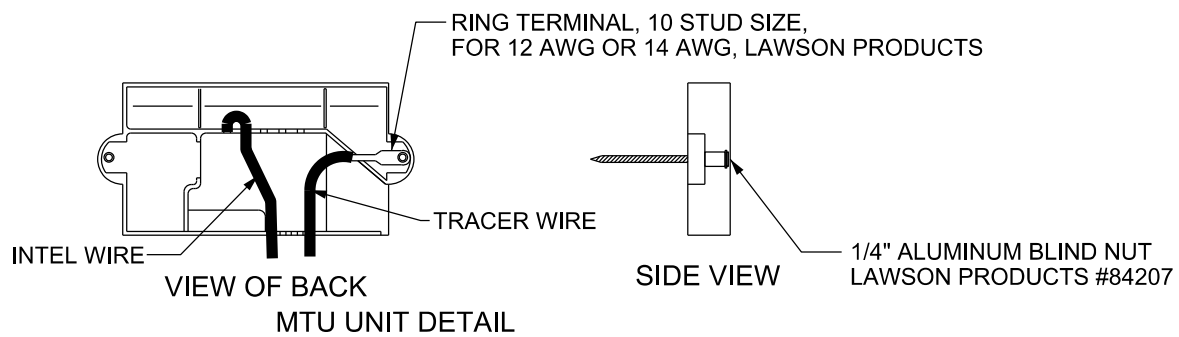
DATE: 8-19-2014

DRAWN BY: JLH

APPROVED BY: TPC

REVISED: 09/19/2016 JLH

512-12B
 FIGURE 12B



GROUND WIRE SHALL HAVE SUFFICIENT
SLACK TO ALLOW METER TO BE CHANGED

COPPER GROUND WIRE OF NO
LESS THAN 1/8" DIA.

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METER SETTING WITH GROUNDING STRAP

SCALE: NONE

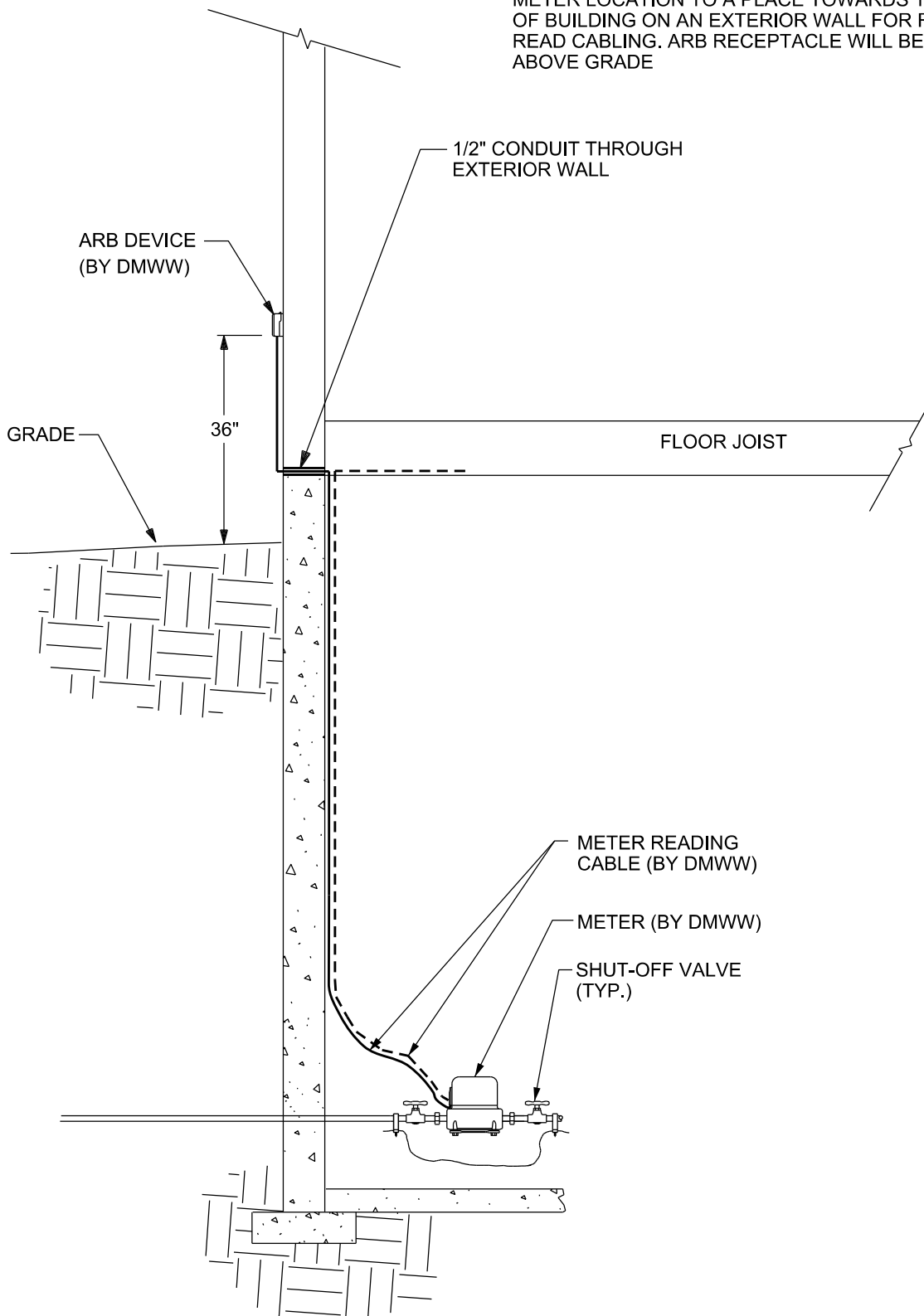
DATE: 5-10-96

DRAWN BY: DLH

APPROVED BY: TPC

REVISED: 08/05/2014 JLH

NOTE: WHEN METER DOES NOT SET ON AN OUTSIDE WALL, A 1/2" CONDUIT MUST BE INSTALLED FROM METER LOCATION TO A PLACE TOWARDS THE FRONT OF BUILDING ON AN EXTERIOR WALL FOR REMOTE READ CABLING. ARB RECEPTACLE WILL BE PLACED 36" ABOVE GRADE



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ARB REQUIREMENTS FOR METER
 SETTING IN UNFINISHED AREA

SCALE: NONE

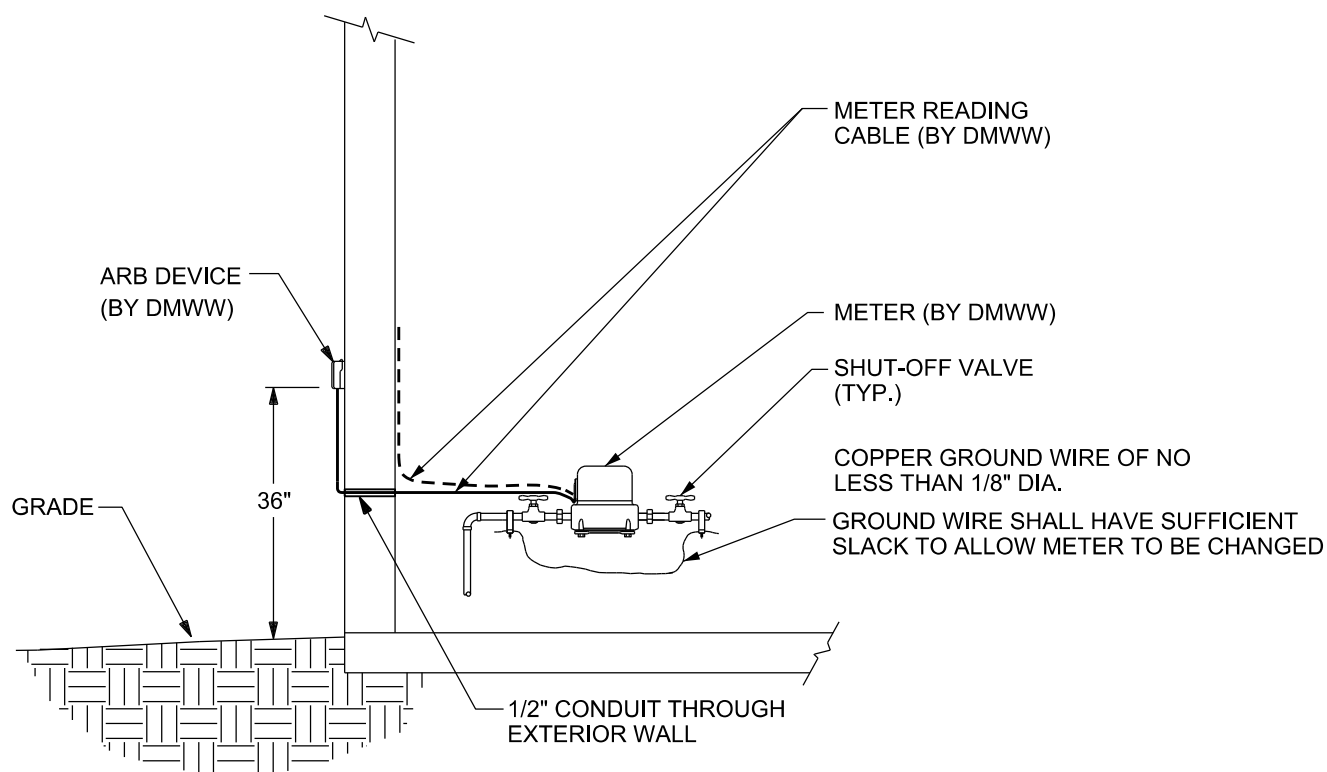
DATE: 10/21/1996

DRAWN BY: DLH

APPROVED BY: TPC

REVISED: 09/19/2016 JLH

NOTE: WHEN METER DOES NOT SET ON AN OUTSIDE WALL, A 1/2" CONDUIT MUST BE INSTALLED FROM METER LOCATION TO A PLACE TOWARDS THE FRONT OF BUILDING ON AN EXTERIOR WALL FOR REMOTE READ CABLING. ARB RECEPTACLE WILL BE PLACED 36" ABOVE GRADE

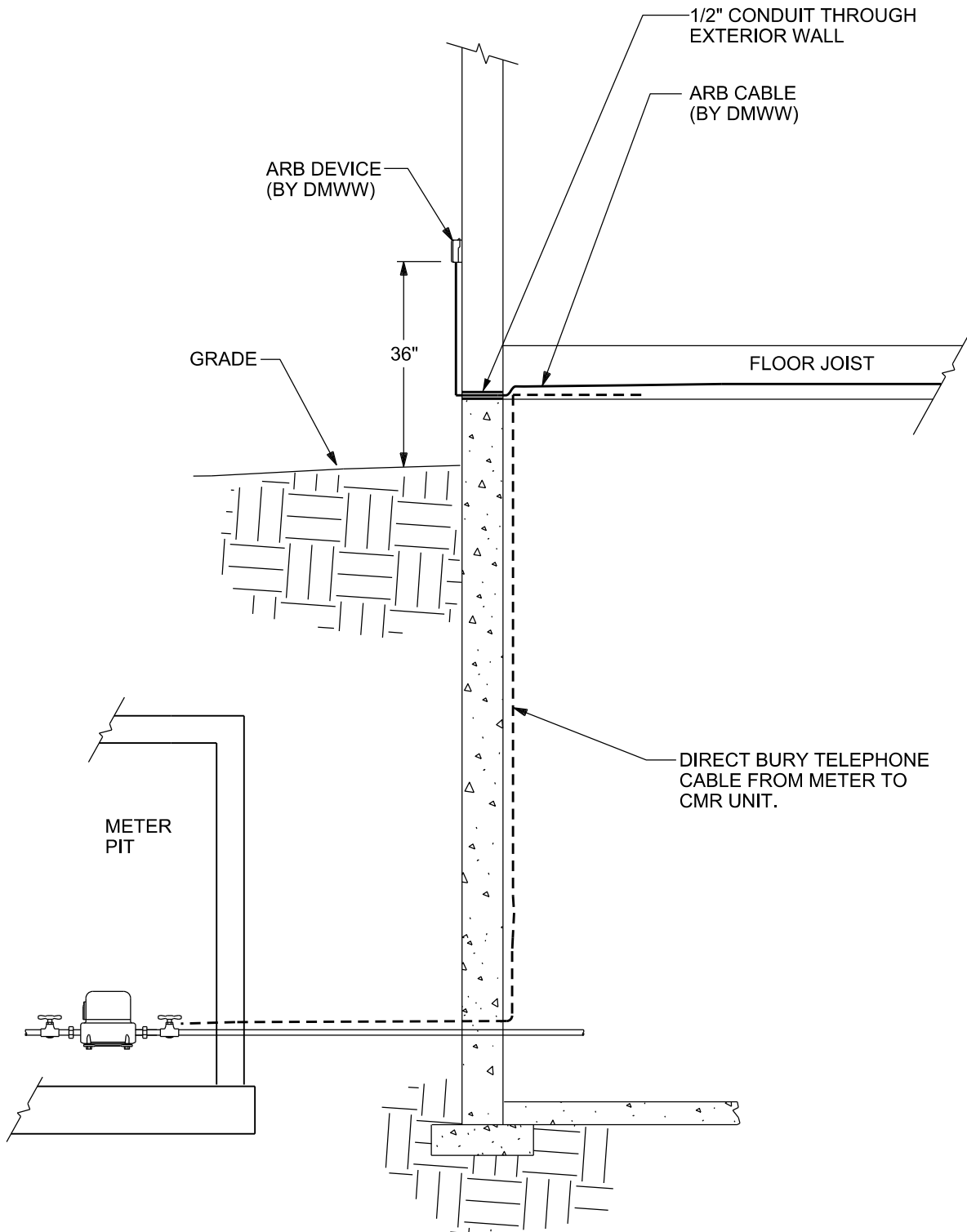


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ARB REQUIREMENTS FOR
 METER SETTING IN FINISHED AREA

SCALE: NONE	DATE: 05/10/1996
DRAWN BY: DLH	APPROVED BY: TPC
REVISED: 09/19/2016 JLH	

NOTE: WHEN METER DOES NOT SET ON AN OUTSIDE WALL, A 1/2" CONDUIT MUST BE INSTALLED FROM METER LOCATION TO A PLACE TOWARDS THE FRONT OF BUILDING ON AN EXTERIOR WALL FOR REMOTE READ CABLING. ARB RECEPTACLE WILL BE PLACED 36" ABOVE GRADE

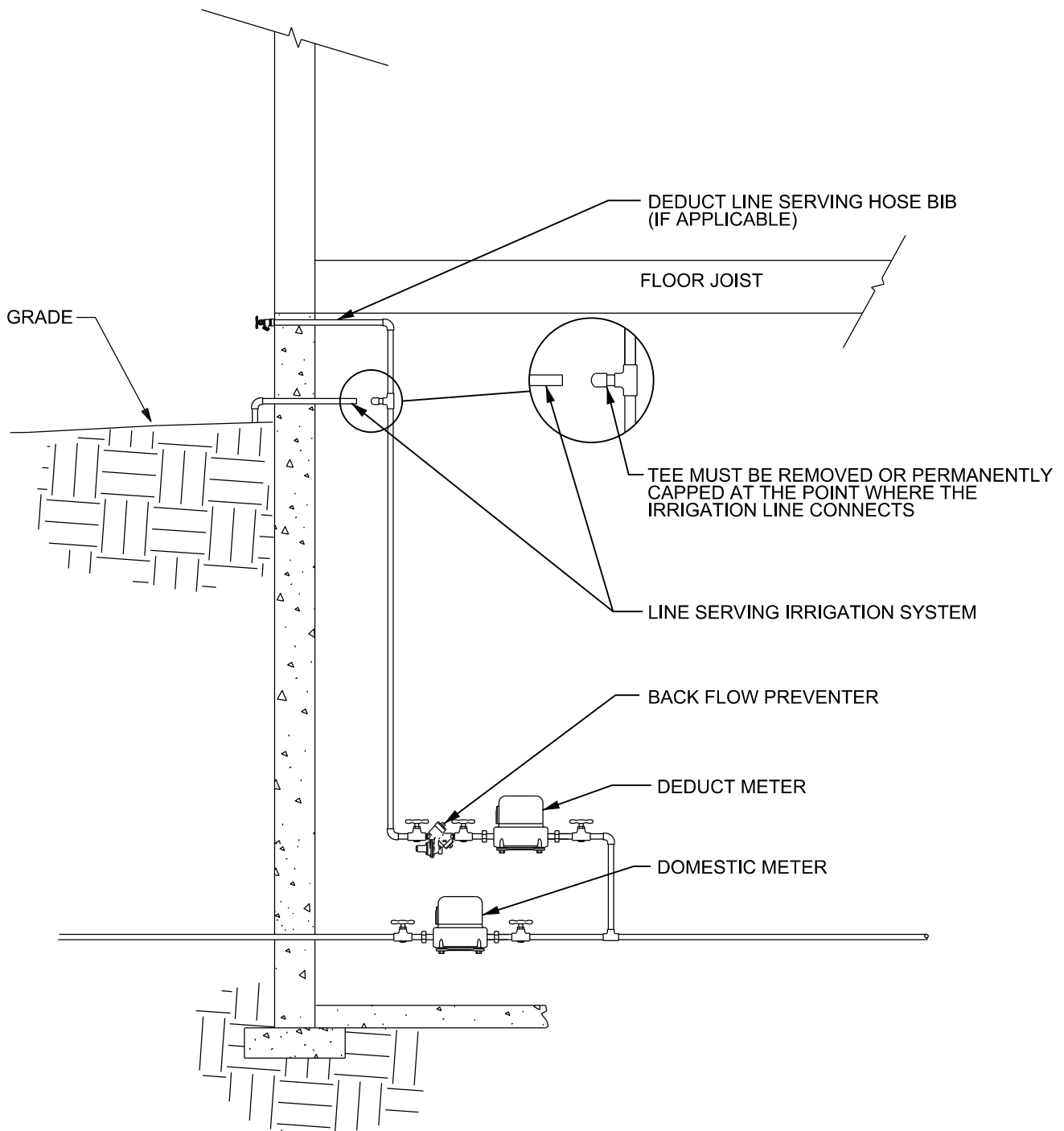


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ARB REQUIREMENTS FOR
 METER SETTING IN METER PIT

SCALE: NONE	DATE: 08/19/2014
DRAWN BY: DLH	APPROVED BY: TPC
REVISED: 09/19/2016 JLH	

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IRRIGATION SYSTEM
DECOMMISSION AND BACKFLOW (INSIDE)
PREVENTER REMOVAL

SCALE: NONE

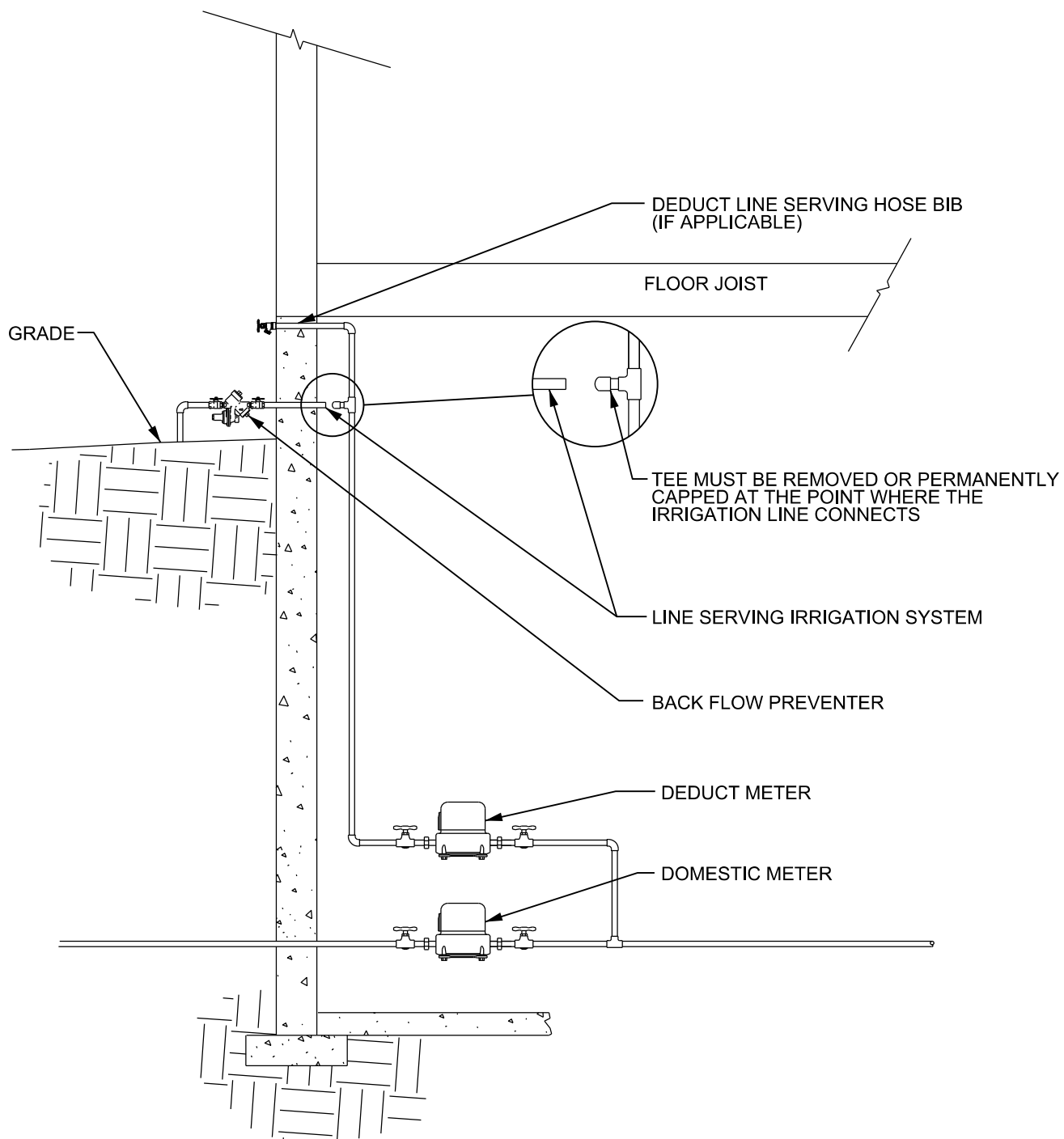
DATE: 9/23/2022

DRAWN BY: DLH

APPROVED BY: JJL

512-13
FIGURE 13D

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ENGINEERING DEPARTMENT
Des Moines, Iowa

IRRIGATION SYSTEM
DECOMMISSION AND BACKFLOW (OUTSIDE)
PREVENTER REMOVAL

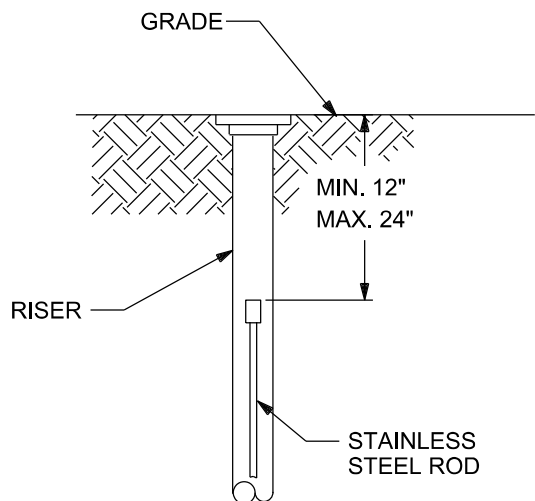
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DATE: 9/23/2022

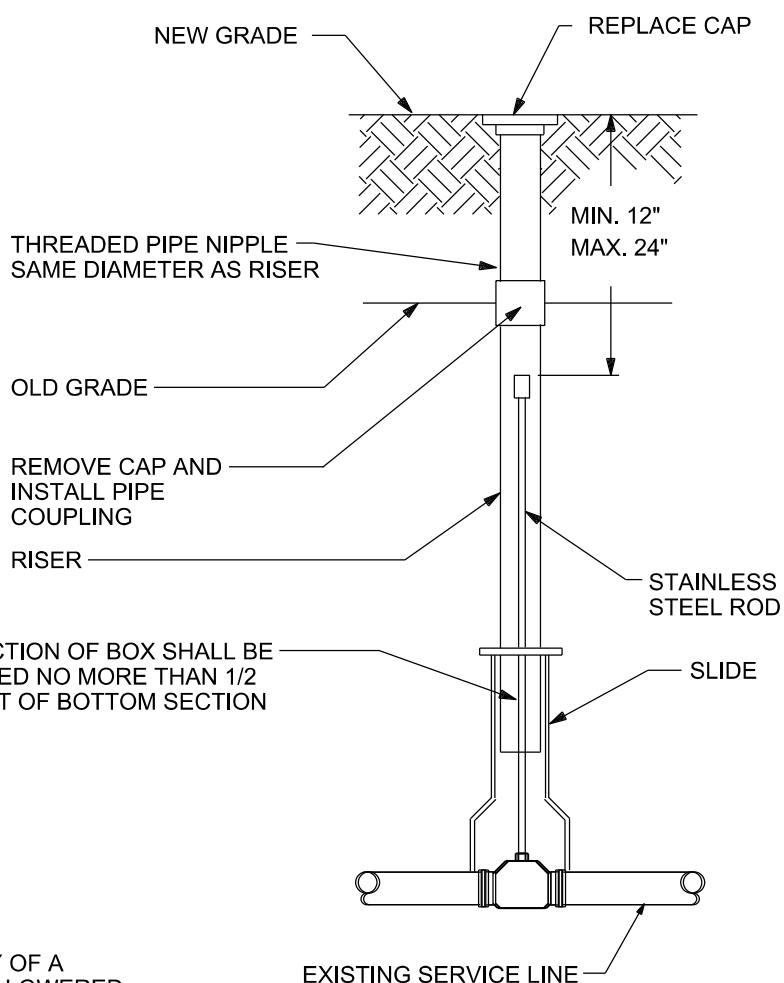
DRAWN BY: DLH

APPROVED BY: JJL

512-13
FIGURE 13E



**NORMAL
INSTALLATION**



**STOP BOX RAISED
TO NEW GRADE**

WHEN THE GRADE IS CHANGED IN THE VICINITY OF A STOP BOX, THE STOP BOX MUST BE RAISED OR LOWERED TO THE NEW GRADE. RAISING THE STOP BOX IS ACCOMPLISHED BY REMOVING THE CAP, INSTALLING A 1" PIPE COUPLING AND A 1" THREADED NIPPLE OF THE APPROPRIATE LENGTH AND REPLACING THE CAP. THE RISER MUST BE INTERGAL AND CONTINUOUS. TO LOWER THE STOP BOX, IT WILL BE NECESSARY TO CUT AND RETHREAD THE RISER PIPE AT THE NEW GRADE AND REPLACE THE CAP. ROD MUST BE LOWERED IN PROPER PROPORTION TO RISER PIPE.

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ADJUSTING STOP BOX TO NEW GRADE
(ARCH PATTERN BOX)

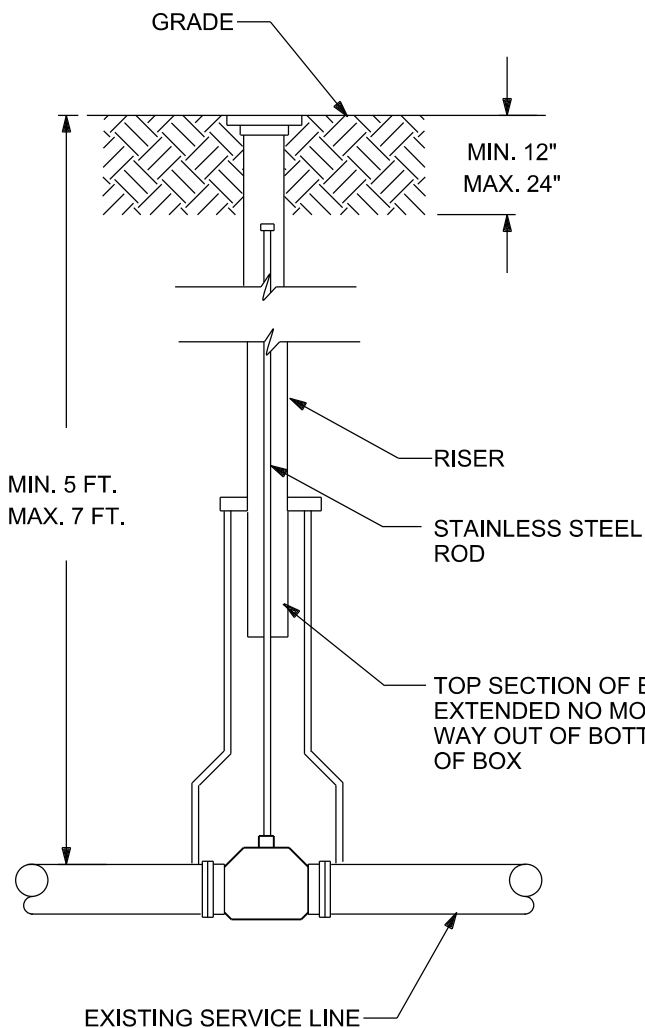
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DATE: 5-10-96

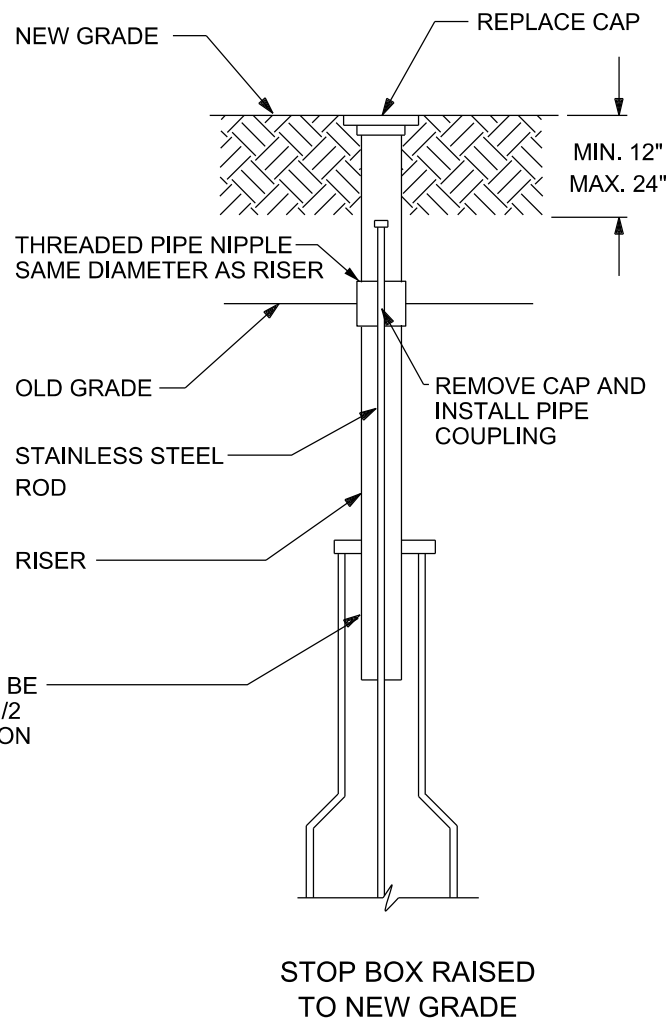
DRAWN BY: DLH

APPROVED BY: TPC

REVISED: 08/11/2000 SLH



**NORMAL
INSTALLATION**



**STOP BOX RAISED
TO NEW GRADE**

WHEN THE GRADE IS CHANGED IN THE VICINITY OF A STOP BOX, THE STOP BOX MUST BE RAISED OR LOWERED TO THE NEW GRADE. RAISING THE STOP BOX IS ACCOMPLISHED BY REMOVING THE CAP, INSTALLING A 1-1/4" PIPE COUPLING AND A 1-1/4" THREADED NIPPLE OF THE APPROPRIATE LENGTH AND REPLACING THE CAP. THE RISER MUST BE INTERGAL AND CONTINUOUS. TO LOWER THE STOP BOX, IT WILL BE NECESSARY TO CUT AND RETHREAD THE RISER PIPE AT THE NEW GRADE AND REPLACE THE CAP.

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ADJUSTING STOP BOX TO NEW GRADE
(MINNEAPOLIS STYLE BOX)

SCALE: NONE

DATE: 5-10-96

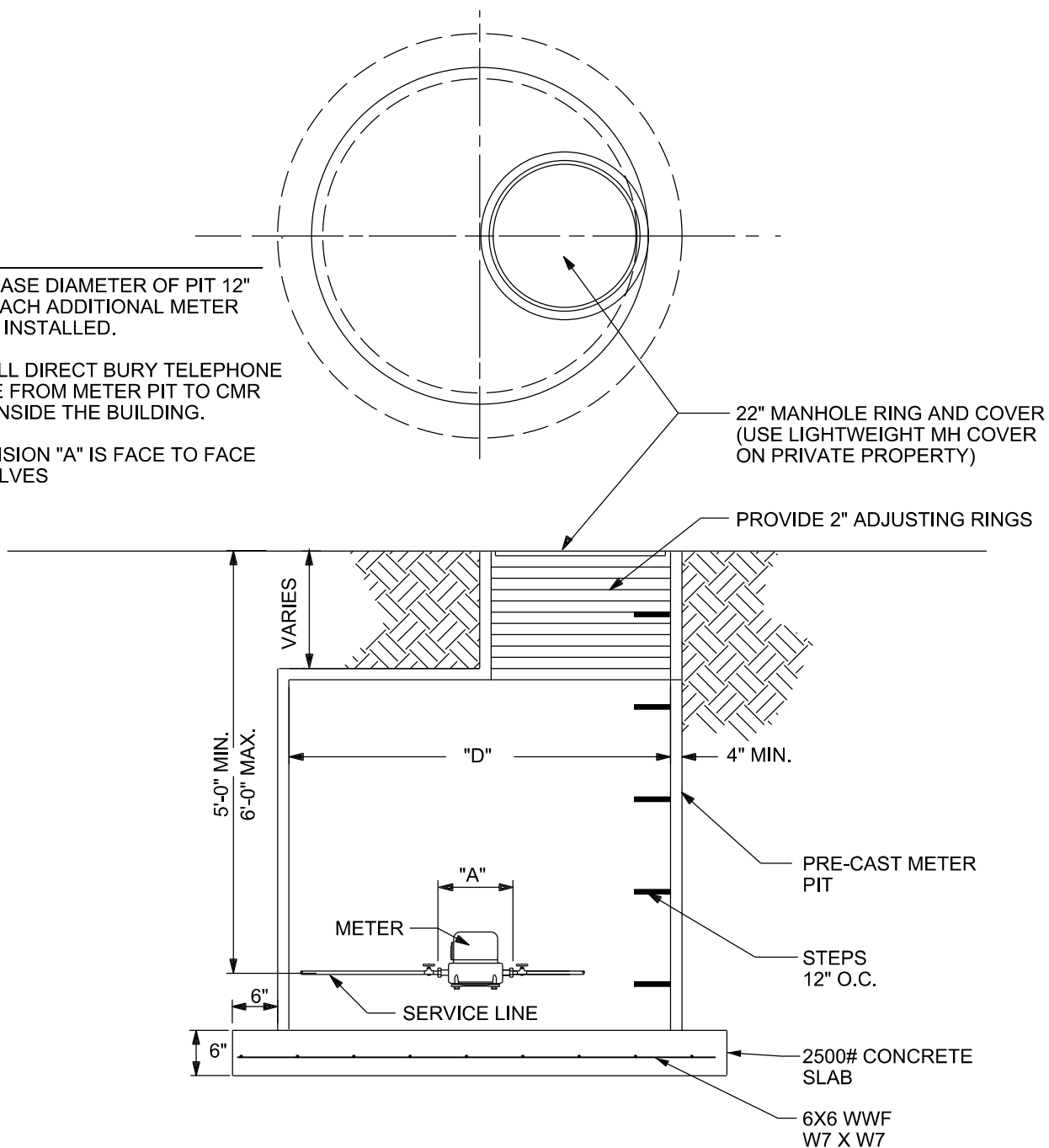
DRAWN BY: DLH

APPROVED BY: TPC

REVISED: 04/29/2013 JLH

NOTE:

1. INCREASE DIAMETER OF PIT 12" FOR EACH ADDITIONAL METER TO BE INSTALLED.
2. INSTALL DIRECT BURY TELEPHONE CABLE FROM METER PIT TO CMR UNIT INSIDE THE BUILDING.
3. DIMENSION "A" IS FACE TO FACE OF VALVES



METER SPACING

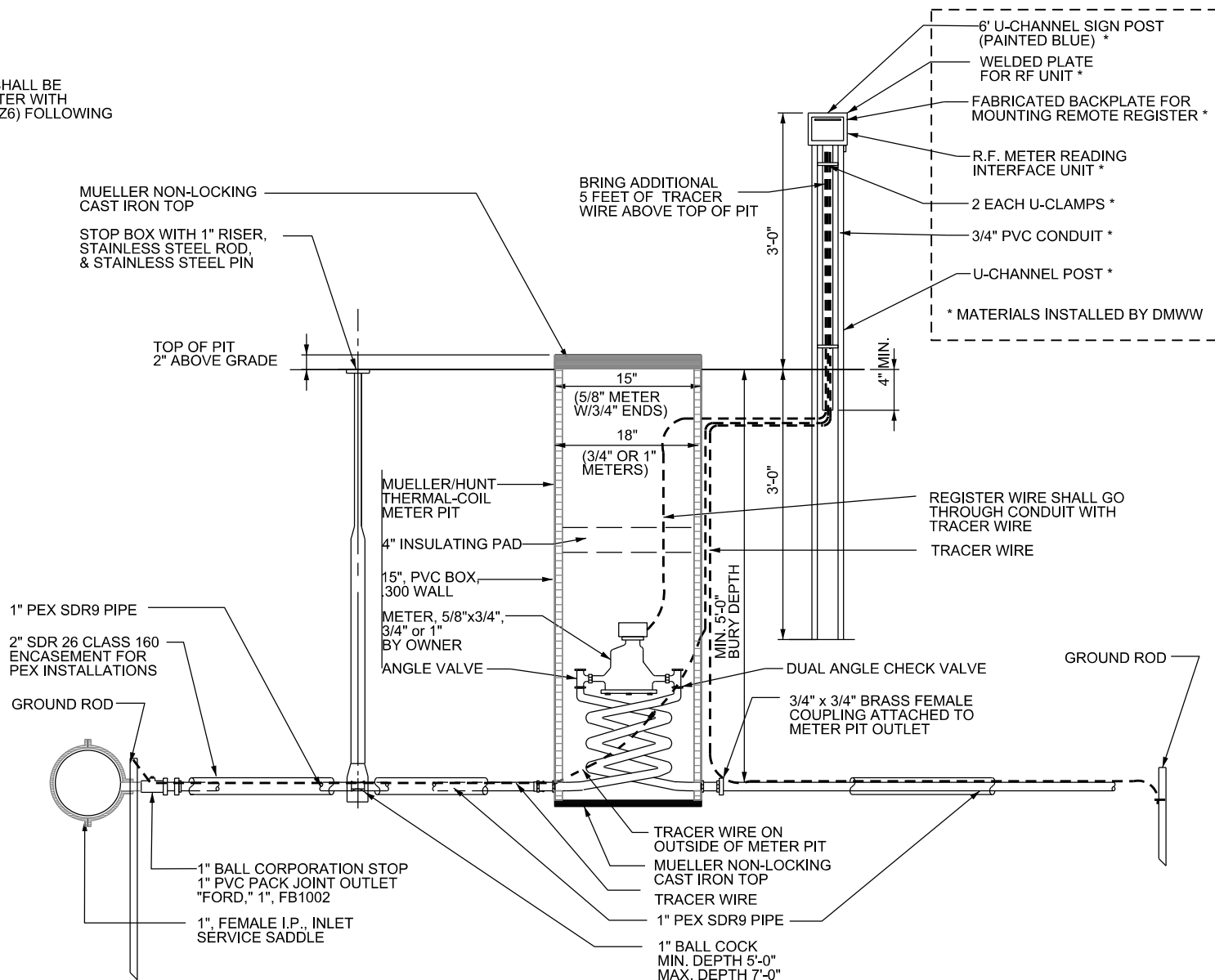
SIZE OF METER	"A" - FACE TO FACE OF VALVES	DIMENSION "D"
5/8"	11-3/4"	48"
3/4"	13-3/4"	48"
1"	15-3/4"	48"
1-1/2"	30"	60"
2"	30"	60"

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DETAIL OF THE STANDARD
METER PIT - DISC METERS

SCALE: NONE DATE: 5-10-96
DRAWN BY: DLH APPROVED BY: TPC
REVISED: 04/29/2013 JLH

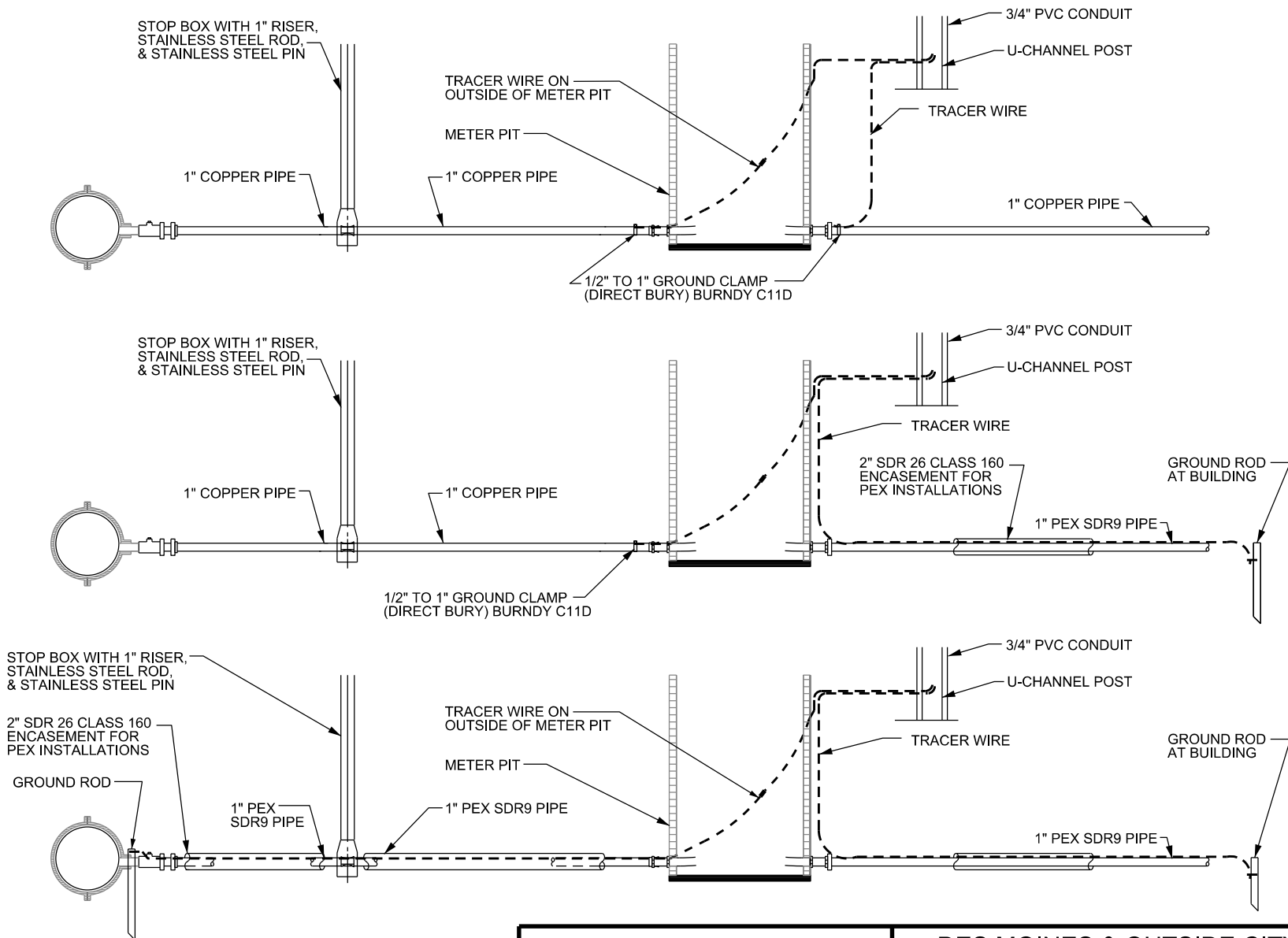
NOTE:
WHEN SPECIFIED THE SETTER SHALL BE
PROVIDED WITH A TANDEM SETTER WITH
A 3/4" WATTS REGULATOR (5M3-Z6) FOLLOWING
METER.



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SCALE: NONE	DATE: 6-29-2007
DRAWN BY: DLH	APPROVED BY: TPC
REVISED: 10/05/2022 DLH	

512-16A
FIGURE 16A



- NOTES:
1. BRING ADDITIONAL 5 FEET OF TRACER WIRE ABOVE TOP OF PIT
 2. TRACER WIRE REQUIRED WITH PEX PIPE (SEE 505.5.2.5 FOR TRACER SYSTEM SPECIFICATIONS). FASTEN TRACER WIRE WITH ZIP TIES EVERY 5 FEET.

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DES MOINES & OUTSIDE CITY
 1"-2" WATER SERVICE W/ METER PIT
 TRACER WIRE DETAIL

SCALE: NONE

DATE: 6-29-2007

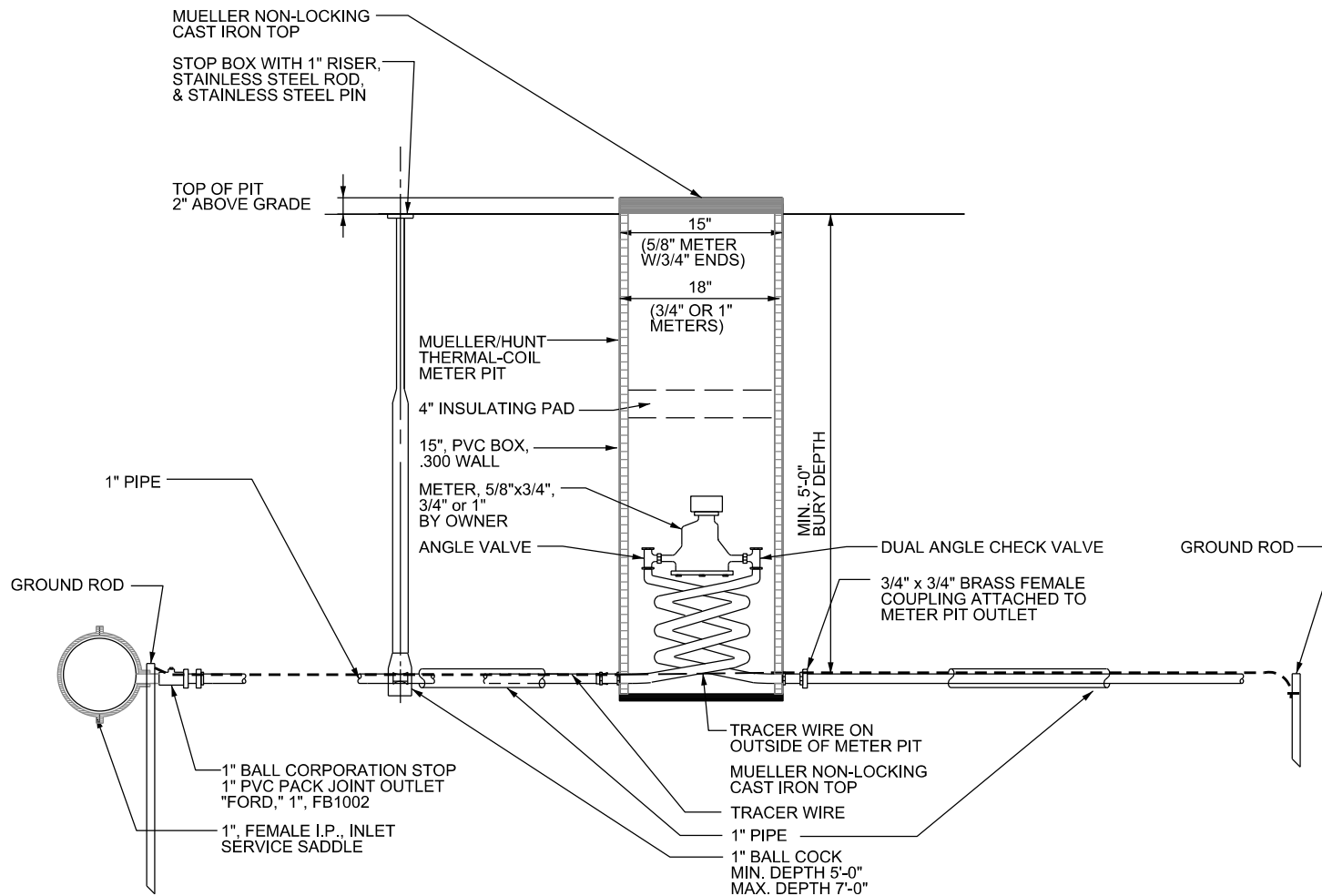
DRAWN BY: DLH

APPROVED BY: TPC

REVISED: 10/05/2022 DLH

NOTE:
METER PITS SHALL BE
66" IN LENGTH (MIN.)

NOTE:
WHEN SPECIFIED THE SETTER SHALL BE
PROVIDED WITH A TANDEM SETTER WITH
A 3/4" WATTS REGULATOR (5M3-Z6) FOLLOWING
METER.



TRACER WIRE REQUIRED
WITH PEX PIPE (SEE 505.5.2.5
FOR TRACER SYSTEM SPECIFICATIONS).
FASTEN TRACER WIRE WITH ZIP
TIES EVERY 5 FEET.

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INSIDE CITY OF DES MOINES
WATER SERVICE
AND METER PIT DETAIL

SCALE: NONE

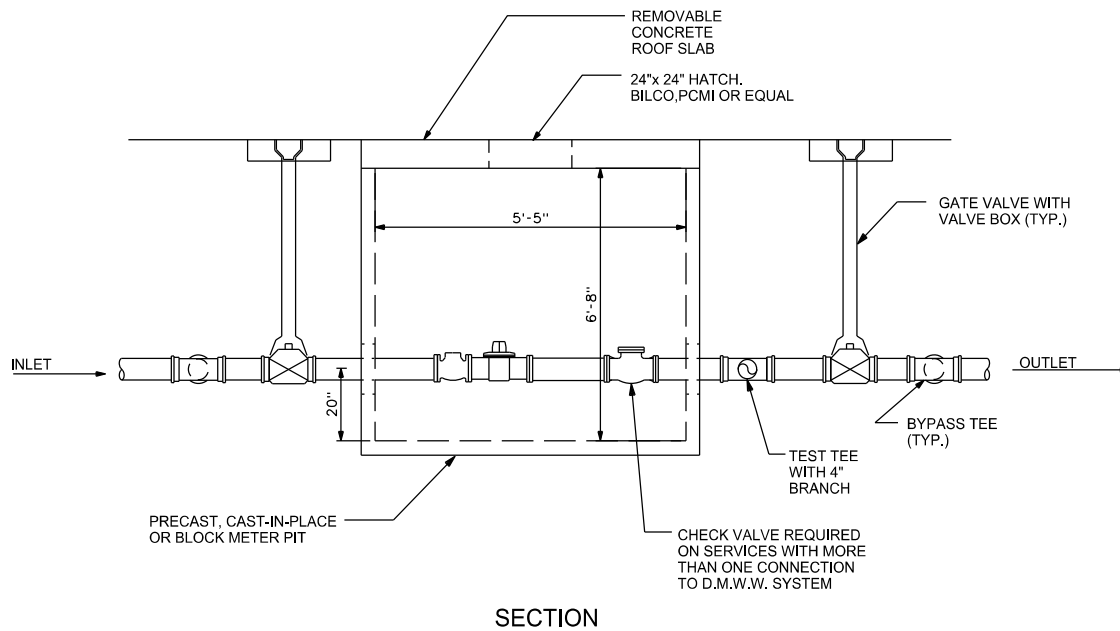
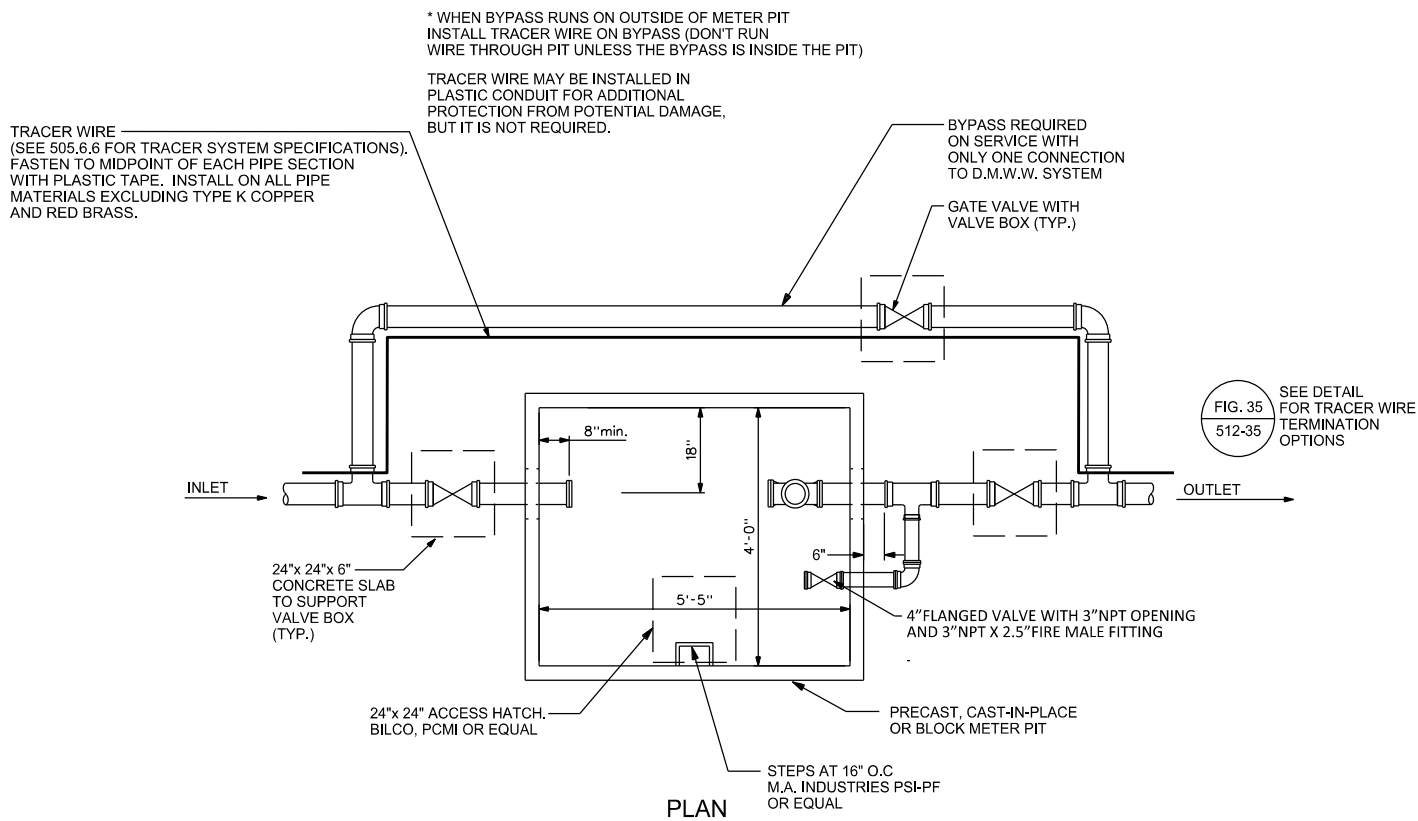
DATE: 10/02/2019

DRAWN BY: JLH

APPROVED BY: TPC

REVISED: 10/06/2022 DLH

512-16C
FIGURE 16C



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**TURBINE OR COMPOUND
METER PIT DETAIL
W/TRACER WIRE**

SCALE: NONE

DATE: 5-10-1996

DRAWN BY: DLH

APPROVED BY: TPC

REVISED: 7/28/2023 DLH

* WHEN BYPASS RUNS ON OUTSIDE OF METER PIT
INSTALL TRACER WIRE ON BYPASS (DON'T RUN
WIRE THROUGH PIT UNLESS THE BYPASS IS INSIDE THE PIT)

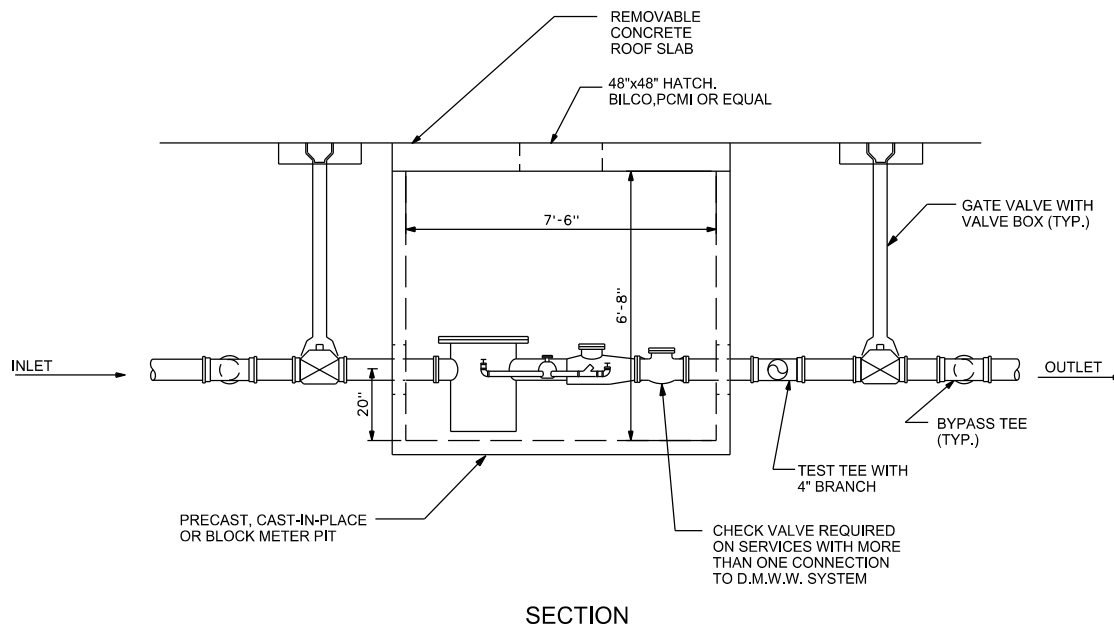
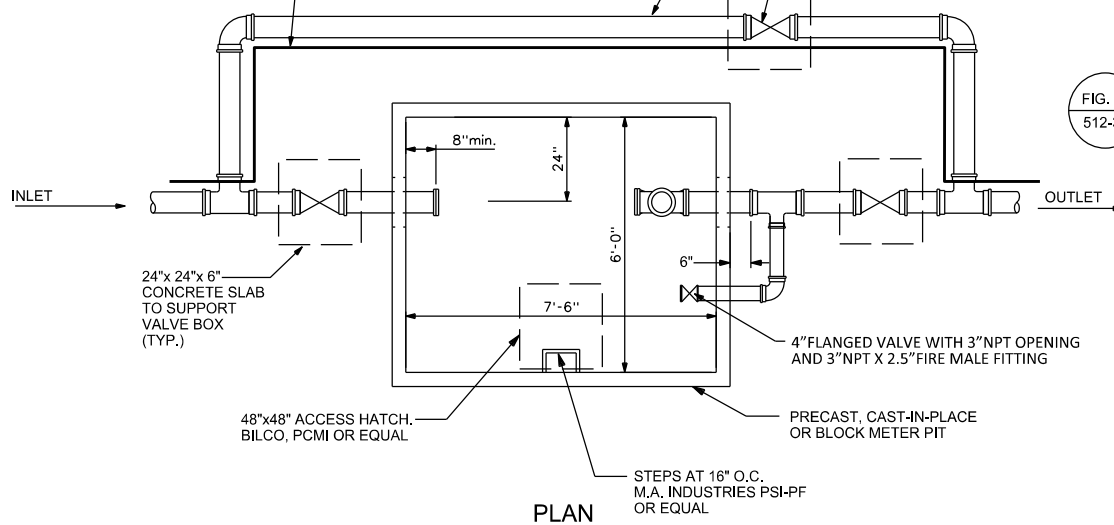
TRACER WIRE MAY BE INSTALLED IN
PLASTIC CONDUIT FOR ADDITIONAL
PROTECTION FROM POTENTIAL DAMAGE,
BUT IT IS NOT REQUIRED.

BYPASS REQUIRED
ON SERVICE WITH
ONLY ONE CONNECTION
TO D.M.W.W. SYSTEM

TRACER WIRE
(SEE 505,6,6 FOR TRACER SYSTEM SPECIFICATIONS),
FASTEN TO MIDPOINT OF EACH PIPE SECTION
WITH PLASTIC TAPE. INSTALL ON ALL PIPE
MATERIALS EXCLUDING TYPE K COPPER
AND RED BRASS.

GATE VALVE WITH
VALVE BOX (TYP.)

FIG. 35
512-35
SEE DETAIL
FOR TRACER WIRE
TERMINATION
OPTIONS



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FIRE SERVICE METER PIT DETAIL W/TRACER WIRE

SCALE: NONE

DATE: 5-10-1996

DRAWN BY: DLH

APPROVED BY: TPC

REVISED: 7/28/2023 DLH

BLANK SHEET

Des Moines

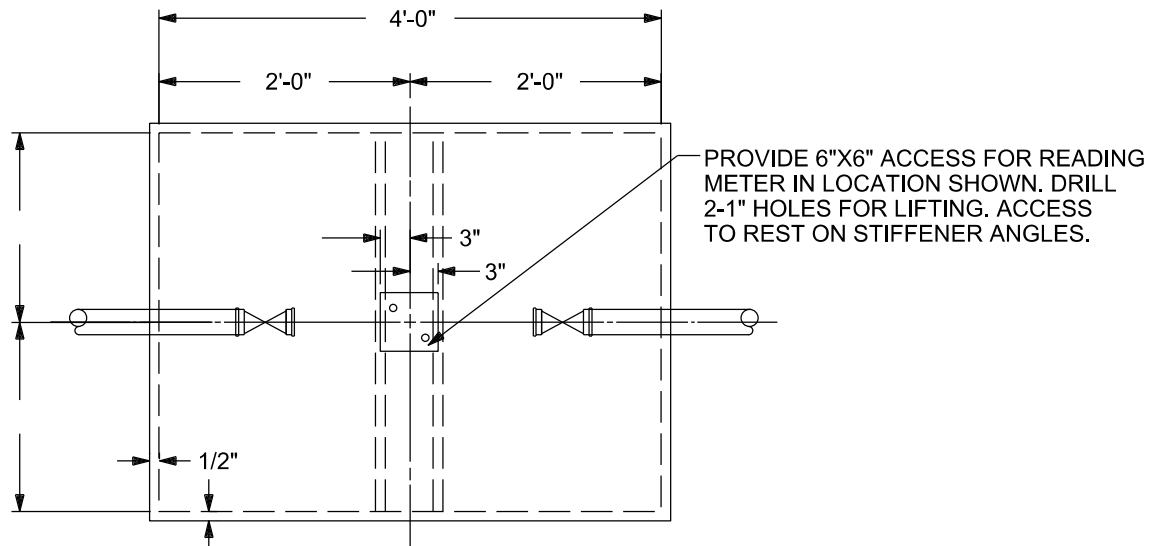
Water Works

Water You Can Trust for Life

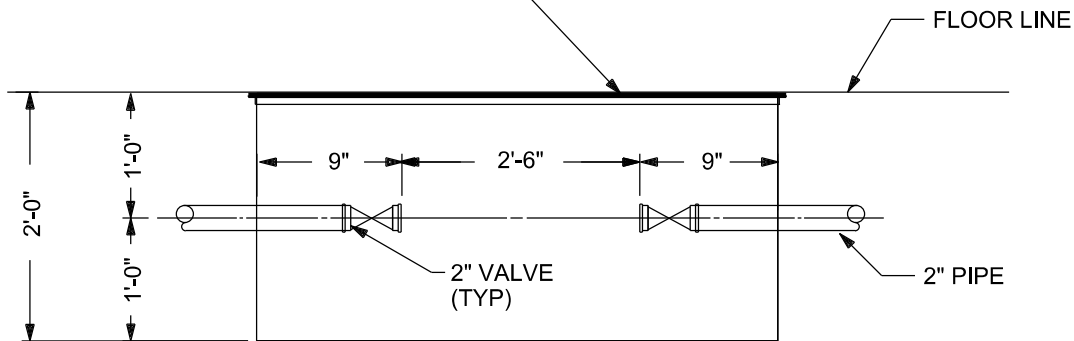
ENGINEERING DEPARTMENT

Des Moines, Iowa

BLANK SHEET	
SCALE: NONE	DATE: 5-10-1996
DRAWN BY: DLH	APPROVED BY: TPC
REVISED: 09/18/2018 JLH	



COVER TO BE 1/4" STEEL PLATE WITH
OPENING TO READ METER. WELD 1"X 1"X 1/8"
ANGLE STIFFENERS TO PLATE



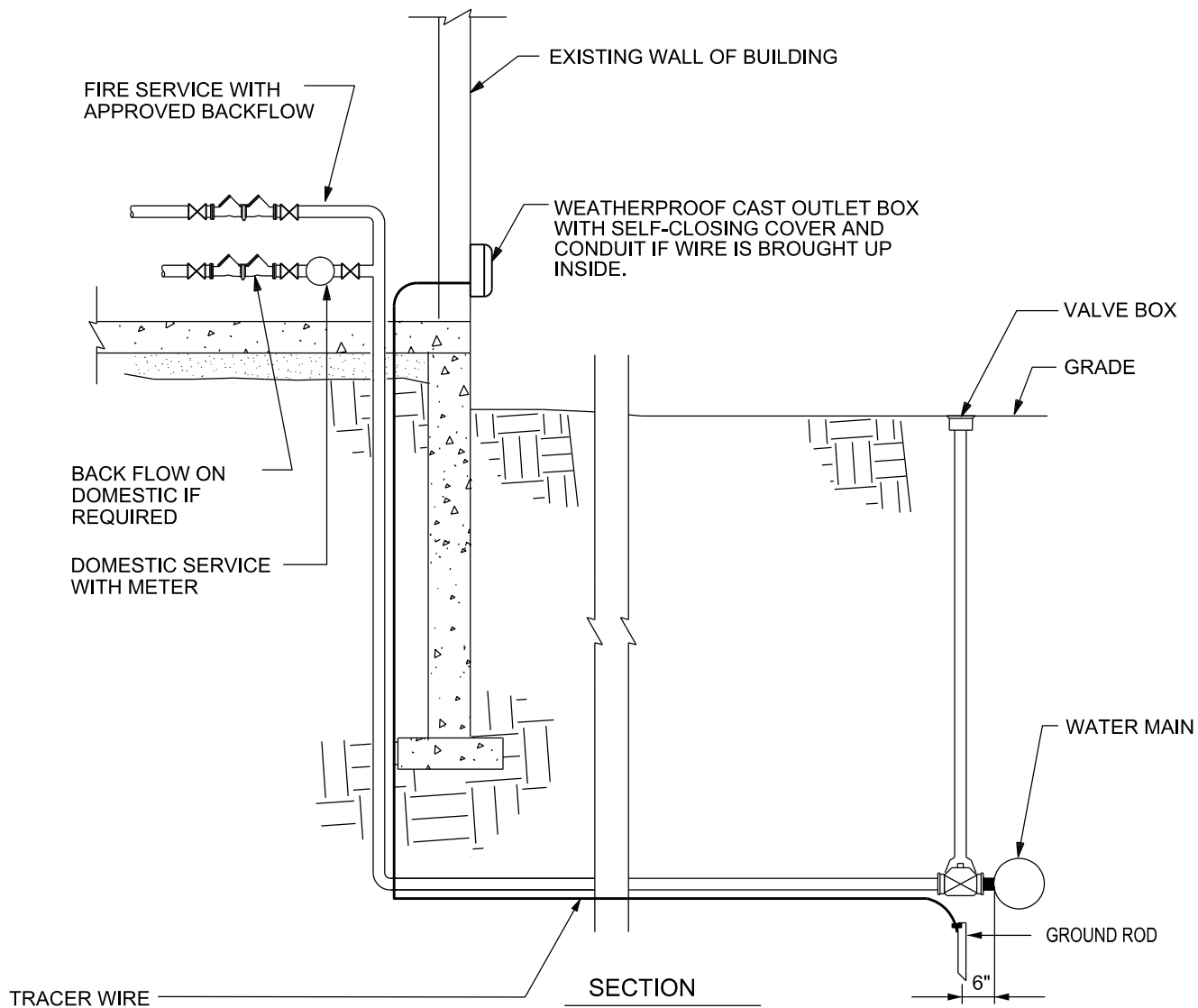
NOTES:

1. INSTALL 1/2" CONDUIT FROM METER TO AN ACCEPTABLE LOCATION FOR MOUNTING METER READING EQUIPMENT
2. BOX TO BE CONSTRUCTED WITH CONCRETE SIDE WALLS AND BOTTOM UNLESS OTHERWISE APPROVED BY DMWW.

Des Moines
Water Works
Water You Can Trust for Life
ENGINEERING DEPARTMENT
Des Moines, Iowa

STANDARD 2" METER SETTING FOR METER BOX

SCALE: NONE	DATE: 5-10-1996
DRAWN BY: DLH	APPROVED BY: TPC
REVISED: 04/29/2013 JLH	



TRACER WIRE
(SEE 505.6.6 FOR TRACER SYSTEM SPECIFICATIONS).
FASTEN TO MIDPOINT OF EACH PIPE SECTION
WITH PLASTIC TAPE. INSTALL ON ALL PIPE
MATERIALS EXCLUDING TYPE K COPPER
AND RED BRASS.

TRACER WIRE MAY BE INSTALLED IN
PLASTIC CONDUIT FOR ADDITIONAL
PROTECTION FROM POTENTIAL DAMAGE,
BUT IT IS NOT REQUIRED.

Des Moines
Water Works
Water You Can Trust for Life
ENGINEERING DEPARTMENT
Des Moines, Iowa

**TYPICAL COMBINATION FIRE &
DOMESTIC SERVICE W/TRACER
WIRE**

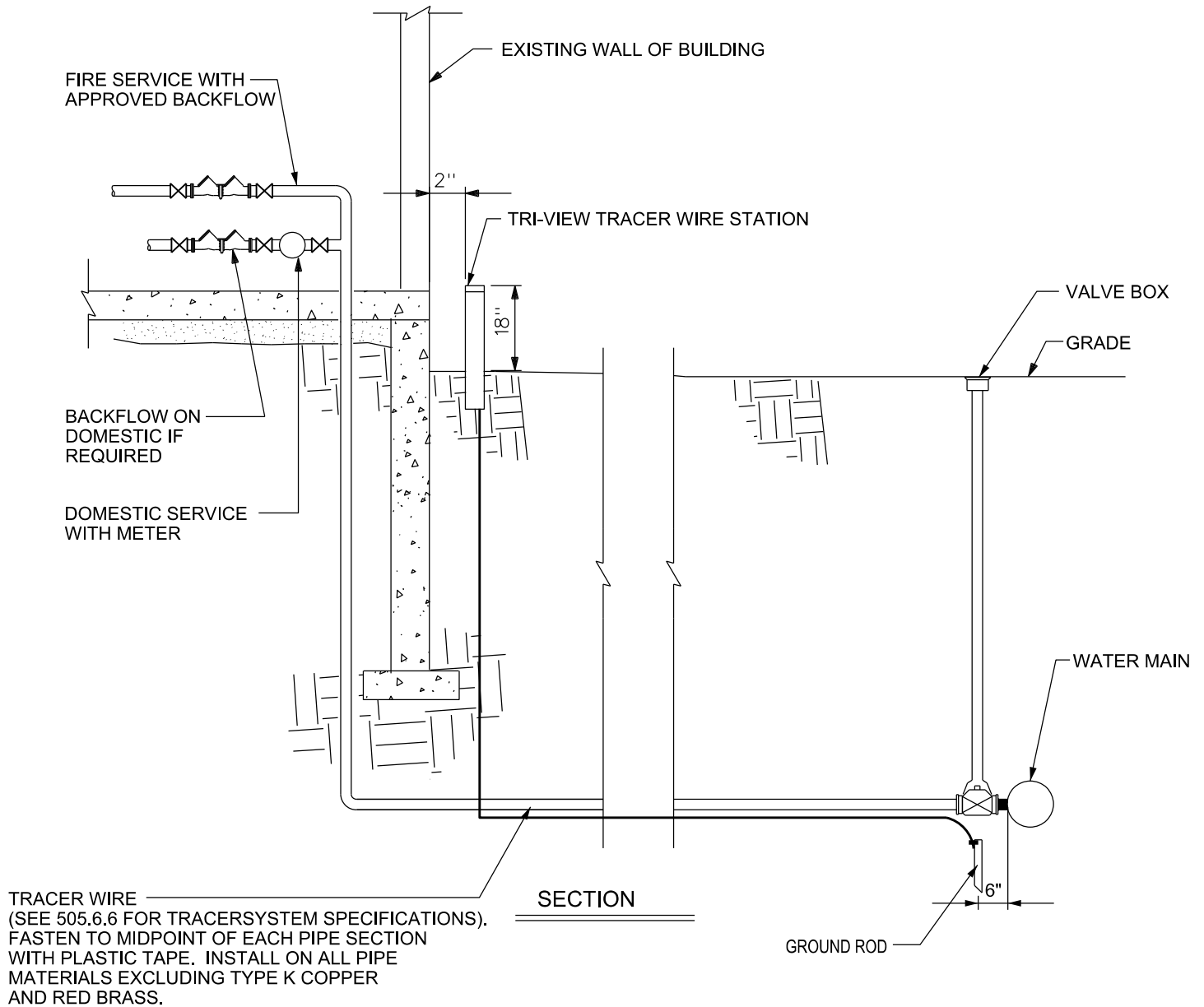
SCALE: NONE

DATE: 8-11-2000

DRAWN BY: DLH

APPROVED BY: TPC

REVISED: 08/05/2014 JLH



Des Moines
Water Works
 Water You Can Trust for Life
 ENGINEERING DEPARTMENT
 Des Moines, Iowa

TYPICAL COMBINATION
 FIRE & DOMESTIC SERVICE
 W/TRI-VIEW TRACER
 WIRE STATION

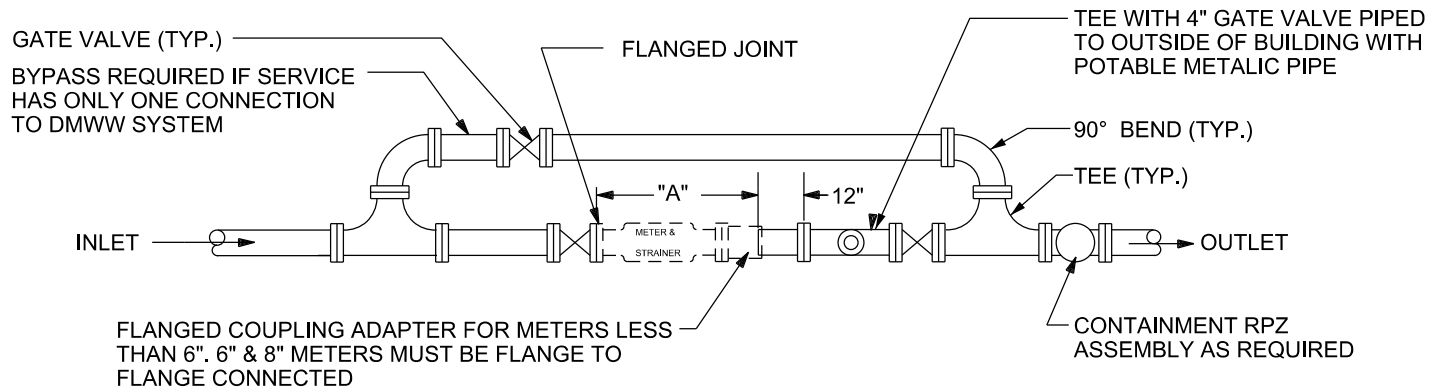
SCALE: NONE

DATE: 2-11-2005

DRAWN BY: DLH

APPROVED BY: TPC

REVISED: 10/06/2022 DLH



METER SETTING 3" & LARGER

SIZE OF METER	DIMENSION "A"							
	TURBINE METER		TRU FLOW COMPOUND METER		FIRE TURBINE		PROTECTUS III	
	FLANGE COUPLING ADAPTOR	FLANGE TO FLANGE	FLANGE COUPLING ADAPTOR	FLANGE TO FLANGE	FLANGE COUPLING ADAPTOR	FLANGE TO FLANGE	FLANGE COUPLING ADAPTOR	FLANGE TO FLANGE
3"	19"	18 3/8"	24"	23 3/8"	26-3/4"	26-3/8"	N/A	N/A
4"	22"	21-7/8"	28-1/2"	27-7/8"	35-3/8"	35 1/4"	33-1/2"	33 1/4"
6"	N/A	27-7/8"	N/A	33-7/8"	N/A	45-1/8"	N/A	45 1/4"
8"	N/A	30 3/8"	N/A	N/A	N/A	51-9/16"	N/A	53 1/4"

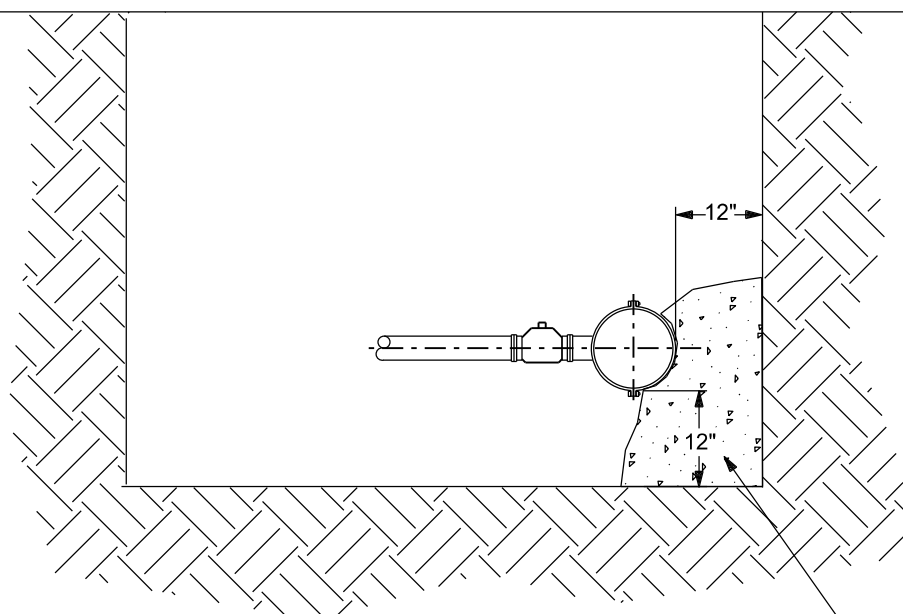
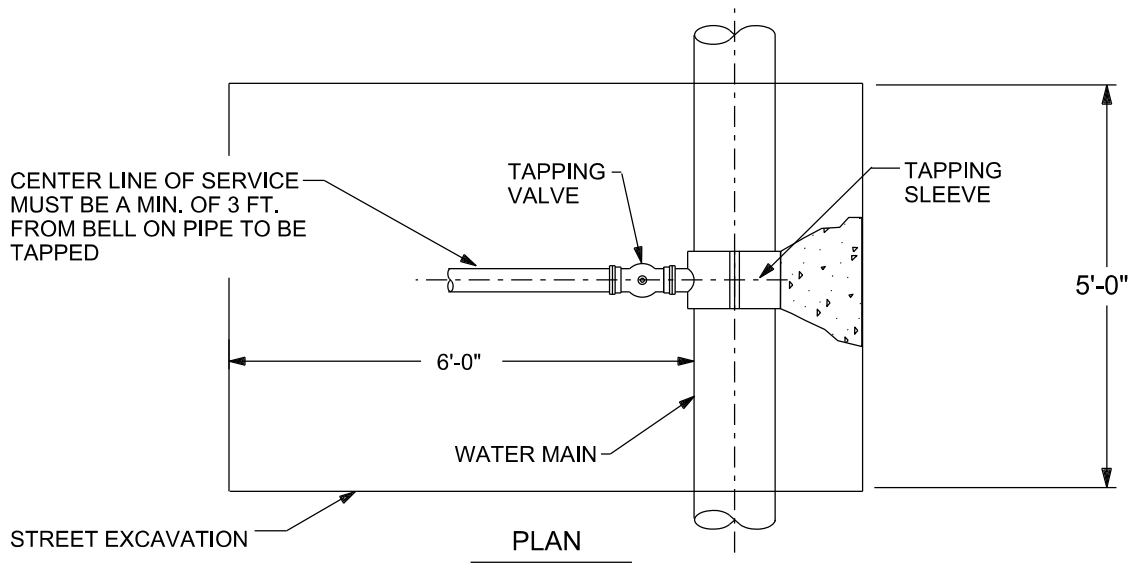
NOTES:

1. INSTALL 1/2" CONDUIT FROM METER TO AN ACCEPTABLE LOCATION FOR MOUNTING METER READING EQUIPMENT.
2. PIPE MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF DES MOINES PLUMBING CODE.
3. IF THE METER SETTING IS INSIDE A BLDG. 4" PIPE MUST BE INSTALLED FROM THE TEST TEE VALVE TO AN APPROVED LOCATION ON THE OUTSIDE WALL OF THE BUILDING.
4. THRUST RESTRAINTS MUST BE PROVIDED AT FLEXIBLE COUPLINGS AND FLANGED COUPLING ADAPTERS WHEN NECESSARY TO PREVENT LEAKAGE AND OVERSTRESSING OF THE PIPE.
5. METER SHALL BE NO MORE THAN 3' OFF THE FLOOR. PROVIDE PIPE SUPPORTS AT TEES OR AS REQUIRED IN METER PITS.
6. MINIMUM HORIZONTAL CLEARANCE FROM CENTER LINE OF METER TO WALL OR OTHER OBSTRUCTION SHALL BE 30" UNLESS OTHERWISE APPROVED BY DES MOINES WATER WORKS.

Des Moines Water Works
 Water You Can Trust for Life
 ENGINEERING DEPARTMENT
 Des Moines, Iowa

STANDARD PLAN FOR METER & BYPASS INSTALLATION

SCALE: NONE DATE: 05/10/1996
 DRAWN BY: DLH APPROVED BY: TPC
 REVISED: 09/19/2016 JLH



NOTES:

1. IF 2 TAPS ARE TO BE MADE, A MIN. OF 3 FT. BETWEEN SERVICES (□ TO □) SHOULD BE MAINTAINED AND THE WIDTH OF THE HOLE INCREASED TO 8 FT. IF BOTH ARE TO BE MADE IN SAME HOLE.
2. EXCAVATIONS OVER 4'-11" DEEP MUST BE SHORED BEFORE A TAP WILL BE MADE. EXCAVATION DIMENSIONS ARE FROM INSIDE FACE OF SHORING.

Des Moines
Water Works
Water You Can Trust for Life
 ENGINEERING DEPARTMENT
 Des Moines, Iowa

**EXCAVATION DETAIL FOR
 TAPPING SLEEVE**

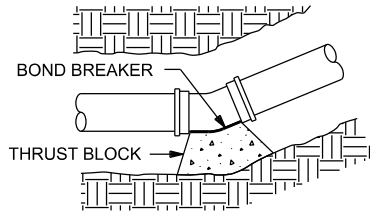
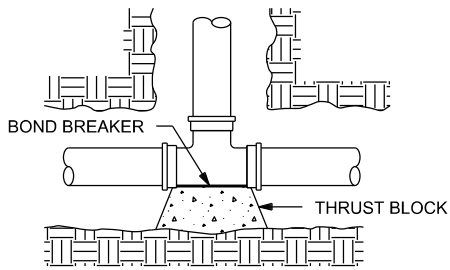
SCALE: NONE

DATE: 5-10-1996

DRAWN BY: DLH

APPROVED BY: TPC

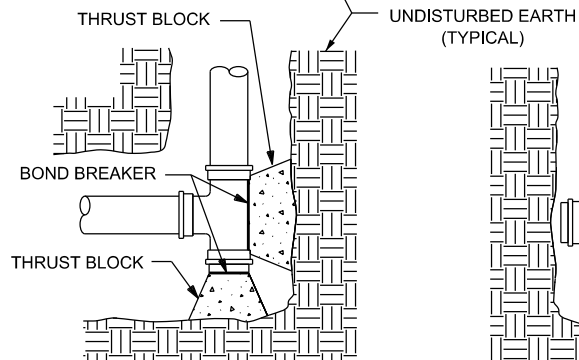
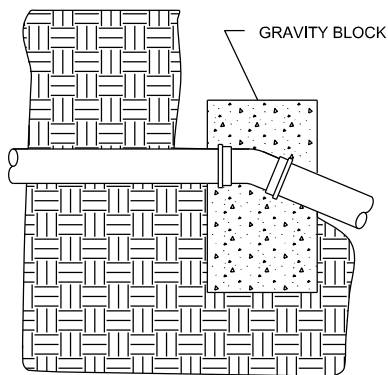
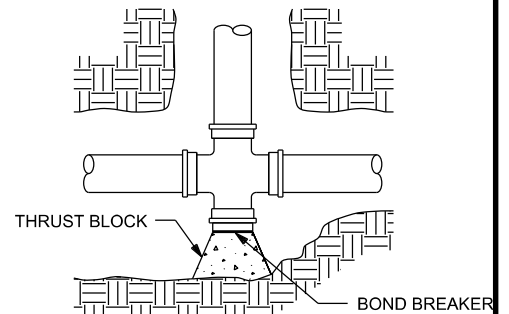
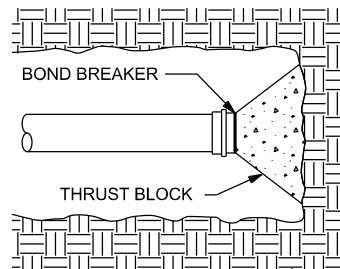
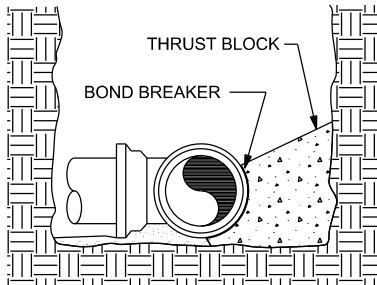
REVISED: 04/29/2013 JLH



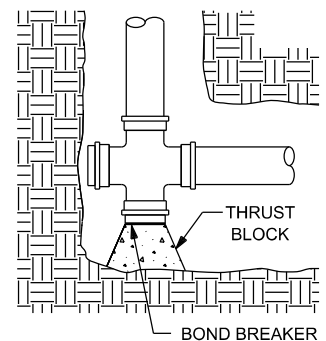
MINIMUM BEARING SURFACE (IN SQ. FT.)					
SIZE OF PIPE	B E N D S				TEE OR DEAD END
	11 1/4°	22 1/2°	45°	90°	
6"	1.00	1.25	2.25	4.50	3.00
8"	1.00	2.00	4.00	7.90	5.25
12"	2.00	4.25	8.25	18.00	11.00
16"	8.00	15.25	28.00	48.00	35.00
20"	8.50	16.50	32.00	57.00	40.00
24"	9.00	18.00	35.00	65.00	45.00

Note:

Restrained joints may be used in lieu of blocking with prior approval from DMWW.



UNDISTURBED EARTH (TYPICAL)



Des Moines
Water Works
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 ENGINEERING DEPARTMENT
 Des Moines, Iowa

CONCRETE THRUST BLOCK STANDARD

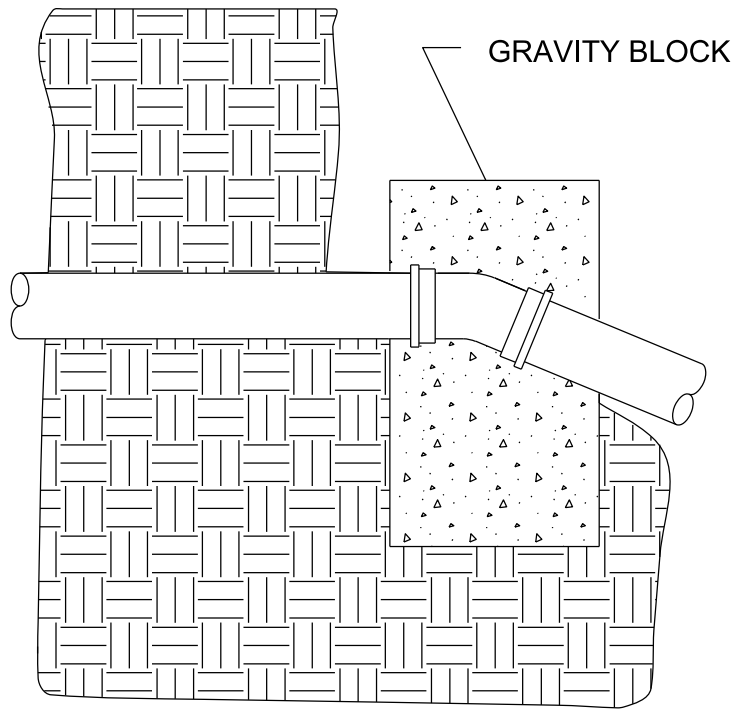
SCALE: NONE

DATE: 9-25-1992

DRAWN BY: DLH

APPROVED BY: TPC

REVISED: 04/29/2013 JLH



VOLUME OF GRAVITY BLOCK
CUBIC METERS (CUBIC YARDS)

PIPE SIZE (INCHES)	ANGLE OF DEFLECTION (DEGREES)			
	11.25	22.5	45	90
4	.16	.43	.910	1.35
6	.16	.43	.90	1.35
8	.30	.76	1.57	2.33
12	.65	1.63	3.33	4.92
16	1.16	2.85	5.80	8.56
20	1.78	4.37	8.91	13.14
24	2.47	6.17	12.63	18.64
30	3.82	9.51	19.43	28.66

NOTE:

RESTRAINED JOINTS MAY BE
USED IN LIEU OF BLOCKING
WITH PRIOR APPROVAL FROM
DMWW.

Des Moines
Water Works
Water You Can Trust for Life
ENGINEERING DEPARTMENT
Des Moines, Iowa

**CONCRETE GRAVITY
BLOCK STANDARD**

SCALE: NONE

DATE: 2-25-1997

DRAWN BY: DLH

APPROVED BY: TPC

REVISED: 04/29/2013 JLH

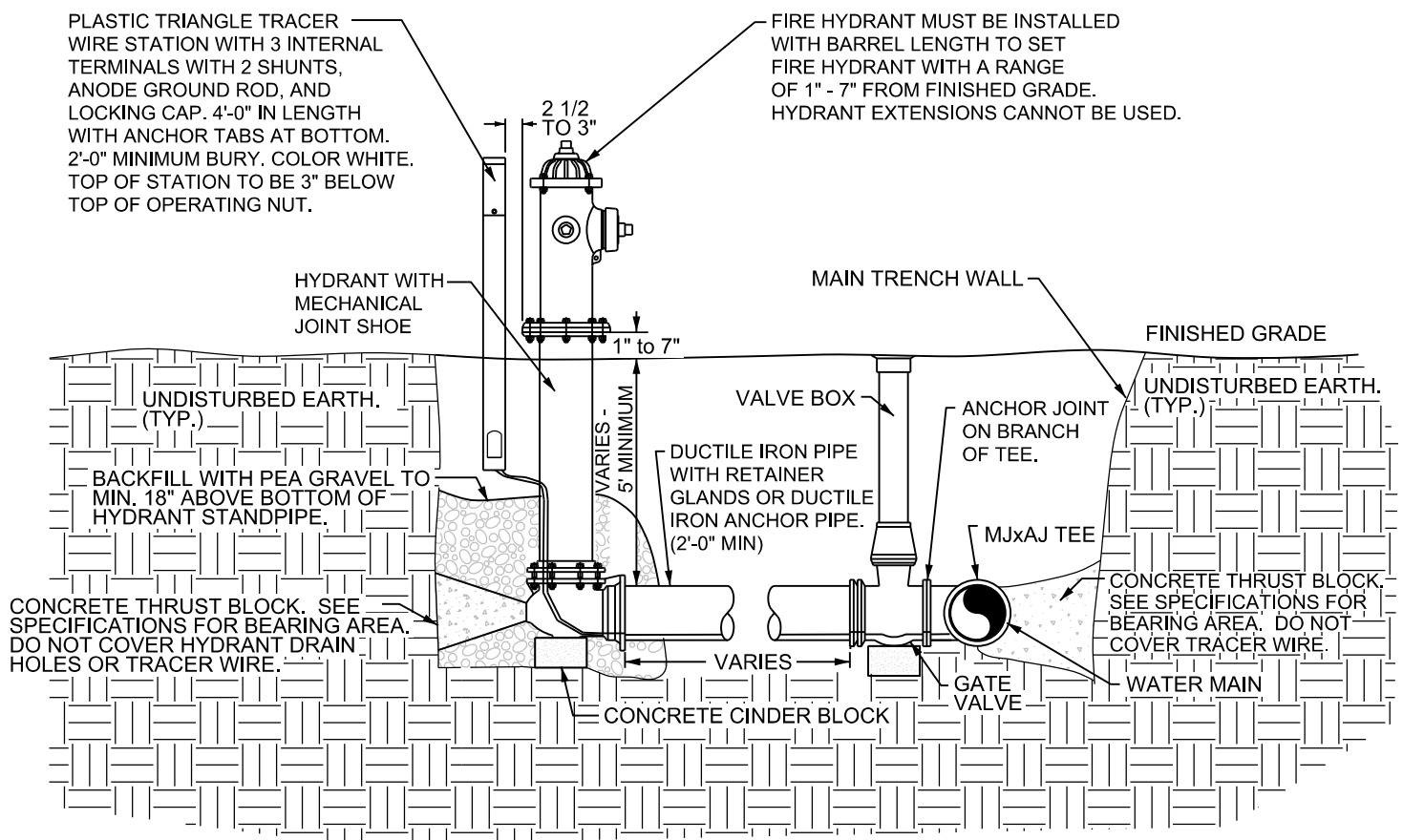
NOTE:

IRON PIPE, VALVE, FITTINGS AND HYDRANT (BURIED PORTION) TO BE WRAPPED WITH POLYETHYLENE ENCASEMENT MATERIAL PER DES MOINES WATER WORKS STANDARDS.

TRACER WIRE MAY BE INSTALLED IN PLASTIC CONDUIT FOR ADDITIONAL PROTECTION FROM POTENTIAL DAMAGE, BUT IT IS NOT REQUIRED.

TRACER WIRE (SEE 505.6.6 FOR TRACER SYSTEM SPECIFICATIONS). FASTEN TO MIDPOINT OF EACH PIPE SECTION WITH PLASTIC TAPE. INSTALL ON ALL PIPE MATERIALS EXCLUDING TYPE K COPPER AND RED BRASS.

TRACER WIRE MAY BE INSTALLED IN PLASTIC CONDUIT FOR ADDITIONAL PROTECTION FROM POTENTIAL DAMAGE, BUT IT IS NOT REQUIRED.



STANDARD HYDRANT ON WATER MAINS 16" OR LESS

NOT TO SCALE

Des Moines
Water Works
Water You Can Trust for Life
ENGINEERING DEPARTMENT
Des Moines, Iowa

**STANDARD HYDRANT
DETAIL W/ TRACER WIRE**

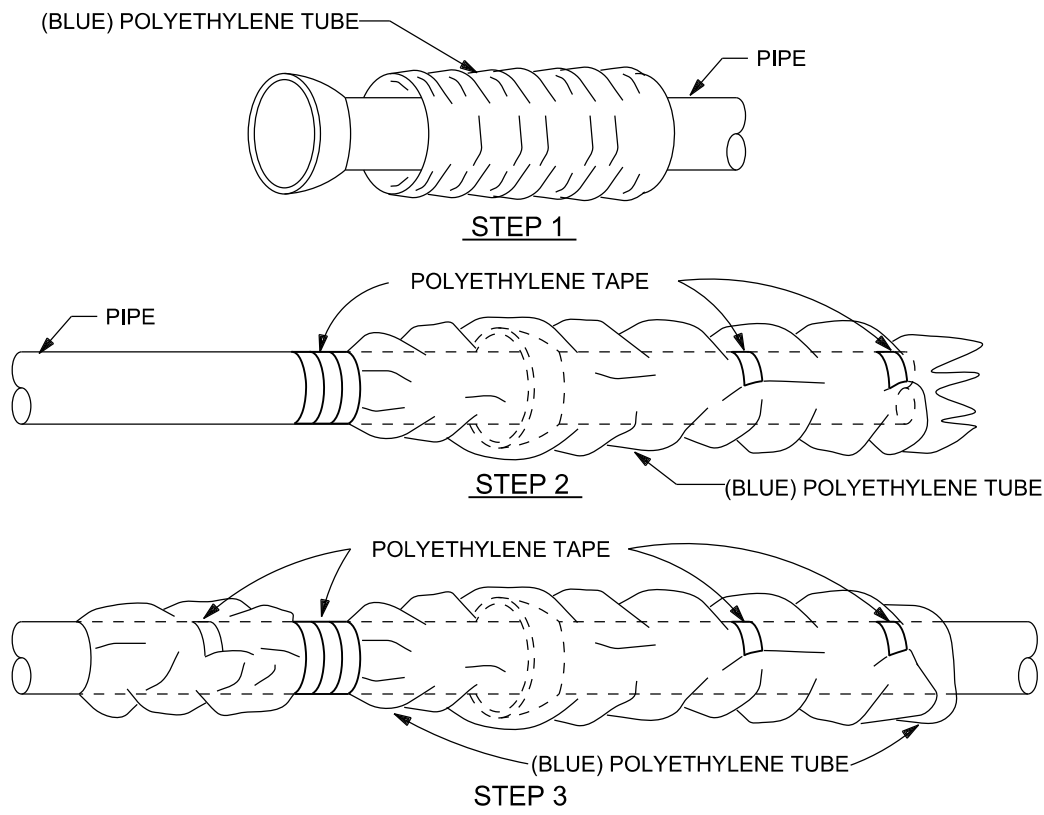
SCALE: NONE

DATE: 5-10-1996

DRAWN BY: DLH

APPROVED BY: TPC

REVISED: 8/14/2023 DLH



FIELD INSTALLATION - POLYETHYLENE WRAP

- STEP 1 - PLACE TUBE OF BLUE POLYETHYLENE MATERIAL ON PIPE PRIOR TO LOWERING IT INTO THE TRENCH.
- STEP 2 - PULL THE TUBE OVER THE LENGTH OF PIPE. TAPE TUBE TO PIPE AT JOINT. FOLD MATERIAL AROUND THE ADJACENT SPIGOT END AND WRAP WITH TAPE TO HOLD THE PLASTIC TUBE IN PLACE.
- STEP 3 - OVERLAP FIRST TUBE WITH ADJACENT TUBE AND AND SECURE WITH PLASTIC ADHESIVE TAPE. THE BLUE POLYETHYLENE TUBE COVERING THE PIPE SHALL BE LOOSE. EXCESS MATERIAL SHALL BE NEATLY DRAWN UP AROUND THE PIPE BARREL, FOLDED ON TOP OF AND TAPED IN PLACE.

NOTE: IRON PIPE FITTINGS, INCLUDING VALVES AND HYDRANTS SHALL BE WRAPPED WITH TWO LAYERS OF BLUE POLYETHYLENE MATERIAL. THE WRAPPING SHALL EXTEND AT LEAST 1' BEYOND THE FITTING JOINTS ONTO THE ADJOINING PIPE AND SHALL BE FASTEN TO THE PIPE WITH PLASTIC TAPE. TAPE SHALL BE USED AS NEEDED TO HOLD WRAP IN PLACE. EITHER POLYETHYLENE SHEETS OR SLIT TUBING MAY BE USED.

Des Moines
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 ENGINEERING DEPARTMENT
 Des Moines, Iowa

POLYETHYLENE WRAP DETAIL

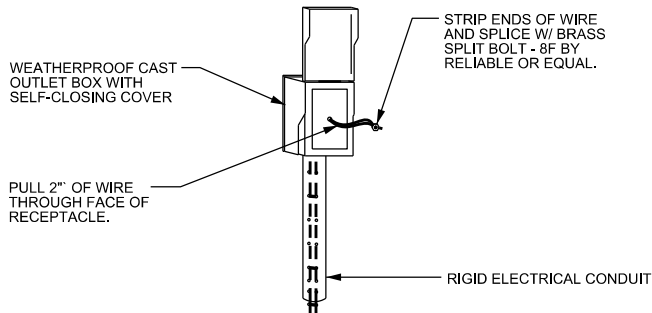
SCALE: NONE

DATE: 5-10-1995

DRAWN BY: DLH

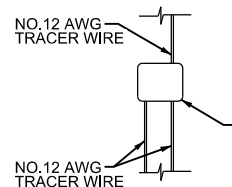
APPROVED BY: TPC

REVISED: 04/29/2013 JLH



TRACER WIRE RECEPTACLE DETAIL ON BUILDING

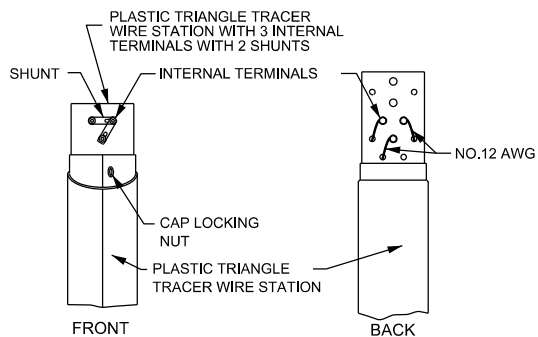
Not to Scale



*SPICES PERMITTED ONLY WITH DMWW APPROVAL

TRACER WIRE SPLICE DETAIL

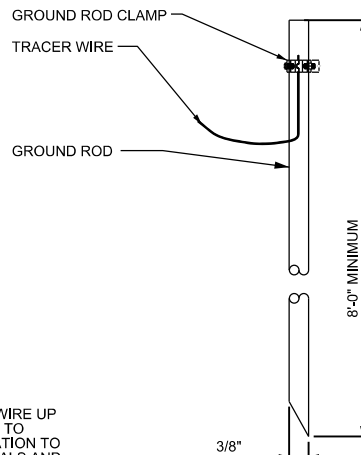
Not to Scale



TRACER WIRE RECEPTACLE DETAIL

Not to Scale

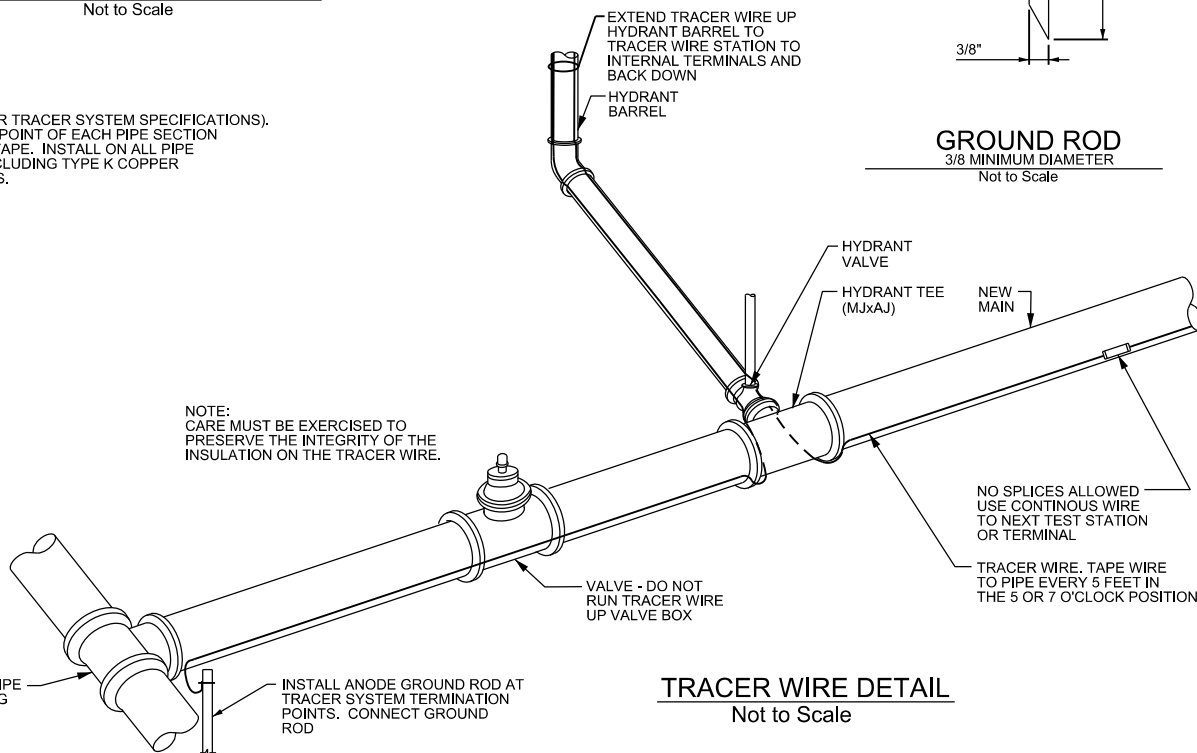
TRACER WIRE (SEE 505.6.6 FOR TRACER SYSTEM SPECIFICATIONS). FASTEN TO MIDPOINT OF EACH PIPE SECTION WITH PLASTIC TAPE. INSTALL ON ALL PIPE MATERIALS EXCLUDING TYPE K COPPER AND RED BRASS.



GROUND ROD

3/8" MINIMUM DIAMETER

Not to Scale



TRACER WIRE DETAIL

Not to Scale

TRACER WIRE MAY BE INSTALLED IN PLASTIC CONDUIT FOR ADDITIONAL PROTECTION FROM POTENTIAL DAMAGE, BUT IT IS NOT REQUIRED.

Des Moines Water Works
Water You Can Trust for Life
ENGINEERING DEPARTMENT
Des Moines, Iowa

TRACER WIRE DETAIL

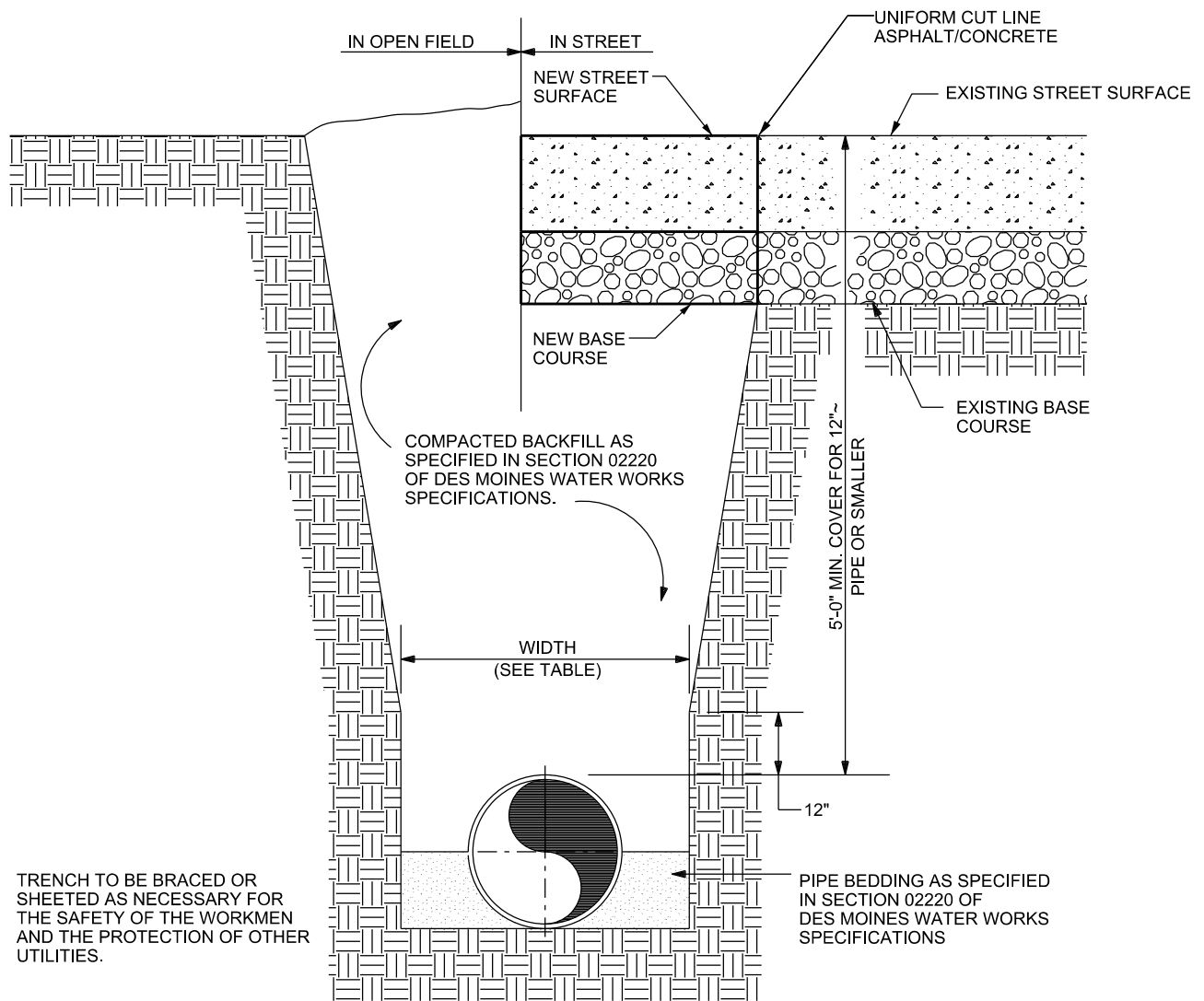
SCALE: NONE

DATE: 5-10-1996

DRAWN BY: DLH

APPROVED BY: TPC

REVISED: 8/14/2023 DLH



PIPE DIAMETER	MINIMUM WIDTH	MAXIMUM WIDTH
4"	1'-4"	2'-4"
6"	1'-6"	2'-6"
8"	1'-8"	2'-8"
12"	2'-0"	3'-0"
16"	2'-4"	3'-4"
20"	2'-8"	3'-8"

TYPICAL TRENCH SECTION
Not to Scale

Des Moines Water Works
Water You Can Trust for Life
ENGINEERING DEPARTMENT
Des Moines, Iowa

TYPICAL TRENCH SECTION

SCALE: NONE

DATE: 9-22-1992

DRAWN BY: DLH

APPROVED BY: TPC

REVISED: 04/29/2013 JLH

COMMERCIAL OFFICE BUILDING
Des MOINES, IOWA
LOAD PROFILE

PERIOD	AVERAGE GALLON CONSUMPTION	PEAK GALLON CONSUMPTION
7:00A.M. TO 8:00A.M.	1,037	1,210
8:00A.M. TO 9:00A.M.	10,369	12,097
9:00A.M. TO 10:00A.M.	12,334	14,390
10:00A.M. TO 11:00A.M.	4,903	5,720
11:00A.M. TO 11:30A.M.	5,185	6,049
11:30A.M. TO 12:30P.M.	12,334	14,390
12:30P.M. TO 1:00P.M.	5,185	6,049
1:00P.M. TO 2:00P.M.	10,369	12,097
2:00P.M. TO 3:00P.M.	4,093	5,720
3:00P.M. TO 4:00P.M.	10,369	12,097
4:00P.M. TO 5:00P.M.	12,334	14,390
5:00P.M. TO 6:00P.M.	8,186	9,550
6:00P.M. TO 7:00P.M.	8,186	9,550
7:00P.M. TO 8:00P.M.	1,037	1,210
8:00P.M. TO 9:00P.M.	1,037	1,210
9:00P.M. TO 10:00P.M.	1,037	1,210
10:00P.M. TO 11:00P.M.	1,037	1,210
11:00P.M. TO 12:00A.M.	1,037	1,210
12:00A.M. TO 7:00A.M.	NEGLIGIBLE	NEGLIGIBLE

NOTE: MINIMUM MEASURABLE FLOW
EQUALS 2 G.P.M.

Des Moines
Water Works
Water You Can Trust for Life
ENGINEERING DEPARTMENT
Des Moines, Iowa

EXAMPLE OF LOAD
PROFILE

SCALE: NONE	DATE: 5-10-1996
DRAWN BY: DLH	APPROVED BY: TPC
REVISED: 04/29/2013 JLH	

FIRE DEPARTMENT REVIEW FORM

Fire service to be connected to the Des Moines Water Works' system:

Date: _____

Address: _____

Owner: _____

Size of proposed fire service: _____

Size of water main to be tapped: _____

Tap street: _____

Maximum sprinkler system demand: _____ gpm _____ psi

Water supply requirement from on-site hydrants: _____ gpm _____ psi

Total fire flow required at connection to DMWW main: _____ gpm _____ psi

Size & type of backflow preventer: _____

Flow Test

Hydrant Location: _____

Date tested: _____ Pitot: _____ psi

Static: _____ psi Calc. Flow _____ gpm

Residual: _____ psi Flow @ 20 psi: _____ gpm

All materials and installations must meet all code requirements as specified in the City of Des Moines Uniform Plumbing Code and recognized practice.

Sketch and description of proposed fire service (attach mechanical plan, if available).

Contractor: _____

Address: _____

Phone: _____

Reviewed by: _____, Fire Inspector Date: _____

Fire Prevention Bureau
Des Moines Fire Department
900 Mulberry Street
Des Moines, IA 50309
Telephone: 515-283-4240
Fax: 515-283-4907

Des Moines
Water Works
Water You Can Trust for Life
ENGINEERING DEPARTMENT
Des Moines, Iowa

EXAMPLE OF FIRE DEPARTMENT REVIEW

SCALE: NONE		DATE: 10-12-1992	
DRAWN BY: DLH		APPROVED BY: TPC	
REVISED: 04/29/2013 JLH			

WATER SERVICE AGREEMENT

Customer Name
Customer Address

Account #
Mailed On [Date]

On [Date], you applied to Des Moines Water Works ("Water Works") for water service to Serve [Address]. The Water Works is a municipal water utility owned and operated by the Board of Water Works Trustees of the City of Des Moines, Iowa (the "Board"). By making such application you represent that you are duly authorized to request water service to such service address and to make the agreements set forth in this Water Service Agreement. Your acceptance of water service to such service address shall be taken as your agreement as the "Customer" to the following:

1. To pay all applicable rates and charges for water service, as established from time to time by the Board. Payment of rates and charges in full is due upon receipt of invoice. In the event of nonpayment in full, late payment charges will be imposed as set forth in the Water Works Water Service Rules and Regulations as established from time to time by the Board (the "Water Service Rules and Regulations"). A copy of the Water Service Rules and Regulations is available for inspection at the offices of the Water Works. If Customer's account becomes delinquent, Water Works may terminate water service, as provided by law, until the account is paid in full, and may also file a property tax lien for the delinquent balance as provided by law. Water Works may also report any delinquent balance to credit agencies as allowed by law.
2. To comply with all of the Water Service Rules and Regulations.
3. The installation, maintenance and repair of the service pipe and fixtures from the main into the property, including corporation stop, shut-off valve, stop or curb box, meter box or setting, and meter pit, is the sole responsibility of the Customer. Any necessary installation, maintenance or repair work must be done at the expense and risk of Customer in accordance with the Water Service Rules and Regulations. If circumstances require the Water Works to perform any of the maintenance and repair work that is Customer's responsibility, then the reasonable cost thereof shall be immediately paid by the Customer to the Water Works.
4. To indemnify and save harmless the Water Works, the Board and the City of Des Moines, Iowa from any and all claims or demands made against any or all of them on account of the condition, state of repair, location, or otherwise involving, Customer's service pipe and fixtures from the main into the Customer's premises.
5. The water furnished hereunder, other than fire service, shall be metered by a meter or meters furnished and owned by the Water Works, and Customer agrees to pay for all water so metered at the applicable rates whether or not such water is wasted. Dedicated fire service shall likewise be paid for in accordance with applicable rates.
6. The Water Works shall always have reasonable access to all meters and meter reading systems, during its normal working day, and at any time in the case of emergency.

Des Moines
Water Works
Water You Can Trust for Life
ENGINEERING DEPARTMENT
Des Moines, Iowa

EXAMPLE OF WATER SERVICE AGREEMENT

SCALE: NONE	DATE: 10-12-92
DRAWN BY:	APPROVED BY: TPC
REVISED: 04/29/2013 JLH	

APPLICATION TO STUB AND REUSE WATER SERVICE LINE

DATE: _____

TO: DES MOINES WATER WORKS

FROM: _____

MAILING ADDRESS: _____

I am the Owner/Agent or Owner of the property or properties known as:

(Service Address)

I understand it is my obligation as Owner of this property to maintain water service lines from the water main in accordance with Des Moines Water Works' Rules and Regulations and local Plumbing Code. I further understand it is my obligation as Owner of this property to cause a service line to be disconnected at the water main upon the discontinuance of service through such service line. Service to the above-described property(s) has been discontinued at my request. Because I expect to reactivate the service not more than one year after the date of application, I hereby request that Des Moines Water Works excuse me from disconnecting the service at the main at this time, and in consideration of their approval for doing so I agree that the service line will be reactivated within one year. If the service line is not reactivated within one year after the date of application, I will have the service line disconnected at the main by a licensed plumber or I hereby authorize Des Moines Water Works to disconnect such service line at my expense. I understand I will be charged monthly non-metered water and, if applicable, sewer availability fees, based on the corresponding size of meter customary for the size of service line. I further understand such an agreement is contingent upon Water Works' review of the following in the field:

- Stub must be copper and must tap in front of the property to be served
- The curb stop must be upgraded to meet the requirements of the Des Moines Water Works Rules and Regulations at the time the water service is stubbed
- There may be only one tap (no bullheaded service lines), and it must be $\frac{3}{4}$ " or larger
- The service must be large enough to serve the proposed use of the property
- There must not be a condition of service on the account due to a leak or needed repair

Des Moines Water Works will notify you whether or not the water service can be stubbed after field review. Your plumber may be required to expose the water service at the stop box in order for us to determine pipe material before a decision can be made.

Owner/Agent Information:

(Name – please print)

(Signature)

(Date)

(Phone number)

DMWW USE ONLY

Service Information _____	_____	_____	_____	_____
(By DMWW)	(Account number)	(Permit number)	(Tap date)	(Tap size)
Des Moines Water Works _____	_____	_____	_____	_____
	(Prepared by)	(Approved for reuse by)	(Date)	

Complete and fax to Des Moines Water Works at 515-283-872. **Application must be approved prior to service line being stubbed.**

Des Moines
Water Works
Water You Can Trust for Life
ENGINEERING DEPARTMENT
Des Moines, Iowa

EXAMPLE APPLICATION TO STUB AND REUSE WATER SERVICE LINE

SCALE: NONE

DATE: 10-12-1992

DRAWN BY:

APPROVED BY: TPC

REVISED: 06/11/2015 JLH

BLANK SHEET

Des Moines

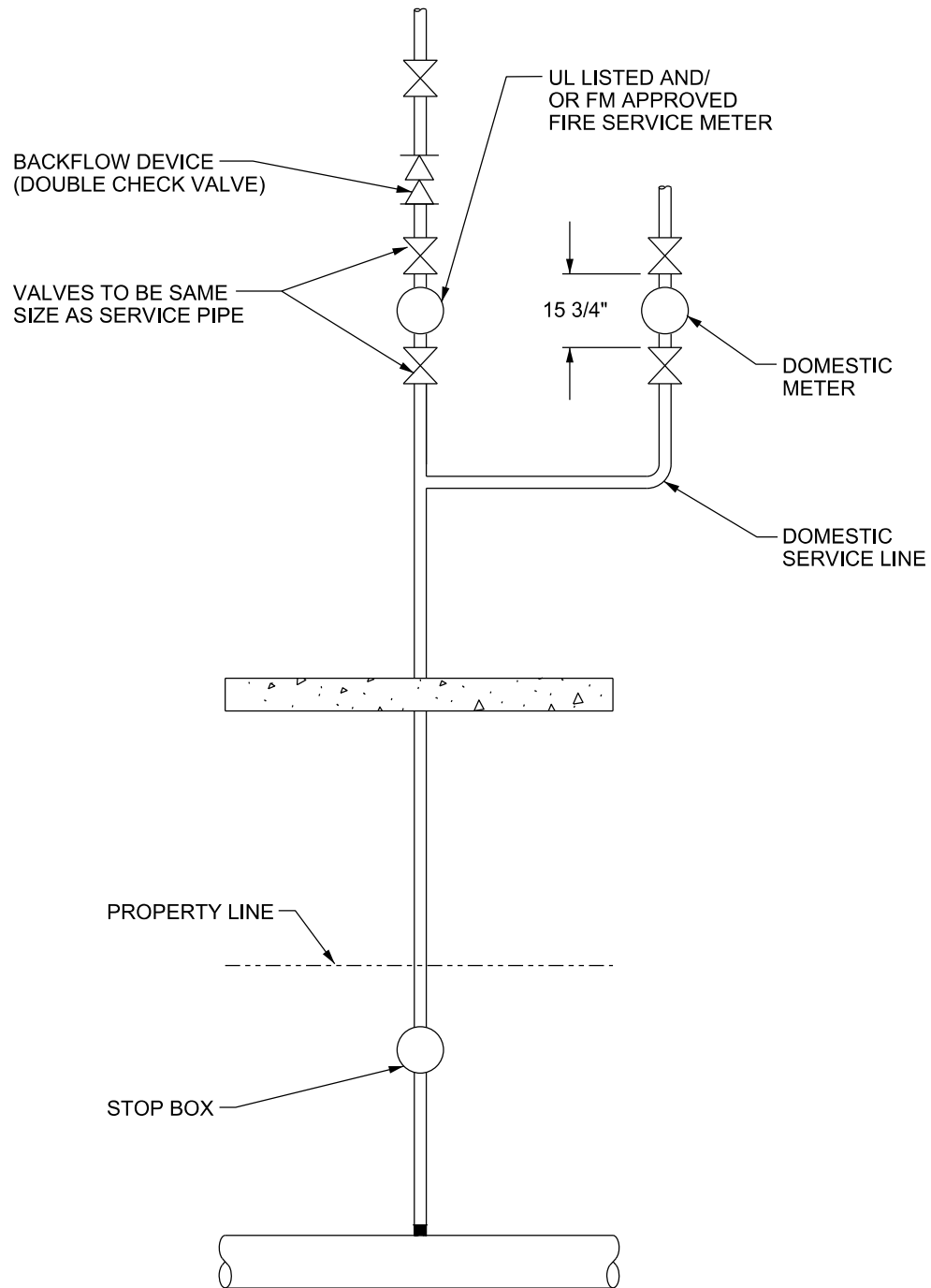
Water Works

Water You Can Trust for Life

ENGINEERING DEPARTMENT

Des Moines, Iowa

BLANK SHEET	
SCALE: NONE	DATE: 10-12-1992
DRAWN BY: DLH	APPROVED BY: TPC
REVISED: 04/29/2013 JLH	



Des Moines
Water Works
Water You Can Trust for Life
 ENGINEERING DEPARTMENT
 Des Moines, Iowa

RESIDENTIAL COMBINATION FIRE & DOMESTIC SERVICE INSTALLATION

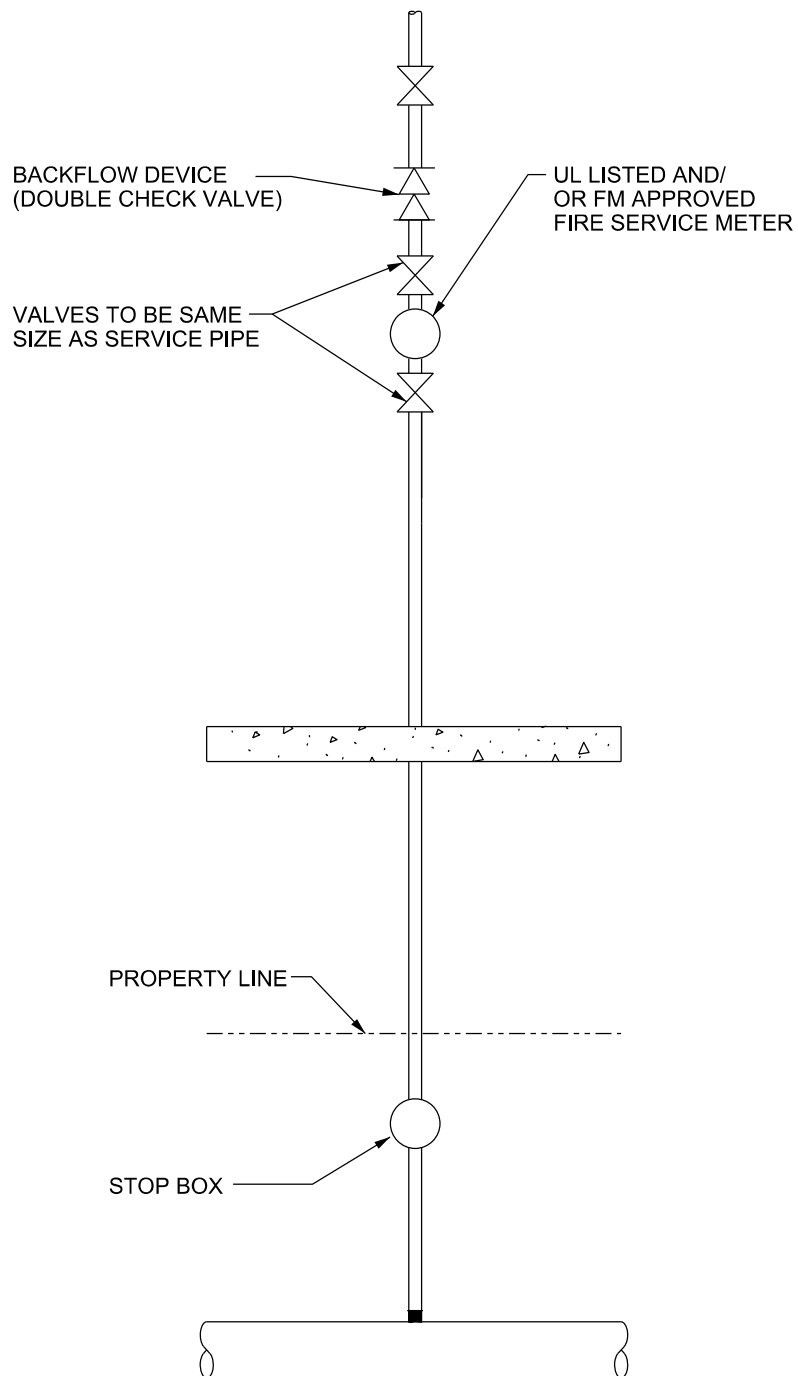
SCALE: NONE

DATE: 12-3-1994

DRAWN BY:

APPROVED BY: TPC

REVISED: 02/05/2015 JLH



Des Moines
Water Works
Water You Can Trust for Life
 ENGINEERING DEPARTMENT
 Des Moines, Iowa

RESIDENTIAL DEDICATED FIRE SERVICE INSTALLATION

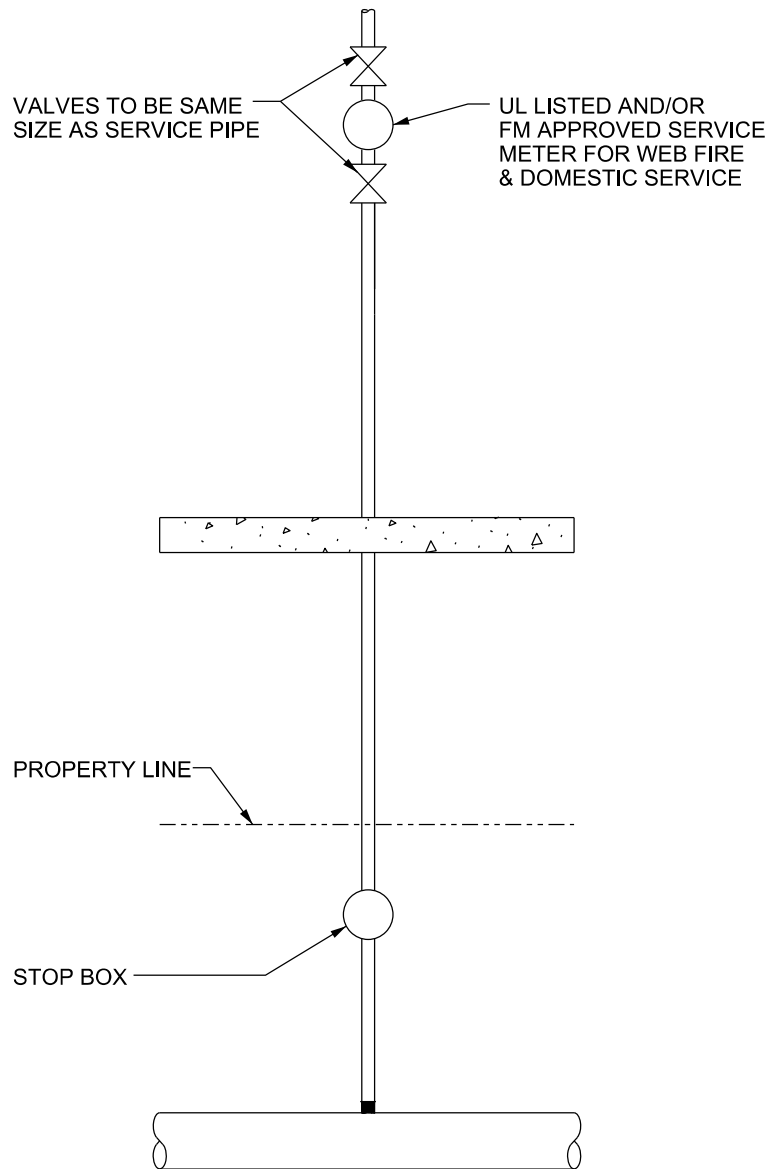
SCALE: NONE

DATE: 02/05/2015

DRAWN BY:

APPROVED BY: TPC

REVISED: 02/05/2015 JLH



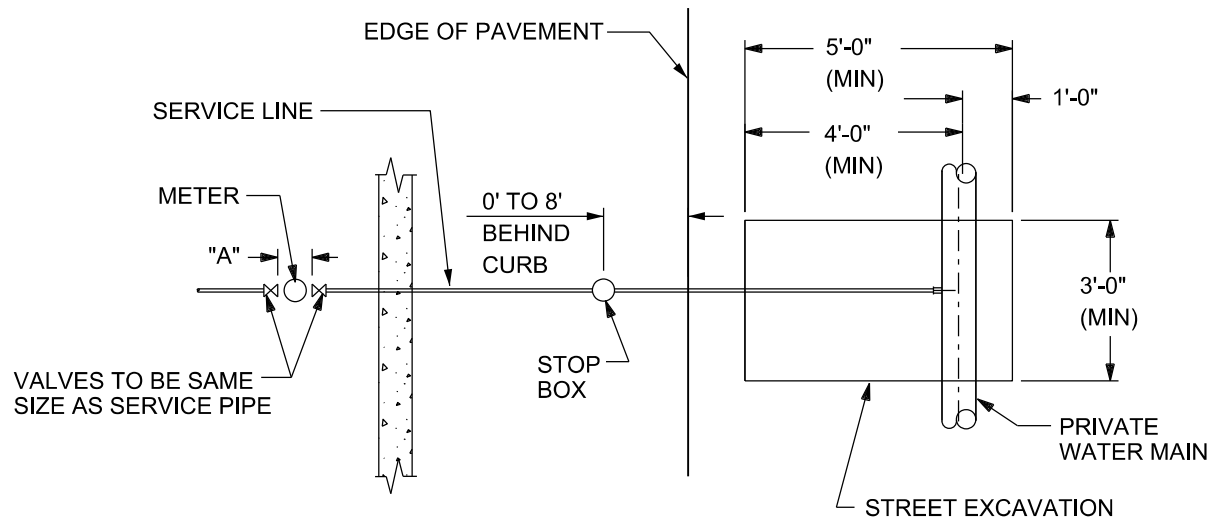
Des Moines
Water Works
 Water You Can Trust for Life
 ENGINEERING DEPARTMENT
 Des Moines, Iowa

**RESIDENTIAL WEB FIRE
 & DOMESTIC SERVICE
 INSTALLATION**

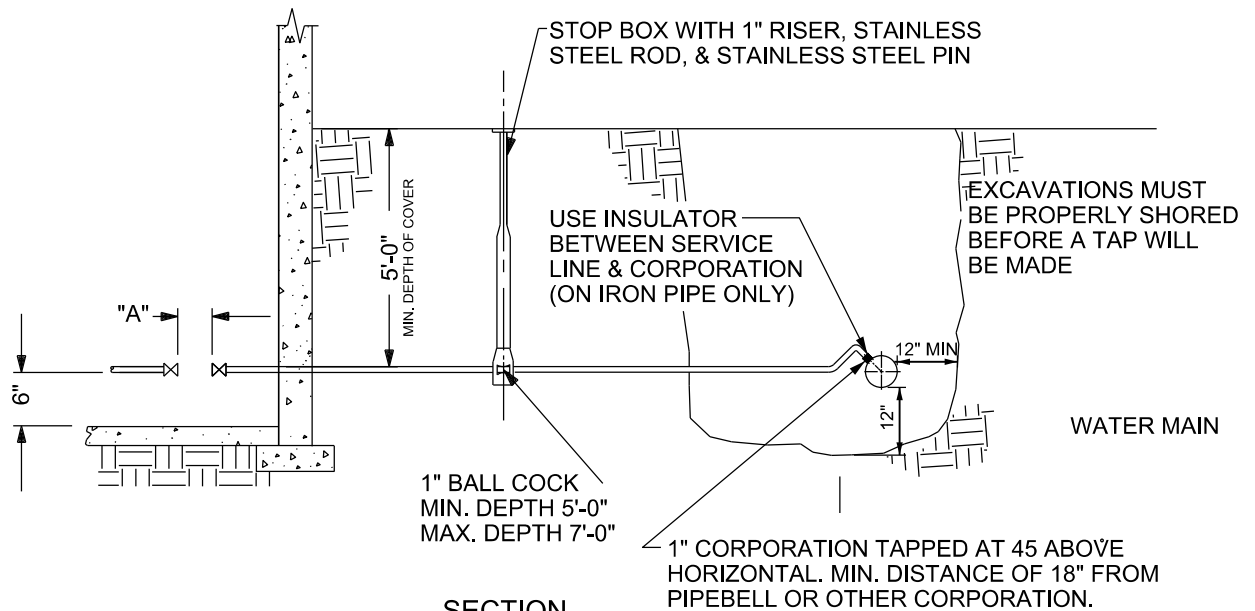
SCALE: NONE	DATE: 02/05/2015
DRAWN BY:	APPROVED BY: TPC
REVISED: 02/05/2015 JLH	

512-33B
 FIGURE 33B

METER SPACING	
SIZE OF METER	"A" - FACE TO FACE OF VALVES
5/8"	11-3/4"
3/4"	13-3/4"
1"	15-3/4"



PLAN

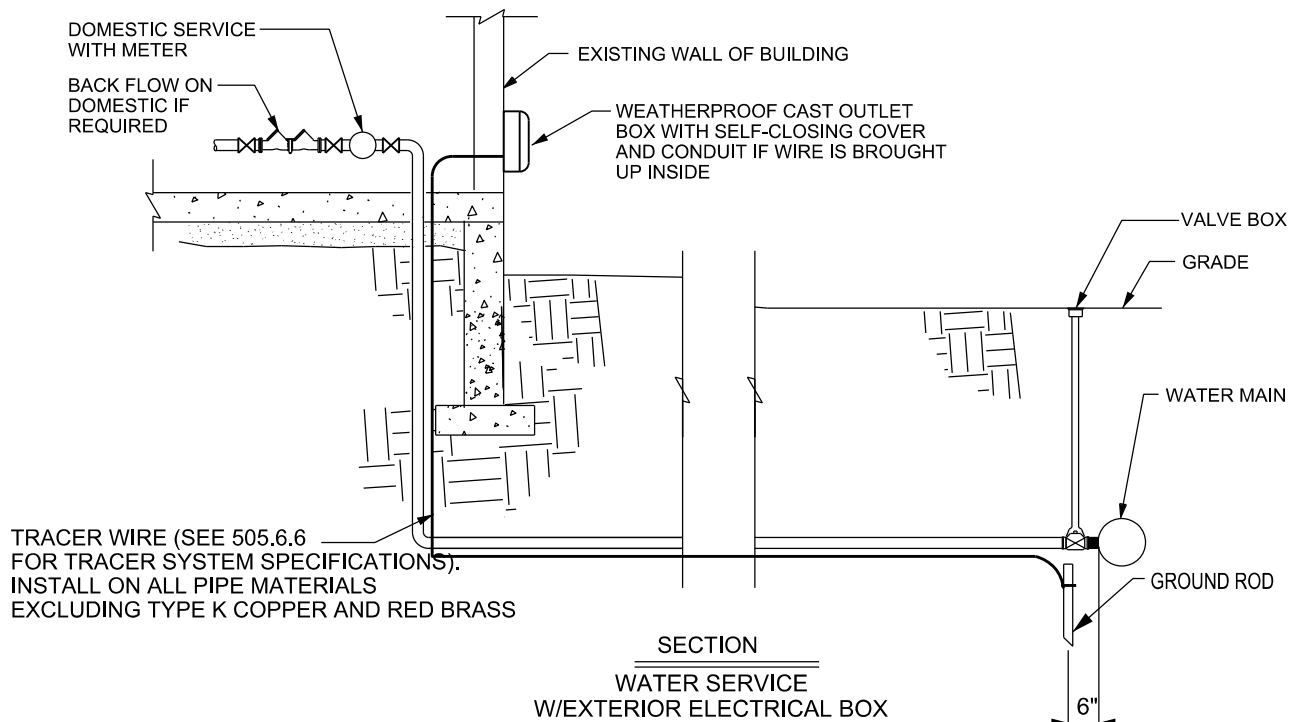
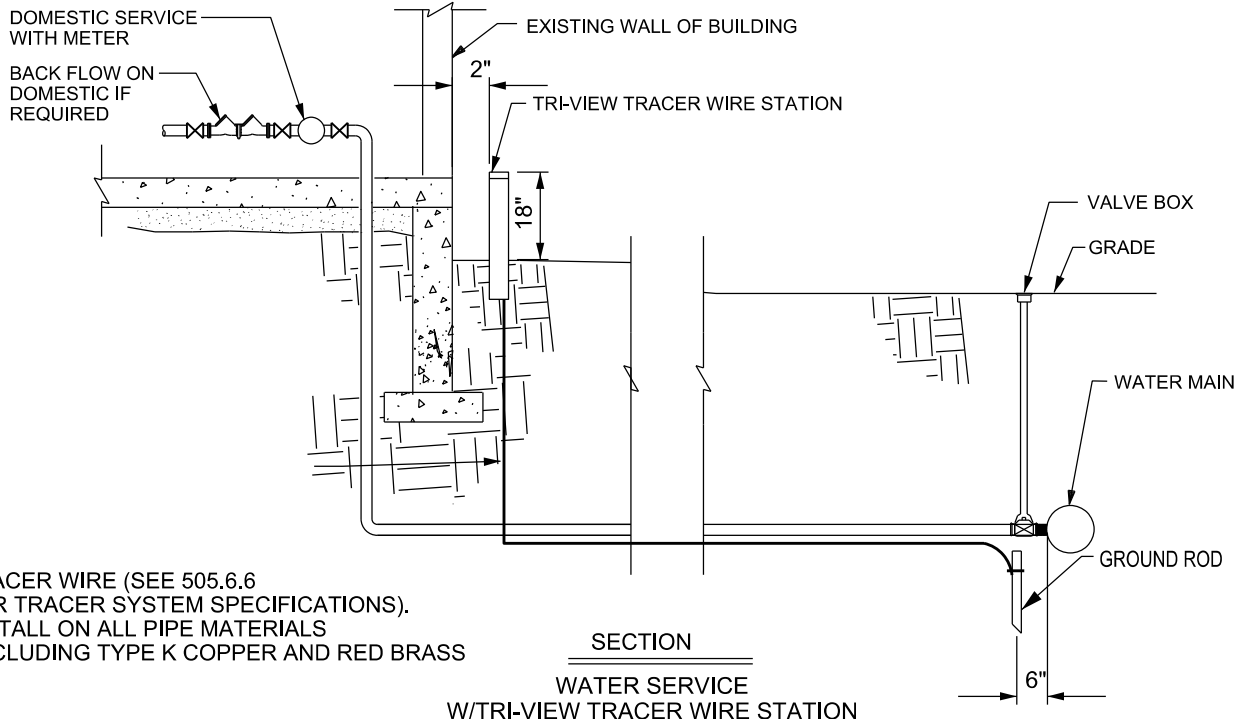


SECTION

Des Moines
Water Works
 Water You Can Trust for Life
 ENGINEERING DEPARTMENT
 Des Moines, Iowa

**DETAIL OF SERVICE
 OFF OF PRIVATE MAIN
 ON PRIVATE PROPERTY**

SCALE: NONE	DATE: 5-10-1996
DRAWN BY: DLH	APPROVED BY: TPC
REVISED: 04/29/2013 JLH	



TRACER WIRE MAY BE INSTALLED IN PLASTIC CONDUIT FOR ADDITIONAL PROTECTION FROM POTENTIAL DAMAGE, BUT IT IS NOT REQUIRED.

Des Moines
Water Works
Water You Can Trust for Life
ENGINEERING DEPARTMENT
Des Moines, Iowa

TRACER WIRE TERMINATION OPTIONS

SCALE: NONE

DATE: 2-11-2005

DRAWN BY:

APPROVED BY: TPC

REVISED: 10/05/2022 DLH

LUST (Leaking Underground Storage Tank) sites And the DMWW distribution system

What Is A Leaking Underground Storage Tank (LUST)?

An UST is a tank and associated piping with 10% or more of its volume below ground and which stored or is storing a regulated substance. A LUST is a leaking underground storage tank.

A regulated substance is an element, compound or solution which, if released into the environment, may present danger to the public health or welfare, or the environment and includes the following:

- any petroleum or petroleum based substances (motor fuels, petroleum solvents, lubricants, used oil, etc.);
- any substance that exhibits hazardous characteristics defined in the Resource Conservation and Recovery Act (RCRA) hazardous waste regulations -or-
- any substance regulated under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

How does a LUST site affect approval for new water service connections?

Section 8.1.2 of the Ten State Standards for Water Main Materials for permeation by organic compounds requires where distribution systems are installed in areas of groundwater contaminated by organic compounds, a) pipe and joint materials which do not allow permeation of the organic compounds shall be used and b) non-permeable materials shall be used for all portions of the system including pipe, joint materials, hydrant leads, and **service connections**. All new water services larger than 2" diameter that are located within a 500' radius of a LUST site will be required to be ductile iron pipe with nitrile gaskets and all 1" and 2" services must be type K Copper unless you provide documentation that the pipe is being installed outside of the contaminated area.

How Do I Get Information About A Specific LUST Site?

A list of LUST site numbers will be included in the Pre-App information packet provided by DMWW at Pre-App meetings OR you may call the Engineering Department at DMWW, 323-6204. **However, sites can be added or removed at any time, it is your responsibility to research the DNR website to verify this list.** When researching LUST sites in the area of a project, you may also use the IDNR's website (www.iowadnr.gov/mapping/index.html).

Write down the LUST site number(s) for all of the circles which fall within your project area. Keep in mind the center of the circle is tied to the address of the property where the LUST site exists, not necessarily to the actual coordinates of the LUST tank. For this reason, the IDNR has chosen to use a 1000' radius around the site to ensure the contamination plume is captured.

Provide the LUST site numbers to the IDNR Records Center to request Utility Company Notification and associated plume maps for each LUST site. Contact information is as follows: Iowa DNR Records Center, Iowa Department of Natural Resources, 502 E 9th Street, Des Moines, IA 50319; phone: 515-242-5818; Fax: 515-281-8895; e-mail: dnr.records@dnr.iowa.gov

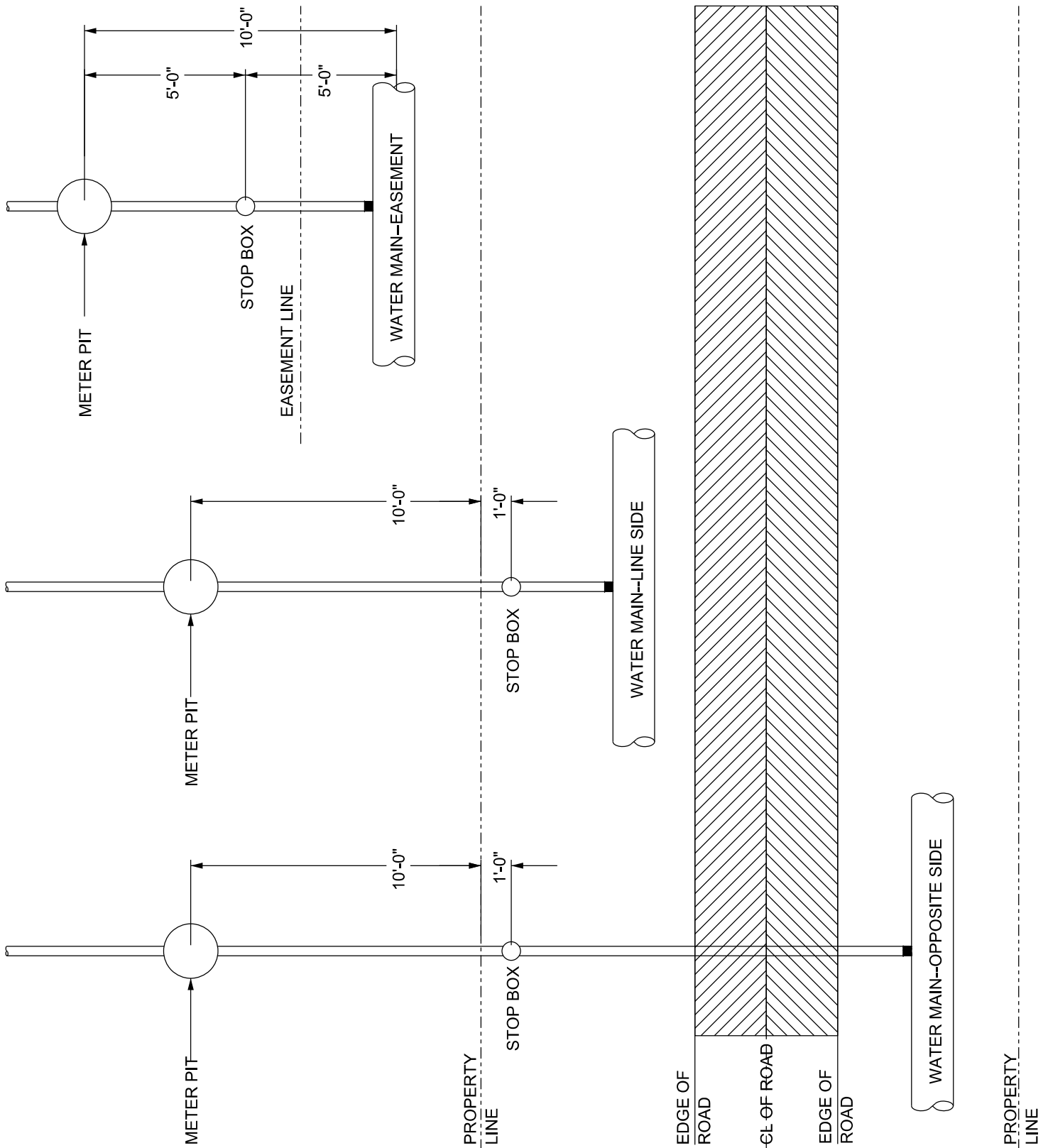
Once you receive the information back from the IDNR Records Center, you will need to submit to DMWW for review. This information will give more exact locations for the contamination plume(s). The project must be at least 200' away from the edge of the contamination plume in order to use PVC pipe. If your project site falls within a LUST site, you will be required to use DI pipe w/nitrile gaskets for services larger than 2" or type K copper for 2" and smaller services. Any reference in the LUST documentation to a site being "cleared for PVC pipe" does **NOT** mean new PVC pipe is allowed on the site, but rather that PVC water lines were either not present or not considered to be at-risk receptors when the LUST site was evaluated.

Des Moines Water Works

Des Moines
Water Works
Water You Can Trust for Life
ENGINEERING DEPARTMENT
Des Moines, Iowa

EXAMPLE LEAKING UNDERGROUND STORAGE TANKS

SCALE: NONE	DATE: 2-11-2005
DRAWN BY: SSD	APPROVED BY: TPC
REVISED: 04/29/2013 JLH	



Des Moines Water Works
 Water You Can Trust for Life
 ENGINEERING DEPARTMENT
 Des Moines, Iowa

**SOUTHEAST POLK
 STOP BOX & METER PIT
 LOCATION OPTIONS**

SCALE: NONE

DATE: 4-2-2008

DRAWN BY:

APPROVED BY: TPC

REVISED: 04/29/2013 JLH



AGENDA ITEM FORM

SUBJECT: Request Authorization for CEO and General Manager to Execute a Service Territory Transfer Agreement with Warren Water District

SUMMARY:

- As part of Central Iowa Water Works ("CIWW") discussions, a consensus has been reached on how to address potential service territory disputes among members due to annexation. Because there is not a good "one size fits all" approach to service territory disputes, the approach accepted by potential Members and reflected in the CIWW 28E/28F is to rely on individual service territory agreements between affected Members, generally a city or independent board of trustees and a rural water district.
- The Warren Water District Board of Directors ("WWD"), a potential Member to CIWW, has agreements with adjoining communities, such as Norwalk and West Des Moines Water Works ("WDMWW"). As a condition to becoming a member to CIWW, Warren has expressed interest in also having a service territory agreement with DMWW in place prior to the effective date of CIWW.
- The attached map illustrates potential areas (shaded orange and purple) that may come into conflict at some time in the future due to City of Des Moines ("City") annexations, although there are no known plans for annexation by the City, and in fact, any annexations in this area if they do occur, are likely to not occur for many years.
- The attached Customer and Territory Buy-Out Agreement outlines the terms of any future customer or territory buy-outs that may occur due to future annexation by the City in areas currently served by WWD. This agreement is materially similar to WWD's agreements with Norwalk and WDMWW and has been reviewed by DMWW legal counsel.

FISCAL IMPACT:


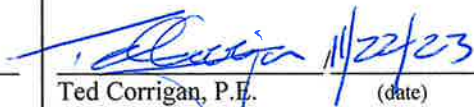
There is no fiscal impact at this time. The agreement outlines the methodology for determining the purchase price of customer or territory buy-outs in the event of future annexations by the City of Des Moines into areas served by Warren Water District.

RECOMMENDED ACTION:

Authorize the CEO and General Manager to execute the Customer and Territory Buy-Out Agreement between Des Moines Water Works and Warren Water District.

BOARD REQUIRED ACTION:

Motion to authorize the CEO and General Manager to execute the Customer and Territory Buy-Out Agreement between Des Moines Water Works and Warren Water District.

 Amy Kahler, CPA (date) 11/20/23 Chief Financial Officer	 Ted Corrigan, P.E. (date) 11/22/23 CEO and General Manager
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Attachments: Des Moines Water Works/Warren Water District Customer and Territory Buy-Out Agreement; Map

DES MOINES WATER WORKS/ WARREN WATER DISTRICT CUSTOMER AND TERRITORY BUY-OUT AGREEMENT

WHEREAS, Warren Water District ("WWD") is a rural water district organized under Chapter 357A of the Code of Iowa that provides water service to certain customers in certain areas of Warren County and Polk County, Iowa.

WHEREAS, the Board of Water Works Trustees of DMWW of Des Moines, Iowa, also known as the Des Moines Water Works ("DMWW") is a trustee-managed municipal utility organized under Chapter 388 of the Code of Iowa, that supplies water to customers in the City of Des Moines, Iowa, and elsewhere.

WHEREAS, the City of Des Moines, Iowa may in the future annex certain geographic areas within WWD's defined boundaries, including territory in which WWD is now providing water service, and the parties desire for DMWW to have the option to purchase WWD's customer taps in these geographic areas on terms as provided herein.

NOW THEREFORE, in consideration of the mutual promises and agreement made herein, it is agreed as follows:

1. Option to Purchase. WWD and DMWW mutually agree that DMWW shall have the option to purchase WWD's customer taps within any geographic areas annexed by the City of Des Moines. This option to purchase may be exercised on multiple occasions during the term of this Agreement. The geographic area to be included need not include the entire area annexed by the City of Des Moines, provided that it shall be based on a reasonable and logical progression extending out from the boundaries of the City of Des Moines city limits and including all customers within that area.

2. Notice to WWD. At such time as DMWW determines that it is desirous of providing water to WWD customers within an area annexed by the City of Des Moines, DMWW shall provide WWD with:

- a. Written notice "(Notice)" of its intent to exercise the option under this Agreement;
- b. A diagram of the geographic area ("Designated Area") involved;
- c. The addresses of the customers whose accounts DMWW intends to purchase ("Acquisition Customers") that are included in the Designated Area; and
- d. The date on which DMWW will commence providing water service ("Commencement Date") to the Acquisition Customers, which shall be at least 90 days after the date of the Notice; and
- e. A description and identification of any infrastructure that DMWW requests to be transferred within the Designated Area.

3. Purchase Price of WWD Customers. If there are existing Acquisition Customers served by WWD within the Designated Area, WWD shall prepare and submit to DMWW within 30 days after receiving the Notice, a statement of the present value of the "Net Revenue" from WWD's acquisition customers in the designated area. "Net Revenue" shall mean the following:

- a. Actual gross revenue to WWD for the 12 months preceding the date of the Notice from all Acquisition Customers in the Designated Area as of the date of the Notice. If an Acquisition Customer has not been a customer for a full 12 months preceding the date of the Notice, the projected revenue for 12 months shall be determined based on twelve times the average monthly revenue actually received from that Acquisition Customer;
- b. Less 20% of the total actual gross revenue for the assumed cost to WWD for pumps and water charges;

The present value of the Net Revenue figure shall be calculated, based on the Net Revenue described above times the weighted average number of years remaining on all WWD financing bonds as of the date of the Notice from DMWW (excluding interim financing), using an assumed interest rate based on the United States Treasury Bonds having a maturity of 20 years, determined as of the Notice date. For avoidance of doubt, an illustrative calculation is provided below:

ASSUMPTIONS FOR ILLUSTRATION	
Customer in buy-out area uses an average of	4,000 gallons
The weighted average of number of years of debt outstanding is	20 years
20 year Treasury bond rate on Notice date	2.28%
BUY-OUT CALCULATION	
Customer's Annual Revenue	635.40
Less 20%	\$ (127.08)
Net annual Revenue	\$ 508.32
PV of annual pmt of \$508.32 @ 2.28% over 20 years	(\$8,091.48) DMWW payment to Warren Water District
Calculation formula in Excel	=PV(0.0228,20,508.32)

Within 15 days after DMWW's receipt of the Statement of present value of the Net Revenue, DMWW shall notify WWD in writing as to whether DMWW accepts WWD's calculations. If WWD and DMWW are unable to agree on a calculation, either party may require that the matter be submitted to Arbitration as set forth in paragraph 13 of this Agreement.

4. Purchase Price if No WWD Acquisition Customers. If there are no WWD acquisition customers in the Designated Area, the Purchase Price shall be based on WWD's "Book Value" of the water transmission main(s) within the Designated Area. "Book Value" shall include:

- a. the actual cost of construction and installation of the water transmission mains in the Designated Area, plus 20% of this figure for the assumed cost of engineering, legal, accounting and archeological fees, if such costs are not included in the actual cost of construction and installation;
- b. less accumulated depreciation in WWD's accounting records for the water transmission mains in the Designated Area.

The fact that the water transmission mains will continue to service any area outside the Designated Area shall not affect the Purchase Price.

Within 30 days after receiving the Notice from DMWW, WWD shall prepare and submit to DMWW a Cost Statement of the Actual Cost of said water transmission main(s).

Within 15 days after DMWW's receipt of the Cost Statement, DMWW shall notify WWD in writing as to whether DMWW accepts WWD's calculations. If WWD and DMWW are unable to agree on the amount of Actual Cost, either party may require that the matter be submitted to Arbitration as set forth in paragraph 13 of this Agreement.

5. Detachment of Geographic Area Not Serviced by WWD. DMWW agrees to make all reasonable efforts to obtain a petition from the property owners to the Warren County Board of Supervisors and the Polk County Board of Supervisors for detachment of any geographic area annexed by the City of Des Moines in which WWD has no customers and no water transmission or service facilities. DMWW shall pay a nominal \$1.00 to WWD per request, plus all of WWD's reasonable legal fees and actual expenses in connection therewith.

6. Continued Water Service. Prior to the Commencement Date, WWD shall continue to provide water service to the WWD customers in good standing within the Designated Area and WWD shall receive all revenue therefrom and be responsible for all expenses.

7. Notice. At least 30 days prior to the Commencement Date, DMWW shall provide written notice to all Acquisition Customers in the Designated Area, advising them of the transfer of customer accounts to DMWW as of the Commencement Date. WWD shall approve the contents of the notice prior to the notice being sent to WWD customers. DMWW agrees to hold WWD harmless concerning any claim by a WWD customer in a Designated Area for a refund of any portion of a connection fee or hookup fee paid by a WWD customer to WWD.

8. New Customers. WWD agrees that no additional infrastructure shall be installed within any area annexed by the City of Des Moines after the annexation without the written approval of DMWW if DMWW is not ready to provide service, which approval shall not be unreasonably withheld. In the event any additional customer taps are requested by new or existing WWD customer(s) any time after DMWW gives a Notice to WWD of its exercise of the option, WWD shall not install or provide service. WWD will tap the water transmission main and DMWW will install or cause to be installed by the customer or a developer the service line and meter to provide service to the customer(s) and WWD shall receive all revenue from the new customer tap(s) until DMWW is ready to provide service to the Designated Area. The additional tap(s) shall not increase the purchase price paid by DMWW to WWD pursuant to this Agreement.

9. Transfer of Water Transmission Mains.

- a. Mains that terminate within Designated Area. At the request of DMWW, WWD will transfer and assign to DMWW, without consideration, any WWD water transmission mains, meter pits and all other appurtenances thereto, within the Designated Area provided that the water transmission mains terminate within the Designated Area. Any assignment of water transmission mains from WWD to DMWW shall be "as is" and without any express or implied warranties of any type and DMWW shall hold WWD harmless from any future claims concerning said water transmission mains as set forth in paragraph 14 of this Agreement. Each party shall, at its own expense, install a cut-off valve at any separation point between WWD's remaining water transmission main and the water transmission main(s) acquired by DMWW.
- b. Mains that do not terminate within Designated Area. WWD will not transfer or assign to DMWW any water transmission mains that do not terminate within the Designated Area. WWD will transfer and assign to DMWW only meter pits and other appurtenances, provided that DMWW shall be responsible for the cost of disconnection of WWD's water service meter pits from the water transmission mains. The transfer shall not include metering equipment and regulators from inside the meter pits. DMWW shall reimburse WWD for the actual cost of disconnecting water service to the WWD customers in the designated area. Any assignment of meter pits from WWD to DMWW shall be "as is" and without any express or implied warranties of any type and DMWW shall hold WWD harmless from any future claim concerning said equipment as set forth in paragraph 14 of this Agreement.

10. Payment. On the Commencement Date, DMWW shall pay in full the Purchase Price and WWD shall cease providing water service to the WWD customers in the Designated Area and shall cease collecting revenue from Acquisition Customers. On the Commencement Date, DMWW shall commence providing water service to the Acquisition Customers and shall be entitled to all future revenue therefrom. In the event DMWW is unable to commence providing water service on the Commencement Date, DMWW is still liable for payment of the full Purchase Price on the Commencement Date, without any adjustment for the delay in transfer of service. WWD shall continue providing water service and shall continue to receive all revenues therefrom until DMWW commences providing water service to the Acquisition Customers in the Designated Area.

11. Accounts Receivable. On the Commencement Date, WWD shall assign to DMWW any outstanding receivables for Acquisition Customers in the Designated Area and DMWW shall reimburse WWD for said amounts collected within 90 days thereafter. Any amounts collected after 90 days from the Acquisition Customers shall remain with DMWW. Notwithstanding the forgoing, DMWW has no obligation to commence any legal action to collect said outstanding receivables.

12. Approval. This Agreement shall become binding on each party upon execution of this Agreement by the Chairperson of the Board of Directors of WWD and the Chairperson of

the Board of Trustees of DMWW, respectively.

13. Arbitration. In the event WWD and DMWW are unable to agree on any issue arising out of this Agreement, either party may require that the issue be submitted to binding arbitration by a single arbitrator who shall be selected by a committee which shall include one member of the Board of Trustees of DMWW, one member of the Board of Directors of WWD, and a disinterested third party selected by the other two members of the committee. The determination of the arbitrator shall be binding on both parties. If the parties cannot agree on an arbitrator within 60 days after either party requests arbitration, either party may petition the Iowa District Court for Warren County, to appoint an arbitrator.

14. Liability. It is the intention of WWD and DMWW that WWD shall not incur any pecuniary liability by reason of the terms of this Agreement, or the undertakings required of WWD by this Agreement, the performance of any act required by WWD to comply with this Agreement, or the performance of any act requested of it by DMWW including all claims, liabilities or losses arising in connection with the violation of any statutes or regulations pertaining to the foregoing. If WWD (including any person at any time serving as an Officer, Director, Trustee, agent or employee) should incur any such pecuniary liability, then in such event, DMWW shall indemnify and hold WWD harmless, (including any person at any time serving as an Officer, Director, Trustee, agent or employee) against all claims by or on behalf of any person, firm or corporation, arising out of the same, and all costs and expenses incurred in connection therewith except to the extent arising from the negligence or intentional act of WWD. DMWW agrees to indemnify and hold WWD, (including any person at any time serving as an Officer, Director, Trustee, agent or employee) harmless to the fullest extent permitted by law from any losses, costs, charges, expenses, (including attorneys' fees), judgments and liabilities incurred by it or them, as the case may be, in connection with any third party action, suit or proceeding instituted or threatened in connection with the transaction contemplated by this Agreement unless caused by the negligent or intentional act of WWD. If any such claim is asserted, WWD, or any individual indemnified herein, as the case may be, will give prompt notice to DMWW, but WWD shall assume its defense thereof selecting legal counsel acceptable to it, with full power to litigate, compromise or settle the same in its sole discretion, it being understood that neither WWD, nor its agents, nor any indemnified individual, will settle or consent to settlement of the same without the written consent of DMWW. The obligation of the parties under this section shall survive the termination of this Agreement.

15. Legal Fees. DMWW agrees to pay all legal fees for WWD's legal counsel for services in connection with the drafting and negotiation of this Agreement and for reasonable services incurred in the future exercise of any option by DMWW pursuant to this Agreement. DMWW acknowledges that WWD's legal counsel is only representing WWD and not representing DMWW, and that DMWW shall not rely on any statements by WWD's legal counsel as representations to DMWW concerning this Agreement or its legal effect.

16. Termination. This Agreement shall be in full force and effect until the earlier of (i) June 30, 2044; or (ii) the termination by the mutual agreement of the parties. Such termination shall not affect any option exercised by DMWW prior to the date of the written notice of termination.

17. Notices. Any notices or mailings required by this Agreement shall be sent to the respective party by personal delivery or certified mail to the following persons at the following addresses:

Warren Water District

Manager
Warren Water District
1204 East 2nd Avenue
Indianola, IA 50125

DMWW

CEO & General Manager
Des Moines Water Works
2201 George Flagg Pkwy
Des Moines, IA 50321

18. Binding on Successors and Assigns. This Agreement is binding on the parties, their successors or assigns.

19. Waiver. The failure of either party to this Agreement to insist upon the performance of any of the terms and conditions of this Agreement, or the waiver of any breach of any of the terms and conditions of this Agreement, shall not be construed as thereafter waiving any such terms and conditions, but same shall continue and remain in full force and effect as if no such forbearance or waiver had occurred.

20. Severability. If any term or provision of this Agreement is held invalid or unenforceable to any extent, the remaining terms and provisions of this Agreement shall not be affected thereby, but each term and provision of this Agreement shall be valid and enforced to the fullest extent permitted by law. This Agreement shall be construed and enforced in accordance with the laws of the State of Iowa and shall be deemed to have been entered into and performed in Warren County, Iowa.

21. Headings. The headings in this Agreement are intended solely for convenience of reference and shall be given no effect in the construction and interpretation of this Agreement.

22. Amendments. The terms, covenants, conditions and provisions of this Agreement cannot be altered, changed modified, added to or deleted from, except in a writing signed by all of the parties hereto.

23. Interpretation of Agreement. This Agreement shall be construed and interpreted without regard to the party responsible for its preparation and will be deemed as prepared jointly by the parties. In resolving any ambiguity or uncertainty relating to the Agreement, the parties agree that no consideration or weight shall be given to the identity of the party drafting the document.

24. Entire Agreement. This Agreement constitutes the entire Agreement of the parties with respect to the subject matter hereof and supersedes all negotiations, preliminary agreements and all prior and contemporaneous discussions and understandings of the parties hereto.

[Signature Pages Follow]

THE BOARD OF WATER WORKS TRUSTEES OF THE
CITY OF DES MOINES, IOWA

By: _____
Andrea Bolton, Board Chair

Dated: _____

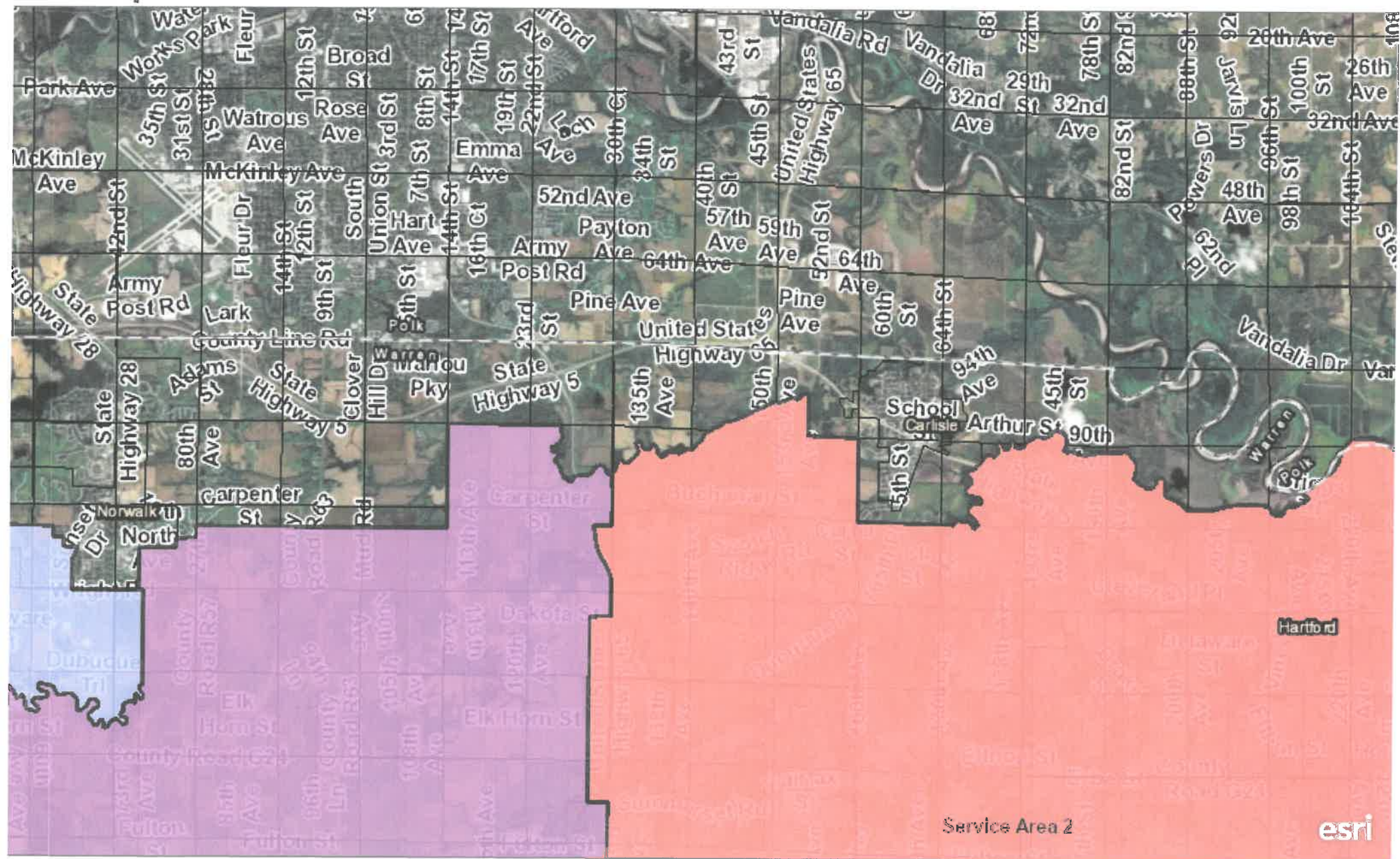
Attest: _____
Ted Corrigan, CEO, General Manager
And Board Secretary

WARREN WATER DISTRICT

By: _____

Dated: _____

Attest: _____
 , Board Secretary



AGENDA ITEM FORM

SUBJECT: Resolution Conditionally Authorizing the Inclusion of Board of Water Works Trustees of the City of Des Moines, Iowa as a Founding Agency of Central Iowa Water Works and Setting Public Hearing on Transfer of Assets

SUMMARY:

- Discussions to form a regional production utility, Central Iowa Water Works (CIWW) have been occurring in earnest since 2017, when representatives from Des Moines Water Works, Urbandale Water Utility and West Des Moines Water Works launched a study into regional governance options. A national financial consultant specializing in utility management was retained. A group representing communities across the metro met in open meetings throughout 2018 and 2019. A number of options were considered.
- A group consisting of representatives from DMWW, UWU, and WDMWW continued to meet through the months of the pandemic in 2020 and 2021 and published an Outcomes Document in November 2021 broadly defining the framework of a cooperative agreement governing drinking water production in the DM metro.
- The Board approved a "Central Iowa Water Works Founding Resolution" in December 2021 stating the Board's desire to participate as a Founding Agency of CIWW, subject to acceptable terms in a 28E/28F and a "critical mass" of participation among potential members,
- Throughout 2022 and 2023, several drafts of a 28/28F Agreement have been distributed, revised, and edited based on comments received from all potential members.
- At the October board meeting, the Board approved a "Resolution of Intent to Participate and Authorizing the Inclusion of the Des Moines Water Works in Final Draft Agreement Establishing Central Iowa Water Works," providing for the 28E/28F to be finalized, particularly related to capacity allocations and financial considerations.
- On November 22, 2023, the final Execution version of the CIWW 28E/28F was distributed to potential Members and published on DMWW's website.
- The attached Resolution authorizes the inclusion of the Board of Water Works Trustees as a Founding Agency of CIWW and sets a public hearing on transfer of assets conditioned on 1) the formal approval by all other named parties in the CIWW Agreement, and 2) a public hearing on the proposed transfer of the DMWW Water Supply Facilities described in Exhibit A, and the Board's final determination of this transfer subsequent to the public hearing.
- There has been an invitation for public comment on regional governance at each month's Board meeting since February 2022; many presentations throughout the community and media outreach have occurred; and DMWW has hosted four public informational meetings, with one being virtual (Zoom). Both the Des Moines City Council and Polk County Board of Supervisors have passed resolutions of support for the creation of CIWW.
- Participating in CIWW provides benefit to DMWW and our customers, including collaborative planning and management of water resources, equitable sharing of system costs and risks, and system resiliency.

FISCAL IMPACT:


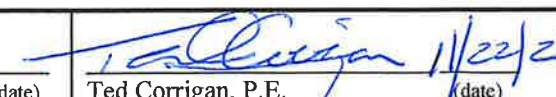
Financial analysis indicates regional governance of water production in the Des Moines metro area will result in the lowest total cost of drinking water production.

RECOMMENDED ACTION:

Pass the Resolution Conditionally Authorizing the Inclusion of Board of Water Works Trustees of The City of Des Moines, Iowa as a Founding Agency of Central Iowa Water Works and Setting Public Hearing on Transfer of Assets.

BOARD REQUIRED ACTION:

Motion to pass the Resolution Conditionally Authorizing the Inclusion of Board of Water Works Trustees of The City of Des Moines, Iowa as a Founding Agency of Central Iowa Water Works and Setting Public Hearing on Transfer of Assets.

 Amy Kahler, CPA (date) Chief Financial Officer	 Ted Corrigan, P.E. (date) CEO and General Manager
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Attachment: Resolution Conditionally Authorizing the Inclusion of Board of Water Works Trustees of The City of Des Moines, Iowa as a Founding Agency of Central Iowa Water Works and Setting Public Hearing on Transfer of Assets; Nov 17, 2023 DRAFT CIWW-DMWW Operating Agreement

RESOLUTION CONDITIONALLY AUTHORIZING THE INCLUSION OF BOARD OF WATER WORKS TRUSTEES OF THE CITY OF DES MOINES, IOWA (“DMWW”) AS A FOUNDING AGENCY OF CENTRAL IOWA WATER WORKS; CONDITIONALLY APPROVING THE CENTRAL IOWA WATER WORKS 28E/28F AGREEMENT; FIXING DATE FOR PUBLIC HEARING ON TRANSFER OF INTEREST IN REAL PROPERTY; AND CONDITIONALLY AUTHORIZING THE EXECUTION OF THE CENTRAL IOWA WATER WORKS 28E/28F AGREEMENT BY DMWW.

WHEREAS, the Board of Water Works Trustees of the City of Des Moines, Iowa, a municipal water utility organized and operating in accordance with Iowa Code Chapter 388 (“DMWW”) has a duty to provide the quantity and quality of water needed by its customers within and without the City of Des Moines;

WHEREAS, historically the Des Moines metropolitan regional area (the "Region") has successfully joined together to provide water services to citizens and customers through shared facilities under various agreements;

WHEREAS, the concept of regional governance and ownership of water supply facilities has been studied for many years among the water utilities serving communities in the Region to analyze and recommend a way to provide the needed quality and quantity of water to citizens and customers in the Region both now and in the future;

WHEREAS, the Board of DMWW considers it desirable to establish a shared regional system of drinking water supply production facilities under regional ownership and governance to meet all of its existing and future needs for safe, reliable, abundant, and reasonably priced drinking water to be distributed to its customers;

WHEREAS, certain water utilities, rural water districts and governmental entities have developed a defined framework for the organization of a new regional water authority as a separate public entity created under Chapter 28E and Chapter 28F, Iowa Code, to be known as the "Central Iowa Water Works" ("CIWW") to act as a regional water wholesale production and supply entity under the material terms and conditions as set forth in the form of the Central Iowa Water Works 28E/28F Agreement, dated November 22, 2023 which is available for review at <https://bit.ly/CIWWExecution28E28F> and a copy of which is on file at the offices of DMWW located at 2201 George Flagg Pkwy, Des Moines, Iowa 50321 (the "CIWW Agreement");

WHEREAS, the Board of DMWW believes it is in the best interest of its customers and in fulfillment of its fiduciary duty to its customers for the provision of long-term comprehensive water needs, to participate as a Founding Agency of CIWW, as defined in the CIWW Agreement, subject to formal approval by all other anticipated Founding Agencies named therein;

WHEREAS, the conditions of membership of DMWW in CIWW, include the transfer of certain water production and supply assets to CIWW in accordance with, and pursuant to, the

terms of the CIWW Agreement (a list of the proposed assets to be transferred to CIWW is attached hereto as Exhibit A)(the “DMWW Water Supply Facilities”);

WHEREAS, the assets listed in Exhibit A include certain interests in real property, and before DMWW can transfer an interest in real property, Iowa Code Section 364.7 requires a public hearing;

WHEREAS, DMWW anticipates issuing revenue obligations to be secured by the Net Revenues of its Water System in connection with certain assets to be transferred to CIWW;

WHEREAS, the transfer the DMWW Water Supply Facilities as provided by the CIWW Agreement is conditioned upon the entry into operating contracts between CIWW and DMWW for operation of the facilities; and

WHEREAS, a form of Operating Contract between DMWW and CIWW has been established to be adopted by CIWW and DMWW after the formation of CIWW and before any asset transfer is to occur which is available for review at <https://bit.ly/CIWW-DMWWOperatingContract> and a copy of which is on file at the offices of DMWW located at 2201 George Flagg Pkwy, Des Moines, Iowa 50321 (the "CIWW-DMWW Operating Contract").

NOW, THEREFORE IT IS HEREBY RESOLVED, by the Board of DMWW:

Section 1. That DMWW and the customers served by DMWW would benefit from DMWW membership as a Founding Agency in CIWW, in accordance with the CIWW Agreement, and it is advisable to enter into the CIWW Agreement. Entering into said Agreement provides benefit to DMWW and its customers, including collaborative planning and management of water resources, equitable sharing of system costs and risks, and system resiliency.

Section 2. That the joinder by DMWW as a Founding Agency of CIWW, and the CIWW Agreement in the form presented to the Board and the CIWW-DMWW Operating Contract in the form presented to the Board are hereby approved, conditioned upon:

- (a) The formal approval by all other named parties in the CIWW Agreement; and
- (b) A public hearing upon the proposed transfer of the DMWW Water Supply Facilities described in Exhibit A, and the final determination of said transfer thereafter by the Board.

Section 3. The Board of DMWW finds that the transfer of assets to CIWW as contemplated in the CIWW Agreement:

- (a) Secures the long-term ability of DMWW to provide cost-effective water services to its customers, and

- (b) Will not impact the revenues of the DMWW water utility, or the ability of the water utility to generate sufficient revenues to meet all of its obligations for operations, maintenance, principal, interest, reserves and coverages; and
- (c) DMWW has no outstanding obligations payable from the Net Revenue of the water utility and therefore the transfer of assets does not conflict with any of the requirements, terms, covenants, conditions, or provision of any resolution authorizing the issuance of any outstanding water revenue bonds, notes, pledge orders or other obligations payable from the Net Revenues of the water utility;
- (d) Under the terms of the CIWW Agreement, transfer of assets by DMWW to CIWW under common ownership and operation on a cooperative basis for the mutual benefit of all Founding Agencies secures added water capacity and expedient redundancy for DMWW as a water utility well into the future, which is more advantageous and of equal or higher value to the DMWW's water utility than retaining said assets under its own ownership; and
- (e) Such transfer shall be completed on condition of the adoption by CIWW of the CIWW-DMWW Operating Contract in the form presented to the Board prior to the transfer of such assets.

Section 4. That the Board shall, as a part of its regular meeting at 2201 George Flag Pkwy, Des Moines, Iowa at 3:30 P.M. on the 19th day of December, 2023 conduct a public hearing on the proposed disposal of interest in real property included as a part of certain water production assets, to be transferred to CIWW in accordance with the terms and provisions of the CIWW Agreement and the CIWW-DMWW Operating Contract. The Board Secretary is directed to cause at least one publication to be made of a notice of this meeting, in a legal newspaper, printed wholly in the English language, published at least once weekly, and having general circulation in Des Moines, Iowa. The publication to be not less than four (4) nor more than twenty (20) days prior to the date of the hearing on the proposed disposal. The Notice will be in substantially the form attached hereto as Exhibit B.

Section 5. To evidence the Board's conditional approval of the CIWW Agreement and the CIWW-DMWW Operating Contract, the Board Secretary is hereby directed to prepare and execute a certified copy of this Resolution with true copies of the CIWW Agreement and the CIWW-DMWW Operating Contract attached, and to file such certificate in the permanent records of the Board.

Section 6. Upon confirmation of the approval of the CIWW Agreement by all named parties therein, and completion of the public hearing and final determination on the proposed disposal of real property to CIWW, the CEO and General Manager and the Board Chair of DMWW are hereby directed to execute the CIWW Agreement and the CIWW-DMWW Operating Contract on behalf of DMWW in the form presented, subject to any revisions needed to correct scrivener errors or to correct other manifest mistake as determined by staff and legal counsel, and to complete any other actions necessary to effectuate the purposes of creating CIWW. Participation as a Founding Agency shall be contingent upon the execution, delivery, and filing of the CIWW Agreement with the Iowa Secretary of State after its execution by all other Founding Agencies named therein.

Section 7. Pursuant to Iowa Code section 28F.3, DMWW hereby acknowledges, consents to, and confirms the planned issuance of not to exceed \$900,000,000 of water revenue debt by CIWW in one or more series over multiple years, in accordance with the CIWW Agreement.

EXHIBIT A: Summary of Assets to Be Transferred

MTR	Wholesale Meters
SOS	Infiltration Gallery
SOS	Raccoon River Intake
SOS	Des Moines River Intake
SOS	Des Moines River Pump Station
SOS	Saylorville Lake Storage Rights
SOS	McMullen Water Treatment Plant Shallow Alluvial Wells
SOS	Maffitt Reservoir and Grounds
SOS	Crystal Lake
SOS	Purple Martin Lake Water Resource Area
SOS	Hallett Lake
SOS	Saylorville Water Treatment Plant Radial Collector Wells
STO	Army Post Road ASR Well
STO	LP Moon ASR Well
STO	McMullen ASR Well
STO	Tenny Standpipe
BPS	LP Moon Pumping Station and Ground Storage Reservoir
BPS	Polk County Pumping Station and Ground Storage Reservoir
BPS	Joint Maffitt Lake Booster Station
BPS	NW 26 th St. Booster Station
TMT	Fleur Drive Water Treatment Plant
TMT	Laboratory

TMT	McMullen Water Treatment Plant
TMT	Saylorville Water Treatment Plant
TRN	Core Network Transmission and Raw Water Mains

*MTR = Meters; BPS = Booster/Pumping Station; SOS = Sources of Supply; STO = Storage; TMT = Treatment Facilities; TRN= Transmission Network
Further detail is provided in the Notes to Schedule IV-7 to the CIWW Agreement, which is available for review at <https://bit.ly/CIWWExecution28E28F> and a copy of which is on file at the offices of DMWW located at 2201 George Flagg Pkwy, Des Moines, Iowa 50321.

EXHIBIT B: Form of Notice of Hearing (Asset Transfer per 364.7)

NOTICE OF MEETING OF THE BOARD OF WATER WORKS TRUSTEES
OF THE CITY OF DES MOINES, IOWA ON THE MATTER OF THE
PROPOSITION FOR THE DISPOSAL OF INTEREST IN REAL PROPERTY
BY TRANSFERRING PROPERTY TO CENTRAL IOWA WATER WORKS

PUBLIC NOTICE is hereby given that as a part of its regular meeting at 2201 George Flagg Pkwy, Des Moines, Iowa at 3:30 P.M. on the 19th day of December, 2023 the Board of Water Works Trustees of the City of Des Moines, Iowa (“Board”) which is the governing body of the municipal water utility of the same name and popularly known as the Des Moines Water Works (“DMWW”) will conduct a public hearing on the proposed disposal of interests in real property owned by DMWW by transfer of certain facilities, which include interests in real property, to a new entity to be created under the provisions of Chapter 28E and 28F, Iowa Code, and to be known as Central Iowa Water Works (“CIWW”) in accordance with and pursuant to the terms of the proposed CIWW 28E/28F Agreement, which is available for review at

<https://bit.ly/CIWWExecution28E28F>

and a copy of which is on file at the offices of DMWW located at 2201 George Flagg Pkwy, Des Moines, Iowa 50321 (the "CIWW Agreement").

The facilities to be transferred to CIWW are set forth in detail in Schedule IV-7 of the CIWW Agreement and include the following:

MTR	Wholesale Meters
SOS	Infiltration Gallery
SOS	Raccoon River Intake
SOS	Des Moines River Intake
SOS	Des Moines River Pump Station
SOS	Saylorville Lake Storage Rights
SOS	McMullen Water Treatment Plant Shallow Alluvial Wells
SOS	Maffitt Reservoir and Grounds
SOS	Crystal Lake
SOS	Purple Martin Lake Water Resource Area

SOS	Hallett Lake
SOS	Saylorville Water Treatment Plant Radial Collector Wells
STO	Army Post Road ASR Well
STO	LP Moon ASR Well
STO	McMullen ASR Well
STO	Tenny Standpipe
BPS	LP Moon Pumping Station and Ground Storage Reservoir
BPS	Polk County Pumping Station and Ground Storage Reservoir
BPS	Joint Maffitt Lake Booster Station
BPS	NW 26 th St. Booster Station
TMT	Fleur Drive Water Treatment Plant
TMT	Laboratory
TMT	McMullen Water Treatment Plant
TMT	Saylorville Water Treatment Plant
TRN	Core Network Transmission and Raw Water Mains

*MTR = Meters; BPS = Booster/Pumping Station; SOS = Sources of Supply; STO = Storage; TMT = Treatment Facilities; TRN= Transmission Network

The transfer shall occur in accordance with the terms established in the CIWW Agreement.

At the above meeting, the Board shall receive oral or written objections from any member of the public. After all objections have been received and considered, the Board will at this meeting, or an adjournment thereof, take action on the final determination of the disposal of interests in real property to CIWW.

This notice is given by order of the Board as provided by Iowa Code 364.7, as amended.

Dated this ____ day of _____, 2023.

BOARD OF WATER WORKS TRUSTEES OF
THE CITY OF DES MOINES, IOWA

/s/ Ted Corrigan, Board Secretary

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WATER SUPPLY FACILITY OPERATING CONTRACT

Between

CENTRAL IOWA WATER WORKS (“CIWW”)

And

BOARD OF WATER WORKS TRUSTEES OF THE CITY OF DES MOINES, IOWA (“DMWW”)

For Operation, Maintenance and Management of
Drinking Water Source, Treatment and Transmission System Facilities

EFFECTIVE AS OF THE CIWW OPERATIONAL COMMENCEMENT DATE

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THIS CONTRACT is made and entered into as of the ____ day of _____, 2024 by and between Central Iowa Water Works ("CIWW"), a joint and cooperative legal entity organized and existing under Iowa Code Chapters 28E and 28F, and the Board of Water Works Trustees of the City of Des Moines, Iowa Works ("DMWW"), a municipal utility organized and existing under Iowa Code Chapter 388 (hereinafter sometimes jointly referred to as "the Parties" or either referred to individually as a "Party").

WHEREAS CIWW is a regional water wholesale production and supply entity created and governed by the Central Iowa Water Works 28E/28F Agreement executed by and among its Founding Agencies and filed with the Iowa Secretary of State as Agreement No _____ ("the CIWW 28E-28F Agreement");

WHEREAS, CIWW has the right and duty to create and supply treated water to its Member Agencies, and for this purpose CIWW will acquire the water supply facilities of DMWW and other Water Producing Member Agencies of CIWW as of the Operational Commencement Date of CIWW;

WHEREAS DMWW is a Water Producing Member of CIWW and the current owner and operator of certain Designated Water Supply Facilities as defined in the CIWW 28E-28F Agreement (the "DMWW Designated Water Supply Facilities");

WHEREAS, CIWW and DMWW desire to implement the water facility operation provisions contemplated by the CIWW 28E-28F Agreement during the Term of this Contract by providing that DMWW shall be engaged as the contract operator of the DMWW Designated Water Supply Facilities acquired by CIWW for twenty years from the Operational Commencement Date of CIWW on the terms provided in this Contract.

NOW, THEREFORE, in consideration of the mutual promises and covenants of each Party to the other as provided in this Contract, and other good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, CIWW and DMWW hereby agree as follows:

ARTICLE I. SCOPE AND TERM OF CONTRACT

Section 1. Scope. This Contract shall govern the relationship between CIWW and DMWW under the CIWW 28E-28F Agreement with respect to the operation and maintenance of the DMWW Designated Water Supply Facilities by DMWW as contract operator from the Effective Date and during the Term of this Contract. As used in this Contract, except as the context may otherwise require, the DMWW Designated Water Supply Facilities shall include all modifications, improvements, updates and expansion thereto during the Term of this Contract.

This Contract shall not govern the purchase of water from CIWW by DMWW and shall not govern any provision for administrative support by DMWW to CIWW or other services provided by and between the Parties. The Parties may enter into other separate Contracts respecting such matters.

Section 2. Effective Date. The "Effective Date" of this Contract shall be the Operational Commencement Date as defined in the CIWW 28E-28F Agreement.

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Section 3. Term. The term of this Contract, subject to the termination provisions herein, shall be twenty years from its Effective Date (the "Term"). Provided, however, such term shall automatically be extended for successive five year periods thereafter unless either party shall, not less than three years prior to the expiration of the first twenty year period hereunder or any subsequent renewal period, give notice in writing to the other party of its intention to terminate such Term. Nothing shall prevent DMWW and CIWW from agreeing to an earlier termination or to an extension of the Term by further agreement in writing.

Section 4. Supplement to CIWW 28E-28F Agreement. This Contract shall be a supplement to the CIWW 28E-28F Agreement and shall be filed as such with the Iowa Secretary of State after its execution by the Parties. This Contract shall govern certain matters between the Parties hereto under the CIWW 28E-28F Agreement. Except as otherwise defined in this Contract, the capitalized terms used herein that are defined in the CIWW 28E-28F Agreement shall have the meanings as defined in the CIWW 28E-28F Agreement. As used herein, the term CIWW 28E-28F Agreement shall not be construed to mean or include any subsequently adopted amendment to such Contract, except to the extent DMWW shall expressly agree in writing to accept any such amendment as applying to this Contract. In the event of a conflict between this Contract and the CIWW 28E-28F Agreement, the terms of this Contract shall control.

ARTICLE II. THE RELATIONSHIP BETWEEN CIWW AND DMWW

Section 1. Nature of Relationship. DMWW shall be, and hereby is, engaged by CIWW as the sole operator of the DMWW Designated Water Supply Facilities acquired by CIWW. In such capacity, DMWW shall provide all labor, services, materials, and supplies necessary to CIWW's production and delivery of finished drinking water under this Contract, including all operations, maintenance, repairs, planning, engineering (whether staffed or contracted), capital improvements, residuals removal, and procurements required to effectively operate, maintain, and manage the DMWW Designated Water Supply Facilities to their full capacity under prevailing conditions as they exist from time to time, including capital and technical upgrades as needed. DMWW shall supply labor and services through its own staff or under contract with others, in its discretion.

Section 2. Operation Obligations. DMWW's obligations under this Contract shall be to operate and maintain the DMWW Designated Water Supply Facilities on behalf of CIWW with a level of care, effort, and diligence as may be reasonably expected to enable CIWW to meet the service obligations of CIWW to its Member Agencies as set forth in Schedule IV-6 of the CIWW 28E-28F Agreement, to the extent possible in view of the actual capacities and limitations of the DMWW Designated Water Supply Facilities under prevailing source water and other conditions. DMWW operations shall be deemed reasonable to the extent consistent with its existing practices and procedures as of the Effective Date with any changes required by changes in prevailing conditions, law or regulation.

Section 3. Independent Contractor. The relationship of DMWW to CIWW under this Contract shall at all times be that of independent contractor. Services under this Contract shall be performed in accordance with good and accepted industry practices for operators similarly situated. However, any such services shall not be considered engineering services, and nothing herein is intended to imply that DMWW is to supply professional engineering services to CIWW, unless specifically stated in this Contract or specifically hereafter agreed by the Parties to the contrary. This provision shall not, however, preclude DMWW from

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providing any services under this Contract by means of professional engineers employed by WMDWW on its staff.

Section 4. Individual Ownership and Responsibility. Except as otherwise explicitly provided in this Contract, each Party shall at all times hold and own its respective properties. Each Party shall be solely authorized to supervise, direct, and manage its own activities and the activities of its respective employees and agents. Each Party shall retain sole responsibility and liability for its own acts and omissions hereunder and for the acts and omissions of its respective employees and agents hereunder. Nothing in this Contract shall be deemed to supersede, replace, impair or limit any collective bargaining agreement between DMWW and any bargaining unit now existing or hereafter arising.

ARTICLE III. OPERATIONAL PROVISIONS

Section 1. DMWW General Authority. DMWW shall at all times during the Term of this Contract have the power and authority to operate and maintain the DMWW Designated Water Supply Facilities to meet applicable provisions of law.

Section 2. Permits and Regulatory Compliance. DMWW shall have and maintain all licenses and permits, including but not limited to Water Use and Water Supply Operations permits, which are required to be obtained by it from State or Federal regulatory agencies for ongoing operation of the DMWW Designated Water Supply Facilities. Unless otherwise required by law or the CIWW 28E-28F Agreement, all such permits shall be obtained and held in the name of DMWW. DMWW shall be responsible for regulatory compliance as outlined in these permits. CIWW shall have and maintain such licenses and permits, if any, to the extent required by applicable law or the CIWW 28E-28F Agreement to allow the Parties to perform their respective obligations under this Contract.

Section 3. Sampling and Laboratory Testing. DMWW will provide, through staff or contract, sampling and laboratory testing necessary to monitor water treatment plant performance in addition to sampling and laboratory testing required to meet regulatory requirements set forth in water supply operations permits, NPDES permits, and/or any federal, state or local laws, rules and regulations, local ordinances, permit or license requirements.

Section 4. Periodic Reporting. DMWW shall prepare and make such periodic reports for the DMWW Designated Water Supply Facilities as are required by applicable laws, rules, regulations or orders, and shall submit them directly to the appropriate regulatory agencies with copies to the CIWW Executive Director as submitted. DMWW shall assist CIWW in meeting any regulatory reporting requirements that it has as to CIWW facilities operated by DMWW.

Section 5. Other Information. DMWW shall make available to CIWW all such reasonably accessible information, schedules, and analysis concerning the DMWW Designated Water Supply Facilities and their operation as CIWW may request.

Section 6. Operation in Accordance with Budgets. DMWW shall operate, maintain, and manage the DMWW Designated Water Supply Facilities in accordance with the budget established as provided in Section 3 of Article VI of this Contract to the extent possible, subject to such unforeseen changes and contingencies as may arise in the ordinary course of business, and subject to emergencies or other circumstances that require deviation from the budgets.

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Section 7. DMWW's Authority to Act in an Emergency. In any emergency affecting the safety of persons, property or water quality, DMWW shall act, at its discretion, and without prior CIWW authorization, but with reasonable notification under the circumstances to the CIWW Executive Director, to prevent threatened damage, injury or loss notwithstanding any provision in this Contract or any previously approved budget and CIWW shall have financial responsibility to reimburse DMWW for the full costs thereof.

Section 8. Ownership of Distribution Facilities. Each CIWW Member Agency, including DMWW, shall exclusively own, operate, maintain, and be responsible, for its own Water Distribution Facilities, including its own Connection Facilities as defined in Section 10 of this Article III.

Section 9. Connection Points. The "Connection Points" at which water is delivered by CIWW to CIWW Member Agencies. Including DMWW, shall be as follows:

- (a) In the case of water sold by CIWW to a specific CIWW Member Agency with a metered point of connection, the Connection Point shall be the point of delivery to the tee or main tap connected to the meter.
- (b) In the case of water produced by the DMWW Designated Water Supply Facilities and sold by CIWW to DMWW for delivery to any retail or wholesale customer of DMWW for which there is no metered point of connection, the Connection Points shall be the points at which the DMWW Water Distribution Facilities connect to the Water Supply Facilities owned by, or dedicated to, CIWW under the CIWW 28E-28F Agreement.

Section 10. Connection Facilities. As used herein "Connection Facilities" shall mean any taps, pipes, corporations, pumps, or other facilities required by any CIWW Member Agency to connect to, or receive water from the DMWW Designated Water Supply Facilities or to meter the water delivered to such Member Agency. DMWW shall have no obligation to supply or maintain the Connection Facilities, including any metering facilities of any other Member Agency. All new wholesale metering facilities that are part of any Connection Facilities shall be constructed and installed in accordance with drawing, plans and specification approved by CIWW, DMWW and affected Member Agency. Any new Connection Facilities established after the Effective Date shall include such device or devices as may be reasonably required to prevent reverse flow.

Section 11. Dual Use Facilities. The Parties recognize that some facilities and equipment, including certain valves and control systems that may be owned by either CIWW and DMWW after Asset Transfer under the CIWW 28E-28F Agreement will be used or usable for both Water Supply Activity on behalf of CIWW and for the Water Distribution Activity of DMWW("Dual Use Facilities"). DMWW is authorized to utilize all Dual Use Facilities for both purposes. The costs of operation, maintenance, repair and replacement of Dual Use Facilities shall be reasonably allocated between CIWW and DMWW based on benefit to each of such use by application of such allocation methods as the Parties may agree upon from time to time. Any dispute as to such allocation shall be resolved under the dispute resolution provisions of the CIWW 28E-28F Agreement.

Section 12. Supply Coordination. CIWW shall assist DMWW and other Water Producing Member Agencies in planning to meet the requirements of all CIWW Member Agencies and shall cause each

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CIWW Member Agency taking water from the DMWW Designated Water Supply Facilities to keep DMWW advised of its requirements and changing requirements. CIWW shall establish a staff-level working group consisting of a single authorized representative from each of the Member Agencies, each to individually serve as an ongoing contact point and coordinator with DMWW to facilitate and optimize water supply operations by DMWW. Such working group shall meet collectively when needed on call from DMWW to coordinate and plan for DMWW operations.

ARTICLE IV. WARRANTIES, EXCLUSION OF WARRANTIES AND DISCLAIMERS

Section 1. Warranty and Exclusion of Implied Warranties. DMWW warrants that its operation of the DMWW Designated Water Supply Facilities shall be reasonable under prevailing source water and other conditions. **DMWW MAKES NO OTHER WARRANTY OF ANY PARTICULAR RESULTS OR OUTCOME FROM ITS OPERATION OF THE DMWW DESIGNATED WATER SUPPLY FACILITIES.**

Section 2. Disclaimers. CIWW agrees that the DMWW Designated Water Supply Facilities of DMWW are special purpose facilities and the performance of such facilities are affected by external conditions over which DMWW has no control. DMWW neither warrants nor guarantees that its facilities existing as of the date of this Contract or that its operation of such facilities will function efficiently or accomplish any specific results under this Contract. CIWW acknowledges that no representations or warranties have been provided to CIWW regarding the DMWW Designated Water Supply Facilities or the ability of DMWW to deliver any particular results in the operation of such facilities. DMWW agrees to cooperate in good faith with CIWW and its Member Agencies to exercise diligence in performing its obligations hereunder, and to use its best efforts to carry out the provisions of this Contract but makes no guarantee of any particular results.

Section 3. Quality and Quantity. DMWW shall use reasonable diligence and efforts to produce finished drinking water and to operate, maintain and manage the DMWW Designated Water Supply Facilities to produce finished drinking water which is (i) in compliance with applicable State and Federal drinking water quality regulations; (ii) in compliance with all applicable water supply operation permits; (iii) delivered in adequate quantity and at adequate pressure to meet the needs of CIWW to supply the customers of CIWW. **DMWW MAKES NO REPRESENTATION OR WARRANTY THAT SUCH OBJECTIVES WILL ALWAYS BE MET UNDER THIS CONTRACT.**

Section 4. Shortages of Water. It is understood that this Contract does not constitute any warranty or assurance by DMWW that water in the quantity required by CIWW and CIWW Member Agencies will always be available or that water quality requirements will always be able to be met.

Section 5. Variation in Quantity and Quality. All Parties acknowledge and agree that there may be fluctuations in the quantity and quality of finished drinking water produced or delivered under this Contract as a result of prevailing source water, operating conditions, and other conditions and that such variations are acceptable under this Contract.

ARTICLE V. CAPITAL PROJECTS

Section 1. Non-expansion Capital Projects. During the Term of this Contract, DMWW shall plan and execute such non-expansion capital projects as DMWW shall deem necessary and proper to enable DMWW to meet its obligations under this Contract. Planning for such projects shall be coordinated with

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the CIWW Technical Committee. Such projects may be designed by staff of DMWW or by consultants selected and engaged by DMWW, or both. Execution of such projects shall be under the sole supervision of DMWW, but shall subject to the review and approval of the CIWW Board as part of the CIWW Budget process, except for projects executed under DMWW's emergency authority provided by Section 7 of Article III. CIWW shall be responsible to pay for the costs of such projects as provided under the CIWW 28E-28F Agreement.

Section 2. Expansion of Capacity. Under the CIWW 28E-28F Agreement CIWW is responsible for planning, engineering, financing, and construction of all new drinking water source, treatment and transmission system facilities needed to expand the capacity of CIWW to meet the requirements of its customers. Such new facilities are referred to herein as "Expansion Facilities", and may include, in CIWW's discretion, facilities constructed or installed to increase the capacity of the DMWW Designated Water Supply Facilities. DMWW shall cooperate and assist CIWW in planning for and constructing any Expansion Facilities that affect the DMWW Designated Water Supply Facilities.

Section 3. Capital Improvement Program. DMWW shall, in coordination with the CIWW Technical Committee, provide data and recommendations to the engineering consultant selected by CIWW, to aid the engineering consultant in developing a multi-year Capital Improvements Program ("CIP") for the DMWW Designated Water Supply Facilities, based on performance and needs assessments as provided in Section 4 of this Article V. CIWW shall provide the capital required for such projects, and DMWW shall cooperate with CIWW in the execution of projects under the CIP for the DMWW Acquired Facilities with DMWW reimbursed by CIWW for the costs incurred for its efforts.

Section 4. Continuous Performance Monitoring and Needs Assessment. DMWW shall, in consultation with the CIWW Technical Committee, the engineering consultant selected by CIWW, and CIWW staff:

- (a) Continuously monitor and assess the DMWW Designated Water Supply Facilities to determine if they are performing optimally;
- (b) Identify and implement operational strategies to optimize the performance of the DMWW Designated Water Supply Facilities;
- (c) Identify facility improvements needed to optimize performance of the DMWW Designated Water Supply Facilities and to keep them in compliance with evolving regulatory requirements, source water quality threats, and evolving technical and operational best practices for facilities of such kind;
- (d) Continuously monitor and assess the use of the DMWW Designated Water Supply Facilities by CIWW Member Agencies to determine if their needs are being optimally met

ARTICLE VI. COMPENSATION TO DMWW

Section 1. Compensation. DMWW shall be compensated in amounts equal to the actual full cost incurred by DMWW of providing materials and services under this Contract, plus 2%, with such amounts to be computed and paid as provided in the CIWW 28E-28F Agreement and Section 2 of this Article VI.

Section 2. CIWW Payment to DMWW. CIWW shall pay DMWW for operation, materials, supplies, and services supplied under this Contract on a cost plus basis, based on the cost and payment principles set forth in Schedule V-2 to the CIWW 28E-28F Agreement. Such amounts shall be paid in seasonally

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adjusted monthly installments with an Annual true-up as set forth in such Schedule. For the avoidance of doubt, it is the intent of this Contract that DMWW be paid its full actual costs, plus a fixed percentage of 2%, after such costs are fully incurred and determined.

Section 3. Operation, Maintenance, and Management (“OM&M”) Budget. For each calendar year beginning on or after the Operational Commencement Date, DMWW shall prepare and submit to CIWW a proposed OM&M budget for the next calendar year on such time schedule as may be required to permit the annual budget process of CIWW to proceed pursuant to the terms of the CIWW 28E-28F Agreement.

The proposed OM&M budget shall govern DMWW’s expenditures for the budget year and shall include:

- (a) A projection of the anticipated reimbursable expenditures that will be incurred by DMWW for production of water in the budget year;
- (b) A comparison of budgeted expenditures for the budget year to the actual expenditures for the prior budget year;
- (c) The insurance and risk management coverages to be in place for the budget year and the expected costs thereof that are chargeable to CIWW; and
- (d) Any additional information requested by the CIWW in advance of DMWW’s budget process commencement.

The Board of CIWW shall conduct a budget hearing on the proposed OM&M budget at its next regular meeting following receipt of the proposed budget. If the proposed budget is not approved by the CIWW Board, CIWW shall provide a detailed statement to DMWW of its objections. Any CIWW objections will be resolved by negotiation between the Parties if possible, but if no approved budget is reached, then DMWW shall operate under its proposed budget, subject to the right of CIWW to challenge any expenditure to which objection is made by claim in arbitration commenced not later than 180 days after the budget was first submitted to CIWW.

Section 4. Information and Input to be Provided by DMWW. Upon the request of CIWW or any CIWW Member Agency, DMWW shall make available such reasonably accessible information, schedules, comparisons and analysis as may be deemed reasonably necessary in order to fully analyze the proposed OM&M budget. DMWW shall cause such members of its staff to be present at the budget hearing established by CIWW as are necessary to explain the proposed budget and respond to inquiries made concerning same.

Article VII. OBLIGATIONS OF CIWW

Section 1. Financial Obligations. CIWW shall promptly satisfy all of its financial obligations to DMWW hereunder, including without limitation, funding under Article V for capital projects. Any loss, damage, or injury resulting from the failure of CIWW to provide funding for capital projects, when reasonably requested by DMWW, shall be the sole responsibility of CIWW.

Section 2. CIWW Rates and Charges. CIWW shall at all times set, impose, and collect rates and charges to its Member Agencies that produce revenues at least sufficient to pay the expenses of operation of

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CIWW, including obligations to DMWW, and all other obligations including principal and interest of bonds and other debt obligations as they become due.

Section 3. Taxes. CIWW shall pay all sales, excise, ad valorem, property, or other taxes, if any, associated with sales or operations under this Contract or assessed against CIWW property.

Section 4. Cooperation and Support. CIWW shall reasonably cooperate in good faith with DMWW in the performance of its obligations under this Contract, and shall all times govern and manage its affairs consistent with the terms of the CIWW 28E-28F Agreement so as to enable and support DMWW's ability to fully perform its obligations under this Contract.

ARTICLE VIII. TERMINATION PROVISIONS

Section 1 Automatic Termination. This Contract shall automatically terminate upon the termination of existence of CIWW for any reason. Such termination shall be effective upon reversion of assets including any dual purpose assets to DMWW as provided in the CIWW 28E-28F Agreement, with the intent that there shall be no interruption of water production upon termination of the existence of CIWW.

Section 2 Termination for Default. In the event that either Party determines that the other Party has defaulted in the performance of its obligations hereunder, the aggrieved Party may declare that default has occurred and give notice thereof to the defaulting Party. Notice of default shall be given in writing, shall specify the nature of the default and the provisions of the Contract involved, and shall specify what action is required of the defaulting Party to correct the default.

The defaulting Party shall have 180 days from the date of its receipt of the notice of default to correct the default. If at the end of said 180-day period the default has not, in the opinion of the aggrieved Party, been corrected, and if such default shall constitute a material breach of this Contract, the aggrieved Party may thereupon terminate the Contract for material breach by giving 60 days written notice of termination. Termination of this Contract shall be effective at the end of said 60-day period unless judicial proceedings are initiated by either Party in a court of competent jurisdiction to determine if a material breach has occurred.

Upon termination of this Contract by the either Party, or upon entry of a court order terminating this Contract, DMWW shall assist CIWW in assuming operation of the DMWW Designated Supply Facilities. CIWW shall pay DMWW the costs of such assistance within thirty (30) days of its receipt of an invoice for such costs.

Any disputes arising under this Section shall not be subject to mandatory arbitration.

ARTICLE IX. LIABILITY, INDEMNITY, INSURANCE, AUDIT, AND GENERAL TERMS

Section 1. No Liability. DMWW shall not be liable to CIWW, to any Member Agency or to any of their customers by reason of any interruption or failure to provide any water supplied or for services contemplated by this Contract, or for any error of judgment by DMWW or its staff, except for any bad faith, willful misconduct, or willful disregard for the terms of this Contract.

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Section 2. Non-Liability for Main Breaks. DMWW shall have no liability to any person for direct or indirect damage caused by water main breaks of CIWW or any other party. CIWW shall indemnify DMWW from any such claimed liabilities, and hold DMWW harmless from all such claims, including all attorney fees and other costs of defense.

Section 3. Limitations of Liability. NO PARTY SHALL BE LIABLE TO ANY OTHER PARTY UNDER THIS CONTRACT FOR ANY CLAIM FOR CONSEQUENTIAL, INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE, OR EXEMPLARY DAMAGES, INCLUDING WITHOUT LIMITATION LOSS OF PROFITS OR REVENUE OR THE LOSS OF USE OF EITHER, OR COSTS OF REPLACEMENT CAPITAL, EXCEPT AS EXPRESSLY PROVIDED IN THIS CONTRACT.

Section 4. Indemnification. DMWW and CIWW to the fullest extent permitted by law, each hereby agrees to indemnify, defend, pay on behalf of, and hold harmless the other and their respective elected officials, appointed officials, agents, employees and volunteers, and others working on behalf of such party ("Indemnities"), against any and all claims, demands, suits, damages or losses, together with any and all outlay and expense connected therewith including, but not limited to, attorneys' fees and court costs, that may be asserted or claimed against, recovered from or suffered by the Indemnities by reason of any injury or loss arising out of any wrongful act or omission of the Indemnifying Party, including, but not limited to, bodily injury or death, property damage, including loss of use thereof, and economic damages that arise out of or are in any way connected to this Contract. No party shall have any right of indemnity for damages or claims proximately caused by its own negligent or intentionally wrongful acts. Each party's Contracts and obligations as set forth in this Section are applicable for the duration of and following expiration or termination of this Contract, regardless of the manner of termination, and notwithstanding other provisions of this Contract.

Section 5. Insurance. The Parties shall each separately, or jointly, establish and maintain insurance and risk management programs with respect its own properties and liabilities within the scope of this Contract. Each Party waives subrogation against the other Party with respect to losses covered by such Party's insurance. DMWW shall adopt insurance and risk management programs to cover risks arising under this Contract that meet or exceed minimum insurance coverage requirements established by the Board of CIWW from time to time, and that are otherwise consistent with: (i) the insurance and risk management programs pertaining to DMWW's other properties and operations; and (ii) the approved annual OM&M Budget hereunder. The respective assets of DMWW and CIWW shall be insured as their interests may appear and except as they may otherwise agree, DMWW and CIWW shall each name the other, and their respective officers, officials, employees, and volunteers, as an additional insured under their respective policies of insurance with respect to their respective insurable risks arising under this Agreement.

Section 6. Audit. CIWW may by notice in writing request access to DMWW's records for purposes of conducting an independent audit of DMWW's financial records relation to compensation or other amounts paid or payable by CIWW to DMWW. Such notice shall identify the records sought for audit, and DMWW shall provide access to the records sought for audit within 30 days after receipt of the notice requesting audit. Such audit shall be conducted by a certified public accounting firm retained by CIWW and it CIWW's sole cost. The audit findings shall be promptly provided to DMWW. In the event that such audit reveals that any overpayment or under payment to DMWW, the Parties shall make such

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adjustments to balances paid or payable between them as the audit determines are proper, with such adjustments to be made within 30 days of the issuance of the audit report. In the event that either Party disputes the findings of the audit, it may notify the other Party of its objection thereto and request binding arbitration to resolve the matter.

Section 7. Assignment of Contract. Neither Party may assign this Contract to a third party without the written consent of the other Party.

Article X. GENERAL TERMS

Section 1. Provisions to be Severable. If any provision of this Contract is held to be invalid by a court of competent jurisdiction, the invalidity of any such provision shall not affect the other provisions of this Contract that can be given effect without the provision determined to be invalid, and to that end, the provisions of this Contract are severable.

Section 2. Notices. Notices which DMWW or CIWW are authorized or required to give one another pursuant to this Contract shall be in writing and may be personally delivered, may be or sent by ordinary mail or delivery service to the addresses for such party reflected in the records of CIWW or DMWW, or may be sent by electronic means, including email. Notice by personal delivery, by delivery service, or by electronic means shall be effective upon actual receipt. Mailed notices shall be effective and deemed to be received by the party to whom directed when they are postmarked.

Section 3. Arbitration.

- (a) CIWW and DMWW agree that any disputes and any claims for money damages arising between or among them with regard to matters within the scope of this Contract shall be submitted to mandatory, binding arbitration at the request of any party. A request for arbitration must be in the form of a written notice requesting arbitration. Such notice shall identify each disputed matter to be submitted to arbitration. In the absence of agreement by the parties to the contrary, the question or questions to be arbitrated shall be those specified in the notice requesting arbitration.
- (b) If the parties agree, there may be one arbitrator. If they fail to agree on a single arbitrator, there shall be three arbitrators, one named in writing by the party or parties requesting arbitration, one named in writing by the adverse party or parties, and the third chosen by the first two arbitrators so chosen.
- (c) The party or parties requesting arbitration shall choose an arbitrator within ten (10) days following the parties' decision that they will not agree to use one arbitrator. Failure to do so shall be deemed a waiver of its request for arbitration. If the adverse party or parties desire to appoint a different arbitrator, they shall name their arbitrator within ten (10) days following the receipt of notice of the naming of the first arbitrator. The two arbitrators first chosen shall name the third arbitrator within ten (10) days following the selection of the

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second arbitrator. Extensions of the time periods to select arbitrators shall not be unreasonably withheld if requested prior to the original deadlines above. Should any party refuse or neglect to supply the arbitrators with any papers or information requested in writing by the arbitrators, the arbitrators are empowered to proceed ex parte. The parties shall agree on the rules to govern the conduct of the arbitration, but in the absence of such an agreement, the most recently published commercial arbitration rules of the American Arbitration Association shall be deemed to apply. The arbitrator or arbitrators must provide a minimum of thirty (30) days' notice before the date set for any hearing on the merits of the dispute.

- (d) No one shall be qualified to act as an arbitrator if service in such role would create a conflict of interest. Each arbitrator selected shall be qualified by experience and knowledge of the matter to be submitted to arbitration. Conflicts of interest include, but are not limited to: (i) current service on the board, commission, council, or other governing body of CIWW or any Member Agency of CIWW; (ii) current employment, either as an employee or independent contractor, by any CIWW or any Member Agency of CIWW; (iii) employment, either as an employee or independent contractor, within the last five (5) years by CIWW or any Member Agency of CIWW; (iv) any prior participation in negotiations related to the dispute; (v) any direct involvement in the dispute, including as a witness to relevant facts; and (vi) other circumstances that would materially impair the ability of the individual to serve as a neutral arbitrator.
- (e) If there is one arbitrator, the award of the sole arbitrator shall be binding; if three, the agreed upon award of any two shall be binding. The award may be set aside only for reasons permitted under Iowa law.
- (f) The award of the arbitrator or arbitrators shall be in writing and separately state the factual and legal analysis relied upon to reach the decision, and it shall not be open to objection on account of the form of the proceeding or the award.
- (g) The arbitrator or arbitrators may retain special counsel for the purpose of conducting the arbitration proceedings and preparing the arbitration award. In selecting special counsel, the arbitrator or arbitrators may not retain any attorney who has represented CIWW or a DMWW within the last five (5) years.
- (h) The costs of arbitration and reasonable attorneys' fees for both parties shall be paid by the party requesting arbitration if it does not prevail in said arbitration proceedings. If the party requesting arbitration prevails in the arbitration proceedings, the cost of arbitration shall be shared equally by the parties. Costs of the arbitration, include, but are not limited to, fees to the arbitrator or arbitrators, special counsel fees, and any other costs of the proceeding, but excluding reasonable attorneys' fees. If the party requesting arbitration prevails, each party shall be responsible for its own attorneys' fees. (i) CIWW and DMWW consent that any award granted through arbitration will be confirmed in the Iowa District Court for Polk County.

Section 4. Specific Performance. In addition to any other remedies available under

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NOVEMBER 17, 2023

applicable law, CIWW and DMWW shall have the right to the equitable remedy of specific performance to enforce compliance with any provision of this Contract.

Section 5. Actions in Court. Except for disputes covered by Section 3 of this Article X requiring arbitration, either CIWW or DMWW may bring an action in Court for declaratory relief, for specific performance, or for any equitable remedy. Any such action shall be brought in the Iowa District Court in Polk County. EACH PARTY WAIVES TRIAL BY JURY IN ANY SUCH ACTION.

Section 6. Duty to Mitigate. CIWW and DMWW each agrees that it has a duty to mitigate damages under this Contract and covenants that it will use reasonable efforts to minimize any damages it may incur as a result of an Event of Default involving any other party.

Section 7. No Third Party Benefit and Limitation. No provision of this Contract shall inure to the benefit of any other entity, or any individual resident, taxpayer, or ratepayer of any Member Agencies of CIWW. This Contract may be the basis of a claim or cause of action on behalf of any other person or entity against CIWW, DMWW or any Member Agency of CIWW or any of their respective residents, taxpayers, or ratepayers.

Section 8. Entire Contract. This Contract and the CIWW 28E-28F Agreement as in force on the Effective Date hereof shall be construed to form a single agreement, and are the entire agreement between the parties respecting the matters within the scope of this Contract. Any subsequent change or modification to the terms of this Contract shall be in the form of a duly approved and executed written amendment to this Contract.

Section 9. Governing Law. This Contract shall be governed by, construed and enforced in accordance with the laws of the State of Iowa.

Section 10. Partnership Disclaimer. Nothing in this Contract is intended or shall be construed as in any way creating or establishing a partnership between the parties hereto, or as constituting any party as an agent or representative of the other for any purpose or in any manner, other than as specified herein.

Section 11. Counterparts. This Contract may be executed in multiple counterparts, each of which so executed shall be deemed to be an original.

Section 12. Force Majeure. No party shall be liable for any failure to perform any or all of the provisions of this Contract if and to the extent performance has been delayed or prevented by reason of any cause beyond the reasonable control of such party. The expression "cause beyond the reasonable control" and the term "Force Majeure" as used in this Contract shall mean and be deemed to include, but not be limited to acts, regulations, laws, or restraints imposed by any governmental official or body; wars, hostilities, sabotage, riots, or commotions; acts of God; pandemic; or fires, floods, storms, or lightning.

Article XI. EXECUTION OF CONTRACT

Section 1. Passage of Resolution. This Contract shall not go into effect unless approved by resolution of the governing boards of DMWW and CIWW.

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NOVEMBER 17, 2023

Section 2. Signature Pages. Each party shall execute the separate signature page provided for it, and the Parties hereto authorize their counsel to assemble the signature pages of all signatory Parties and to append such signature pages to copies of this Contract for filing with the Iowa Secretary of State.

[Signature Pages Follow]

CENTRAL IOWA WATER WORKS

By: _____
_____, Board Chairperson

ATTEST:

_____, Board Secretary

STATE OF IOWA)
) SS:
COUNTY OF POLK)

On this _____ day of _____, 2024, before me, a Notary Public in and for the State of Iowa, personally appeared _____ and _____ to me personally known, and, who being by me duly sworn, did say that they are the Board Chairperson and Board Secretary of CENTRAL IOWA WATER WORKS that no seal has been procured by the entity; that the attached instrument was signed on behalf of the said entity by authority of its Board as contained in the resolution adopted by the Board on the ____ day of _____, 2024, and that _____ and _____ acknowledged the execution of the instrument to be the voluntary act and deed of the CENTRAL IOWA WATER WORKS, by it and by them voluntarily executed.

Notary Public in and for the State of Iowa

BOARD OF WATER WORKS TRUSTEES OF THE CITY OF
DES MOINES, IOWA

By: _____
_____, Board Chairperson

ATTEST:

_____, CEO & General Manager

STATE OF IOWA)
) SS:
COUNTY OF POLK)

On this _____ day of _____, 2024, before me, a Notary Public in and for the State of Iowa, personally appeared _____ and _____ to me personally known, and, who being by me duly sworn, did say that they are the Board Chairperson and the CEO & General Manager of the BOARD OF WATER WORKS TRUSTEES OF THE CITY OF DES MOINES, IOWA, that no seal has been procured by the entity; that the attached instrument was signed on behalf of the said entity by authority of its Board as contained in the resolution adopted by the Board on the ____ day of _____, 202____, and that _____ and _____ acknowledged the execution of the instrument to be their voluntary act and deed of the BOARD OF WATER WORKS TRUSTEES OF THE CITY OF DES MOINES, IOWA, by it and by them voluntarily executed.

Notary Public in and for the State of Iowa



DES MOINES WATER WORKS
Board of Water Works Trustees

Agenda Item No. III-G
Meeting Date: November 28, 2023
Chairperson's Signature ☐ Yes ☒ No

AGENDA ITEM FORM

SUBJECT: Proposed 2024 Schedules for the Board of Water Works Trustees and Committee Meetings

SUMMARY:

The proposed 2024 schedules for the Board of Water Works Trustees and Committee meetings are attached.

FISCAL IMPACT:

No impact to budget.

RECOMMENDED ACTION:

Adopt the proposed 2024 schedules for the Board of Water Works Trustees and Committee meetings.

BOARD REQUIRED ACTION:

Motion to adopt the proposed 2024 schedules for the Board of Water Works Trustees and Committee meetings.

<hr style="width: 100%; border: none; border-top: 1px solid black; margin-bottom: 5px;"/> (date)	<hr style="width: 100%; border: none; border-top: 1px solid black; margin-bottom: 5px;"/> (date)	 Ted Corrigan, P.E. CEO and General Manager (date) 11/22/23
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Attachments: Proposed 2024 Board Meeting Schedule, Proposed 2024 Committee Meeting Schedule

BOARD OF WATER WORK TRUSTEES

2024 MEETING SCHEDULE

3:30 P.M.

January 23, 2024

February 27, 2024

March 26, 2024

April 23, 2024

May 28, 2024

June 25, 2024

July 23, 2024

August 27, 2024

September 24, 2024

October 22, 2024

November 26, 2024

December 17, 2024
(third Tuesday)

**BOARD OF WATER WORKS TRUSTEES
2024 COMMITTEE MEETING SCHEDULE
3:30 P.M.**

Finance & Audit Committee
(First Tuesday)

January 9 (2nd Tuesday)

February 6

March 5

April 2

May 7

June 4

July 9 (2nd Tuesday)

August 6

September 3

October 1

November 5

December 3

Planning Committee
(Second Tuesday)

January 16

February 13

March 12

April 9

May 14

June 11

July 16

August 13

September 10

October 8

November 12

December 10

AGENDA ITEM FORM

SUBJECT: IDOT Polk 35-80 Hickman Interchange

SUMMARY:

- In September 2023, the Board of Water Works Trustees authorized staff to solicit bids for the IDOT Polk 35-80 Hickman Interchange project. The public hearing was established as the date of the November 2023 Board meeting.
- Plans, specifications, and contract documents were taken out by several prospective bidders. Five bids were submitted on November 7, 2023.

Name of Bidder:	Base Bid A – Ductile Iron	Base Bid B – Prestressed Concrete Cylinder Pipe
J&K Contracting, LLC	\$1,234,567.00	No Bid
Synergy Contracting, LLC	\$1,368,692.00	No Bid
On Track Construction, LLC	\$1,436,365.00	\$1,420,625.00
Rognes Corporation	\$1,647,275.00	\$1,786,095.00
Minger Construction Co., Inc.	\$1,774,139.00	\$1,706,288.00

- The engineer's estimate for this contract is Base Bid A: \$1,443,000.00 – Base Bid B: \$1,377,000.00.
- An alteration to the existing key feeder main is required to address conflicts under the IDOT 35-80 Hickman Interchange project which is scheduled to begin in January 2025.
- Work at the Hickman Interchange under this Contract will consist of installation of approximately 720 feet of 36-inch Ductile Iron Pipe (DIP) which will be completed in the Fall of 2024.
- J&K Contracting has successfully completed other projects for Des Moines Water Works in the past.
- Staff has briefed the Technical Committee of Central Iowa Water Works on the project design, bid results, and the recommendation to award.
- Staff recommends the Board award the IDOT Polk 35-80 Hickman Interchange project to J&K Contracting, in the amount of \$1,234,567.00.

FISCAL IMPACT:




Funds for this project will come from the 2023 Des Moines Water Main Replacement Budget.

RECOMMENDED ACTION:

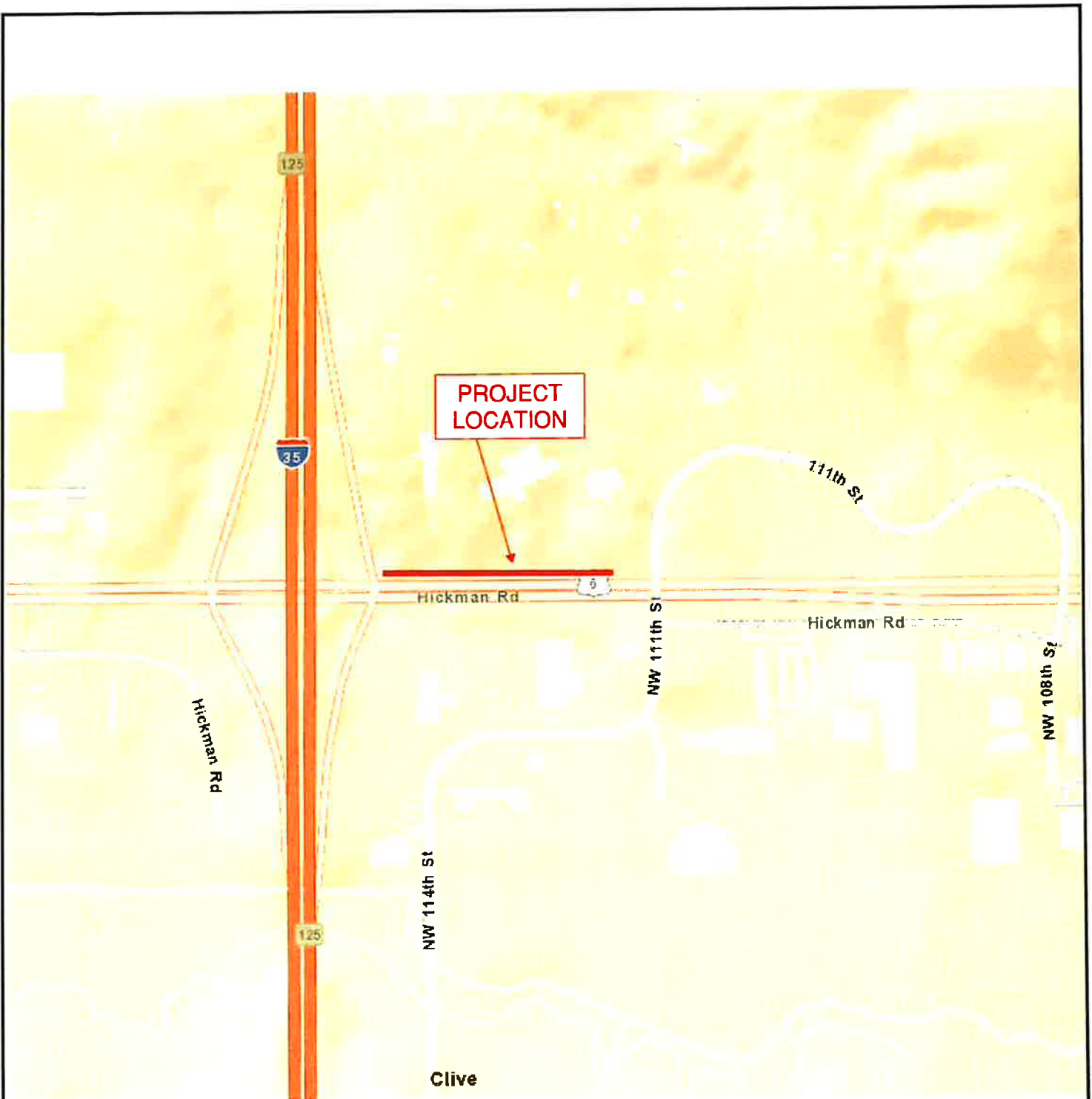
Award the IDOT Polk 35-80 Hickman Interchange project to J&K Contracting, in the amount of \$1,234,567.00, and authorize the Chairperson and CEO and General Manager to execute the contract.

BOARD REQUIRED ACTION:

- Public Hearing – Opened by Chairperson for comments from the public regarding the form of contract, plans and specifications, and estimated cost. Chairperson closes hearing.
- Motion for adoption of form of contract, plans and specifications, and estimated cost.
- Analysis of bids received.
- Award the IDOT Polk 35-80 Hickman Interchange project to J&K Contracting, in the amount of \$1,234,567.00, and authorize the Chairperson and CEO and General Manager to execute the contract.

 Carla J. Schumacher, P.E. Project Manager	 Michael J. McCurnin, P.E. Director of Engineering Services	 Ted Corrigan, P.E. CEO and General Manager
11/20/23 (date)	11/21/23 (date)	11/22/23 (date)

Attachments: Site Map



NOT TO SCALE

Des Moines
Water Works
Water You Can Trust for Life

IDOT POLK 35-80 & HICKMAN INTERCHANGE

AGENDA ITEM FORM

SUBJECT: 2023 MWTP Chemical Feed Improvements

SUMMARY:

- At its September 2023 meeting, the Board of Water Works Trustees authorized staff to solicit bids for the 2023 MWTP Chemical Feed Improvements project. The Public Hearing was established as the date of the November 2023 Board meeting.
- Plans, specifications, and contract documents were taken out by several prospective bidders. Three (3) bids were submitted on October 24, 2023. Bid results are as follows:

Name of Bidder:	Lump Sum Bid:	Alternate 1: PAC Feeder	Alternate 2: Floor Coating	Total With Alternates:
WRH, Inc.	\$1,075,000.00	\$75,000.00	\$75,000.00	\$1,255,000.00
Shank Constructors, Inc.	\$1,099,100.00	\$200,600.00	\$83,400.00	\$1,383,100.00
Woodruff Construction, Inc.	\$1,203,700.00	\$209,300.00	\$69,700.00	\$1,482,700.00

- The engineer's estimate for the Lump Sum Bid and both alternates was \$1,165,400.
- While the lowest responsible bidder has submitted a bid that is about 7% more than the estimate, staff believes a competitive bid environment was obtained.
- WRH, Inc., has successfully completed projects for Des Moines Water Works in the past.
- Staff has briefed the Technical Committee of Central Iowa Water Works on the project design, bid results, and the recommendation to award.
- Staff recommends Alternate 1 and Alternate 2 be included in the scope and for the Board to award the 2023 MWTP Chemical Feed Improvements to WRH, Inc., in the amount of \$1,255,000.00.

FISCAL IMPACT:


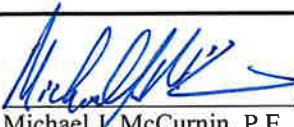

Funds for this project will come from the 2023 and 2024 McMullen Treatment Plant budgets.

RECOMMENDED ACTION:

Staff recommends the Board award the 2023 MWTP Chemical Feeds Improvements Contract to WRH, Inc., in the amount of \$1,225,000.00 and authorize the Chairperson and CEO and General Manager to execute the contract.

BOARD REQUIRED ACTION:

- Public Hearing – Opened by Chairperson for comments from the public regarding the form of contract, plans and specifications, and estimated cost. Chairperson closes the hearing.
- Motion for adoption of form of contract, plans and specifications, and estimated cost.
- Analysis of bids received.
- Award the 2023 MWTP Chemical Feed Improvements Contract in the amount of \$1,255,00.00 to WRH, Inc., and authorize the Chairperson and CEO and General Manager to execute the contract.

 Lindsey Wanderscheid, P.E. (date) 11/21/23 Engineering Supervisor	 Michael J. McCurnin, P.E. (date) 11/21/23 Director of Engineering Services	 Ted Corrigan, P.E. (date) 11/22/23 CEO and General Manager
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Attachment: None

AGENDA ITEM FORM

SUBJECT: Request Authorization for CEO and General Manager to Execute Agreements for Professional Services for UF Membrane Pilot Skid Testing

SUMMARY:

- On February 6, 2023, the CEO and General Manager executed a Professional Services Agreement (PSA) with HDR for the SWTP Capacity Expansion project to start design of the source, treatment, and finished water pumping elements associates with the 10 MGD expansion at the Saylorville Water Treatment Plant.
- Part of the design process is to add additional ultrafiltration (UF) membrane capacity. As part of the permitting process, pilot testing must be conducted. Therefore, staff and HDR developed a request for proposals (RFP) to conduct pilot testing that was sent to interested parties. The goals of the pilot testing are to:
 - Demonstrate that the equipment can meet water quality goals.
 - Determine effectiveness and efficiency of membrane process.
 - Determine operating parameters that will be the basis of design for the full-scale UF membrane system.
 - Develop an effective cleaning regimen.
 - Provide the required justification to the Iowa Department of Natural Resources (IDNR) for the proposed membrane changes that DMWW will likely want to implement.
- The responding firms to the RFP were:
 - WesTech Engineering
 - Wigen Water Technologies
 - Harn R/O Systems, Inc.
 - Aqua Aerobics, Inc.
- The proposals were evaluated based on membrane product, schedule, experience, and cost.
- Since this will be considered a regional asset, the Central Iowa Water Works Technical Committee (TC) voted on approving the UF pilot testing to an amount of up to \$260,800. There were no dissenting opinions from the remaining members of the TC.
- Staff recommends a Professional Services Agreement with Wigen Water Technologies in the amount of \$79,750, Aqua Aerobics Inc. in the amount of \$63,200, and Harn R/O Systems, Inc. in the amount of \$99,750 to conduct UF membrane pilot skid testing contingent upon negotiation of terms and conditions acceptable to staff and subsequent review by legal counsel. Total cost is anticipated to be \$242,700.

FISCAL IMPACT:


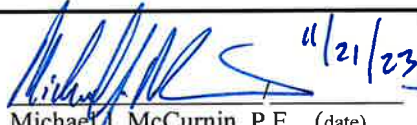

Funds for the pilot testing will come from the 2023 SWTP – Treatment Expansion – 10 MGD budget.

RECOMMENDED ACTION:

Authorize the CEO and General Manager to execute a Professional Services Agreement with Wigen Water Technologies in the amount of \$79,750, Aqua Aerobics, Inc. in the amount of \$63,200, and Harn R/O Systems, Inc. in the amount of \$99,750 to conduct UF membrane pilot testing contingent upon negotiation of terms and conditions acceptable to staff and subsequent review by legal counsel.

BOARD REQUIRED ACTION:

Motion to authorize the CEO and General Manager to execute a Professional Services Agreement with Wigen Water Technologies in the amount of \$79,750, Aqua Aerobics, Inc. in the amount of \$63,200, and Harn R/O Systems, Inc. in the amount of \$99,750 to conduct UF membrane pilot testing contingent upon negotiation of terms and conditions acceptable to staff and subsequent review by legal counsel.

 Lindsey Wanderscheid, P.E. (date) Engineering Supervisor	 Michael J. McCurnin, P.E. (date) Director of Engineering Services	 Ted Corrigan, P.E. (date) CEO and General Manager
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Attachments: None

AGENDA ITEM FORM

SUBJECT: Request Permission to Establish the Date of Public Hearing for Ground Lease Agreement with USCOC of Greater Iowa, LLC at Tenny Standpipe as the Date of the January 2024 Board Meeting

SUMMARY:

- In February 2005, the Board of Water Works Trustees executed an Option and Ground Lease Agreement with USCOC of Greater Iowa doing business as U.S. Cellular (U.S. Cellular). This lease agreement granted U.S. Cellular an exclusive lease to 600 square feet (30 feet by 20 feet) at the Tenny Standpipe property on Merle Hay Road.
- This lease agreement allowed U.S. Cellular to use the 600 square foot lease area to install ground facilities for the transmission and receipt of wireless communication signals.
- The lease agreement also provided a 12-foot-wide access easement for U.S. Cellular's use from Merle Hay Road to the lease area.
- Under a separate agreement with AT&T Wireless Services, U.S. Cellular would co-locate their antennae equipment on AT&T's monopole on an adjacent lease area. Des Moines Water Works (DMWW) has no obligations or duties related to this separate agreement between AT&T Wireless and U.S. Cellular.
- The initial term of the original lease agreement between DMWW and U. S. Cellular terminated on November 30, 2005. U.S. Cellular then had the right to extend the lease agreement for four additional five-year terms, or an additional twenty years. U.S. Cellular exercised this right to extend the lease agreement.
- As such, the original lease agreement between DMWW and U. S. Cellular that is currently in effect expires on November 30, 2025.
- U.S. Cellular has requested the existing lease agreement with DMWW at the Tenny Standpipe site be extended.
- Rather than extend the original agreement, U.S. Cellular was informed by staff that a new, replacement agreement would need to be negotiated.
- Terms and conditions under the new replacement agreement with U.S. Cellular include the following:
 - DMWW can terminate the agreement upon five years written notice to U.S. Cellular.
 - Liability insurance provisions that provide enhanced protection to DMWW from risk.
 - Reimbursement of legal and administrative costs incurred by DMWW from management of the agreement.
 - Annual increase by 3% to amount of rent paid to DMWW by U.S. Cellular.
 - Initial term is five years with the right to extend the lease agreement for five additional five-year terms.
- Staff and legal counsel are nearing the end of negotiations with U.S. Cellular for the new, replacement agreement.
- Staff recommends the Board establish the date of Public Hearing to consider the replacement Ground Lease Agreement with U.S. Cellular at the Tenny Standpipe site as the date of the January 2024 Board meeting.

FISCAL IMPACT:

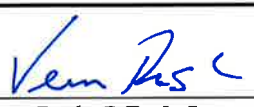

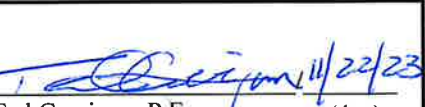
DMWW will collect approximately \$1,800 per month in rent from U.S. Cellular with an annual increase of 3 percent.

RECOMMENDED ACTION:

Establish the date of Public Hearing to consider the replacement Ground Lease Agreement with U.S. Cellular at the Tenny Standpipe site as the date of the January 2024 Board meeting.

BOARD REQUIRED ACTION:

Motion to establish the date of Public Hearing to consider the replacement Ground Lease Agreement with U.S. Cellular at the Tenny Standpipe site as the date of the January 2024 Board meeting.

 Vern Rash, P.E., L.S. Project Manager	 Michael J. McCurnin, P.E. Director of Engineering Services	 Ted Corrigan, P.E. CEO and General Manager
11/20/23 (date)	11/21/23 (date)	11/22/23 (date)

Attachments: None

AGENDA ITEM FORM

SUBJECT: Request Authorization for CEO and General Manager to Execute Agreements for Professional Services for UF Membrane Pilot Skid Testing

SUMMARY:

- On February 6, 2023, the CEO and General Manager executed a Professional Services Agreement (PSA) with HDR for the SWTP Capacity Expansion project to start design of the source, treatment, and finished water pumping elements associates with the 10 MGD expansion at the Saylorville Water Treatment Plant.
- Part of the design process is to add additional ultrafiltration (UF) membrane capacity. As part of the permitting process, pilot testing must be conducted. Therefore, staff and HDR developed a request for proposals (RFP) to conduct pilot testing that was sent to interested parties. The goals of the pilot testing are to:
 - Demonstrate that the equipment can meet water quality goals.
 - Determine effectiveness and efficiency of membrane process.
 - Determine operating parameters that will be the basis of design for the full-scale UF membrane system.
 - Develop an effective cleaning regimen.
 - Provide the required justification to the Iowa Department of Natural Resources (IDNR) for the proposed membrane changes that DMWW will likely want to implement.
- The responding firms to the RFP were:
 - WesTech Engineering
 - Wigen Water Technologies
 - Harn R/O Systems, Inc.
 - Aqua Aerobics, Inc.
- The proposals were evaluated based on membrane product, schedule, experience, and cost.
- Since this will be considered a regional asset, the Central Iowa Water Works Technical Committee (TC) voted on approving the UF pilot testing to an amount of up to \$260,800. There were no dissenting opinions from the remaining members of the TC.
- Staff recommends a Professional Services Agreement with Wigen Water Technologies in the amount of \$79,750, Aqua Aerobics Inc. in the amount of \$63,200, and Harn R/O Systems, Inc. in the amount of \$99,750 to conduct UF membrane pilot skid testing contingent upon negotiation of terms and conditions acceptable to staff and subsequent review by legal counsel. Total cost is anticipated to be \$242,700.

FISCAL IMPACT:


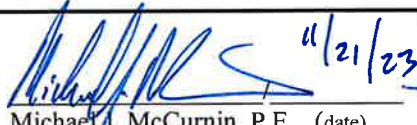

Funds for the pilot testing will come from the 2023 SWTP – Treatment Expansion – 10 MGD budget.

RECOMMENDED ACTION:

Authorize the CEO and General Manager to execute a Professional Services Agreement with Wigen Water Technologies in the amount of \$79,750, Aqua Aerobics, Inc. in the amount of \$63,200, and Harn R/O Systems, Inc. in the amount of \$99,750 to conduct UF membrane pilot testing contingent upon negotiation of terms and conditions acceptable to staff and subsequent review by legal counsel.

BOARD REQUIRED ACTION:

Motion to authorize the CEO and General Manager to execute a Professional Services Agreement with Wigen Water Technologies in the amount of \$79,750, Aqua Aerobics, Inc. in the amount of \$63,200, and Harn R/O Systems, Inc. in the amount of \$99,750 to conduct UF membrane pilot testing contingent upon negotiation of terms and conditions acceptable to staff and subsequent review by legal counsel.

 Lindsey Wanderscheid, P.E. (date) 11/21/23 Engineering Supervisor	 Michael J. McCurnin, P.E. (date) 11/21/23 Director of Engineering Services	 Ted Corrigan, P.E. (date) 11/22/23 CEO and General Manager
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Attachments: None

AGENDA ITEM FORM

SUBJECT: Request Permission to Establish the Date of Public Hearing for Ground Lease Agreement with USCOC of Greater Iowa, LLC at Tenny Standpipe as the Date of the January 2024 Board Meeting

SUMMARY:

- In February 2005, the Board of Water Works Trustees executed an Option and Ground Lease Agreement with USCOC of Greater Iowa doing business as U.S. Cellular (U.S. Cellular). This lease agreement granted U.S. Cellular an exclusive lease to 600 square feet (30 feet by 20 feet) at the Tenny Standpipe property on Merle Hay Road.
- This lease agreement allowed U.S. Cellular to use the 600 square foot lease area to install ground facilities for the transmission and receipt of wireless communication signals.
- The lease agreement also provided a 12-foot-wide access easement for U.S. Cellular's use from Merle Hay Road to the lease area.
- Under a separate agreement with AT&T Wireless Services, U.S. Cellular would co-locate their antennae equipment on AT&T's monopole on an adjacent lease area. Des Moines Water Works (DMWW) has no obligations or duties related to this separate agreement between AT&T Wireless and U.S. Cellular.
- The initial term of the original lease agreement between DMWW and U. S. Cellular terminated on November 30, 2005. U.S. Cellular then had the right to extend the lease agreement for four additional five-year terms, or an additional twenty years. U.S. Cellular exercised this right to extend the lease agreement.
- As such, the original lease agreement between DMWW and U. S. Cellular that is currently in effect expires on November 30, 2025.
- U.S. Cellular has requested the existing lease agreement with DMWW at the Tenny Standpipe site be extended.
- Rather than extend the original agreement, U.S. Cellular was informed by staff that a new, replacement agreement would need to be negotiated.
- Terms and conditions under the new replacement agreement with U.S. Cellular include the following:
 - DMWW can terminate the agreement upon five years written notice to U.S. Cellular.
 - Liability insurance provisions that provide enhanced protection to DMWW from risk.
 - Reimbursement of legal and administrative costs incurred by DMWW from management of the agreement.
 - Annual increase by 3% to amount of rent paid to DMWW by U.S. Cellular.
 - Initial term is five years with the right to extend the lease agreement for five additional five-year terms.
- Staff and legal counsel are nearing the end of negotiations with U.S. Cellular for the new, replacement agreement.
- Staff recommends the Board establish the date of Public Hearing to consider the replacement Ground Lease Agreement with U.S. Cellular at the Tenny Standpipe site as the date of the January 2024 Board meeting.

FISCAL IMPACT:

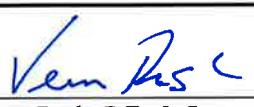

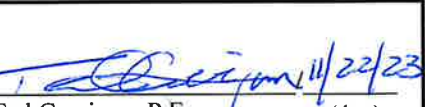
DMWW will collect approximately \$1,800 per month in rent from U.S. Cellular with an annual increase of 3 percent.

RECOMMENDED ACTION:

Establish the date of Public Hearing to consider the replacement Ground Lease Agreement with U.S. Cellular at the Tenny Standpipe site as the date of the January 2024 Board meeting.

BOARD REQUIRED ACTION:

Motion to establish the date of Public Hearing to consider the replacement Ground Lease Agreement with U.S. Cellular at the Tenny Standpipe site as the date of the January 2024 Board meeting.

 Vern Rash, P.E., L.S. Project Manager	 Michael J. McCurnin, P.E. Director of Engineering Services	 Ted Corrigan, P.E. CEO and General Manager
11/20/23 (date)	11/21/23 (date)	11/22/23 (date)

Attachments: None



DES MOINES WATER WORKS
Board of Water Works Trustees

Agenda Item No. III-L
Meeting Date: November 28, 2023
Chairperson's Signature ☐ Yes ☒ No

AGENDA ITEM FORM

SUBJECT: Request Permission to Issue a Purchase Order for Parts and Repairs of the Des Moines River Intake Gates

SUMMARY:

- Screening equipment for the Des Moines River Intake is currently in need of major repair. Conducting repairs requires water flow into the structure to be stopped and the interior space to be pumped dry. The facility features sluice gates that isolate the interior structure from the river to stop water flow. The sluice gates are not functioning properly due to operational hardware being worn and deteriorated.
- Staff solicited proposals for the required sluice gate parts and repairs. Two proposals were received. A proposal of \$298,006 was received from Baker Group. A proposal of \$241,638 was received from The Waldinger Corporation. Both proposals adequately covered the necessary repairs.
- Engineering staff recommends awarding a Purchase Order to The Waldinger Corporation, in the amount of \$241,638 for providing parts and required labor for repair of the Des Moines River Intake Gates.

FISCAL IMPACT:

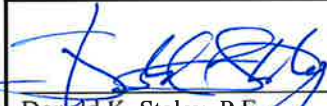
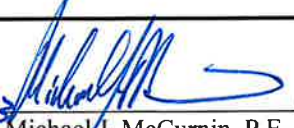
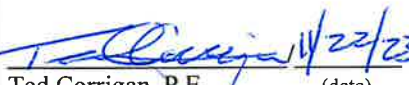
Funds for this project will come from the 2023 Facility Management Work Plan

RECOMMENDED ACTION:

Authorize staff to issue a Purchase Order to The Waldinger Corporation, in the amount of \$241,638 for providing parts and repairs of the Des Moines River Intake Gates.

BOARD REQUIRED ACTION:

Motion to authorize staff to issue a Purchase Order to The Waldinger Corporation, in the amount of \$241,638 for providing parts and repairs of the Des Moines River Intake Gates.

 Donald K. Staley, P.E. (date) <u>11-21-23</u> Project Manager	 Michael J. McCurnin, P.E. (date) <u>11/21/23</u> Director of Engineering Services	 Ted Corrigan, P.E. (date) <u>11/22/23</u> CEO and General Manager
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Attachments: Proposals from The Waldinger Corporation and Baker Group



Baker Group
1600 S.E. Corporate Woods Drive
Ankeny, Iowa 50021-7501
Direct Phone: 515.299.1946
Mobile: 515.240.4900
fettersj@thebakergroup.com

7/10/2023

Tony Knox
WP Maintenance Manager
Des Moines Water Works
2201 George Flagg Parkway
Des Moines, Iowa 50321-1190
knox@dmwww.com

Dear Tony,

Baker Group is pleased to provide you with the requested proposal to repair 2 gate valves on the river for Des Moines Water Works at the Prospect site

Our Scope of work for repairing 2 Gates:

- We will remove the roof hatches for ease of removal and replacement of the river gates (one at a time as necessary to keep one in operation at all times)
- Water Works to pump down the water in the pit as necessary
- We will remove both gates (one at a time) and send to the shop for cleaning and removing of seals and wheels
- We will provide and install a temporary gate to keep out debris
- We will provide and install new factory seals and wheels
- We will clean the surface of the non-removable steel that the gate seals against
- We will re-install the repaired gates (one at a time)
- We have included a crane for our work
- All work is estimated to be completed during our normal working hours

Price for Above Work: \$298,006.00 (plus applicable taxes)

Sincerely,

A handwritten signature in blue ink, appearing to read "James D. Fetters".

Jim Fetters
Project Manager

APPROVED BY: _____

Name: _____

Title: _____

Date: _____

PROJECT TERMS AND CONDITIONS

GENERAL

1. Baker Group agrees to perform all work in a careful and workman-like manner and to furnish only materials of good quality.
2. The customer will provide reasonable access to all areas and equipment and will allow Baker Group to stop and start equipment as may be necessary to fulfill the terms of the project.
3. All work will be performed during normal working hours, 8:00 AM to 4:30 PM, Monday through Friday.
4. The customer will promptly pay invoices upon receipt. Should a payment become thirty (30) days or more delinquent, Baker Group may stop all work under this project without notice and/or cancel this project, and the entire project amount shall become due and payable immediately upon demand.
5. In addition to any price specified on the face hereof, the customer shall pay and be responsible for the gross amount of any present or future sales, use, excise, value-added, or other similar tax, however designated, applicable to the price, sale or delivery or any products, services or the work furnished hereunder or for their use by Baker Group on behalf of the customer whether such tax shall be local, state, or federal in nature.
6. In the event Baker Group must commence legal action in order to recover any amount payable under this Agreement, the customer shall pay Baker Group all court costs and attorney's fees incurred by Baker Group.
7. Any legal action relating to this agreement, or the breach thereof, shall be commenced within one (1) year from the date of the work.
8. This Proposal valid for a period of 60 days after issuance.
9. Any balance unpaid for 30 days shall bear a FINANCE CHARGE computed by a "periodic rate" of 1.5% per month, which is an ANNUAL PERCENTAGE OF 18%.
10. To pay with MasterCard or Visa, please visit www.thebakergroup.com and click on the link "Invoice Payment: near the bottom of the webpage. There is a 3% convenience fee for payment on line using a credit card. Remittance using E-check on line with no fee is available.

LIMITATIONS OF LIABILITY AND INDEMNITIES

1. Baker Group will not be liable for damage or loss caused by delay in installation or interrupted service due to fire, flood, corrosive substance in the air, strike lockout, dispute with workmen, inability to obtain material or services, commotion, war, act of God, or any other cause beyond Baker Group's reasonable control.
2. Adding, removing or making changes to your electrical power distribution system may affect your NFPA 70, 70B or 70E Electrical Arc Flash ratings. Unless specifically stated, our scope does not include creating or updating the code required power study for your facility.
3. In no event, whether as a result of breach of contract, or any tort including negligence or otherwise shall Baker Group or its suppliers, employees or agents be liable for any special, consequential, incidental, or penal damage including, but not limited to loss of profit or revenues, loss of use of any products, machinery, equipment, damage to associated equipment, cost of capital, cost of substitute products, facilities, services or replacement power, down time costs, lost profits, or claims of Buyer's customers for such damages.
4. No other warranty expressed or other liability is given and no other affirmation of Baker Group, by word or action, shall constitute a warranty. This warranty is expressly in lieu of any other express or implied warranty including any implied warranty of merchantability of fitness, and any other obligation on the part of Baker Group.
5. Baker Group warrants materials only to the extent and for the time period said materials are warranted to Baker Group by the manufacturer(s) of the same. Baker Group's liability, if any, upon any warranty, either expressed or implied, shall be limited to replacement of defective materials and correction of faulty workmanship which is in violation of local, state, or federal building codes at the time of performance of the work by Baker Group.



Baker Group Commercial and Industrial Services

Mechanical:

Boiler Installation and Service
Chiller / Cooling Tower Installation and Service
Power House Piping
Industrial Process Piping
Code Welding: ASME S, U &
National Board R Stamp
Stainless Steel Piping
Medical Gas Piping
Underground Piping and Utilities
Plumbing Systems
HVAC Systems
Refrigeration
Compressed Air Systems

Sheet Metal:

Specialty Metal Fabrication & Installation
Heating, Cooling and Ventilation
Architectural Sheet Metal
Dust Collection / Filtration Systems
Kitchen and Food Prep Surfaces
Custom Machine Guards
Smoke Stacks and Boiler Stacks
Combustion Air Systems
Generator Exhaust Damper
Installation and Repair

Electrical:

Site Utilities and Facility Power Distribution
Switchgear, Bus Way and Cable Tray Systems
Variable Speed Drives
Lighting Systems – New and Upgrades
Electrical Power Monitoring Analysis
Hazardous Location Installations
Infrared Thermography Analysis
Lightning Protection/Systems Grounding
Industrial Instrumentation and Control
Emergency Power – Generators and UPS Systems Voice /
Data / Video / Fiber

Engineering Services:

Design-Build Mechanical, Electrical and Plumbing
3-D Design and Documentation
VDC / Building Information Modeling (BIM)
USGBC LEED® – Accredited Professionals
Specialized Regulatory Commissioning
Custom Environmental Chamber Design
Energy Use Analysis and Benchmarking
Indoor Air Quality Analysis
Air Balancing – Active Pressurization Control
Refrigerant Management and Replacement
Facility Improvement Master Planning

Building and Process Automation:

Specialized Turnkey Systems Integration
Data Analytics
Digital Temperature Control Systems
Industrial PLC Installation and Programming
Industrial Process and HVAC Control
SCADA (System Control and Data Acquisition)
Temperature and Pressure Transmitter Installation
Pneumatic Control Systems
Boiler Sequencing and Control Wiring
Lighting Control
Real-time Energy Monitoring and Control
Refrigerant Monitoring – Leak Reporting
Internet Based Monitoring and Control Systems
Laboratory and Critical Environment Controls

Security, Fire and Parking Systems :

Video Surveillance Systems and Analytics
Access Control / Biometric Systems / Photo ID
Intercom - Video and Audio
Electrified Door Hardware, Wireless Locks
Gas Detection Monitoring
Lightning Detection
Integrated Building Automation / Security Systems
Parking Lot Gate Controls
Parking Revenue Control Systems (PARCS)
Burglary Systems with Wireless Options
Fire Alarm Design, Install, Inspection and Service

Advanced Manufacturing and Prefabrication:

Multi-Trade Prefabricated Assemblies
Computerized Plasma Pipe Cutter
AutoCAD Connected 20' Plasma Table
AutoCAD Connected Duct Machine
TURBO Bend for Architectural Metal
Electrical Assembly
Prefabrication UL
508A Labeled
Electrical Panel
Building

Maintenance and Repair Services:

Scheduled Preventive Maintenance
Flat Fee Comprehensive Service Program
Vibration Analysis and Laser Shaft Alignment
Meg-Ohm Motor Winding Testing
Microlog Motor Condition Analysis
Equipment Start Up / Baseline Establishment
Ultra-sonic Gas Leak Detection
Boiler Combustion Efficiency Tuning
Back Flow Testing and Certification
Chiller Maintenance and Rebuilding
Building Operations Staffing
Computerized Maintenance Management

Thursday, July 20, 2023

Des Moines Water Works
2201 George Flagg Parkway
Des Moines, IA 50321

Attn: Tony Knox - Water Production Maintenance Manager

Subj: DMWW Prospect Road – Rodney Hunt Gate Repairs

Tony,

We are pleased to provide you with this Mechanical proposal for the refurbishment of the two (2) Rodney Hunt Roller Gates at the Des Moines Prospect Road River Intake Location. Please note the following information utilized in preparation of our estimate:

PROJECT DOCUMENTATION

- As-Built Drawings:
 - Rodney Hunt Fabricated Steel Roller Gate Submittal Dated 01-30-81
 - V&K River Intake – Mechanical Design Drawing Dated 08-3-83
- Jobsite Visits and on-site discussions

GENERAL CONDITIONS

- Applicable management and supervision
- Sales taxes have been excluded

DEMOLITION SCOPE

- Remove roller gate actuators (x2)
- Remove actuator pedestal – Set aside for re-installation (x2)
- Remove roller gate stem at thrust nut – Set aside for re-installation (x2)
- Remove roller gate from intake structure (x2)
- Remove existing gate wheels, axles, and bearings (x8/each gate) - Discard
- Remove existing gate gasketing, clamping collars, and associated hardware (480 LF) – Discard
- Remove existing closure angle, hardware, and grout at bottom of gates (x2) - Discard

MECHANICAL SCOPE OF WORK

- Furnish and install the following genuine Rodney Hunt Replacement parts
 - 10" Diameter flanged gate wheels (to be positioned at the top and bottom of each gate) – (x8)
 - **12-14-week lead time upon order**
 - 8" Diameter "plain" wheels (to be positioned near the center of each gate) - (x8)
 - **12-14-week lead time upon order**
 - New wheel axles are 304 SS with non-metallic Orkot thrust washers and bushings
 - Neoprene Hy-Q seal for flush bottom closure (97" in length)
 - **7-8-week lead time upon order**
 - J-seal with 180 Deg Fluorocarbon Cladded Bulb for sides and top of gates (416" in length)
 - **7-8-week lead time upon order**
 - Furnish and install new stainless steel seal retainer plates and attachment hardware
- Furnish and install new hardware for mounting of existing actuator pedestal
- Furnish and install new grouting materials beneath existing actuator pedestal
- Furnish and install new 316SS angle and attachment hardware for gate bottom closure
- Furnish and install new grouting materials behind bottom closure angle
- Inspect gate sealing surfaces and report findings to Des Moines Water Works



THE WALDINGER CORPORATION

- Inspect gate rolling surfaces and report findings to Des Moines Water Works
- Inspect condition of supporting concrete structure and report findings to Des Moines Water Works

PAINTING SCOPE

- Sandblast two (2) roller gates offsite per SSPC-6 commercial blasting specification
- Apply two (2) coats of Tnemec Series 66 coating at offsite location
- Field touch-up as required

Your investment for the above **base bid** Mechanical work is:

Two hundred and forty-one thousand six hundred and thirty-eight

\$241,638.00

Voluntary Alternate #1: Genuine Rodney Hunt Replacement Parts Furnished by Others: **Deduct \$133,618.00**

CLARIFICATIONS

- Des Moines Water Works to provide temporary cofferdam to safely isolate river intake structure to allow work to commence. It is assumed that both Rodney Hunt gates will be able to be removed at the same time.

EXCLUSIONS

- | | |
|---|---|
| • Power washing and removal of sludge and debris within intake structure | • Roofing including repairs and patching. |
| • Dewatering pumping system | • Asbestos and abatement |
| • Painting and coating of roller gate rails | • Excavation and disposal of hazardous waste materials. |
| • Temporary gates | • Liquidated/consequential damages |
| • Bonds | • Testing, adjusting & balancing |
| • Winter conditions | • Control wiring and pneumatic tubing |
| • Premium labor | • Electrical power wiring outside of what has been specified above. |
| • DNR permitting as applicable | |
| • Concrete work including cut and patch outside of what has been specified above. | |

TERMS & CONDITIONS

- Our proposal is conditioned on receiving an acceptable contract, generally like AIA A401 or AGC ConsensusDocs 750.
- In the event a contract requires us to add parties as additional insureds to the General Liability policy, it will be done using ISO CG 20 10 04/13 or 12/19 edition endorsements.
- Builder's Risk insurance will be provided by others, insuring TWC's interests as an additional insured, with waivers of subrogation between all insureds, and with deductibles not exceeding \$5000. To the extent that our work is to be insured by property insurance in lieu of Builder's Risk, our proposal relies on the property coverage to insure our work, to the extent the loss is from a covered peril. If you want us to provide Builder's Risk, it will be done at an add to the quoted price.

We appreciate this opportunity to work with Des Moines Water Works on this project. Please contact me should you have any questions. This proposal is subject to review in 10 days. The prices contained herein are proprietary to the recipient and should be considered confidential.

Sincerely,

Scott Miller
Mechanical Production Engineer
Office Ph 515-330-4466
Cell Ph 515-721-3353
Scott.Miller@waldinger.com

AGENDA ITEM FORM

SUBJECT: Request Authorization to Solicit Bids for Saylorville Water Treatment Plant (SWTP) West Feeder Main Phase 3

SUMMARY:

- In 2017, DMWW teamed with CH2M and HDR to complete the DMWW Long Range Plan 2017 (2017 LRP). The 2017 LRP used population, water use and production statistics from all regional entities to project the necessary source, treatment, transmission, storage, and pumping needs for the Des Moines Metropolitan region through 2040. The 2017 LRP recommended an initial expansion at the Saylorville Water Treatment Plant of 10 MGD, which is currently in design.
- To allow the 10 MGD expansion to occur at SWTP, two transmission pipelines (DT-20-08 and DT-20-09) were identified to be constructed. The Board authorized a Professional Services Agreement with Snyder and Associates, Inc. on November 22nd, 2022 to begin the design work for these projects. Project DT-20-08 (as indicated on the attached map) has since been named "Saylorville Water Treatment Plant (SWTP) West Feeder Main Phase 3."
- Easement acquisition through the project area is currently underway.
- The Saylorville Water Treatment Plant (SWTP) West Feeder Main Phase 3 project will consist of approximately 8,100 feet of 36" transmission main, 3,000 feet of 48" transmission main, appurtenances, utility relocations, pavement replacement, site restoration, and other correlated work. The project is being designed for the use of either Ductile Iron or Prestressed Concrete Cylinder piping materials to facilitate competition and improved pricing. The work is planned to begin in the spring of 2024 and be completed in the 2025 construction season.
- Preparation of plans, specifications, and contract documents for the Saylorville Water Treatment Plant (SWTP) West Feeder Main Phase 3 project are nearing completion. The Engineer's estimate is \$15,300,000.
- The project was presented to the Central Iowa Water Works Technical Committee on November 8th, 2023. The Technical Committee discussed the revised cost estimate (near \$15 million) relative to the cost estimate completed as part of preliminary engineering (near \$10 million). Approximately \$2 million of this cost difference is attributable to upsizing 3,000 feet from 36-inch to 48-inch. The bulk of the difference between the preliminary and current cost estimates is attributable to material cost increases to the present day that were not fully captured in the preliminary estimating effort.

FISCAL IMPACT:




Funds for the SWTP West Feeder Main Phase 3 project will be obtained from an Iowa State Revolving Fund (SRF) loan. The loan will become an obligation of Central Iowa Water Works once the entity is created.

RECOMMENDED ACTION:

Authorize staff to solicit bids for the SWTP West Feeder Main Phase 3 project and establish the date of the Public Hearing as the date of the February 2024 Board meeting.

BOARD REQUIRED ACTION:

Motion to authorize staff to solicit bids for SWTP West Feeder Main Phase 3 project and establish the date of the Public Hearing as the date of the February 2024 Board meeting, and direct staff to publish notice as provided by law.

 Jonathan Mouw, P.E. Engineering Supervisor	11/21/23 (date)	 Michael J. McCurnin, P.E. Director of Engineering Services	11/21/23 (date)	 Ted Corrigan, P.E. CEO and General Manager	11/22/23 (date)
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Attachments: Site Map



AGENDA ITEM FORM

SUBJECT: Request Authorization for CEO and General Manager to Execute Professional Services Agreement with Snyder & Associates, Inc., for 2023 Des Moines Water Main Replacement - Contract 5

SUMMARY:

- Staff developed a Request for Qualifications (RFQ) to solicit proposals for 2023-2028 master service consultant agreements for multiple disciplines in February 2023. Proposals were received March 9, 2023.
- Seventeen (17) consultants responded in the water distribution engineering category. Those responding were AECOM, Barr Engineering, Bolton & Menk, CDM Smith, Civil Design Advantage, HDR Engineering, HNTB, HR Green, IMEG, I&S Group, McClure Engineering, Short Eliot Hendrickson (SEH), Shive Hattery, Snyder & Associates, Stanley Consultants, Strand, and Veenstra & Kimm (V&K).
- Staff reviewed the proposals based upon project team, firm experience, staff resources and approach, and fees. Staff recommended 5-year Master Services Agreements for water distribution engineering be executed with HNTB and Snyder & Associates at the April 25th board meeting, which have since been completed.
- The 2023 Des Moines Water Main Replacement – Contract 5 is comprised of eight streets in northwest Des Moines.
- Des Moines Water Works (DMWW) staff will complete the design for the following five water main replacement segments that had been partially designed and put on hold in early 2023. Budgetary estimate for 2024 construction of the streets selected for DMWW to design is \$1,198,000.
 - **33rd Street** from College Ave to 1630 33rd St
 - **Mondamin Avenue** from 33rd St to 32nd St
 - **32nd Street** from Mondamin Ave to College Ave
 - **6th Avenue** from High St to 809 6th Ave
 - **Park Street** from 6th Ave to 7th St
- Snyder will complete the design for the following three water main replacement segments. Budgetary estimate for 2024 construction of the streets selected for Snyder to design is \$674,000.
 - **Adams Avenue** from 34th St to 3238 Adams St (dead end)
 - **Forest Avenue** from 3717 Forest Ave to Beaver Ave
 - **Randall Place** from Forest Ave to Dead End
- Staff recommends a Professional Services Agreement be executed with Snyder & Associates for the identified streets in the 2023 Des Moines Water Main Replacement - Contract 5 subject to the terms and conditions in their 2023-2028 indefinite scope master agreement.
- Snyder & Associates has successfully completed multiple water main designs in Iowa.
- The anticipated design fee stated in Snyder & Associates' proposal is \$98,300.

FISCAL IMPACT:




Funds for this project will come from the 2023 Des Moines Water Main Replacement Budget.

RECOMMENDED ACTION:

Authorize the CEO and General Manager to execute a Professional Services Agreement with Snyder & Associates, Inc., in the amount of \$98,300 for 2023 Des Moines Water Main Replacement - Contract 5 design services.

BOARD REQUIRED ACTION:

Motion to authorize the CEO and General Manager to execute a Professional Services Agreement with Snyder & Associates, Inc., in the amount of \$98,300 for 2023 Des Moines Water Main Replacement - Contract 5 design services.

 Carla J. Schumacher, P.E. (date) 11/21/23 Project Manager	 Michael J. McCurnin, P.E. (date) 11/21/23 Director of Engineering Services	 Ted Corrigan, P.E. (date) 11/22/23 CEO and General Manager
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Attachments: None

AGENDA ITEM FORM

SUBJECT: Acquisition of Easement Saylorville Water Treatment Plant (SWTP) West Feeder Main Phase 3 from Johnston Golf Development, LLC

SUMMARY:

- Staff will be seeking an authorization from the Board of Water Works Trustees to solicit bids for the Saylorville Water Treatment Plant (SWTP) West Feeder Main Phase 3 project at the November 28th, 2023, Board Meeting.
- Design of this project requires easement be procured throughout the bulk of the project alignment. The largest lone easement segment, approximately 1.5 acres, involves property owned by Johnston Golf Development, LLC located at 5055 Merle Hay Road in Johnston, Iowa. The Owner is developing this site and has titled the location as the "Bomber's Subdivision."
- DMWW staff and its design consultant, Snyder & Associates, Inc., have been working with Johnston Golf Development, LLC since the spring of 2023 to coordinate the respective location of proposed improvements by both parties. Easement negotiations for the Bombers Subdivision site began in August of 2023. The site, easement, and transmission main can be viewed on the attached map.
- The Owner has agreed to grant the easement for a consideration of \$270,000. In doing so, the Owner agrees to forgo a proposed expansion of the onsite pond that would negatively affect the new pipeline alignment, and to also delay any planned improvements over the easement until after the feeder main has been constructed. DMWW and Snyder & Associates, Inc. staff evaluated a variety of easement valuation methods based on multiple site appraisals and is comfortable with the negotiated amount.
- The wording of the easement documents is currently being finalized. DMWW staff seek the Boards' authorization to finalize and accept the easement agreement for a consideration of \$270,000 once it is complete. The easement was presented to the Central Iowa Water Works Technical Committee on November 8th, 2023. The Technical committee voted unanimously in favor of procuring the \$270,000 easement through the Bomber's Subdivision from Johnston Golf Development, LLC.

FISCAL IMPACT:




Funds for the SWTP West Feeder Main Phase 3 project will be obtained from an Iowa State Revolving Fund (SRF) loan. The loan will become an obligation of Central Iowa Water Works once the entity is created.

RECOMMENDED ACTION:

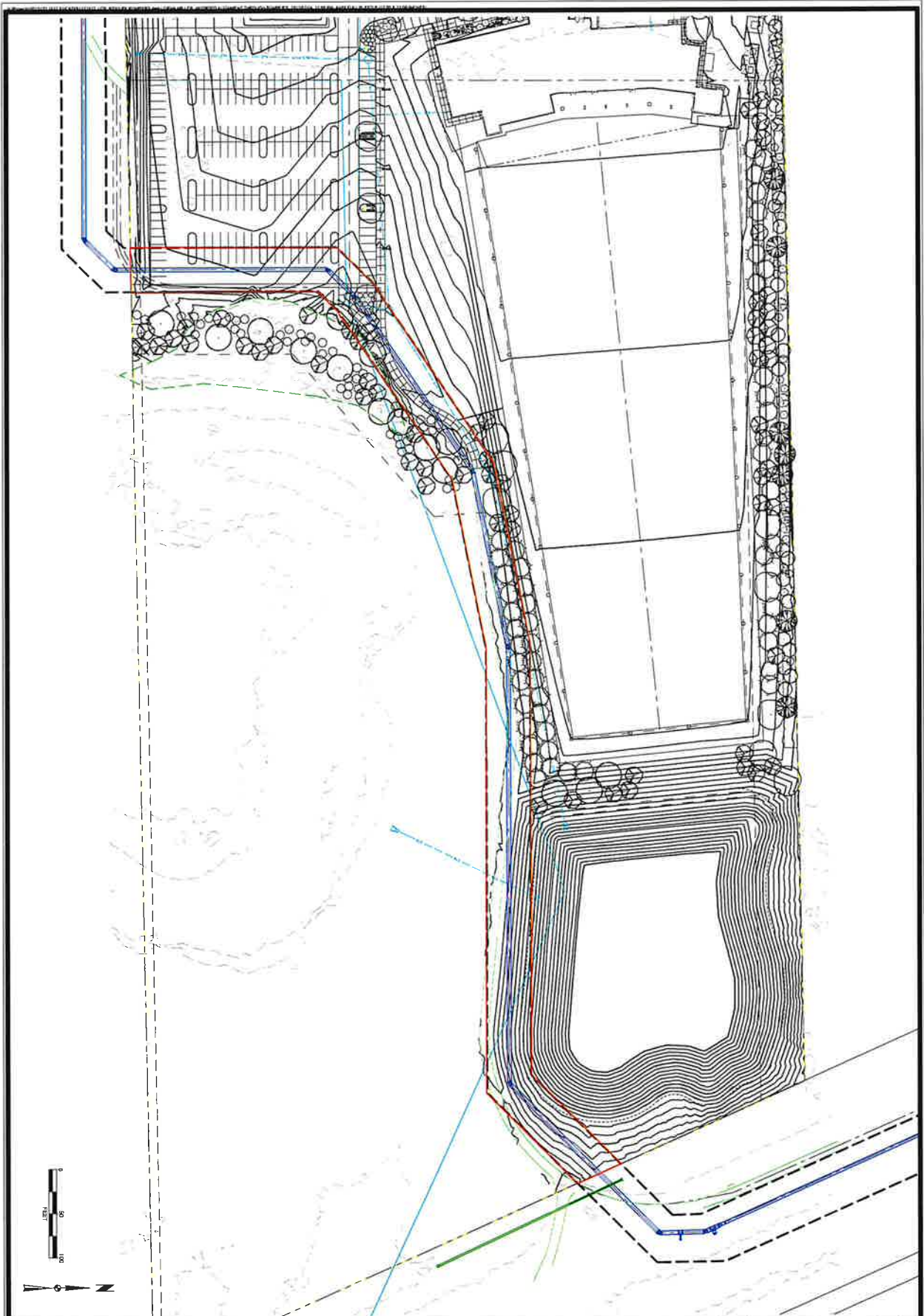
Authorize the CEO and General Manager to execute the easement agreement, pending final legal review, with Johnston Golf Development LLC in the amount of \$270,000 for the acquisition of a utility easement through the Bomber's Subdivision.

BOARD REQUIRED ACTION:

Motion to authorize the CEO and General Manager to execute the easement agreement, pending final legal review, with Johnston Golf Development LLC in the amount of \$270,000 for the acquisition of a utility easement through the Bomber's Subdivision.

 Jonathan Mouw, P.E. Engineering Supervisor	 Michael J. McCurnin, P.E. Director of Engineering Services	 Ted Corrigan, P.E. CEO and General Manager
11/21/23 (date)	11/21/23 (date)	_____ (date)

Attachments: Site Map




SNYDER & ASSOCIATES
 Project No. 122.1637.01
 Sheet EXH2

DMWW SWTP TRANSMISSION MAIN-DT-20-08
MODIFIED ALIGNMENT THROUGH BOMBER'S
JOHNSTON, IOWA
SNYDER & ASSOCIATES, INC.
 3737 S.W. SNYDER BLVD
 ANKENY, IOWA 50023
 515-964-2020 | www.snyder-associates.com

MARK	REVISION	DATE	BY
Engineer: WCF	Checked By: WCF	Scale: 1" = 50'	
Technician: LM	Date: 05-25-2023	Drawn: TTNRRW-SB	
Project No. 122.1637.01			Sheet EXH2



DES MOINES WATER WORKS
Board of Water Works Trustees

Agenda Item No. Information Items A-D
Meeting Date: November 28, 2023
Chairperson's Signature ☐ Yes ☒ No

AGENDA ITEM FORM

SUBJECT: Information Items

SUMMARY:

- A. Board Committee Reports
 - Finance and Audit Committee
 - Planning Committee
 - Greater Des Moines Botanical Garden Board
 - Des Moines Water Works Park Foundation
- B. CEO and General Manager's Comments
- C. Safety Update
- D. Contract Status and Professional Services Agreements

FISCAL IMPACT:

No impact to the budget.

RECOMMENDED ACTION:

For review and discussion.

BOARD REQUIRED ACTION:

Review and discussion.

<hr style="width: 100%; border: none; border-top: 1px solid black; margin-bottom: 5px;"/> (date)	<hr style="width: 100%; border: none; border-top: 1px solid black; margin-bottom: 5px;"/> (date)	 Ted Corrigan, P.E. CEO and General Manager
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Attachments: DMWWPF Executive Summary, October Board Minutes, October 2023 Financials, Events Calendar; Safety Update; Contract Status and Professional Services Agreements Spreadsheets

17 November 2023

Updates from the Des Moines Water Works Park Foundation

November Meeting Minutes attached along with October Financials.



Programming

The final scheduled event “Girls on the Run” took place on November 12th. While no more events are scheduled we are planning on putting up a winter light display along the “meander pathway” to continue to draw people to the park (example of what it looks like to the right sans scary face). The unusual warm November weather has allowed us to extend the Biergarten operation past October with several “pop up” openings during the warm days. We will be discussing possibly doing some pop up winter events in conjunction with the light display to celebrate winter in the park. More info to come. In the meantime we have been removing the seasonal trailers, equipment etc. Recap of the season below:



*Ballet Des Moines – June 1

Iowa Craft Brew Festival – June 3

Nice Tri (Aethism benefit) – June 4

*Zenith Chamber Music Festival – June 8

Charles Wesley Godwin – June 9

*Des Moines Pride – June 10

Charlie Crocket – June 23

Willie Nelson – June – 27

Young the Giant - June 28

Koe Wetzell – June 30

Dirty Heads – July 3

*Peace Walk for Srebrenica – July 9

*Music Under the Stars – July 9

The Dead South – July 13

Styx – July 14

Corridos Festival – July 15

*Ukraine Benefit – July 16

*Music Under the Stars - July 16

Whiskey Meyers – July 20

*RAGBRAI & Lynard Skynard – July 26

*Iowa Dance Theater Choreography Festival – August 5

Perry Johnson – American Dream Rally – August 12

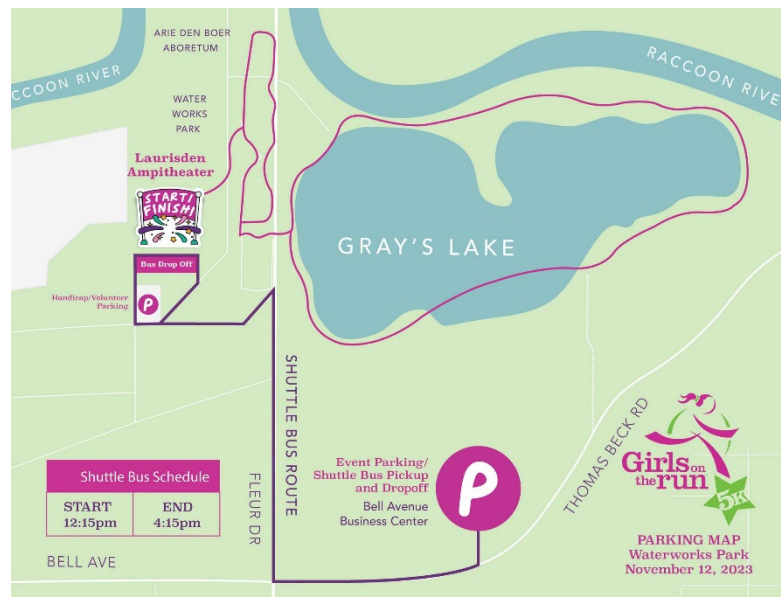
Above & Beyond Concert Elevate Festival – August 20

Dominic Fike – August 21

*Des Moines Symphony - Direct from Sweden: The Music of ABBA - September 2

*Des Moines Symphony – Heroes & Legends - September 3,

Jordan Davis - September 15



Women Owned Business Pop Up market – September 16

Oktoberfest – September 22 – 24

DMPS ONE RUN – September 23

Paul Caurther – September 29

Wonder Women Run – October 1

IMT Des Moines Marathon – October 15

Girls on the Run – November 12

**Part of the Foundation's Free Cultural Series*

Completed



DES MOINES WATER WORKS PARK FOUNDATION
Board of Directors Meeting
Friday, November 17 – Board Meeting - 12:00 - 1:30 PM
Meeting Minutes



DMWWPF Vision: *Water Works Park is the place where nature and people flourish.*

DMWWPF Mission: *Foster stewardship for clean water and nature through unique learning opportunities, cultural experiences, and outdoor adventures.*

BOD Members in Person Attendance: Jason Stone, Taylor Boland, Pat Bruner, Crystal Franke, Drew Manatt, Corey Morrison, Brad Sporrer and Matt Van Loon

BOD Members Virtual: Ardis Kelley, Jenny Herrera, Andrea Boulton, Jen Cross, Ardis Kelley, Chris Lightfoot,

BOD Members Absent: Ashley Aust

Guests/Staff: Sam Carrell – DMWWPF; Teri TeBockhorst – DMWWPF - virtually

I. Call to Order – Jason Stone called the meeting to order at 12:00 PM on November 17, 2023.

II. Approve Minutes – Jason Stone

- Upon a motion by Pat Bruner, and a second by Taylor Boland, the Board of Directors unanimously approved the Des Moines Water Works Park Foundation Meeting Minutes for October 2023.

III. President's Report – Jason Stone provided an update on items including the Des Moines Music Coalition. The Board discussed.

IV. Financial Report – Ardis Kelley

- Ardis Kelley reported on the October balance sheet and income statement and discussion ensued. Upon a motion by Brad Sporrer, and a second by Matt Van Loon, the Board of Directors unanimously accepted the October 2023 Financials.
- Ardis Kelley and Sam Carrell discussed the Financial Services RFP responses received and the recommendation for next steps. Ardis recommended Tarbell Accounting Services for our annual contract.
- Upon a motion made by Matt Van Loon and a second by Brad Sporrer, the board unanimously approved Tarbell Accounting Services for the approved vendor.

V. Committee Reports

- Governance – Teri Wood TeBockhorst provided an update on the 2024 Board Slate.
- Programming – Jenny Herrera provided an updated on upcoming programming initiatives.
 - Teri reported on a lighted holiday art display opportunity in cooperation with Wright Outdoor Services.
- Marketing – Chris Lightfoot provided an update on the Web Ad Hoc committee.
 - Corey Morrison explained the committee's goals and objectives for soliciting an audit of the website with the final goal of a potential redesign.
 - Teri Wood TeBockhorst reported the Fall/Winter newsletter was slated to be emailed on 11-20 and would include our Friends of the Park Membership offering.
- Development – Teri Wood TeBockhorst discussed the Donor Appreciation Dinner and the expense/revenue reconciliation report.

- DMWW – Mike McCurnin provided an update on the Des Moines Water Works and stated the utility set another usage record. He also reported the water utilities regionalization plan is going forward,

VI. Executive Director Report – Sam Carrell

- Development Brochure – distributed brochure and discussed goals for sponsorships,
- BPC – Discussed hosting opportunity for 2025 DM Magazine Release. Will pursue through marketing committee.
- Scissor Lift Purchase – discussed purchase and determined to pay for seasonal rental and defer and development procurement strategy for frequently used items/equipment.
- 2024 Season – Carrell reviewed bookings and holds thus far for 2024.
- 990 Filed – The DMWWPF 990 form has been filed with the IRS
- 2024 Draft Budget – 2023 Performance – Carrell working with Kelley to create a new report to more clearly show performance of the different revenue streams and expense items and their alignment with Budget lines.

VII. Announcements

- None

VIII. Adjourn – Upon the motion of Pat Bruner, and second by Taylor Boland, the Meeting was adjourned at 1:43 PM.

Respectfully submitted by Ashley Aust, Board Secretary.

Des Moines Water Works Park Foundation

<i>Comparative Statements of Financial Position as of</i>	<u>October 31, 2023</u>	<u>September 30, 2023</u>	<u>December 31, 2022</u>
ASSETS			
Cash and Cash Equivalents	\$ 175,563.64	\$ 201,640.36	\$ 184,062.05
Investments - Endow Iowa	49,438.76	51,831.99	48,176.08
Pledges Receivable	493,207.07	497,607.07	634,107.07
Prepaid Expenses	1,984.22	2,314.85	1,005.28
Total Assets	<u>\$ 720,193.69</u>	<u>\$ 753,394.27</u>	<u>\$ 867,350.48</u>
Accounts Payable	\$ -	\$ -	\$ 11,007.53
Accrued Expenses	1,730,212.29	1,730,212.29	1,790,212.29
Loan Payable - Line of Credit	373,204.55	373,204.55	484,370.55
Total Liabilities	<u>\$ 2,103,416.84</u>	<u>\$ 2,103,416.84</u>	<u>\$ 2,285,590.37</u>
NET ASSETS			
Net Assets without donor restrictions:			
Available to Spend	\$ 1,022,833.35	\$ 1,043,534.63	\$ 899,414.69
Net Assets with donor restrictions:			
Endow Iowa	49,438.76	51,831.99	48,176.08
Karras Kaul Sculpture (Ragbrai)	10,107.21	10,107.21	10,957.21
Park Improvement/Fleur Trail	(2,465,602.47)	(2,455,496.40)	(2,376,787.87)
Total Net Assets	<u>\$ (1,383,223.15)</u>	<u>\$ (1,350,022.57)</u>	<u>\$ (1,418,239.89)</u>
Total Liabilities and Net Assets	<u>\$ 720,193.69</u>	<u>\$ 753,394.27</u>	<u>\$ 867,350.48</u>

Des Moines Water Works Park Foundation
Consolidated Statement of Financial Activity and Change in Net Assets
For the ten months ending October 31, 2023

	October-23					FISCAL YEAR TO DATE			Annual Budget
	Operating	Development	Programming	Capital	Total	Actual	Budget	Budget Variances	2023
REVENUES AND OTHER SUPPORT									
Corporate & Foundation Giving	\$ -	\$ 1,000.00	\$ -	\$ -	\$ 1,000.00	\$ 2,017.24	\$ 76,800.00	\$ (74,782.76)	\$ 92,160.00
Individual Gifts	-	5,253.42	-	-	5,253.42	19,116.86	4,166.67	14,950.19	5,000.00
Merchandise Sales	-	-	-	-	-	1,430.40	-	1,430.40	-
Miscellaneous Income	-	-	-	-	-	161.33	-	161.33	-
Park Sponsorship	-	-	-	-	-	-	104,166.67	(104,166.67)	125,000.00
Program Income	-	(2,500.00)	-	-	(2,500.00)	19,150.00	-	19,150.00	-
Special Event Income	-	2,500.00	6,401.73	-	8,901.73	311,260.22	41,666.67	269,593.55	50,000.00
User/Vendor Revenue	-	-	3,500.00	-	3,500.00	39,050.00	353,291.67	(314,241.67)	423,950.00
Investment Income, net of fees	(1,893.10)	-	-	0.60	(1,892.50)	4,897.06	-	4,897.06	-
Total Revenues and Other Support	\$ (1,893.10)	\$ 6,253.42	\$ 9,901.73	\$ 0.60	\$ 14,262.65	\$ 397,083.11	\$ 580,091.67	\$ (184,600.29)	\$ 696,110.00
EXPENSES									
Accounting/Audit	\$ 875.00	\$ -	\$ -	\$ -	\$ 875.00	\$ 8,750.00	\$ 9,235.42	\$ (485.42)	\$ 11,082.50
Advancement Tools	-	-	-	-	-	10.70	-	10.70	-
Amphitheater Programming	6.35	-	3,652.80	-	3,659.15	63,891.60	87,500.00	(23,608.40)	\$ 105,000.00
Building Maintenance	-	-	-	-	-	51,863.30	-	51,863.30	-
Consulting Services	6,400.00	-	-	-	6,400.00	8,400.00	-	8,400.00	-
Community Programming	-	300.00	2,050.00	-	2,350.00	9,350.00	21,875.00	(12,525.00)	26,250.00
Development	-	-	-	-	-	-	67,083.33	(67,083.33)	80,500.00
Food Expense	-	-	55.42	-	55.42	200.41	-	200.41	-
Furnishing Expense	-	-	-	-	-	22,161.74	-	22,161.74	-
General Office	436.30	12,077.87	-	-	12,514.17	23,358.85	4,583.33	18,775.52	5,500.00
Governance	-	-	-	-	-	1,158.50	2,458.33	(1,299.83)	2,950.00
Information Technology	297.35	219.49	-	-	516.84	1,385.76	-	1,385.76	-
Interest Expense	-	-	-	3,152.33	3,152.33	28,447.18	29,166.67	(719.49)	35,000.00
Marketing	-	-	144.45	-	144.45	2,167.43	17,333.33	(15,165.90)	20,800.00
Misc. Expense	-	-	-	-	-	-	416.67	(416.67)	500.00
Office Equipment	-	936.94	-	-	936.94	1,780.25	-	1,780.25	-
Park Maintenance	-	-	-	-	-	-	37,500.00	(37,500.00)	45,000.00
Professional Services	-	7,609.88	-	-	7,609.88	59,086.88	-	59,086.88	-
Rent Expense	130.00	-	-	-	130.00	1,170.00	-	1,170.00	-
Staffing & Administrative Costs	6,400.00	-	-	-	6,400.00	67,370.00	128,000.00	(60,630.00)	153,600.00
Sponsorship Activity	-	-	-	-	-	225.00	-	225.00	-
Supplies Expense	-	-	-	-	-	240.00	-	240.00	-
Travel Expense	-	-	-	-	-	15.60	-	15.60	-
Utilities	-	-	2,719.05	-	2,719.05	9,408.17	9,545.00	(136.83)	11,454.00
Website Maintenance	-	-	-	-	-	1,625.00	-	1,625.00	-
Total Expenses	\$ 14,545.00	\$ 21,144.18	\$ 8,621.72	\$ 3,152.33	\$ 47,463.23	\$ 362,066.37	\$ 414,697.08	\$ (75,017.45)	\$ 497,636.50
Change in Net Assets	\$ (16,438.10)	\$ (14,890.76)	\$ 1,280.01	\$ (3,151.73)	\$ (33,200.58)	\$ 35,016.74	\$ 165,394.58	\$ (109,582.83)	\$ 198,473.50
Net Assets, Beginning of Year						(1,418,239.89)			
Net Assets, End of Year						<u>\$ (1,383,223.15)</u>			

2023	Date	Event
March	18	St Paddy's Marathon
	22	Plant tour NRCS
April	1-2	Iowa Coursing Hounds
	5	Plant tour Waukee APEX
	8	DSM Criterium bike race
	15	Wombat Rugby at football fields
	15-16	Coursing Hounds of Iowa
	21	Trash bash park clean up
	22	Private shelter rental
	22	Extraordinary egg event
	23	Yoga at Maffitt
	29	Scream it out event
	29	Wombat Rugby at football fields
	29	Polk County Victims Rights walk
	29	Private gazebo rental
	30	Groupo Frontera concert
May	4	DSM Criterium bike race
	5	Pet Rock concert - reschedule later
	6-7	DSM Women's marathon race
	6	The Pork Tornadoes
	11	Private shelter rental
	12	DSM Criterium bike race - RESCHEDULE LATER
	13	Race for Hope
	13	Political Rally - cancelled possible reschedule
	14	DSM Criterium bike race RESCHEDULE LATER
	18	Wedding rehearsal fountain
	20	Private fountain rental
	20	Polk Co Foster Children - photos in park
	26	Private shelter rental
	27-28	Karen Association of Iowa - soccer
June	1	DSM Ballett
	1	DSM Criterium bike race
	2	Pet Rock concert - reschedule later - MOVED LOCATION
	2-4	Lowdown car show
	3	Iowa Craft Brew Festival
	4	Lazy not a tri race
	8	Zenith Chamber music festival
	9	Charles Wesley Godwin concert
	10	Private shelter rental
	10	People's Pride event
	11	IRONMAN
	13	Maffitt Wedding
	15	Plant tour - agricultural relations council
	17-18	Iowa Coursing Hounds
	21	Private shelter rental
	23	Charley Crocket concert
	24	Private fountain rental
	27	Willie Nelson concert
	28	Young the Giant concert
	30	Koe Wetzel concert
	30-July 2	Iowa Coursing Hounds

KEY
Sport/Fitness Event
DMWWPF Event
Wedding/shelter
Misc. (car shows, political events, festivals)

2023	Date	Event
July	3	Dirty Heads
	9	Music under the stars
	9	DSM Criterium bike race
	9	Peace Walk
	9	Music under the stars
	13	Dead South concert
	14	Styx concert
	14	Private shelter rental
	14-15	Beaverdale Bluegrass festival
	15	Private Shelter rental
	15	Moonlight Classic bike ride
	15	Hispanic concert
	16	Music under the stars
	16	Private shelter rental
	16	Ukraine Benefit
	18	Plant tour
	20	Bike Race
	20	Whiskey Meyers concert
	26	RAGBRAI - camping and concert
	29-30	Iowa Coursing Hounds
August	2	DSM Criterium bike race
	2	Plant tour - RRAP
	5	Iowa Dance Theater
	5-6	Karen Association of Iowa - soccer
	11	Private shelter rental
	12	Private shelter rental
	12	DSM Criterium bike race
	12	American Dream Rally/concert
	13	Ruan appreciation picnic
	13	Bartet Market Pop in
	13	Private shelter rental
	13	Lyceum event
	16	Lead DSM Orientation
	18	Plant tour - Congressmand Nunn Staff
	19-20	Karenni Comm of DSM - soccer
	20	Elevate above and beyond cancer event
	21	Dominic Fike concert
	24	Private gazebo rental
	27	Peddle for the Pantry Ride
	31	USA RAPTORS band
September	2-3	DSM Symphony
	7	plant tour - agribusiness
	8	DMWW social club employee luncheon
	8	Private Shelter rental
	9-10	Karen Association of Iowa - soccer
	10	School of Rock dance event
	11	Champaign event
	13	DSM Criterium bike race
	13	Leader Institute DSM Alumni event
	13	Plant tour -
	15	Jordan Davis concert
	16	Private Shelter rental
	16	Pop up market
	17	Hy-Vee marathon
	17	New City Church
	17	Private Shelter rental
	20	Private Shelter rental
	20-24	Octoberfest - set up, event
	21	Private Shelter rental
October	22-24	Ikcs outdoor expo
	22	Plant tour City of Adel
	23	Private fountain rental
	23	DMPS One Run
	27-Oct 1	Polk County Democrats - set up, event
November	26	Private event amphitheater
	29	Paul Cauthen concert
	1	Wonder Women run
	8	Blazing 5K
	9	Plant tour - legislators
	14-15	DSM Marathon - set up, event
	28-29	Coursing Hounds of Iowa
	12	Girls on the Run
	17	DSM Criterium bike race

Biergarten every Thursday-Sunday at amphitheater
Bands, Bikes, Brews - small concerts at beer garden area on Sundays

Muddy Boots Forest Camp Tuesdays and Thursdays
September- December areas throughout park

MEMORANDUM

DATE: November 20, 2023

TO: Ted Corrigan, CEO and General Manager
Kyle Danley, COO

FROM: Dylan White, Field Safety Specialist

SUBJECT: Safety Memo

Injuries

6 (06/19/2023)

Accidents

12 (7 preventable)

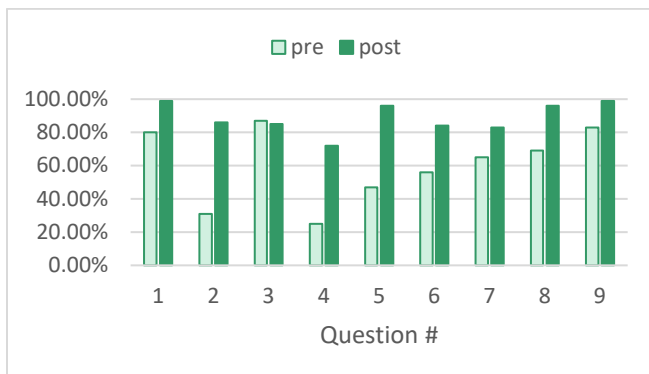
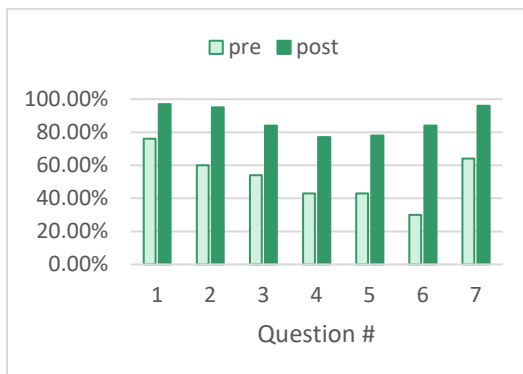
Near Misses

21 Awareness

46 Actionable (59% resolved)

- Since 2019, Des Moines Water Works has utilized Safety Skills' general content. However, one function that led us to expand the use of NeoGov is that it allows for customizable content.
- We are working to build content that is directly applicable to Des Moines Water Works and specific to positions within the Utility. This approach is not meant to replace on-the-job training but rather to supplement and reinforce it.
- Below are two eLearning topics administered across various departments. Each question reflects the percentage of employees who answered correctly. The average score increased by 31.5% after learning the content between the pretest and posttest.

Two Pre & Post Test Score Comparison



COMPETITIVE BIDS CONTRACT STATUS FOR NOVEMBER 2023

2021 Well Rehabilitation	SWTP sites complete. MWTP #6 to be completed in fall of 2023.	Contractor Notice to Proceed Original Contract Sum Net Change by Change Orders Contract Sum to Date Total Completed to Date Anticipated Completion Date	Layne Christensen Company, Inc. 2/14/2022 \$1,344,820.00 \$743,265.00 \$2,088,085.00 \$1,081,996.00 Dec-23
L. P. Moon Pumping Station - Pump No. 8	Start-up complete. Final punch list items remain.	Contractor Notice to Proceed Original Contract Sum Net Change by Change Orders Contract Sum to Date Total Completed to Date Anticipated Completion Date	The Waldinger Corporation 1/9/2023 \$123,390.00 \$4,654.00 \$128,044.00 \$123,381.90 Dec-23
Norwalk Highway G14 Meter Vault	Electrical and control work being finalized.	Contractor Notice to Proceed Original Contract Sum Net Change by Change Orders Contract Sum to Date Total Completed to Date Anticipated Completion Date	Rognes Corp. 4/6/2022 \$536,000.00 \$2,853.00 \$538,853.00 \$474,392.65 Dec-23
Fleur Drive Operations Center Stormwater System Improvements - Phase 2	Construction is substantially complete. Acceptance deferred until resolution of transformer issue.	Contractor Notice to Proceed Original Contract Sum Net Change by Change Orders Contract Sum to Date Total Completed to Date Anticipated Completion Date	WRH, Inc. 3/28/2022 \$1,179,900.00 \$24,622.89 \$1,204,522.89 \$1,189,022.89 Dec-23
McMullen High Service Pump Building HVAC and Roofing Upgrades	Construction in progress	Contractor Notice to Proceed Original Contract Sum Net Change by Change Orders Contract Sum to Date Total Completed to Date Anticipated Completion Date	Brockway Mechanical & Roofing Co., Inc. 4/17/2023 \$233,094.00 \$6,950.00 \$240,044.00 \$130,082.00 Jan-24
Maffitt East Feeder Main - Valve Vault	Construction in progress	Contractor Notice to Proceed Original Contract Sum Net Change by Change Orders Contract Sum to Date Total Completed to Date Anticipated Completion Date	WRH, Inc. 6/12/2023 \$1,280,000.00 \$0.00 \$1,280,000.00 \$326,575.00 Apr-24

Item IV-D

2023 Des Moines Water Main Replacement - Contract 1	Construction in progress	Contractor	Corell Contractor, Inc.
		Notice to Proceed	5/24/2023
		Original Contract Sum	\$2,145,227.00
		Net Change by Change Orders	\$3,592.50
		Contract Sum to Date	\$2,148,819.50
		Total Completed to Date	\$1,898,936.60
		Anticipated Completion Date	Sep-24
DMWW Grounds Maintenance Facility	Construction in progress	Contractor	Henkel Construction Company
		Notice to Proceed	10/2/2020
		Original Contract Sum	\$3,780,900.00
		Net Change by Change Orders	\$0.00
		Contract Sum to Date	\$3,780,900.00
		Total Completed to Date	\$196,732.25
		Anticipated Completion Date	Dec-24
MWTP Truck Scale Replacement	Construction in progress	Contractor	Edge Commercial
		Notice to Proceed	10/6/2023
		Original Contract Sum	\$823,000.00
		Net Change by Change Orders	\$0.00
		Contract Sum to Date	\$823,000.00
		Total Completed to Date	\$0.00
		Anticipated Completion Date	Mar-24
FDTP Closed Loop Cooling Systems	Contract signed. Notice to proceed and pre-construction meeting to be calendared.	Contractor	The Waldinger Corporation
		Notice to Proceed	10/30/2023
		Original Contract Sum	\$1,458,216.00
		Net Change by Change Orders	\$0.00
		Contract Sum to Date	\$1,458,216.00
		Total Completed to Date	\$38,903.71
		Anticipated Completion Date	Jun-24

COMPETITIVE QUOTATIONS CONTRACT STATUS FOR OCTOBER 2023

2023 Des Moines Hydrant Relocations - Phase 1

Contractor	J&K Contracting, LLC
Notice to Proceed	10/17/2023
Original Contract Sum	\$86,200.00
Net Change by Change Orders	\$0.00
Contract Sum to Date	\$86,200.00
Total Completed to Date	\$41,800.00
Anticipated Completion Date	May-24

PROFESSIONAL SERVICES AGREEMENTS

Service	Selected Vendor	Date	Amount	Comments
Updates to Regional Cost Model with Retail Rate Impacts	FCS Group	1/1/2021	\$33,200	
Social Media Consultant	Megan McDowell	2/15/2021	\$909.09/month	Independent contractor
Engineering Services - Drafting water main relocations for City of Des Moines Hamilton Drain - Phase 2	Kirkham Michael	2/25/2021	\$10,000	COMPLETE
Design and construction services: Joint Eastside Booster Station Hypochlorite Feed System	Veenstra & Kimm, Inc.	6/8/2021	\$22,900	
Design and construction services: Operation Center Stormwater Pump Station Improvements	Veenstra & Kimm, Inc.	6/8/2021	\$50,150	
Roof Membrane Relaxation Design	WTI	7/2/2021	\$3,000	
Legislative Advocacy - October 1, 2021 - December 31, 2022	Advocacy Strategies	9/24/2021	\$53,125	\$10,625/qtr
Survey Services for 2022 WMR - SW 10th Place	Snyder & Associates	11/9/2021	\$24,600	COMPLETE
Survey Services for 2022 WMR - SW 11th Street	Snyder & Associates	11/9/2021	\$24,600	COMPLETE
Specs and Contract Documents for 2022 Tank Painting - Tenny	Dixon Engineering	11/24/2021	\$5,125	COMPLETE
Drafting and Design for City of DM 2nd Ave. Improvements Project - University Ave to 2nd Ave Bridge	Bolton & Menk	11/22/2021	\$39,510	
Survey Services for 2022 WMR - Luster Ln & SW 9th St	McClure Engineering	12/1/2021	\$19,325	COMPLETE
Specs and Contract Documents for 2022 Tank Painting - Runnells	Dixon Engineering	12/28/2021	\$6,625	COMPLETE
Communications, Public Relations - Melissa Walker	MW Media Consultants, LLC	1/1/2022	\$4,800/month	
Consulting Services for Replacement of Financial Mgmt. Software	Adbo Financial Solution	2/11/2022	\$98,400	
2022 Voice of the Customer Survey/Research	SPPG+Essman Research	3/21/2022	\$40,000	
Survey Services for 2022 Des Moines WMR - Contract 2	Snyder & Associates	3/22/2022	\$37,953	
Diversity and Inclusion Plan	Keen Independent Research	4/15/2022	\$49,985	
Inspection Services for Tenny Standpipe painting	KLM Engineering, Inc.	5/12/2022	\$60,295	
Engineering Services - Drafting water main relocations for City of Des Moines Hamilton Drain - Phase 3	Kirkham Michael	6/15/2022	\$20,000	
Engineering Svcs for City of DM E Court Ave from DM River to E14th St	Shive-Hattery	6/23/2022	\$112,500	
Grounds Maintenance Facility	SVPA Architects	6/30/2022	\$118,280	
Water Main Design for Windsor Heights 73rd St. Phase 1 Improvements	Bolten & Menk, Inc.	7/14/2022	\$30,000	
Development of Drafting Standards for Engineering Department	DTM Solutions	8/30/2022	\$13,200	
MicroStation Connect and OpenRoads Designer Training	DTM Solutions	8/30/2022	\$3,800	
Design, Bid, and Construction Administration Services - MWTP HVAC	Shive-Hattery	9/26/2022	\$25,750	
Engineering Services - Closed Loop Cooling Projects Planning Study	IMEG	9/27/2022	\$23,600	COMPLETE
Engineering Services - Vine Street Water Main Improvements	ISG, Inc.	11/4/2022	\$21,600	
FDWTP 5KV Study	KFI	11/16/2022	\$38,100	
DM River and NW Beaver Drive Geotechnical Exploration Services	Allender Butzke Engineers, Inc.	11/16/2022	\$15,000	
SWTP Transmission Improvements Design & Construction	Snyder & Associates	11/28/2022	\$1,078,400	
FDWTP Pumping Station HVAC - RTU Replacement	IMEG	12/29/2022	\$84,700	
Roof Relaxation Specs, Drawings and Bidding Documents	WTI	1/18/2023	\$7,250	
LP Moon ASR Pump Electrical Evaluation	AECOM	1/20/2023	\$7,800	
Hickman Feeder Main Relocation Design & Construction Services	Snyder & Associates	1/24/2023	\$82,700	
McMullen Truck Scale Improvements Engineering Services	Snyder & Associates	1/31/2023	\$63,500	
MWTP Chemical Feed Improvements Engineering Services	McClure Engineering	2/3/2023	\$106,670	
SWTP Capacity Expansion Design & Construction Services	HDR Engineering	2/6/2023	\$12,999,057	
Closed Loop Cooling Projects Design	IMEG	3/1/2023	\$47,300	COMPLETE
McKinley Ave Reconstruction from SW 9th to SW 14th	HR Green, Inc.	3/1/2023	\$70,500	
ASR at Polk County Pumping Station	Strand & Associates	3/14/2023	\$909,400	
2023 DM WMR Contract 2 Surveying Services	McClure Engineering	5/1/2023	\$64,746	
2023 DM WMR Contract 3 Surveying Services	McClure Engineering	5/1/2023	\$43,158	
Affordability Study	Rafelis	5/3/2023	\$79,785	
FDTP - Distribution Building Improvements	WJE	5/31/2023	\$70,000	
Maffitt East Feeder Main Control Valve Construction Testing	Allender Butzke Engineers, Inc.	6/6/2023	\$16,231	
Maffitt East Feeder Main Control Valve Design	Stanley Consultants	6/7/2023	\$40,000	
Maffit East Feeder Main Control Valve Cathodic Protect	Corpro Corrosion Companies	9/14/2023	\$5,000	
2023 DM WMR Contract 4 Surveying Services	Snyder & Associates	6/13/2023	\$26,624	
5 kV Switchgear Controls - Phase 1	KFI Engineers, Inc.	6/28/2023	\$119,000	
FDWTP Filtration Pilot Study	CDM Smith	6/29/2023	\$333,900	
FDWTP Filter Media Replacement	CDM Smith	7/14/2023	\$90,600	
Saylorville Water Treatment Plant RO Pilot	Wigen	8/9/2023	\$55,000	
Saylorville Water Treatment Plant RO Pilot	Harn	8/11/2023	\$62,750	
FDTP Closed Loop Cooling Systems	IMEG	8/15/2023	\$69,200	
FDTP - Distribution Building Improvements	SVPA Architects	8/30/2023	\$34,780	
2024 City of DM WMR Contract 1	McClure Engineering	8/31/2023	\$55,854	
MWTP Truck Scale Replacement	Allender Butzke Engineers, Inc.	8/31/2023	\$10,120.18	
FDTP Closed Loop Cooling Systems	Team Services, Inc	9/6/2023	\$960	
Maffitt East Feeder Main Control Valve Design	Corpro Corrosion Companies	9/14/2023	\$5,000	
McMullen Slaker Room Access Walkway	McClure Engineering	10/24/2023	\$5,000	
DMWW Grounds Maintenance Facility - Construction Services	Snyder & Associates	11/9/2023	\$111,322	
DMWW Grounds Maintenance Facility - Construction Testing	Allender Butzke Engineers, Inc.	11/9/2023	\$14,000	
2024 City of DM WMR Contract 3	McClure Engineering	11/2/2023	\$10,935	
DMWW FWTP Pump Station HVAC Upgrades	Team Services, Inc	11/14/2023	\$720	