



**IMU Board of Trustees of the
Electric, Water and Communications Utilities
March 22, 2021
City Hall Council Chambers
5:30 p.m.**

Agenda

1. Call to Order
2. Roll Call
3. Public Comments
4. Consent Agenda
 - A. Claims for March 22, 2021.
 - B. March 8 and 10, 2021 Minutes.
5. Electric Utility Action Items
 - A. Resolution authorizing the purchase of two 1-ton 4×4 crew cab pickups for the Electric Department.
 - B. Resolution setting public hearings on proposed plans, specifications, form of contract and estimate of costs and letting dates for the Downtown Underground Conversion project.
6. Electric Utility Informational Items
7. Water Utility Action Items
 - A. **North 8th St Water Main Improvements**

1. Public Hearing on the plans, specifications, form of contract and estimate of costs on the North 8th Street Water Main Improvements.
2. Resolution approving the plans, specifications, form of contract and estimate of costs on the North 8th Street Water Main Improvements.
3. Resolution awarding contract.
8. Water Utility Informational Items
9. Communications Utility Informational Items
10. Combined Electric, Water and Communications Utilities Action Items
 - A. Receive and file the Fiscal Year 20 Audit.
11. Combined Electric, Water and Communications Utilities Informational Items
12. Other Business
 - A. Enter into closed session in accordance with Iowa Code Section 21.5 (1)(i) to evaluate the professional competency of an individual whose appointment, hiring, performance, or discharge is being considered when necessary to prevent needless and irreparable injury to that individual's reputation and that individual requests a closed session.
13. Adjourn

IMU Regular Downstairs
Meeting Date: 03/22/2021

4. A.

Information

Subject

Claims for March 22, 2021.

Information

Fiscal Impact

Attachments

Claims

AP Check Preview

Date Range: All Dates

Indianola Municipal Utilities

Friday, March 19, 2021

9:27:50 AM

Vendor	Due Date	Notes	Terms	Bill Total	Discount	Interest	Amount Due	Payment	Invoice Number	Bill Number
Account To Be Paid From 0000-10120-999										
Avesis Third Party Administrators Inc - VEND-1108										
	3/31/2021	0321 Vision	Net 30	261.51	0.00	15.00	261.51	261.51	2629946	BL-5020
							261.51	261.51		
Big Ten Network - VEND-1096										
	3/30/2021	BTN	Net 30	1,732.50	0.00	15.00	1,732.50	1,732.50	52904	BL-5054
							1,732.50	1,732.50		
B-Line Studio - VEND-1141 - BL-5011										
	3/9/2021	Credit Refund	Net 30	15.72	0.00	0.00	15.72	15.72	00030492-7	BL-5011
							15.72	15.72		
Border States Industries Inc - VEND-1070										
	4/11/2021	2" PVC Conduit 20' and 2" PVC Couplings	Net 30	5,547.05	0.00	15.00	5,547.05	5,547.05	921702751	BL-5087
							5,547.05	5,547.05		
Caleb Vandelune - VEND-1141 - BL-5033										
	3/11/2021	Credit Refund	Net 30	20.65	0.00	0.00	20.65	20.65	00056943-7	BL-5033
							20.65	20.65		
Cappel's Ace Hardware - VEND-1204										
	3/29/2021	Lever flush	Net 30	6.99	0.00	15.00	6.99	6.99	000752	BL-5013
	4/4/2021	O rings and trash can	Net 30	20.17	0.00	15.00	20.17	20.17	000767	BL-5014
							27.16	27.16		
CDW Government - VEND-1029										
	4/8/2021	Cisco Smartnet	Net 30	26,490.14	0.00	15.00	26,490.14	26,490.14	9067072	BL-5046
	4/5/2021	VMware	Net 30	1,337.50	0.00	15.00	1,337.50	1,337.50	8980093	BL-5047
	4/2/2021	MS surface pro	Net 30	1,583.01	0.00	15.00	1,583.01	1,583.01	8812263	BL-5048
	3/27/2021	Surface cover	Net 30	98.92	0.00	15.00	98.92	98.92	8582252	BL-5078
							29,509.57	29,509.57		
Cedar Falls Utilities - VEND-1045 - BL-5093										
	4/4/2021	Fiber to 5Gb and wholesale bandwidth service	Net 30	6,700.00	0.00	15.00	6,700.00	6,700.00	Fiber to 5Gb & wholesale	BL-5093
							6,700.00	6,700.00		
Cintas Corporation - VEND-1007										

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Indianola Municipal Utilities

Friday, March 19, 2021

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	3/28/2021	1st Aid supplies/AED inspections	Net 30	70.93	0.00	15.00	70.93	70.93	8405025076	BL-5086
	4/9/2021	First aid supplies	Net 30	44.52	0.00	15.00	44.52	44.52	5054798547	BL-5035
							115.45	115.45		
CROSSROADS MOBILE MAINTENANCE - VEND-102507										
	3/11/2021	Unit 28 repairs	Open Terms	3,672.09	0.00	0.00	3,672.09	3,672.09	201S3460	BL-5088
							3,672.09	3,672.09		
Crystal Clear Communications LLC - VEND-1205										
	4/2/2021	0321 Newslatter and newsletter planning, layo	Net 30	4,000.00	0.00	15.00	4,000.00	4,000.00	CCC-0221	BL-5062
	4/3/2021	Skeleton Joe response	Net 30	250.00	0.00	15.00	250.00	250.00	CCC-0223	BL-5027
							4,250.00	4,250.00		
Des Moines Register Media - VEND-1010										
	3/3/2021	Board of trustee minutes	Net 30	402.53	0.00	15.00	402.53	402.53	0003734259	BL-5061
							402.53	402.53		
Dust Pros Janitorial - VEND-1011										
	4/11/2021	Cleaning supplies-WA	Net 30	270.50	0.00	15.00	270.50	270.50	2337	BL-5094
	4/17/2021	0321 Cleaning-Util Svcs	Net 30	749.00	0.00	15.00	749.00	749.00	2338	BL-5100
	4/17/2021	Cleaning supplies-Util Svcs	Net 30	34.51	0.00	15.00	34.51	34.51	2339	BL-5101
	4/10/2021	0321 Scrub And Buff-WA	Net 30	180.00	0.00	15.00	180.00	180.00	2336	BL-5041
							1,234.01	1,234.01		
Dwight Rivera - VEND-1141 - BL-5009										
	3/9/2021	Credit Refund	Net 30	11.00	0.00	0.00	11.00	11.00	00052061-2	BL-5009
							11.00	11.00		
ECHO Group, Inc - VEND-1061										
	4/8/2021	1/2" PVC COUPLER	Net 30	8.66	0.00	15.00	8.66	8.66	S8883253.001	BL-5060
							8.66	8.66		
Forget Rental, Norman - VEND-1141 - BL-5010										
	3/9/2021	Credit Refund	Net 30	4.60	0.00	0.00	4.60	4.60	00013372-6	BL-5010
							4.60	4.60		
Fox Sports Midwest - VEND-1097										
	3/24/2021	EXP Basic	Net 30	4,327.40	0.00	15.00	4,327.40	4,327.40	S52977	BL-5053
							4,327.40	4,327.40		
GRAYMONT WESTERN LIME INC - VEND-101387										

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	3/3/2021	High calcium quicklime	Open Terms	4,723.15	0.00	0.00	4,723.15	4,723.15	163691	BL-5024
							4,723.15	4,723.15		
Hearst Television Inc - VEND-1131										
	4/30/2021	KCCI	Net 30	5,149.60	0.00	15.00	5,149.60	5,149.60	376045	BL-5056
							5,149.60	5,149.60		
IEUSTA - VEND-23614										
	3/16/2021	2021 Membership Dues	Open Terms	150.00	0.00	0.00	150.00	150.00	2021 Membership Dues	BL-5090
							150.00	150.00		
IMU - VEND-8629										
	3/2/2021	Utilities-WA	Open Terms	13,213.79	0.00	0.00	13,213.79	13,213.79	10099311	BL-5025
							13,213.79	13,213.79		
ITRON INC. - VEND-25704										
	9/12/2020	Meter reading equipment	Open Terms	618.24	0.00	0.00	618.24	618.24	567313	BL-5028
	10/1/2020	Meter reading equipment	Open Terms	618.23	0.00	0.00	618.23	618.23	558602	BL-5029
	3/13/2021	Meter reading equipment	Open Terms	649.14	0.00	0.00	649.14	649.14	584573	BL-5099
							1,885.61	1,885.61		
John Deere Financial - VEND-1106										
	4/8/2021	Windshield solvent and diesel fluid	Net 30	59.92	0.00	15.00	59.92	59.92	3099358	BL-5040
							59.92	59.92		
Kimball Construction - VEND-1146										
	4/14/2021	0321 Duct Installs	Net 30	1,537.10	0.00	15.00	1,537.10	1,537.10	0321 Duct Installs	BL-5091
							1,537.10	1,537.10		
Mahaska Communications Group - VEND-1017										
	3/31/2021	0321 T1 Transport	Net 30	165.00	0.00	15.00	165.00	165.00	0321 T1 Transport	BL-5050
							165.00	165.00		
Marquee Sports Network - VEND-1165										
	3/30/2021	0221 Expanded Basic	Net 30	2,594.20	0.00	15.00	2,594.20	2,594.20	0221 Expanded Basic	BL-5058
							2,594.20	2,594.20		
McCoy Hardware Inc - VEND-1035										

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	3/31/2021	Nyl plate	Net 30	2.32	0.00	15.00	2.32	2.32	A482077	BL-5026
	4/4/2021	Valves and nozzles	Net 30	51.51	0.00	15.00	51.51	51.51	A482669	BL-5015
							53.83	53.83		
Metlife - Group Benefits - VEND-1109										
	3/31/2021	0321 Dental	Net 30	1,980.15	0.00	15.00	1,980.15	1,980.15	0321 Dental	BL-5021
							1,980.15	1,980.15		
Mid American Energy Co - VEND-1018										
	3/31/2021	Gas-909 E Hillcrest	Net 30	12.13	0.00	15.00	12.13	12.13	509713494	BL-5023
	4/3/2021	Annual 15 pole attachments	Net 30	75.00	0.00	15.00	75.00	75.00	509847079	BL-5102
							87.13	87.13		
Midwest Alarm Services - VEND-1116										
	1/7/2021	Service call	Net 30	20.00	0.00	15.00	20.00	20.00	338083	BL-5016
							20.00	20.00		
MUNICIPAL ENERGY AGENCY OF NEBRASKA - VEND-35805										
	3/30/2021	Purchased power	Net 30	794,285.99	0.00	15.00	794,285.99	794,285.99	301704	BL-5045
							794,285.99	794,285.99		
Mutual Of Omaha - VEND-1107										
	3/31/2021	0321 Premiums	Net 30	1,427.89	0.00	15.00	1,427.89	1,427.89	1177591154	BL-5019
							1,427.89	1,427.89		
NAPA AUTO PARTS - VEND-35949										
	3/12/2021	Oil and filter	Open Terms	36.38	0.00	0.00	36.38	36.38	987379 & 987413	BL-5038
	3/12/2021	Boxed miniatures	Open Terms	22.90	0.00	0.00	22.90	22.90	987380	BL-5039
							59.28	59.28		
National Cable Television Cooperative, Inc. - VEND-1095										
	4/14/2021	0221 Cable	Net 30	40,604.30	0.00	15.00	40,604.30	40,604.30	21010709-01	BL-5059
							40,604.30	40,604.30		
NewCom Technologies, Inc - VEND-1091										
	4/17/2021	Streetscape underground fiber	Net 30	23,496.00	0.00	15.00	23,496.00	23,496.00	48861	BL-5103
							23,496.00	23,496.00		
Nexstar Broadcasting, Inc - VEND-1092										
	3/31/2021	WHO - credit	Net 30	4,185.85	0.00	15.00	4,185.85	4,185.85	375468	BL-5051

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	4/30/2021	WGN	Net 30	292.60	0.00	15.00	292.60	292.60	374816	BL-5052
							4,478.45	4,478.45		
Nolasoft Development - VEND-1021										
	4/16/2021	Quarterly Website hosting i-m-u.com	Net 30	120.00	0.00	15.00	120.00	120.00	8663	BL-5092
	4/7/2021	IMU Website updates	Net 30	2,415.00	0.00	15.00	2,415.00	2,415.00	8652	BL-5044
							2,535.00	2,535.00		
Norwalk Ready Mix Concrete, Inc. - VEND-1119										
	4/3/2021	M-4 Limestone	Net 30	1,370.00	0.00	15.00	1,370.00	1,370.00	273210	BL-5042
							1,370.00	1,370.00		
Peggy Foote - VEND-1141 - BL-5104										
	3/19/2021	Credit Refund	Net 30	65.04	0.00	0.00	65.04	65.04	00049244-6	BL-5104
							65.04	65.04		
PITNEY BOWES - VEND-42424										
	3/4/2021	Last leasing payment	Open Terms	733.08	0.00	0.00	733.08	733.08	3313111028	BL-5018
							733.08	733.08		
Power & Tel - VEND-1037										
	3/30/2021	Fiber drops	Net 30	11,600.80	0.00	15.00	11,600.80	11,600.80	7080176-01	BL-5076
	4/7/2021	FIBER PATCHCORD - CABINETS	Net 30	486.14	0.00	15.00	486.14	486.14	7164027-00	BL-5077
							12,086.94	12,086.94		
Prolmage Sign & Lighting - VEND-1150										
	3/20/2021	Electric decals	Net 30	56.50	0.00	15.00	56.50	56.50	3374	BL-5089
							56.50	56.50		
SHRED IT USA - VEND-103010										
	3/8/2021	Shred service	Open Terms	90.19	0.00	0.00	90.19	90.19	8181614824	BL-5022
							90.19	90.19		
SKARSHAUG TESTING LABORATORY INC - VEND-50410										
	2/26/2021	High voltage glove testing	Open Terms	508.88	0.00	0.00	508.88	508.88	250066	BL-5085
							508.88	508.88		
STATE HYGIENIC LABORATORY - VEND-23245										
	3/1/2021	Testing	Open Terms	202.50	0.00	0.00	202.50	202.50	204497	BL-5017
							202.50	202.50		

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TEGNA - VEND-1148										
	4/30/2021	WOI and KCWI	Net 30	5,926.75	0.00	15.00	5,926.75	5,926.75	376997	BL-5057
							5,926.75	5,926.75		
Terry-Durin Co - VEND-1038										
	4/10/2021	1/2" INNER DUCT COUPLERS	Net 30	422.65	0.00	15.00	422.65	422.65	76637-00	BL-5074
							422.65	422.65		
TrueNorth Companies LC - VEND-1100										
	3/18/2021	February safety meeting	Net 30	66.67	0.00	15.00	66.67	66.67	114075	BL-5031
							66.67	66.67		
UPHDM Occupational Medicine - VEND-1101										
	2/21/2021	PreEmployment testing	Net 30	262.00	0.00	15.00	262.00	262.00	58930	BL-5034
							262.00	262.00		
VAN WERT INC - VEND-101069										
	3/10/2021	Neptun and meter connections	Open Terms	10,819.70	0.00	0.00	10,819.70	10,819.70	228274	BL-5037
	3/12/2021	Neptune	Open Terms	8,972.80	0.00	0.00	8,972.80	8,972.80	228284	BL-5096
							19,792.50	19,792.50		
VERIZON WIRELESS - VEND-3535										
	3/1/2021	Hot spots	Open Terms	311.52	0.00	0.00	311.52	311.52	9874453304	BL-5043
							311.52	311.52		
VESSCO INC - VEND-57620										
	3/9/2021	Seal, sensor and cable	Open Terms	1,920.68	0.00	0.00	1,920.68	1,920.68	82700	BL-5095
							1,920.68	1,920.68		
Warren County Engineer - VEND-1102										
	4/1/2021	0221 Fuel Distribution	Net 30	1,999.38	0.00	15.00	1,999.38	1,999.38	0221 Fuel Distribution	BL-5030
							1,999.38	1,999.38		
WESCO - VEND-60220										
	3/17/2021	Tools	Open Terms	95.02	0.00	0.00	95.02	95.02	643610	BL-5097
	3/17/2021	Insulators - 5/8" Spring Washers	Open Terms	403.73	0.00	0.00	403.73	403.73	643611	BL-5098
	3/10/2021	LED lights	Open Terms	301.74	0.00	0.00	301.74	301.74	634227	BL-5080
	3/13/2021	Stand Off Plugs	Open Terms	968.35	0.00	0.00	968.35	968.35	639414	BL-5081
	3/6/2021	Primary Cable Mounting bracket	Open Terms	337.26	0.00	0.00	337.26	337.26	629860	BL-5082

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Friday, March 19, 2021

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	3/6/2021	Locate Paint - Insulators	Open Terms	859.10	0.00	0.00	859.10	859.10	630497	BL-5083
	3/6/2021	1/0 Primary Cable - 350 URD	Open Terms	17,885.05	0.00	0.00	17,885.05	17,885.05	630498	BL-5084
							20,850.25	20,850.25		
YMCA Of Greater Des Moines - VEND-1169										
	3/31/2021	0321 Employee wellness	Net 30	25.00	0.00	15.00	25.00	25.00	CPD012604	BL-5032
							25.00	25.00		
			Check Count: 55			Totals:	\$1,023,036.82	\$1,023,036.82		

IMU Regular Downstairs

4. B.

Meeting Date: 03/22/2021

Information

Subject

March 8 and 10, 2021 Minutes.

Information

Fiscal Impact

Attachments

March 8 Minutes

March 10 Minutes

BOARD OF TRUSTEE MINUTES – REGULAR SESSION – March 8, 2021

The Board of Trustees met in regular session at 5:30 p.m. on March 8, 2021, in the City Hall Council Chambers. Chairperson Adam Voigts called the meeting to order and on roll call the following members were present: Deb Richardson, Adam Voigts, Mike Rozga and Lesley Forbush. Absent: Lori Smith.

The consent agenda consisting of the following was approved on a motion by Richardson and seconded by Rozga. Question was called for and on voice vote the Chairperson declared the motion carried unanimously.

- Claims list for February 25 and March 8, 2021.
- Minutes from February 22, 2021.

In public comment, Pam Pepper, 308 N 16th St, asked the Board to consider partnering with the City to educate the public on how to read utility bills, learn what factors effect utility bills, and how to find information on proposed rate increases. Board Members agreed this was a good idea. It was also suggested to include information on social media and in newsletters.

Mike Metcalf, Electric Superintendent reported staff is working on projects and developments.

Lou Elbert, Water Superintendent, stated staff is working on repairs. He also explained how the department fixes concrete due to water main breaks.

Resolution 2021-06 approving an intergovernmental agreement between Indianola Municipal Utilities and City of Pella Telecommunications Utility providing for joint ownership and use of certain facilities and related matters was introduced on a motion by Rozga and seconded by Richardson. On roll call, the vote was AYES: Richardson, Voigts, Rozga and Forbush. NAYS: None. Whereupon the Chairperson declared the motion carried unanimously.

Richardson moved to set a public hearing for proposed telecommunication rate changes for April 12, 2021 at 5:30 pm in the City Hall Council Chambers and Rozga seconded it. Question was called for and on voice vote the Chairperson declared the motion carried unanimously.

Kurt Ripperger, Telecommunications Superintendent, reported staff is working on fiber installations and performing site surveys. Installations are being booked two weeks out.

It was moved by Rozga and seconded by Richardson to approve utility accounts to be written off and to use any customary collection method, including submission to the state offset program, and to charge any applicable collection fees. Question was called for and on voice vote the Chairperson declared the motion carried unanimously.

In combined information items, General Manager Des Planques asked customers with billing questions to contact the billing department.

Rozga moved at 6:00 pm to enter into closed session in accordance with Iowa Code Section 388.9(1) to discuss marketing and pricing strategies and proprietary information of the telecommunications division whose competitive position will be harmed by public disclosure that is not required of potential or actual competitors and no public purpose is served by such disclosure. Richardson seconded the motion. On roll call, the vote was

AYES: Richardson, Voigts, Rozga and Forbush. NAYS: None. Whereupon the Chairperson declared the motion carried unanimously.

It was moved by Richardson and seconded by Rozga at 6:19 pm to exit closed session. On roll call, the vote was AYES: Richardson, Voigts, Rozga and Forbush. NAYS: None. Whereupon the Chairperson declared the motion carried unanimously.

No action was taken on items discussed in closed session.

Meeting adjourned at 6:20 pm on a motion by Richardson and seconded by Rozga.

\s\ Jackie Raffety, Deputy City Clerk

Special Joint Session – City Council and IMU Board of Trustees – March 10, 2021

The City Council and IMU Board of Trustees met in special session at 6:00 p.m. on March 10, 2021, in the City Hall Council Chambers. Mayor Pam Pepper called the meeting to order and on roll call the following Council members were present: Heather Hulen, John Parker, Gwen Schroder, Greta Southall (via Zoom), Greg Marchant and the following Board Members were present:, Deb Richardson, Adam Voigts and Mike Rozga and Lesley Forbush and Lori Smith via Zoom. Absent: Council Member Bob Kling.

Gail Webb and Alesha Wilhite of Holmes Murphy gave a presentation regarding health insurance. Highlights of the presentation included a review of current benefits, the budget and fund balance, medical benchmarking and 2021 considerations.

Staff, Council and Board Members discussed the fund balance.

Marchant moved and Parker seconded to adjourn the meeting at 7:11 pm.

Pam Pepper, Mayor

Adam Voigts, Chairperson, IMU Board

ATTEST:

Andrew J. Lent, City Clerk/CFO

Information

Subject

Resolution authorizing the purchase of two 1-ton 4×4 crew cab pickups for the Electric Department.

Information

The two trucks will replace a 2011 Ford ¾ ton 4×4 extended cab and a 2008 Ford ¾ ton 4×4 extended cab with both being sold at auction. The new trucks are in the 2021/2022 Capital Budget. Estimated delivery of the trucks is the Fall of 2021.

Company	Price each	Total
Stew Hansen Dodge City	\$30,922. + tax	\$61,844 + tax
DeYarman Ford	\$36,913.40 + tax	\$73,826.80 + tax

Roll call is in order.

Fiscal Impact

Attachments

Resolution Authorizing Purchase
Bids

Indianola Municipal Utilities

RESOLUTION NO 2021-

**RESOLUTION AUTHORIZING THE PURCHASE OF TWO 1-TON 4X4 CREW CAB PICKUPS
FOR THE ELECTRIC DEPARTMENT**

WHEREAS, Indianola Municipal Utilities owns a 2011 Ford ¾ ton 4x4 extended cab truck and a 2008 Ford ¾ ton 4x4 extended cab truck which are used by the Electric Department; and

WHEREAS, the Fiscal Year 22 capital budget includes funding for two vehicles in the Electric Department; and

WHEREAS, the Electric Department will sell the 2008 and 2011 vehicles at auction; and

WHEREAS, the Electric Department is recommending the purchase of two pickups from Stew Hansen Dodge City as bid in the attached document.

NOW, THEREFORE BE IT RESOLVED, by the Indianola Board of Trustees that

1. The 2008 and 2011 Ford trucks shall be sold at auction
2. The two 2021 Dodge Ram 3500 Crew Cab Tradesman pickups shall be purchased from Stew Hansen Dodge City in an amount not to exceed \$30,922 plus tax per vehicle
3. The Electric Department Superintendent is authorized and directed to execute on behalf of Indianola Municipal Utilities the documents required to purchase the vehicles.

Approved this 22nd day of March 2021.

Adam Voigts, Chairperson

ATTEST:

Jackie Raffety, Deputy City Clerk



Request for Proposal (RFP)
For
Two - 1 Ton 4X4 Crew Cab Trucks

Issued by:
Indianola Municipal Utilities (IMU)
Electric Department

Bid Mailing Address:
Indianola Municipal Utilities
c/o Mike Metcalf, Crew Cab Truck RFP
PO Box 356
Indianola, Iowa 50125

Bid Drop Off Location:
Indianola Municipal Utilities
210 West 2nd Ave.
Indianola, Iowa 50125

Bid Email Address:
mmetcalf@indianolaiowa.gov

All proposals must be submitted in person, by mail or by email.

No later than 10:00 am

On March 17, 2021

LATE RFP's WILL BE REJECTED

Further information or questions regarding this RFP may be directed to:

Mike Metcalf – Electric Superintendent

Email: mmetcalf@indianolaiowa.gov

Phone: 515-962-5305



IMU is requesting bids for the following two 1-Ton, 4X4, crew cab trucks with the listed minimum requirements. Please include a specification sheet, bid document with company letterhead, this page of the RFP document (Yes/No Compliance) and lead time for IMU to take possession.

Overall Unit Specs	Compliance	
	Yes	No
1-Ton	X	
Crew Cab	X	
Exterior Color - White	X	
8' Box	X	
6.2 Liter Gas Engine	X	
6-Speed Automatic Transmission	X	
Tow/Haul Mode	X	
4.10 Rear Axle Ratio	X	
4-Wheel Antilock Disk Brakes	X	
Locking/Limited Slip Rear Differential	X	
11,400 Pound GVWR	X	
14,000 Pound Towing Capacity	X	
4-Wheel Drive	X	
17" Painted Steel Wheels	X	
17" "AT" Tires – 10-Ply	X	
17" "AT" 10-Ply Spare Tire	X	
40/20/40 Front Split Bench	X	
Cruise Control	X	
Tilt Steering Column	X	
Power Windows and Locks	X	
Air Conditioning	X	
Power Steering	X	
Daytime Running Lamps	X	
Intermittent Windshield Wiper Control	X	
Vinyl Seats	X	
Vinyl/Rubberized Floor Covering	X	
Spray-on Bedliner – Includes Over The Rails	X	
Tow Package – Includes Class 4 Hitch	X	
Tow Mirrors	X	
Integrated Trailer Brake Controller	X	

Upfitter Switches	X	
Backup Camera	X	
AM/FM Radio	X	
Driver and Passenger Air Bag Restraint System	X	
12-Volt Power Outlet and USB Port(s) – Dash Mounted	X	
Hands Free/Bluetooth Capable	X	
Exterior Temperature Display	X	
Instrument Cluster – Speedometer – Fuel Level – Engine Temperature, Tachometer, Voltage and Oil Pressure	X	

Dealership Submitting RFP: Stew Hansen Dodge City

Dealership representative name: Harry Bougher

Dealership representative signature: Harry Bougher

Vehicle brand: RAM

Vehicle model: 3500 Crew Cab Tradesman

Price of Spec'd vehicles: \$30,922

Estimated lead time for delivery of both vehicles: Fall 2021

IMU reserves the right to accept or reject any or all RFP's.

2020 RAM 3500 TRADESMAN CREW CAB 4X4 8' BOX





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Overall Unit Specs	Compliance	
	Yes	No
1-Ton	✓	
Crew Cab	✓	
Exterior Color - White	✓	
8' Box	✓	
6.2 Liter Gas Engine	✓	
6-Speed Automatic Transmission	✓	
Tow/Haul Mode	✓	
4.10 Rear Axle Ratio	✓	
4-Wheel Antilock Disk Brakes	✓	
Locking/Limited Slip Rear Differential	✓	
11,400 Pound GVWR	✓	
14,000 Pound Towing Capacity	✓	
4-Wheel Drive	✓	
17" Painted Steel Wheels	✓	
17" "AT" Tires – 10-Ply	✓	
17" "AT" 10-Ply Spare Tire	✓	
40/20/40 Front Split Bench	✓	
Cruise Control	✓	
Tilt Steering Column	✓	
Power Windows and Locks	✓	
Air Conditioning	✓	
Power Steering	✓	
Daytime Running Lamps	✓	
Intermittent Windshield Wiper Control	✓	
Vinyl Seats	✓	
Vinyl/Rubberized Floor Covering	✓	
Spray-on Bedliner – Includes Over The Rails	✓	
Tow Package – Includes Class 4 Hitch	✓	
Tow Mirrors	✓	
Integrated Trailer Brake Controller	✓	

10 Speed
Standard

4.10 Not
Available
4.30 needed
to achieve
towing cap.

18"
Required
for
GVWR
Requirements

Spray
Line-X
Inc.

Upfitter Switches	✓	
Backup Camera	✓	
AM/FM Radio	✓	
Driver and Passenger Air Bag Restraint System	✓	
12-Volt Power Outlet and USB Port(s) – Dash Mounted	✓	
Hands Free/Bluetooth Capable	✓	
Exterior Temperature Display	✓	
Instrument Cluster – Speedometer – Fuel Level – Engine Temperature, Tachometer, Voltage and Oil Pressure	✓	

Dealership Submitting RFP:

DeVarman Ford-Indianda

Dealership representative name:

TRAVIS KIPP

Dealership representative signature:

TJK.

Vehicle brand:

FORD

Vehicle model:

F-350

Price of Spec'd vehicles:

\$36,913.⁴⁰ EACH / \$73,826.⁸⁰ BOTH

Estimated lead time for delivery of both vehicles:

4 months

IMU reserves the right to accept or reject any or all RFP's.

IMU Regular Downstairs

5. B.

Meeting Date: 03/22/2021

Information

Subject

Resolution setting public hearings on proposed plans, specifications, form of contract and estimate of costs and letting dates for the Downtown Underground Conversion project.

Information

Roll call is in order.

Fiscal Impact

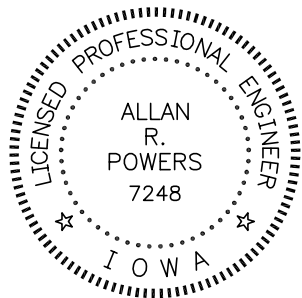
Attachments

Construction Contract
Public Notice - Contract
Materials Contract
Public Notice - Materials
Resolution Setting Hearing

INDIANOLA MUNICIPAL UTILITIES

Downtown Underground Conversion Project CONSTRUCTION CONTRACT

CONSTRUCTION SPECIFICATIONS AND DRAWINGS



I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT
WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL
SUPERVISION AND THAT I AM A DULY LICENSED PRO-
FESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

(signature)

(date)

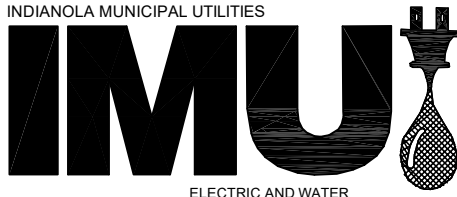
ALLAN R. POWERS, IOWA REG. NO. 07248

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2022

PAGES OR SHEETS COVERED BY THIS SEAL:

As listed on Index Page 00000-1

INDIANOLA MUNICIPAL UTILITIES



ELECTRIC AND WATER

ISSUED FOR BIDDING
March 22, 2021

P & E ENGINEERING CO.
POWER SYSTEM ANALYSIS AND DESIGN

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Construction Contract
Index

SECTION TITLE

Bidding Requirements

00050	Notice to Bidders and Notice of Public Hearing
00200	Instructions to Bidders
00410	Bid Form

Contract Documents

00410	Bid Proposal and Bidding Form (as submitted by successful bidder)
00520	Agreement
00610	Performance Bond
00615	Payment Bond
00700	General Conditions of the Contract {These are the Standard General Conditions of the Construction Contract as published by the Engineers Joint Contract Documents Committee (EJCDC) as Document No. C700 (2018 Edition)}
00800	Supplementary Conditions
00850	IMU Safety Requirements

Construction Specifications

01000	General Requirements
16402	Underground Distribution Construction
16403	Premise Wiring Modifications
16910	Materials
16920	Staking Sheets
16921	Conduit Schedule
16922	Secondary Cable Schedule
16923	Building Service Schedule
16924	Meter Stack Schedule
16925	Module Drawings
E9731-019	Major Project Labor Units
E9731-020	Index and Drawings

Construction Drawings

See Drawing Index on Sheet E9790-001

NOTICE OF HEARING AND LETTING
Downtown Underground Conversion Project
Construction Contract

Sealed proposals will be received by the Board of Trustees of Indianola Municipal Utilities (IMU), Indianola, Iowa, (Owner) at the Indianola City Hall at 110 N. First St., Indianola, Iowa until 2:00 P.M. local time on April 20, 2021 for a project identified as DOWNTOWN UNDERGROUND CONVERSION PROJECT, and as described in detail in the specifications for the project now on file in the office of the City Clerk/CFO. Proposals will be opened in public session at that time. Proposals will be acted upon by the Board of Trustees at a meeting to be held in the Council Chambers of the Indianola City Hall at 110 N. First St, Indianola, Iowa at 5:30 P.M. local time on April 26, 2021 or at such later time and place as may then be fixed. At that time and place a hearing will be held on the proposed plans, specifications, form of contract and estimate of cost for the improvements, and at the hearing any interested person may appear and file objections to the project or to the cost of the improvements.

The extent of the improvements is generally bounded by First St., B.St., First Ave., and Euclid Ave., all within the city limits of Indianola and in Warren County, Iowa.

The Work includes the installation of new underground conduit and concrete encased duct banks, 13 kV class and 600 volt class underground distribution cable, and related pad mounted equipment; and conversion of existing building wiring to accommodate the change from overhead to underground service.

Each proposal shall be sealed in an envelope marked "BIDS FOR DOWNTOWN UNDERGROUND CONVERSION PROJECT". Each bid must be accompanied in a separate envelope by a bid bond, certified check or cashier's check drawn on a State of Iowa or federally chartered bank, or a certified share draft on a State of Iowa or federally chartered credit union, in an amount not less than five per cent (5%) of the total value of the Proposal, and made payable to the Owner as a security that the bidder will enter into a contract for the Work within ten (10) days after the award of the contract to such bidder.

Bidders shall not be permitted to withdraw their bids for a period of thirty (30) days after they are opened.

Payment will be made to the contractor in an amount of 95% of the completed contract value, upon acceptance of the improvements by IMU. The balance of the amount due the successful bidder will be paid not earlier than 31 days from the final acceptance of the improvements by IMU, subject to the conditions and in accordance with the provisions of Chapter 384 and 573 of the Code of Iowa

Payment to the Contractor for completion of the improvements will be made in cash derived from available cash on hand from revenue and such other sources as may be available to IMU. The City of Indianola shall not incur any general obligation for the Improvements. The contract for the furnishing of the improvements shall not constitute a general obligation of the City of Indianola nor be payable in any manner by taxation.

The successful bidder will be required to furnish a performance bond and a payment bond in an amount equal to 100% of the contract price, the bonds to be issued by a responsible surety approved by IMU, and shall guarantee the faithful performance of the contract and the terms and conditions contained in it, and save harmless IMU from claims and damages of any kind caused by the operations of the Contractor.

If the successful bidder fails to enter into a contract with IMU for the Improvements or furnish bonds as required by law, then the certified check or cashier's check deposited by the Contractor shall be cashed, or the bid bond declared forfeited, and proceeds retained by IMU as agreed liquidated damages.

Work is to commence on or about May 1, 2021, unless an earlier start date is negotiated between the Owner and the successful bidder. Work must be substantially complete by December 1, 2022 with all work completed by December 20, 2022.

Plans and specifications governing the proposed improvements have been prepared by P&E Engineering Co., 245 South Fifth Street, P.O. Box 620, Carlisle, Iowa 50047. The plans and specifications, prior proceedings of IMU referring to and defining the improvements and a proposed contract are hereby made a part of this notice by reference. The proposed contracts shall be executed in accordance with them. Copies of the plans and specifications may be obtained from P & E Engineering Co.

By virtue of statutory authority a preference will be given to products and provisions grown and produced within the State of Iowa and Iowa domestic labor.

IMU reserves the right to reject any or all proposals and to waive informalities. Published upon order of the Board of Trustees Indianola Municipal Utilities, Indianola, Iowa.

ANDY LENT
City Clerk / CFO

**INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Construction Contract
Bidding Requirements
Section 00200 – Instructions to Bidders**

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**INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
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Bidding Requirements
Section 00200 – Instructions to Bidders**

ARTICLE 1—DEFINED TERMS

- 1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:
- A. *Issuing Office*—The office from which the Bidding Documents are to be issued, and which registers plan holders. The Issuing Office for this project will be P & E Engineering Co., 245 S. 5th Street, PO Box 620, Carlisle, IA 50047.

ARTICLE 2—BIDDING DOCUMENTS

- 2.01 Bidder shall obtain a complete set of Bidding Requirements and proposed Contract Documents (together, the Bidding Documents). See the Agreement for a list of the Contract Documents. It is Bidder's responsibility to determine that it is using a complete set of documents in the preparation of a Bid. Bidder assumes sole responsibility for errors or misinterpretations resulting from the use of incomplete documents, by Bidder itself or by its prospective Subcontractors and Suppliers.
- 2.02 Bidding Documents are made available for the sole purpose of obtaining Bids for completion of the Project and permission to download or distribution of the Bidding Documents does not confer a license or grant permission or authorization for any other use. Authorization to download documents, or other distribution, includes the right for plan holders to print documents solely for their use, and the use of their prospective Subcontractors and Suppliers, provided the plan holder pays all costs associated with printing or reproduction. Printed documents may not be re-sold under any circumstances.
- 2.03 Bidder may register as a plan holder and obtain complete sets of Bidding Documents in printed or electronic (digital) format (compact disk, USB, or direct transmittal) from the Issuing Office. Bidders may rely that sets of Bidding Documents obtained from the Issuing Office are complete, unless an omission is blatant. Registered plan holders will receive Addenda issued by Owner.
- 2.04 Plan rooms (including construction information subscription services, and electronic and virtual plan rooms) may distribute the Bidding Documents, or make them available for examination. Those prospective bidders that obtain an electronic (digital) copy of the Bidding Documents from a plan room are encouraged to register as plan holders from the Issuing Office. Owner is not responsible for omissions in Bidding Documents or other documents obtained from plan rooms, or for a Bidder's failure to obtain Addenda from a plan room.
- 2.05 *Electronic Documents*
- A. Bidding Documents will be made available as Electronic Documents in the following manner.
1. Bidding Documents will be provided in Adobe PDF (Portable Document Format) (.pdf) Version 1.4. It is the intent of the Engineer and Owner that such Electronic Documents are to be exactly representative of the paper copies of the documents. However, because the Owner and Engineer cannot totally control the transmission and receipt of Electronic Documents nor the Contractor's means of reproduction of such documents, the Owner and Engineer cannot and do not guarantee that Electronic Documents and

**INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
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Bidding Requirements
Section 00200 – Instructions to Bidders**

reproductions prepared from those versions are identical in every manner to the paper copies.

- B. The Bidder may use and rely upon complete sets of Electronic Documents of the Bidding Documents, described in Paragraph 2.06.A above. However, Bidder assumes all risks associated with differences arising from transmission/receipt of Electronic Documents versions of Bidding Documents and reproductions prepared from those versions and, further, assumes all risks, costs, and responsibility associated with use of the Electronic Documents versions to derive information that is not explicitly contained in printed paper versions of the documents, and for Bidder's reliance upon such derived information.
- C. After the Contract is awarded, the Owner will provide or direct the Engineer to provide for the use of the Contractor documents that were developed by Engineer as part of the Project design process, as Electronic Documents in native file formats.
 - 1. Electronic Documents that are available in native file format include:
 - a. Bill of Material (Refer to Section 16910 of the Contract)
 - 2. Release of such documents will be solely for the convenience of the Contractor. No such document is a Contract Document.
 - 3. The Contractor shall take appropriate measures to verify that any electronic/digital information provided in Electronic Documents is appropriate and adequate for the Contractor's specific purposes.
 - 4. In no case will the Contractor be entitled to additional compensation or time for completion due to any differences between the actual Contract Documents and any related document in native file format.

ARTICLE 3—QUALIFICATIONS OF BIDDERS

- 3.01 To demonstrate Bidder's qualifications to perform the Work, after submitting its Bid and within five (5) days of Owner's request, Bidder must submit the following information:
 - A. Written evidence establishing its qualifications such as financial data, previous experience, and present commitments.
 - B. A written statement that Bidder is authorized to do business in the state where the Project is located, or a written certification that Bidder will obtain such authority prior to the Effective Date of the Contract.
 - C. Bidder's state or other contractor license number, if applicable.
 - D. Subcontractor and Supplier qualification information.
 - E. Other required information regarding qualifications.

**INDIANOLA MUNICIPAL UTILITIES
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Section 00200 – Instructions to Bidders**

- 3.02 A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.
- 3.03 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.

ARTICLE 4—PRE-BID CONFERENCE

- 4.01 A non-mandatory pre-bid conference will be held at 1:30 PM on March 30, 2021 at the Indianola Municipal Utility office building at 210 W Second Ave. in Indianola, Iowa. Contractors may attend in person or by a remote video link. Log-in information will be provided to all registered plan holders. Representatives of Owner and Engineer will be available to discuss the Project. Bidders are encouraged to attend and participate in the conference; however, attendance at this conference is not required to submit a Bid.
- 4.02 Information presented at the pre-Bid conference does not alter the Contract Documents. Owner will issue Addenda to make any changes to the Contract Documents that result from discussions at the pre-Bid conference. Information presented, and statements made at the pre-bid conference will not be binding or legally effective unless incorporated in an Addendum.

ARTICLE 5—SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE

5.01 *Site and Other Areas*

- A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.

5.02 *Existing Site Conditions*

A. *Subsurface and Physical Conditions; Hazardous Environmental Conditions*

1. The Supplementary Conditions identify the following regarding existing conditions at or adjacent to the Site:
 - a. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data.
 - b. Those drawings known to Owner of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data.
 - c. Reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
 - d. Technical Data contained in such reports and drawings.

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2. Owner will make copies of reports and drawings referenced above available to any Bidder on request. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, as provided in the General Conditions, has been identified and established in the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.
 3. If the Supplementary Conditions do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.
- B. *Underground Facilities:* Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05 of the General Conditions, and not in the drawings referred to in Paragraph 5.02.A of these Instructions to Bidders. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.
- 5.03 *Other Site-related Documents*
- A. No other Site-related documents are available.
- 5.04 *Site Visit and Testing by Bidders*
- A. Bidder is required to visit the Site and conduct a thorough visual examination of the Site and adjacent areas. During the visit the Bidder must not disturb any ongoing operations at the Site.
- B. A Site visit will be scheduled following the pre-bid conference.
- C. Bidders visiting the Site are required to arrange their own transportation to the Site.
- D. All access to the Site other than during a regularly scheduled Site visit must be coordinated through the following Owner contact. Bidder must conduct the required Site visit during normal working hours.
- Mr. Mike Metcalf
Indianola Municipal Utilities
515-975-5447 (cell)
- E. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.
- F. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder general access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site. Bidder is responsible for establishing access needed to reach specific selected test sites.
- G. Bidder must comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established

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by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.

- H. Bidder must fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

5.05 *Owner's Safety Program*

- A. Site visits and work at the Site may be governed by an Owner safety program. If an Owner safety program exists, it will be noted in the Supplementary Conditions.

5.06 *Other Work at the Site*

- A. Reference is made to Article 8 of the Supplementary Conditions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

ARTICLE 6—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

6.01 *Express Representations and Certifications in Bid Form, Agreement*

- A. The Bid Form that each Bidder will submit contains express representations regarding the Bidder's examination of Project documentation, Site visit, and preparation of the Bid, and certifications regarding lack of collusion or fraud in connection with the Bid. Bidder should review these representations and certifications, and assure that Bidder can make the representations and certifications in good faith, before executing and submitting its Bid.
- B. If Bidder is awarded the Contract, Bidder (as Contractor) will make similar express representations and certifications when it executes the Agreement.

ARTICLE 7—INTERPRETATIONS AND ADDENDA

- 7.01 Owner on its own initiative may issue Addenda to clarify, correct, supplement, or change the Bidding Documents.
- 7.02 Bidder shall submit all questions about the meaning or intent of the Bidding Documents via email to arpowers@peengr.com and must include "Question related to IMU Project" in the subject line. Confirm the email has been received by calling AI Powers at 515-558-8412.
- 7.03 Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all registered plan holders. Questions received less than seven days prior to the date for opening of Bids may not be answered.
- 7.04 Only responses set forth in an Addendum will be binding. Oral and other interpretations or clarifications will be without legal effect. Responses to questions are not part of the Contract

**INDIANOLA MUNICIPAL UTILITIES
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Documents unless set forth in an Addendum that expressly modifies or supplements the Contract Documents.

ARTICLE 8—BID SECURITY

- 8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of **5** percent of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form prescribed in the NOTICE TO BIDDERS AND NOTICE OF PUBLIC HEARING.
- 8.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract, furnished the required Contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract and furnish the required Contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture will be Owner's exclusive remedy if Bidder defaults.
- 8.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of 7 days after the Effective Date of the Contract or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.
- 8.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within 7 days after the Bid opening.

ARTICLE 9—CONTRACT TIMES

- 9.01 The number of days within which, or the dates by which, the Work is to be (a) substantially completed and (b) ready for final payment, and (c) Milestones (if any) are to be achieved, are set forth in the Agreement.

ARTICLE 10—SUBSTITUTE AND "OR EQUAL" ITEMS

- 10.01 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration during the bidding and Contract award process of possible substitute or "or-equal" items. In cases in which the Contract allows the Contractor to request that Engineer authorize the use of a substitute or "or-equal" item of material or equipment, application for such acceptance may not be made to and will not be considered by Engineer until after the Effective Date of the Contract.
- 10.02 All prices that Bidder sets forth in its Bid will be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as

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supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of “or-equal” or substitution requests are made at Bidder’s sole risk.

ARTICLE 11—SUBCONTRACTORS, SUPPLIERS, AND OTHERS

- 11.01 The apparent Successful Bidder, and any other Bidder so requested, must submit to Owner a list of the Subcontractors or Suppliers proposed for any portion of the Work within five days after Bid opening:
- 11.02 If requested by Owner, such list must be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor or Supplier, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder will submit a substitute.
- 11.03 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors and Suppliers. Declining to make requested substitutions will not constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor or Supplier, so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to subsequent revocation of such acceptance as provided in Paragraph 7.07 of the General Conditions.

ARTICLE 12—PREPARATION OF BID

- 12.01 The Bid Form is included with the Bidding Documents.
 - A. All blanks on the Bid Form must be completed in ink and the Bid Form signed in ink. Erasures or alterations must be initialed in ink by the person signing the Bid Form. A Bid price must be indicated for each section, Bid item, alternate, adjustment unit price item, and unit price item listed therein.
 - B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words “No Bid” or “Not Applicable.”
- 12.02 If Bidder has obtained the Bidding Documents as Electronic Documents, then Bidder shall prepare its Bid on a paper copy of the Bid Form printed from the Electronic Documents version of the Bidding Documents. The printed copy of the Bid Form must be clearly legible, printed on 8½ inch by 11-inch paper and as closely identical in appearance to the Electronic Document version of the Bid Form as may be practical. The Owner reserves the right to accept Bid Forms which nominally vary in appearance from the original paper version of the Bid Form, providing that all required information and submittals are included with the Bid.
- 12.03 A Bid by a corporation must be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation must be shown.

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- 12.04 A Bid by a partnership must be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership must be shown.
- 12.05 A Bid by a limited liability company must be executed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm must be shown.
- 12.06 A Bid by an individual must show the Bidder's name and official address.
- 12.07 A Bid by a joint venture must be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The joint venture must have been formally established prior to submittal of a Bid, and the official address of the joint venture must be shown.
- 12.08 All names must be printed in ink below the signatures.
- 12.09 The Bid must contain an acknowledgment of receipt of all Addenda, the numbers of which must be filled in on the Bid Form.
- 12.10 Postal and e-mail addresses and telephone number for communications regarding the Bid must be shown.
- 12.11 The Bid must contain evidence of Bidder's authority to do business in the state where the Project is located, or Bidder must certify in writing that it will obtain such authority within the time for acceptance of Bids and attach such certification to the Bid.
- 12.12 If Bidder is required to be licensed to submit a Bid or perform the Work in the state where the Project is located, the Bid must contain evidence of Bidder's licensure, or Bidder must certify in writing that it will obtain such licensure within the time for acceptance of Bids and attach such certification to the Bid. Bidder's state contractor license number, if any, must also be shown on the Bid Form.

ARTICLE 13—BASIS OF BID

- 13.01 *Lump Sum plus Unit Price*
 - A. Bidders must submit a Bid on a lump sum basis for each item listed in the lump sum section of the Bid Form.
 - B. Bidders must submit a Bid on a unit price basis for each item of Work listed in the unit price section of the Bid Form.
 - C. The "Bid Price" (sometimes referred to as the extended price) for each unit price Bid item will be the product of the "Estimated Quantity", which Owner or its representative has set forth in the Bid Form, for the item and the corresponding "Bid Unit Price" offered by the Bidder. The total of all unit price Bid items will be the sum of these "Bid Prices"; such total will be used by Owner for Bid comparison purposes. The final quantities and Contract Price will be determined in accordance with Paragraph 13.03 of the General Conditions.
 - D. The total bid price will be the sum of all lump sum bid items plus the sum of all Bid Unit Prices.

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- E. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

ARTICLE 14—SUBMITTAL OF BID

- 14.01 The Bidding Documents include one separate unbound copy of the Bid Form, and, if required, the Bid Bond Form. The unbound copy of the Bid Form is to be completed and submitted with the Bid security and the other documents required to be submitted under the terms of Article 2 of the Bid Form. See Paragraph 12.02 for Bid Documents that are received as Electronic Documents
- 14.02 A Bid must be received no later than the date and time prescribed and at the place indicated in the Advertisement or invitation to bid and must be enclosed in a plainly marked package with the Project title, and, if applicable, the designated portion of the Project for which the Bid is submitted, and the name and address of Bidder. This package shall be plainly labeled "BID ENCLOSED." The package must contain two sealed opaque envelopes, one for the Bid and other required documents and one for the Bid Security.
- 14.03 The sealed envelope containing the Bid and all required documents (except for the bid security) must be plainly marked with the notation "BID ENCLOSED".
- 14.04 The sealed envelope containing the bid security must be plainly marked with the notation "BID SECURITY ENCLOSED".
- 14.05 A Bid sent by mail shall be addressed to:
- Indianola Municipal Utilities
Attn: Ms. Chris Longer
PO Box 356
Indianola, Iowa 50125
Phone 515-962-5302
- 14.06 A bid sent by delivery service or hand delivered shall be delivered to:
- Indianola City Hall
Attn: Mr. Andy Lent
110 N. First St.
Indianola, Iowa 50125
Phone 515-961-9410
- 14.07 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened.

ARTICLE 15—MODIFICATION AND WITHDRAWAL OF BID

- 15.01 An unopened Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted
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prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.

- 15.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 15.01 and submit a new Bid prior to the date and time for the opening of Bids.
- 15.03 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, the Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, the Bidder will be disqualified from further bidding on the Work.

ARTICLE 16—OPENING OF BIDS

- 16.01 Bids will be opened at the time and place indicated in the advertisement or invitation to bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

ARTICLE 17—BIDS TO REMAIN SUBJECT TO ACCEPTANCE

- 17.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 18—EVALUATION OF BIDS AND AWARD OF CONTRACT

- 18.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner also reserves the right to waive all minor Bid informalities not involving price, time, or changes in the Work.
- 18.02 Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible.
- 18.03 If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, whether in the Bid itself or in a separate communication to Owner or Engineer, then Owner will reject the Bid as nonresponsive.
- 18.04 If Owner awards the contract for the Work, such award will be to the responsible Bidder whose bid is considered to be in the best interest of the Owner.
- 18.05 *Evaluation of Bids*
- A. In evaluating Bids, Owner will consider whether the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.

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- B. For the determination of the apparent low Bidder when unit price bids are submitted, Bids will be compared on the basis of the total of the products of the estimated quantity of each item and unit price Bid for that item, together with any lump sum items.
- 18.06 In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.
- 18.07 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.

ARTICLE 19—BONDS AND INSURANCE

- 19.01 Article 6 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds, other required bonds (if any), and insurance. When the Successful Bidder delivers the executed Agreement to Owner, it must be accompanied by required bonds and insurance documentation.
- 19.02 Article 8, Bid Security, of these Instructions, addresses any requirements for providing bid bonds as part of the bidding process.

ARTICLE 20—SIGNING OF AGREEMENT

- 20.01 When Owner issues a Notice of Award to the Successful Bidder, it will be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within 15 days thereafter, Successful Bidder must execute and deliver the required number of counterparts of the Agreement and any bonds and insurance documentation required to be delivered by the Contract Documents to Owner. Within 10 days thereafter, Owner will deliver one fully executed counterpart of the Agreement to Successful Bidder, together with printed and/or electronic copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

ARTICLE 21—SALES AND USE TAXES

- 21.01 Owner is subject to state and local sales and use taxes on materials and equipment to be incorporated in the Work. Said taxes shall be included in the Bid. Refer to Paragraph SC-7.10 of the Supplementary Conditions for additional information.

ARTICLE 22—CONTRACTS TO BE ASSIGNED

- 22.01 This Article is not used.

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The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 1—OWNER AND BIDDER

1.01 This Bid is submitted to:

Indianola Municipal Utilities
PO Box 356
210 W Second Ave.
Indianola, Iowa 50125

The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2—ATTACHMENTS TO THIS BID

2.01 The following documents are submitted with and made a condition of this Bid:

- A. Required Bid security;
- B. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such authority within the time for acceptance of Bids;
- C. Contractor's license number as evidence of Bidder's State Contractor's License or a covenant by Bidder to obtain said license within the time for acceptance of Bids;
- D. A completed Iowa Department of Labor Bidder Status Form (309-6001) regarding the Contractor's resident status within the State of Iowa.

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ARTICLE 3—BASIS OF BID—LUMP SUM BID AND UNIT PRICES

3.01 Lump Sum Bids

- A. Bidder (_____) will complete the Work in accordance with the Contract Documents for the following lump sum (stipulated) price(s), together with any Unit Prices indicated in Paragraph 3.02:

1. Lump Sum Price (Single Lump Sum)

Lump Sum Bid Price for Base Bid	\$
Bid Alternate 1 – Lump sum deduct to substitute DB-120 PVC conduit for Sch 40 PVC conduit for concrete encased duct banks	\$
Bid Alternate 2 – Lump sum deduct to substitute aluminum conductor for copper conductor for certain below grade secondary cables as shown in the specifications.	\$

See Paragraph 2.7.1 in Section 16402 for a description of the Work to be included in BID ALTERNATE 1.

See Paragraph 3.0 of Section 16922 for a description of the Work to be included in BID ALTERNATE 2.

3.02 Unit Price Bids

- A. No unit price items are included in this bid

ARTICLE 4—TIME OF COMPLETION

- 4.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

ARTICLE 5—BIDDER’S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

5.01 Bid Acceptance Period

- A. This Bid will remain subject to acceptance for 30 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

5.02 Instructions to Bidders

- A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.

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5.03 *Receipt of Addenda*

A. Bidder hereby acknowledges receipt of the following Addenda:

Addendum Number	Addendum Date

ARTICLE 6—BIDDER’S REPRESENTATIONS AND CERTIFICATIONS

6.01 *Bidder’s Representations*

A. In submitting this Bid, Bidder represents the following:

1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.
2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site, if any, that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
6. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder’s (Contractor’s) safety precautions and programs.
7. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.

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8. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the---- Bidding Documents.
9. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
10. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

6.02 Bidder's Certifications

A. The Bidder certifies the following:

1. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.
2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
3. Bidder has not solicited or induced any individual or entity to refrain from bidding.
4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:
 - a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.
 - b. Fraudulent practice means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition.
 - c. Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels.
 - d. Coercive practice means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

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BIDDER hereby submits this Bid as set forth above:

Bidder:

(typed or printed name of organization)

By:

(individual's signature)

Name:

(typed or printed)

Title:

(typed or printed)

Date:

(typed or printed)

If Bidder is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.

Attest:

(individual's signature)

Name:

(typed or printed)

Title:

(typed or printed)

Date:

(typed or printed)

Address for giving notices:

Bidder's Contact:

Name:

(typed or printed)

Title:

(typed or printed)

Phone:

Email:

Address:

Bidder's Contractor License No.: (if applicable)

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This Agreement is by and between Indianola Municipal Utilities (“Owner”) and

_____ (“Contractor”).

Terms used in this Agreement have the meanings stated in the General Conditions and the Supplementary Conditions.

Owner and Contractor hereby agree as follows:

ARTICLE 1—WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

- a. Install underground conduit and concrete encased duct banks.
- b. Install primary (13 kV) and secondary cable.
- c. Install and connect pad mounted transformers, junction cabinets, pedestals, hand holes, and related equipment.
- d. Install steel street and area lighting poles and fixtures.
- e. Convert building electrical services from overhead to underground, including all required work in and on the buildings
- f. Furnish all material required for the completion of the Work, except that to be supplied by Owner.

ARTICLE 2—THE PROJECT

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows:

Convert portions of the Indianola Municipal Utilities electric distribution system from overhead to underground 13.2 kV, including conversion of residential and commercial buildings from overhead to underground service.

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ARTICLE 3—ENGINEER

- 3.01 The Owner has retained P & E Engineering Co. (“Engineer”) to act as Owner’s representative, assume all duties and responsibilities of Engineer, and have the rights and authority assigned to Engineer in the Contract.
- 3.02 The part of the Project that pertains to the Work has been designed by Engineer.

ARTICLE 4—CONTRACT TIMES

- 4.01 *Time is of the Essence*
- A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract. See Paragraph 4.o of Contract Section 01000.
- 4.02 *Contract Times: Dates*
- A. The Work will be substantially complete on or before December 1, 2022, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before December 20, 2022.

ARTICLE 5—CONTRACT PRICE

- 5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents, the amounts that follow, subject to adjustment under the Contract:
- A. For all Work other than Unit Price Work,
- | | |
|----------------------|-------------------------------|
| Base Bid: | a lump sum of \$_____. |
| Bid Alternate 1 | a lump sum deduct of \$_____. |
| Bid Alternate 2 | a lump sum deduct of \$_____. |
| Total Lum Sum Amount | \$_____. |
- B. Not Used

ARTICLE 6—PAYMENT PROCEDURES

- 6.01 *Submittal and Processing of Payments*
- A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.
- 6.02 *Progress Payments; Retainage*
- A. Owner shall make progress payments on the basis of Contractor’s Applications for Payment, which is to be submitted on or about the 1st day of each month during performance of the

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Work, as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.

1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold in accordance with the Contract.
 - a. 95 percent of the value of the Work completed (with the balance being retainage).
 - b. 95 percent of cost of materials and equipment stored on site but not yet incorporated in the Work (with the balance being retainage).

B. Following Substantial Completion, partial payment of retainage may be made in accordance with the Contract Documents and applicable State Law.

6.03 *Final Payment*

A. Upon final completion and acceptance of the Work, Owner shall pay the remainder of the Contract Price in accordance with Paragraph 15.06 of the General Conditions.

6.04 *Consent of Surety*

A. Owner will not make final payment, or return or release retainage at Substantial Completion or any other time, unless Contractor submits written consent of the surety to such payment, return, or release.

6.05 *Interest*

A. All amounts not paid when due will bear interest at the rate of **[number]** percent per annum.

ARTICLE 7—CONTRACT DOCUMENTS

7.01 *Contents*

A. The Contract Documents consist of all of the following:

1. This Agreement.
2. Bonds:
 - a. Performance bond (together with power of attorney).
 - b. Payment bond (together with power of attorney).
3. General Conditions, Section 00700.
4. Supplementary Conditions, Section 00800.
5. General Requirements, section 01000.

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6. Specifications as listed in the table of contents of the project manual.
7. Drawings as listed in the table of contents of the project manual.
8. Addenda (numbers ____ to ____, inclusive).
9. Exhibits to this Agreement (enumerated as follows):
 - a. Contractor's Bid
10. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - a. Notice to Proceed.
 - b. Work Change Directives.
 - c. Change Orders.
 - d. Field Orders.
- B. The Contract Documents listed in Paragraph 7.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 7.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the Contract.

ARTICLE 8—REPRESENTATIONS, CERTIFICATIONS, AND STIPULATIONS

8.01 Contractor's Representations

- A. In order to induce Owner to enter into this Contract, Contractor makes the following representations:
 1. Contractor has examined and carefully studied the Contract Documents, including Addenda.
 2. Contractor has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 3. Contractor is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
 4. Contractor has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions (if any), with respect to the Technical Data in such reports and drawings.
 5. Contractor has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in

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the Supplementary Conditions, with respect to Technical Data in such reports and drawings.

6. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (c) Contractor's safety precautions and programs.
7. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
8. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
9. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
10. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
11. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

8.02 Contractor's Certifications

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 8.02:
 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

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Section 00520 – Agreement

3. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

8.03 *Standard General Conditions*

- A. Owner stipulates the General Conditions that are made a part of this Contract are EJCDC® C-700, Standard General Conditions for the Construction Contract (2018), published by the Engineers Joint Contract Documents Committee (Section 00700 of the Contract), and that all modifications to the standard wording of such published document are shown in the Supplementary Conditions.

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Contract Documents
Section 00520 – Agreement

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on _____, _____ (which is the Effective Date of the Contract).

Owner:

Indianola Municipal Utilities

(typed or printed name of organization)

By:

(individual's signature)

Date:

(date signed)

Name:

(typed or printed)

Title:

(typed or printed)

Attest:

(individual's signature)

Title:

(typed or printed)

Address for giving notices:

Indianola Municipal Utilities

210 West 2nd Ave.

PO Box 356

Indianola, Iowa 50125

Contractor:

(typed or printed name of organization)

By:

(individual's signature)

Date:

(date signed)

Name:

(typed or printed)

Title:

(typed or printed)

(If [Type of Entity] is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:

(individual's signature)

Title:

(typed or printed)

Address for giving notices:

PERFORMANCE BOND

Contractor Name: [Full formal name of Contractor] Address <i>(principal place of business)</i> : [Address of Contractor's principal place of business]	Surety Name: [Full formal name of Surety] Address <i>(principal place of business)</i> : [Address of Surety's principal place of business]
Owner Name: [Full formal name of Owner] Mailing address <i>(principal place of business)</i> : [Address of Owner's principal place of business]	Contract Description <i>(name and location)</i> : [Owner's project/contract name, and location of the project] Contract Price: [Amount from Contract] Effective Date of Contract: [Date from Contract]
Bond Bond Amount: [Amount] Date of Bond: [Date] <i>(Date of Bond cannot be earlier than Effective Date of Contract)</i> Modifications to this Bond form: ☐ None ☐ See Paragraph 16	
Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Performance Bond, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.	
Contractor as Principal	Surety
<i>(Full formal name of Contractor)</i>	<i>(Full formal name of Surety) (corporate seal)</i>
By: _____	By: _____
<i>(Signature)</i>	<i>(Signature)(Attach Power of Attorney)</i>
Name: _____	Name: _____
<i>(Printed or typed)</i>	<i>(Printed or typed)</i>
Title: _____	Title: _____
Attest: _____	Attest: _____
<i>(Signature)</i>	<i>(Signature)</i>
Name: _____	Name: _____
<i>(Printed or typed)</i>	<i>(Printed or typed)</i>
Title: _____	Title: _____
<i>Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.</i>	

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond will arise after:
 - 3.1. The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice may indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 will be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement does not waive the Owner's right, if any, subsequently to declare a Contractor Default;
 - 3.2. The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
 - 3.3. The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.
4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 does not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.
5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
 - 5.1. Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;
 - 5.2. Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;
 - 5.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or
 - 5.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

- 5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
 - 5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.
- 6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment, or the Surety has denied liability, in whole or in part, without further notice, the Owner shall be entitled to enforce any remedy available to the Owner.
- 7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner will not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety will not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:
 - 7.1. the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
 - 7.2. additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and
 - 7.3. liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
- 8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.
- 9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price will not be reduced or set off on account of any such unrelated obligations. No right of action will accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.
- 10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
- 11. Any proceeding, legal or equitable, under this Bond must be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and must be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit will be applicable.
- 12. Notice to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears.
- 13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted therefrom and provisions conforming to such

statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.

14. Definitions

- 14.1. *Balance of the Contract Price*—The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.
 - 14.2. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.
 - 14.3. *Contractor Default*—Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.
 - 14.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
 - 14.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.
15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
16. Modifications to this Bond are as follows: **[Describe modification or enter “None”]**

PAYMENT BOND

Contractor Name: [Full formal name of Contractor] Address <i>(principal place of business)</i> : [Address of Contractor's principal place of business]	Surety Name: [Full formal name of Surety] Address <i>(principal place of business)</i> : [Address of Surety's principal place of business]
Owner Name: [Full formal name of Owner] Mailing address <i>(principal place of business)</i> : [Address of Owner's principal place of business]	Contract Description <i>(name and location)</i> : [Owner's project/contract name, and location of the project] Contract Price: [Amount, from Contract] Effective Date of Contract: [Date, from Contract]
Bond Bond Amount: [Amount] Date of Bond: [Date] <i>(Date of Bond cannot be earlier than Effective Date of Contract)</i> Modifications to this Bond form: ☐ None ☐ See Paragraph 18	
Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Payment Bond, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.	
Contractor as Principal	Surety
<i>(Full formal name of Contractor)</i>	<i>(Full formal name of Surety) (corporate seal)</i>
By: _____ <i>(Signature)</i>	By: _____ <i>(Signature)(Attach Power of Attorney)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
Attest: _____ <i>(Signature)</i>	Attest: _____ <i>(Signature)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
<i>Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.</i>	

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond will arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
5. The Surety's obligations to a Claimant under this Bond will arise after the following:
 - 5.1. Claimants who do not have a direct contract with the Contractor
 - 5.1.1. have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
 - 5.1.2. have sent a Claim to the Surety (at the address described in Paragraph 13).
 - 5.2. Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).
6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
 - 7.1. Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
 - 7.2. Pay or arrange for payment of any undisputed amounts.
 - 7.3. The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 will not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

8. The Surety's total obligation will not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond will be credited for any payments made in good faith by the Surety.
9. Amounts owed by the Owner to the Contractor under the Construction Contract will be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfying obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.
11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
12. No suit or action will be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit will be applicable.
13. Notice and Claims to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, will be sufficient compliance as of the date received.
14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted here from and provisions conforming to such statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.
15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.
16. Definitions
 - 16.1. *Claim*—A written statement by the Claimant including at a minimum:
 - 16.1.1. The name of the Claimant;
 - 16.1.2. The name of the person for whom the labor was done, or materials or equipment furnished;
 - 16.1.3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
 - 16.1.4. A brief description of the labor, materials, or equipment furnished;

- 16.1.5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
 - 16.1.6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
 - 16.1.7. The total amount of previous payments received by the Claimant; and
 - 16.1.8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.
- 16.2. *Claimant*—An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic’s lien or similar statute against the real property upon which the Project is located. The intent of this Bond is to include without limitation in the terms of “labor, materials, or equipment” that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor’s subcontractors, and all other items for which a mechanic’s lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.
- 16.3. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.
- 16.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
- 16.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.
17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
18. Modifications to this Bond are as follows: **[Describe modification or enter “None”]**

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared By



Endorsed By



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National Society of Professional Engineers
1420 King Street, Alexandria, VA 22314-2794
(703) 684-2882
www.nspe.org

American Council of Engineering Companies
1015 15th Street N.W., Washington, DC 20005
(202) 347-7474
www.acec.org

American Society of Civil Engineers
1801 Alexander Bell Drive, Reston, VA 20191-4400
(800) 548-2723
www.asce.org

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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The document prepared by Contractor, in a form acceptable to Engineer, to request progress or final payments, and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The Advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.

10. *Claim*

- a. A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment of Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract.
 - b. A demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal, or seeking resolution of a contractual issue that Engineer has declined to address.
 - c. A demand or assertion by Owner or Contractor, duly submitted in compliance with the procedural requirements set forth herein, made pursuant to Paragraph 12.01.A.4, concerning disputes arising after Engineer has issued a recommendation of final payment.
 - d. A demand for money or services by a third party is not a Claim.
11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
12. *Contract*—The entire and integrated written contract between Owner and Contractor concerning the Work.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.

20. *Electronic Document*—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital format.
21. *Electronic Means*—Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by the recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.
22. *Engineer*—The individual or entity named as such in the Agreement.
23. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
24. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto.
- a. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated into the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, is not a Hazardous Environmental Condition.
 - b. The presence of Constituents of Concern that are to be removed or remediated as part of the Work is not a Hazardous Environmental Condition.
 - c. The presence of Constituents of Concern as part of the routine, anticipated, and obvious working conditions at the Site, is not a Hazardous Environmental Condition.
25. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and binding decrees, resolutions, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
26. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
27. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date, or by a time prior to Substantial Completion of all the Work.
28. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
29. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.

30. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
31. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising Contractor's plan to accomplish the Work within the Contract Times.
32. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
33. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative (RPR) includes any assistants or field staff of Resident Project Representative.
34. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
35. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals.
36. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
37. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
38. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands or areas furnished by Owner which are designated for the use of Contractor.
39. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
40. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
41. *Submittal*—A written or graphic document, prepared by or for Contractor, which the Contract Documents require Contractor to submit to Engineer, or that is indicated as a Submittal in the Schedule of Submittals accepted by Engineer. Submittals may include Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers'

instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether or not approved or accepted by Engineer, are not Contract Documents. Change Proposals, Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals.

42. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion of such Work.
43. *Successful Bidder*—The Bidder to which the Owner makes an award of contract.
44. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
45. *Supplier*—A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
46. *Technical Data*
- a. Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (1) existing subsurface conditions at or adjacent to the Site, or existing physical conditions at or adjacent to the Site including existing surface or subsurface structures (except Underground Facilities) or (2) Hazardous Environmental Conditions at the Site.
 - b. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then Technical Data is defined, with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06, as the data contained in boring logs, recorded measurements of subsurface water levels, assessments of the condition of subsurface facilities, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical, environmental, or other Site or facilities conditions report prepared for the Project and made available to Contractor.
 - c. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data, and instead Underground Facilities are shown or indicated on the Drawings.
47. *Underground Facilities*—All active or not-in-service underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including but not limited to those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water,

other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.

48. *Unit Price Work*—Work to be paid for on the basis of unit prices.

49. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

50. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

- A. The words and terms discussed in Paragraphs 1.02.B, C, D, and E are not defined terms that require initial capital letters, but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives*: The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day*: The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective*: The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - 1. does not conform to the Contract Documents;
 - 2. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - 3. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or Paragraph 15.04).

E. *Furnish, Install, Perform, Provide*

1. The word “furnish,” when used in connection with services, materials, or equipment, means to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
2. The word “install,” when used in connection with services, materials, or equipment, means to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, means to furnish and install said services, materials, or equipment complete and ready for intended use.
4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.

F. *Contract Price or Contract Times*: References to a change in “Contract Price or Contract Times” or “Contract Times or Contract Price” or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term “or both” is not expressed.

G. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Performance and Payment Bonds; Evidence of Insurance*

- A. *Performance and Payment Bonds*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner the performance bond and payment bond (if the Contract requires Contractor to furnish such bonds).
- B. *Evidence of Contractor’s Insurance*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each additional insured (as identified in the Contract), the certificates, endorsements, and other evidence of insurance required to be provided by Contractor in accordance with Article 6, except to the extent the Supplementary Conditions expressly establish other dates for delivery of specific insurance policies.
- C. *Evidence of Owner’s Insurance*: After receipt of the signed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each additional insured (as identified in the Contract), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully signed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

- A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Contract (or as otherwise required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 - 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 - 2. a preliminary Schedule of Submittals; and
 - 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work, and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other Submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review the schedules submitted in accordance with Paragraph 2.03.A. No progress payment will be made to Contractor until acceptable schedules are submitted to Engineer.
 - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or

progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.

2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.
4. If a schedule is not acceptable, Contractor will have an additional 10 days to revise and resubmit the schedule.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may send, and shall accept, Electronic Documents transmitted by Electronic Means.
- B. If the Contract does not establish protocols for Electronic Means, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. Subject to any governing protocols for Electronic Means, when transmitting Electronic Documents by Electronic Means, the transmitting party makes no representations as to long-term compatibility, usability, or readability of the Electronic Documents resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the Electronic Documents.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one Contract Document is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic versions of the Contract Documents (including any printed copies derived from such electronic versions) and the printed record version, the printed record version will govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.
- F. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Contractor, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

G. Nothing in the Contract Documents creates:

1. any contractual relationship between Owner or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity; or
2. any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity, except as may otherwise be required by Laws and Regulations.

3.02 *Reference Standards*

A. *Standards Specifications, Codes, Laws and Regulations*

1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, means the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
2. No provision of any such standard specification, manual, reference standard, or code, and no instruction of a Supplier, will be effective to change the duties or responsibilities of Owner, Contractor, or Engineer from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner or Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*

1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error,

ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer in writing all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly notify Owner and Contractor in writing that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media versions, or reuse any such Drawings,

Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or

2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein precludes Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the 30th day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the 60th day after the day of Bid opening or the 30th day after the Effective Date of the Contract, whichever date is earlier.

4.02 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work may be done at the Site prior to such date.

4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 2. Proposed adjustments in the Progress Schedule that will change the Contract Times must be submitted in accordance with the requirements of Article 11.

- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work will be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Such an adjustment will be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
 - 1. Severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 - 2. Abnormal weather conditions;
 - 3. Acts or failures to act of third-party utility owners or other third-party entities (other than those third-party utility owners or other third-party entities performing other work at or adjacent to the Site as arranged by or under contract with Owner, as contemplated in Article 8); and
 - 4. Acts of war or terrorism.
- D. Contractor's entitlement to an adjustment of Contract Times or Contract Price is limited as follows:
 - 1. Contractor's entitlement to an adjustment of the Contract Times is conditioned on the delay, disruption, or interference adversely affecting an activity on the critical path to completion of the Work, as of the time of the delay, disruption, or interference.
 - 2. Contractor shall not be entitled to an adjustment in Contract Price for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor. Such a concurrent delay by Contractor shall not preclude an adjustment of Contract Times to which Contractor is otherwise entitled.
 - 3. Adjustments of Contract Times or Contract Price are subject to the provisions of Article 11.

- E. Each Contractor request or Change Proposal seeking an increase in Contract Times or Contract Price must be supplemented by supporting data that sets forth in detail the following:
1. The circumstances that form the basis for the requested adjustment;
 2. The date upon which each cause of delay, disruption, or interference began to affect the progress of the Work;
 3. The date upon which each cause of delay, disruption, or interference ceased to affect the progress of the Work;
 4. The number of days' increase in Contract Times claimed as a consequence of each such cause of delay, disruption, or interference; and
 5. The impact on Contract Price, in accordance with the provisions of Paragraph 11.07.
- Contractor shall also furnish such additional supporting documentation as Owner or Engineer may require including, where appropriate, a revised progress schedule indicating all the activities affected by the delay, disruption, or interference, and an explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work.
- F. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5, together with the provisions of Paragraphs 4.05.D and 4.05.E.
- G. Paragraph 8.03 addresses delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

ARTICLE 5—SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor in writing of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 *Use of Site and Other Areas*

- A. *Limitation on Use of Site and Other Areas*
 1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent

areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.

2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.13, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or in a court of competent jurisdiction; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.
- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris will conform to applicable Laws and Regulations.
 - C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
 - D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data;
2. Those drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data; and
3. Technical Data contained in such reports and drawings.

B. *Underground Facilities:* Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph 5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.

C. *Reliance by Contractor on Technical Data:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b.

D. *Limitations of Other Data and Documents:* Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;
3. the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or
4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 *Differing Subsurface or Physical Conditions*

A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site:

1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate;
2. is of such a nature as to require a change in the Drawings or Specifications;

3. differs materially from that shown or indicated in the Contract Documents; or
4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine whether it is necessary for Owner to obtain additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the subsurface or physical condition in question may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- E. *Possible Price and Times Adjustments*
 1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. Such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,

- c. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
- 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise;
 - b. The existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice required by Paragraph 5.04.A.
- 3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
- 4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.
- F. *Underground Facilities; Hazardous Environmental Conditions*: Paragraph 5.05 governs rights and responsibilities regarding the presence or location of Underground Facilities. Paragraph 5.06 governs rights and responsibilities regarding Hazardous Environmental Conditions. The provisions of Paragraphs 5.03 and 5.04 are not applicable to the presence or location of Underground Facilities, or to Hazardous Environmental Conditions.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities*: Unless it is otherwise expressly provided in the Supplementary Conditions, the cost of all of the following are included in the Contract Price, and Contractor shall have full responsibility for:
 - 1. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 - 2. complying with applicable state and local utility damage prevention Laws and Regulations;
 - 3. verifying the actual location of those Underground Facilities shown or indicated in the Contract Documents as being within the area affected by the Work, by exposing such Underground Facilities during the course of construction;
 - 4. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and

5. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated on the Drawings, or was not shown or indicated on the Drawings with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing regarding such Underground Facility.
- C. *Engineer's Review:* Engineer will:
1. promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy;
 2. identify and communicate with the owner of the Underground Facility; prepare recommendations to Owner (and if necessary issue any preliminary instructions to Contractor) regarding the Contractor's resumption of Work in connection with the Underground Facility in question;
 3. obtain any pertinent cost or schedule information from Contractor; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and
 4. advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the Underground Facility may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the Underground Facility in question and conditions affected by its presence have been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- F. *Possible Price and Times Adjustments*
1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, to the extent that any existing Underground Facility at the Site that was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in

Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

- a. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - b. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E; and
 - c. Contractor gave the notice required in Paragraph 5.05.B.
2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.
 4. The information and data shown or indicated on the Drawings with respect to existing Underground Facilities at the Site is based on information and data (a) furnished by the owners of such Underground Facilities, or by others, (b) obtained from available records, or (c) gathered in an investigation conducted in accordance with the current edition of ASCE 38, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, by the American Society of Civil Engineers. If such information or data is incorrect or incomplete, Contractor's remedies are limited to those set forth in this Paragraph 5.05.F.

5.06 *Hazardous Environmental Conditions at Site*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site;
2. drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
3. Technical Data contained in such reports and drawings.

B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures

- of construction to be employed by Contractor, and safety precautions and programs incident thereto;
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.
- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, as a result of such Work stoppage, such special conditions under which Work is agreed to be resumed by Contractor, or any costs or expenses incurred in response to the Hazardous Environmental Condition, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off. Entitlement to any such adjustment is subject to the provisions of Paragraphs 4.05.D, 4.05.E, 11.07, and 11.08.

- H. If, after receipt of such written notice, Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I obligates Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J obligates Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of Contractor's obligations under the Contract. These bonds must remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the terms of a prescribed bond form, the Supplementary Conditions, or other provisions of the Contract.

- B. Contractor shall also furnish such other bonds (if any) as are required by the Supplementary Conditions or other provisions of the Contract.
- C. All bonds must be in the form included in the Bidding Documents or otherwise specified by Owner prior to execution of the Contract, except as provided otherwise by Laws or Regulations, and must be issued and signed by a surety named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Department Circular 570 (as amended and supplemented) by the Bureau of the Fiscal Service, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority must show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- D. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue bonds in the required amounts.
- E. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer in writing and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which must comply with the bond and surety requirements above.
- F. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- G. Upon request to Owner from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Owner shall provide a copy of the payment bond to such person or entity.
- H. Upon request to Contractor from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Contractor shall provide a copy of the payment bond to such person or entity.

6.02 *Insurance—General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized in the state or jurisdiction in which the Project is located to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Alternative forms of insurance coverage, including but not limited to self-insurance and "Occupational Accident and Excess Employer's Indemnity Policies," are not sufficient to meet the insurance requirements of this Contract, unless expressly allowed in the Supplementary Conditions.

- D. Contractor shall deliver to Owner, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Contractor has obtained and is maintaining the policies and coverages required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, full disclosure of all relevant exclusions, and evidence of insurance required to be purchased and maintained by Subcontractors or Suppliers. In any documentation furnished under this provision, Contractor, Subcontractors, and Suppliers may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those applicable to this Contract.
- E. Owner shall deliver to Contractor, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Owner has obtained and is maintaining the policies and coverages required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, and full disclosure of all relevant exclusions. In any documentation furnished under this provision, Owner may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those relevant to this Contract.
- F. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, will not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- G. In addition to the liability insurance required to be provided by Contractor, the Owner, at Owner's option, may purchase and maintain Owner's own liability insurance. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.
- H. Contractor shall require:
 - 1. Subcontractors to purchase and maintain worker's compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project, and to name as additional insureds Owner and Engineer (and any other individuals or entities identified in the Supplementary Conditions as additional insureds on Contractor's liability policies) on each Subcontractor's commercial general liability insurance policy; and
 - 2. Suppliers to purchase and maintain insurance that is appropriate for their participation in the Project.
- I. If either party does not purchase or maintain the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.

- J. If Contractor has failed to obtain and maintain required insurance, Contractor's entitlement to enter or remain at the Site will end immediately, and Owner may impose an appropriate set-off against payment for any associated costs (including but not limited to the cost of purchasing necessary insurance coverage), and exercise Owner's termination rights under Article 16.
- K. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect (but is in no way obligated) to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price will be adjusted accordingly.
- L. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests. Contractor is responsible for determining whether such coverage and limits are adequate to protect its interests, and for obtaining and maintaining any additional insurance that Contractor deems necessary.
- M. The insurance and insurance limits required herein will not be deemed as a limitation on Contractor's liability, or that of its Subcontractors or Suppliers, under the indemnities granted to Owner and other individuals and entities in the Contract or otherwise.
- N. All the policies of insurance required to be purchased and maintained under this Contract will contain a provision or endorsement that the coverage afforded will not be canceled, or renewal refused, until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured and Engineer.

6.03 *Contractor's Insurance*

- A. *Required Insurance:* Contractor shall purchase and maintain Worker's Compensation, Commercial General Liability, and other insurance pursuant to the specific requirements of the Supplementary Conditions.
- B. *General Provisions:* The policies of insurance required by this Paragraph 6.03 as supplemented must:
 - 1. include at least the specific coverages required;
 - 2. be written for not less than the limits provided, or those required by Laws or Regulations, whichever is greater;
 - 3. remain in effect at least until the Work is complete (as set forth in Paragraph 15.06.D), and longer if expressly required elsewhere in this Contract, and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract;
 - 4. apply with respect to the performance of the Work, whether such performance is by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable; and

5. include all necessary endorsements to support the stated requirements.
- C. *Additional Insureds*: The Contractor's commercial general liability, automobile liability, employer's liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies, if required by this Contract, must:
 1. include and list as additional insureds Owner and Engineer, and any individuals or entities identified as additional insureds in the Supplementary Conditions;
 2. include coverage for the respective officers, directors, members, partners, employees, and consultants of all such additional insureds;
 3. afford primary coverage to these additional insureds for all claims covered thereby (including as applicable those arising from both ongoing and completed operations);
 4. not seek contribution from insurance maintained by the additional insured; and
 5. as to commercial general liability insurance, apply to additional insureds with respect to liability caused in whole or in part by Contractor's acts or omissions, or the acts and omissions of those working on Contractor's behalf, in the performance of Contractor's operations.

6.04 *Builder's Risk and Other Property Insurance*

- A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). The specific requirements applicable to the builder's risk insurance are set forth in the Supplementary Conditions.
- B. *Property Insurance for Facilities of Owner Where Work Will Occur*: Owner is responsible for obtaining and maintaining property insurance covering each existing structure, building, or facility in which any part of the Work will occur, or to which any part of the Work will attach or be adjoined. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, providing coverage consistent with that required for the builder's risk insurance, and will be maintained until the Work is complete, as set forth in Paragraph 15.06.D.
- C. *Property Insurance for Substantially Complete Facilities*: Promptly after Substantial Completion, and before actual occupancy or use of the substantially completed Work, Owner will obtain property insurance for such substantially completed Work, and maintain such property insurance at least until the Work is complete, as set forth in Paragraph 15.06.D. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, and provide coverage consistent with that required for the builder's risk insurance. The builder's risk insurance may terminate upon written confirmation of Owner's procurement of such property insurance.
- D. *Partial Occupancy or Use by Owner*: If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will

provide advance notice of such occupancy or use to the builder's risk insurer, and obtain an endorsement consenting to the continuation of coverage prior to commencing such partial occupancy or use.

- E. *Insurance of Other Property; Additional Insurance:* If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, then the entity or individual owning such property item will be responsible for insuring it. If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.04, it may do so at Contractor's expense.

6.05 *Property Losses; Subrogation*

- A. The builder's risk insurance policy purchased and maintained in accordance with Paragraph 6.04 (or an installation floater policy if authorized by the Supplementary Conditions), will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors.
 - 1. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils, risks, or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all individuals or entities identified in the Supplementary Conditions as builder's risk or installation floater insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused.
 - 2. None of the above waivers extends to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Any property insurance policy maintained by Owner covering any loss, damage, or consequential loss to Owner's existing structures, buildings, or facilities in which any part of the Work will occur, or to which any part of the Work will attach or adjoin; to adjacent structures, buildings, or facilities of Owner; or to part or all of the completed or substantially completed Work, during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06, will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them, and that the insured is allowed to waive the insurer's rights of subrogation in a written contract executed prior to the loss, damage, or consequential loss.
 - 1. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for all losses and damages caused by, arising out

of, or resulting from fire or any of the perils, risks, or causes of loss covered by such policies.

- C. The waivers in this Paragraph 6.05 include the waiver of rights due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other insured peril, risk, or cause of loss.
- D. Contractor shall be responsible for assuring that each Subcontract contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from fire or other peril, risk, or cause of loss covered by builder's risk insurance, installation floater, and any other property insurance applicable to the Work.

6.06 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of property insurance required by Paragraph 6.04 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.04 shall maintain such proceeds in a segregated account, and distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, Contractor shall repair or replace the damaged Work, using allocated insurance proceeds.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.01 *Contractor's Means and Methods of Construction*

- A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. If the Contract Documents note, or Contractor determines, that professional engineering or other design services are needed to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor's expense. Such services are not Owner-delegated professional design services under this Contract, and neither Owner nor Engineer has any responsibility with respect to

(1) Contractor's determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

7.02 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who will not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.03 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall maintain good discipline and order at the Site.
- B. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of Contractor's employees; of Suppliers and Subcontractors, and their employees; and of any other individuals or entities performing or furnishing any of the Work, just as Contractor is responsible for Contractor's own acts and omissions.
- C. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site will be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.04 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work must be new and of good quality, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications will expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment must be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.05 “Or Equals”

- A. *Contractor’s Request; Governing Criteria:* Whenever an item of equipment or material is specified or described in the Contract Documents by using the names of one or more proprietary items or specific Suppliers, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or “or equal” item is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material, or items from other proposed Suppliers, under the circumstances described below.
1. If Engineer in its sole discretion determines that an item of equipment or material proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer will deem it an “or equal” item. For the purposes of this paragraph, a proposed item of equipment or material will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that the proposed item:
 - 1) is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) has a proven record of performance and availability of responsive service; and
 - 4) is not objectionable to Owner.
 - b. Contractor certifies that, if the proposed item is approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) the item will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor’s Expense:* Contractor shall provide all data in support of any proposed “or equal” item at Contractor’s expense.
- C. *Engineer’s Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each “or-equal” request. Engineer may require Contractor to furnish additional data about the proposed “or-equal” item. Engineer will be the sole judge of acceptability. No “or-equal” item will be ordered, furnished, installed, or utilized until Engineer’s review is complete and Engineer determines that the proposed item is an “or-equal,” which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. *Effect of Engineer’s Determination:* Neither approval nor denial of an “or-equal” request will result in any change in Contract Price. The Engineer’s denial of an “or-equal” request will be final and binding, and may not be reversed through an appeal under any provision of the Contract.

- E. *Treatment as a Substitution Request*: If Engineer determines that an item of equipment or material proposed by Contractor does not qualify as an “or-equal” item, Contractor may request that Engineer consider the item a proposed substitute pursuant to Paragraph 7.06.

7.06 *Substitutes*

- A. *Contractor’s Request; Governing Criteria*: Unless the specification or description of an item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material under the circumstances described below. To the extent possible such requests must be made before commencement of related construction at the Site.
1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of equipment or material from anyone other than Contractor.
 2. The requirements for review by Engineer will be as set forth in Paragraph 7.06.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
 3. Contractor shall make written application to Engineer for review of a proposed substitute item of equipment or material that Contractor seeks to furnish or use. The application:
 - a. will certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design;
 - 2) be similar in substance to the item specified; and
 - 3) be suited to the same use as the item specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times;
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from the item specified; and
 - 2) available engineering, sales, maintenance, repair, and replacement services.

- d. will contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee*: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost*: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination*: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request will be final and binding, and may not be reversed through an appeal under any provision of the Contract. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.06.D, by timely submittal of a Change Proposal.

7.07 *Concerning Subcontractors and Suppliers*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.
- B. Contractor shall retain specific Subcontractors and Suppliers for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor or Supplier to furnish or perform any of the Work against which Contractor has reasonable objection.

- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 5 days.
- E. Owner may require the replacement of any Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor or Supplier.
- F. If Owner requires the replacement of any Subcontractor or Supplier retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis, Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors and Suppliers.
- J. The divisions and sections of the Specifications and the identifications of any Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.
- K. All Work performed for Contractor by a Subcontractor or Supplier must be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract for the benefit of Owner and Engineer.
- L. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor for Work performed for Contractor by the Subcontractor or Supplier.
- M. Contractor shall restrict all Subcontractors and Suppliers from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed in this Contract.

7.08 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If an invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights will be disclosed in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.09 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits, licenses, and certificates of occupancy. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

7.10 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.11 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It is not Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this does not relieve Contractor of its obligations under Paragraph 3.03.
- C. Owner or Contractor may give written notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such written notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.12 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.13 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations.
- B. Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.

- C. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;
 - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- D. All damage, injury, or loss to any property referred to in Paragraph 7.13.C.2 or 7.13.C.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- E. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.
- F. Contractor shall notify Owner; the owners of adjacent property; the owners of Underground Facilities and other utilities (if the identity of such owners is known to Contractor); and other contractors and utility owners performing work at or adjacent to the Site, in writing, when Contractor knows that prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- G. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. Any Owner's safety programs that are applicable to the Work are identified or included in the Supplementary Conditions or Specifications.
- H. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- I. Contractor's duties and responsibilities for safety and protection will continue until all the Work is completed, Engineer has issued a written notice to Owner and Contractor in accordance with Paragraph 15.06.C that the Work is acceptable, and Contractor has left the Site (except as otherwise expressly provided in connection with Substantial Completion).
- J. Contractor's duties and responsibilities for safety and protection will resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of safety data sheets (formerly known as material safety data sheets) or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused by an emergency, or are required as a result of Contractor's response to an emergency. If Engineer determines that a change in the Contract Documents is required because of an emergency or Contractor's response, a Work Change Directive or Change Order will be issued.

7.16 *Submittals*

A. *Shop Drawing and Sample Requirements*

1. Before submitting a Shop Drawing or Sample, Contractor shall:
 - a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determine and verify:
 - 1) all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;
 - 2) the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - 3) all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;
 - c. confirm that the Submittal is complete with respect to all related data included in the Submittal.
2. Each Shop Drawing or Sample must bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that Submittal, and that Contractor approves the Submittal.
3. With each Shop Drawing or Sample, Contractor shall give Engineer specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents. This notice must be set forth in a written communication separate from the Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.

B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall label and submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals.

1. *Shop Drawings*

- a. Contractor shall submit the number of copies required in the Specifications.
- b. Data shown on the Shop Drawings must be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide, and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.C.

2. *Samples*

- a. Contractor shall submit the number of Samples required in the Specifications.
 - b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the Submittal for the limited purposes required by Paragraph 7.16.C.
3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. *Engineer's Review of Shop Drawings and Samples*

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the accepted Schedule of Submittals. Engineer's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.
3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
4. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order or other appropriate Contract modification.
5. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for complying with the requirements of Paragraphs 7.16.A and B.

6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, will not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
7. Neither Engineer's receipt, review, acceptance, or approval of a Shop Drawing or Sample will result in such item becoming a Contract Document.
8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.C.4.

D. Resubmittal Procedures for Shop Drawings and Samples

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous Submittals.
2. Contractor shall furnish required Shop Drawing and Sample submittals with sufficient information and accuracy to obtain required approval of an item with no more than two resubmittals. Engineer will record Engineer's time for reviewing a third or subsequent resubmittal of a Shop Drawing or Sample, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved Shop Drawing or Sample, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

E. Submittals Other than Shop Drawings, Samples, and Owner-Delegated Designs

1. The following provisions apply to all Submittals other than Shop Drawings, Samples, and Owner-delegated designs:
 - a. Contractor shall submit all such Submittals to the Engineer in accordance with the Schedule of Submittals and pursuant to the applicable terms of the Contract Documents.
 - b. Engineer will provide timely review of all such Submittals in accordance with the Schedule of Submittals and return such Submittals with a notation of either Accepted or Not Accepted. Any such Submittal that is not returned within the time established in the Schedule of Submittals will be deemed accepted.
 - c. Engineer's review will be only to determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.
 - d. If any such Submittal is not accepted, Contractor shall confer with Engineer regarding the reason for the non-acceptance, and resubmit an acceptable document.
2. Procedures for the submittal and acceptance of the Progress Schedule, the Schedule of Submittals, and the Schedule of Values are set forth in Paragraphs 2.03, 2.04, and 2.05.

- F. Owner-delegated Designs: Submittals pursuant to Owner-delegated designs are governed by the provisions of Paragraph 7.19.

7.17 Contractor's General Warranty and Guarantee

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer is entitled to rely on Contractor's warranty and guarantee.
- B. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 15.08. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.17 is limited only by applicable Laws and Regulations restricting actions to enforce such rights; provided, however, that after the end of the correction period under Paragraph 15.08:
 - 1. Owner shall give Contractor written notice of any defective Work within 60 days of the discovery that such Work is defective; and
 - 2. Such notice will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the notice.
- C. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 - 1. abuse, or improper modification, maintenance, or operation, by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 - 2. normal wear and tear under normal usage.
- D. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents, a release of Contractor's obligation to perform the Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.17:
 - 1. Observations by Engineer;
 - 2. Recommendation by Engineer or payment by Owner of any progress or final payment;
 - 3. The issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 - 4. Use or occupancy of the Work or any part thereof by Owner;
 - 5. Any review and approval of a Shop Drawing or Sample submittal;
 - 6. The issuance of a notice of acceptability by Engineer;
 - 7. The end of the correction period established in Paragraph 15.08;
 - 8. Any inspection, test, or approval by others; or
 - 9. Any correction of defective Work by Owner.

- E. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract will govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from losses, damages, costs, and judgments (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A will not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

7.19 *Delegation of Professional Design Services*

- A. Owner may require Contractor to provide professional design services for a portion of the Work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that Contractor must furnish to Engineer with respect to the Owner-delegated design.
- B. Contractor shall cause such Owner-delegated professional design services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional. Such design professional must issue all certifications of design required by Laws and Regulations.
- C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Engineer, then such Shop Drawing or other Submittal must bear the written approval of Contractor's design professional when submitted by Contractor to Engineer.

- D. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or employed by Contractor under an Owner-delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.
- E. Pursuant to this Paragraph 7.19, Engineer's review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:
 - 1. Checking for conformance with the requirements of this Paragraph 7.19;
 - 2. Confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and
 - 3. Establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents.
- F. Contractor shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.
- G. Contractor is not required to provide professional services in violation of applicable Laws and Regulations.

ARTICLE 8—OTHER WORK AT THE SITE

8.01 *Other Work*

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.
- D. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or

alter others' work with the written consent of Engineer and the others whose work will be affected.

- E. If the proper execution or results of any part of Contractor's Work depends upon work performed by others, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.
- F. The provisions of this article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.05.C.3.

8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
 - 1. The identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 - 2. An itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. The extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

- A. If, in the course of performing other work for Owner at or adjacent to the Site, the Owner's employees, any other contractor working for Owner, or any utility owner that Owner has arranged to perform work, causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment will take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract, and any remedies available to Contractor under Laws or Regulations concerning utility action or inaction. When applicable, any such equitable adjustment in Contract Price

will be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times or Contract Price is subject to the provisions of Paragraphs 4.05.D and 4.05.E.

- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.
 - 1. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this Paragraph 8.03.B.
 - 2. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due Contractor.
- C. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9—OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents will be that of the former Engineer.

9.03 *Furnish Data*

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 *Pay When Due*

A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

9.05 *Lands and Easements; Reports, Tests, and Drawings*

A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.

B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.

C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 *Insurance*

A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

9.07 *Change Orders*

A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.08 *Inspections, Tests, and Approvals*

A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 *Limitations on Owner's Responsibilities*

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.10 *Undisclosed Hazardous Environmental Condition*

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 *Evidence of Financial Arrangements*

A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract (including obligations under proposed changes in the Work).

9.12 *Safety Programs*

A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.

- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10—ENGINEER’S STATUS DURING CONSTRUCTION

10.01 *Owner’s Representative*

- A. Engineer will be Owner’s representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner’s representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe, as an experienced and qualified design professional, the progress that has been made and the quality of the various aspects of Contractor’s executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer’s efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer’s visits and observations are subject to all the limitations on Engineer’s authority and responsibility set forth in Paragraph 10.07. Particularly, but without limitation, during or as a result of Engineer’s visits or observations of Contractor’s Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor’s means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Resident Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in the Supplementary Conditions and in Paragraph 10.07.
- B. If Owner designates an individual or entity who is not Engineer’s consultant, agent, or employee to represent Owner at the Site, then the responsibilities and authority of such individual or entity will be as provided in the Supplementary Conditions.

10.04 *Engineer’s Authority*

- A. Engineer has the authority to reject Work in accordance with Article 14.
- B. Engineer’s authority as to Submittals is set forth in Paragraph 7.16.

- C. Engineer's authority as to design drawings, calculations, specifications, certifications and other Submittals from Contractor in response to Owner's delegation (if any) to Contractor of professional design services, is set forth in Paragraph 7.19.
- D. Engineer's authority as to changes in the Work is set forth in Article 11.
- E. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.05 *Determinations for Unit Price Work*

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.06 *Decisions on Requirements of Contract Documents and Acceptability of Work*

- A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.07 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation, and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Contractor under Paragraph 15.06.A, will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.07 also apply to the Resident Project Representative, if any.

10.08 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs of which Engineer has been informed.

ARTICLE 11—CHANGES TO THE CONTRACT

11.01 *Amending and Supplementing the Contract*

- A. The Contract may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
- B. If an amendment or supplement to the Contract includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order.
- C. All changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, must be supported by Engineer's recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of the Engineer.

11.02 *Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 - 1. Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 - 2. Changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 - 3. Changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.05, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters; and
 - 4. Changes that embody the substance of any final and binding results under: Paragraph 11.03.B, resolving the impact of a Work Change Directive; Paragraph 11.09, concerning Change Proposals; Article 12, Claims; Paragraph 13.02.D, final adjustments resulting from allowances; Paragraph 13.03.D, final adjustments relating to determination of quantities for Unit Price Work; and similar provisions.
- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of Paragraph 11.02.A, it will be deemed to be of full force and effect, as if fully executed.

11.03 *Work Change Directives*

- A. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Contract Price.
- B. If Owner has issued a Work Change Directive and:
 - 1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Proposal seeking such an adjustment no later than 30 days after the completion of the Work set out in the Work Change Directive.
 - 2. Owner believes that an adjustment in Contract Times or Contract Price is necessary, then Owner shall submit any Claim seeking such an adjustment no later than 60 days after issuance of the Work Change Directive.

11.04 *Field Orders*

- A. Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly.
- B. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.05 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Changes involving the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters will be supported by Engineer's recommendation.
- B. Such changes in the Work may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work must be performed under the applicable conditions of the Contract Documents.
- C. Nothing in this Paragraph 11.05 obligates Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.06 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.C.2.

11.07 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:
 - 1. Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03);
 - 2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.07.C.2); or
 - 3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).
- C. *Contractor's Fee:* When applicable, the Contractor's fee for overhead and profit will be determined as follows:
 - 1. A mutually acceptable fixed fee; or
 - 2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. For costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee will be 15 percent;
 - b. For costs incurred under Paragraph 13.01.B.3, the Contractor's fee will be 5 percent;
 - c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.07.C.2.a and 11.07.C.2.b is that the Contractor's fee will be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of 5 percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted Work the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the Work;

- d. No fee will be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
- e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in Cost of the Work will be the amount of the actual net decrease in Cost of the Work and a deduction of an additional amount equal to 5 percent of such actual net decrease in Cost of the Work; and
- f. When both additions and credits are involved in any one change or Change Proposal, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.

11.08 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment in the Contract Times must comply with the provisions of Article 12.
- B. Delay, disruption, and interference in the Work, and any related changes in Contract Times, are addressed in and governed by Paragraph 4.05.

11.09 *Change Proposals*

- A. *Purpose and Content:* Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; contest an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a set-off against payment due; or seek other relief under the Contract. The Change Proposal will specify any proposed change in Contract Times or Contract Price, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Proposal will address only one issue, or a set of closely related issues.
- B. *Change Proposal Procedures*
 - 1. *Submittal:* Contractor shall submit each Change Proposal to Engineer within 30 days after the start of the event giving rise thereto, or after such initial decision.
 - 2. *Supporting Data:* The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal.
 - a. Change Proposals based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.

- b. Change proposals related to a change of Contract Price must include full and detailed accounts of materials incorporated into the Work and labor and equipment used for the subject Work.

The supporting data must be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event.

- 3. *Engineer's Initial Review:* Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal. If in its discretion Engineer concludes that additional supporting data is needed before conducting a full review and making a decision regarding the Change Proposal, then Engineer may request that Contractor submit such additional supporting data by a date specified by Engineer, prior to Engineer beginning its full review of the Change Proposal.
- 4. *Engineer's Full Review and Action on the Change Proposal:* Upon receipt of Contractor's supporting data (including any additional data requested by Engineer), Engineer will conduct a full review of each Change Proposal and, within 30 days after such receipt of the Contractor's supporting data, either approve the Change Proposal in whole, deny it in whole, or approve it in part and deny it in part. Such actions must be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
- 5. *Binding Decision:* Engineer's decision is final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- C. *Resolution of Certain Change Proposals:* If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties in writing that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice will be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.
- D. *Post-Completion:* Contractor shall not submit any Change Proposals after Engineer issues a written recommendation of final payment pursuant to Paragraph 15.06.B.

11.10 Notification to Surety

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12—CLAIMS

12.01 *Claims*

- A. *Claims Process*: The following disputes between Owner and Contractor are subject to the Claims process set forth in this article:
1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents;
 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters; and
 4. Subject to the waiver provisions of Paragraph 15.07, any dispute arising after Engineer has issued a written recommendation of final payment pursuant to Paragraph 15.06.B.
- B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim rests with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
- C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim will be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation*
1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate will stay the Claim submittal and response process.
 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process will resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process will resume as of the date of the conclusion of the mediation, as determined by the mediator.
 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.

- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action will be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim will be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim will be incorporated in a Change Order or other written document to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13—COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 - 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
 - 2. When needed to determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work will be in amounts no higher than those commonly incurred in the locality of the Project, will not include any of the costs itemized in Paragraph 13.01.C, and will include only the following items:
 - 1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor in advance of the subject Work. Such employees include, without limitation, superintendents, foremen, safety managers, safety representatives, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work will be apportioned on the basis of their time spent on the Work. Payroll costs include, but are not limited to, salaries and wages plus the cost of fringe benefits, which include social security contributions, unemployment, excise, and payroll taxes, workers'

compensation, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, will be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts will accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment will accrue to Owner, and Contractor shall make provisions so that they may be obtained.
3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, which will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee will be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed or retained for services specifically related to the Work.
5. Other costs consisting of the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - 1) In establishing included costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or the estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. Contractor will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such item.
 - c. *Construction Equipment Rental*
 - 1) Rentals of all construction equipment and machinery, and the parts thereof, in accordance with rental agreements approved by Owner as to price (including any surcharge or special rates applicable to overtime use of the construction equipment or machinery), and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs will be in accordance with the terms of said rental agreements. The rental of any such equipment,

machinery, or parts must cease when the use thereof is no longer necessary for the Work.

- 2) Costs for equipment and machinery owned by Contractor or a Contractor-related entity will be paid at a rate shown for such equipment in the equipment rental rate book specified in the Supplementary Conditions. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs.
 - 3) With respect to Work that is the result of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price ("changed Work"), included costs will be based on the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, must cease to accrue when the use thereof is no longer necessary for the changed Work.
- d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
 - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of builder's risk or other property insurance established in accordance with Paragraph 6.04), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses will be included in the Cost of the Work for the purpose of determining Contractor's fee.
 - g. The cost of utilities, fuel, and sanitary facilities at the Site.
 - h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
 - i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.
- C. *Costs Excluded:* The term Cost of the Work does not include any of the following items:
1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered

by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.

2. The cost of purchasing, renting, or furnishing small tools and hand tools.
3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
6. Expenses incurred in preparing and advancing Claims.
7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. Contractor's Fee

1. When the Work as a whole is performed on the basis of cost-plus-a-fee, then:
 - a. Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.
 - b. for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:
 - 1) When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.
 - 2) When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.
2. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work will be determined in accordance with Paragraph 11.07.C.2.

- E. Documentation and Audit:** Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor and pertinent Subcontractors will establish and maintain records of the costs in accordance with generally accepted accounting practices. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all Contractor's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and Contractor's fee. Contractor shall preserve all such documents for a period of three years after the final payment by Owner. Pertinent Subcontractors will afford such access to Owner, and preserve such documents, to the same extent required of Contractor.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances*: Contractor agrees that:
 - 1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 - 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment for any of the foregoing will be valid.
- C. *Owner's Contingency Allowance*: Contractor agrees that an Owner's contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor for Work covered by allowances, and the Contract Price will be correspondingly adjusted.

13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, and the final adjustment of Contract Price will be set forth in a Change Order, subject to the provisions of the following paragraph.

E. *Adjustments in Unit Price*

1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:
 - a. the quantity of the item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
 - b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.
2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.
3. Adjusted unit prices will apply to all units of that item.

ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply with such procedures and programs as applicable.

14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work will be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 3. by manufacturers of equipment furnished under the Contract Documents;
 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests will be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering will be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt written notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the

costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work will be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work will not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 *Owner May Correct Defective Work*

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace defective Work as required by Engineer, then Owner may, after 7 days' written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15—PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 *Progress Payments*

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments*
 - 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work

completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.

2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation establishing full payment by Contractor for the materials and equipment; (b) at Owner's request, documentation warranting that Owner has received the materials and equipment free and clear of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
3. Beginning with the second Application for Payment, each Application must include an affidavit of Contractor stating that all previous progress payments received by Contractor have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
4. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. Review of Applications

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.

3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work;
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto;
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work;
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid by Owner; or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
 - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. Payment Becomes Due

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. Reductions in Payment by Owner

1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. Claims have been made against Owner based on Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages resulting from Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. The Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. The Contract Price has been reduced by Change Orders;
 - i. An event has occurred that would constitute a default by Contractor and therefore justify a termination for cause;
 - j. Liquidated or other damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens; or
 - l. Other items entitle Owner to a set-off against the amount recommended.
2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the

amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed will be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.

3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld will be treated as an amount due as determined by Paragraph 15.01.D.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than 7 days after the time of payment by Owner.

15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which will fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have 7 days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work,

property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.

- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
 - 1. At any time, Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through 15.03.E for that part of the Work.
 - 2. At any time, Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
 - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
 - 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.04 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *Final Payment*

A. *Application for Payment*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.12), and other documents, Contractor may make application for final payment.
2. The final Application for Payment must be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
 - d. a list of all duly pending Change Proposals and Claims; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.

- B. *Engineer's Review of Final Application and Recommendation of Payment:* If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within 10 days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the final Application for Payment to Owner for payment. Such recommendation will account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

- C. *Notice of Acceptability*: In support of its recommendation of payment of the final Application for Payment, Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to stated limitations in the notice and to the provisions of Paragraph 15.07.
- D. *Completion of Work*: The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment and issuance of notice of the acceptability of the Work.
- E. *Final Payment Becomes Due*: Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to Contractor within 30 days of Owner's receipt of the final Application for Payment from Engineer.

15.07 *Waiver of Claims*

- A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by Contractor, except as set forth in an outstanding Claim, appeal under the provisions of Article 17, set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted as a Claim, or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the Supplementary Conditions or the terms of any applicable special guarantee required by the Contract Documents), Owner gives Contractor written notice that any Work has been found to be defective, or that Contractor's repair of any damages to the Site or adjacent areas has been found to be defective, then after receipt of such notice of defect Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such adjacent areas;
 - 2. correct such defective Work;
 - 3. remove the defective Work from the Project and replace it with Work that is not defective, if the defective Work has been rejected by Owner, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting from the corrective measures.
- B. Owner shall give any such notice of defect within 60 days of the discovery that such Work or repairs is defective. If such notice is given within such 60 days but after the end of the correction period, the notice will be deemed a notice of defective Work under Paragraph 7.17.B.

- C. If, after receipt of a notice of defect within 60 days and within the correction period, Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others). Contractor's failure to pay such costs, losses, and damages within 10 days of invoice from Owner will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the failure to pay.
- D. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- E. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- F. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times directly attributable to any such suspension. Any Change Proposal seeking such adjustments must be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the Progress Schedule);
 - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or

4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) 10 days' written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:
 1. declare Contractor to be in default, and give Contractor (and any surety) written notice that the Contract is terminated; and
 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.
- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond will govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate for Convenience*

- A. Upon 7 days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid for any loss of anticipated profits or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon 7 days' written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, 7 days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17—FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this article:
 - 1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full, pursuant to Article 12; and

2. Disputes between Owner and Contractor concerning the Work, or obligations under the Contract Documents, that arise after final payment has been made.
- B. *Final Resolution of Disputes*: For any dispute subject to resolution under this article, Owner or Contractor may:
 1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions;
 2. agree with the other party to submit the dispute to another dispute resolution process; or
 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18—MISCELLANEOUS

18.01 *Giving Notice*

- A. Whenever any provision of the Contract requires the giving of written notice to Owner, Engineer, or Contractor, it will be deemed to have been validly given only if delivered:
 1. in person, by a commercial courier service or otherwise, to the recipient's place of business;
 2. by registered or certified mail, postage prepaid, to the recipient's place of business; or
 3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

18.02 *Computation of Times*

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to

Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of Contractor.

18.07 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Assignment of Contract*

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party to this Contract of any rights under or interests in the Contract will be binding on the other party without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract.

18.09 *Successors and Assigns*

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

18.10 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared By



Endorsed By



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**SUPPLEMENTARY CONDITIONS
OF THE CONSTRUCTION CONTRACT**

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SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

These Supplementary Conditions amend or supplement EJCDC® C-700, Standard General Conditions of the Construction Contract (2018), Section 00700 of this Contract. The General Conditions remain in full force and effect except as amended.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added—for example, "Paragraph SC-4.05."

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

SC-1.01 Add the following

IMU Contractor or Utility Contractor: Contractor as defined in the General Conditions, *The* individual or entity with which Owner has contracted for performance of the Work.

StreetScape Contractor: The individual or entity with which the City of Indianola has contracted for construction of the City of Indianola, Iowa, City Square Reconstruction Project, including all entities performing work or supplying materials to the prime contractor for the project.

Owner: Indianola Municipal Utilities

Engineer: P & E Engineering Co., Carlisle, Iowa

ARTICLE 2—PRELIMINARY MATTERS

SC-2.06 *Electronic Transmittals*

SC-2.06 Delete Paragraphs 2.06.B and 2.06.C in their entirety and insert the following in their place:

- B. *Electronic Documents Protocol:* The parties shall conform to the following provisions in Paragraphs 2.06.B and 2.06.C, together referred to as the Electronic Documents Protocol ("EDP" or "Protocol") for exchange of electronic transmittals.

1. *Basic Requirements*

- a. To the fullest extent practical, the parties agree to and will transmit and accept Electronic Documents in an electronic or digital format using the procedures described in this Protocol. Use of the Electronic Documents and any information contained therein is subject to the requirements of this Protocol and other provisions of the Contract.

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- b. The contents of the information in any Electronic Document will be the responsibility of the transmitting party.
- c. Electronic Documents as exchanged by this Protocol may be used in the same manner as the printed versions of the same documents that are exchanged using non-electronic format and methods, subject to the same governing requirements, limitations, and restrictions, set forth in the Contract Documents.
- d. Except as otherwise explicitly stated herein, the terms of this Protocol will be incorporated into any other agreement or subcontract between a party and any third party for any portion of the Work on the Project, or any Project-related services, where that third party is, either directly or indirectly, required to exchange Electronic Documents with a party or with Engineer. Nothing herein will modify the requirements of the Contract regarding communications between and among the parties and their subcontractors and consultants.
- e. When transmitting Electronic Documents, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the receiving party's use of software application packages, operating systems, or computer hardware differing from those established in this Protocol.
- f. Nothing herein negates any obligation 1) in the Contract to create, provide, or maintain an original printed record version of Drawings and Specifications, signed and sealed according to applicable Laws and Regulations; 2) to comply with any applicable Law or Regulation governing the signing and sealing of design documents or the signing and electronic transmission of any other documents; or 3) to comply with the notice requirements of Paragraph 18.01 of the General Conditions.

2. *System Infrastructure for Electronic Document Exchange*

- a. Each party will provide hardware, operating system(s) software, internet, e-mail, and large file transfer functions ("System Infrastructure") at its own cost and sufficient for complying with the EDP requirements. With the exception of minimum standards set forth in this EDP, and any explicit system requirements specified by attachment to this EDP, it is the obligation of each party to determine, for itself, its own System Infrastructure.
 - 1) The maximum size of an email attachment for exchange of Electronic Documents under this EDP is 5.0 MB. Attachments larger than that may be exchanged using large file transfer functions or physical media.
 - 2) Each Party assumes full and complete responsibility for any and all of its own costs, delays, deficiencies, and errors associated with converting, translating, updating, verifying, licensing, or otherwise enabling its System Infrastructure, including operating systems and software, for use with respect to this EDP.
- b. Each party is responsible for its own system operations, security, back-up, archiving, audits, printing resources, and other Information Technology ("IT") for

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maintaining operations of its System Infrastructure during the Project, including coordination with the party's individual(s) or entity responsible for managing its System Infrastructure and capable of addressing routine communications and other IT issues affecting the exchange of Electronic Documents.

- c. Each party will operate and maintain industry-standard, industry-accepted, ISO-standard, commercial-grade security software and systems that are intended to protect the other party from: software viruses and other malicious software like worms, trojans, adware; data breaches; loss of confidentiality; and other threats in the transmission to or storage of information from the other parties, including transmission of Electronic Documents by physical media such as CD/DVD/flash drive/hard drive. To the extent that a party maintains and operates such security software and systems, it shall not be liable to the other party for any breach of system security.
- d. In the case of disputes, conflicts, or modifications to the EDP required to address issues affecting System Infrastructure, the parties shall cooperatively resolve the issues; but, failing resolution, the Owner is authorized to make and require reasonable and necessary changes to the EDP to effectuate its original intent. If the changes cause additional cost or time to Contractor, not reasonably anticipated under the original EDP, Contractor may seek an adjustment in price or time under the appropriate process in the Contract.
- e. Each party is responsible for its own back-up and archive of documents sent and received during the term of the contract under this EDP, unless this EDP establishes a Project document archive, either as part of a mandatory Project website or other communications protocol, upon which the parties may rely for document archiving during the specified term of operation of such Project document archive. Further, each party remains solely responsible for its own post-Project back-up and archive of Project documents after the term of the Contract, or after termination of the Project document archive, if one is established, for as long as required by the Contract and as each party deems necessary for its own purposes.
- f. If a receiving party receives an obviously corrupted, damaged, or unreadable Electronic Document, the receiving party will advise the sending party of the incomplete transmission.
- g. The parties will bring any non-conforming Electronic Documents into compliance with the EDP. The parties will attempt to complete a successful transmission of the Electronic Document or use an alternative delivery method to complete the communication.

C. *Software Requirements for Electronic Document Exchange; Limitations*

- 1. Each party will acquire the software and software licenses necessary to create and transmit Electronic Documents and to read and to use any Electronic Documents received from the other party (and if relevant from third parties), using the software formats required in this section of the EDP.

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- a. Prior to using any updated version of the software required in this section for sending Electronic Documents to the other party, the originating party will first notify and receive concurrence from the other party for use of the updated version or adjust its transmission to comply with this EDP.
2. The parties agree not to intentionally edit, reverse engineer, decrypt, remove security or encryption features, or convert to another format for modification purposes any Electronic Document or information contained therein that was transmitted in a software data format, including Portable Document Format (PDF), intended by sender not to be modified, unless the receiving party obtains the permission of the sending party or is citing or quoting excerpts of the Electronic Document for Project purposes.
3. Software and data formats for exchange of Electronic Documents will conform to the requirements set forth in Exhibit A to this EDP, including software versions, if listed.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.06 *Drawings*

SC-3.06 Add the following new paragraph immediately after Paragraph 3.05:

3.06 *Drawings*

- A. Details of construction and other engineering data are shown on the included Drawings. In addition to these drawings, other drawings or data may hereafter be furnished and issued by Engineer to explain portions of the work covered by these Specifications in more detail.
- B. The Drawings, in general, are to scale, but figured dimensions shall always be followed and Drawings shall not be scaled.
- C. Engineer will give Contractor reasonable assistance in interpreting the Drawings and Specifications, but such assistance shall not relieve Contractor from any responsibility for his work.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.03 *Starting the Work*

SC-4.02 Add the following paragraphs immediately after Paragraph 4.02.A.

- B. The Contractor shall notify Owner and Engineer 24 hours before starting operations under this Contract, both initially and after any lapse of work lasting more than seven (7) consecutive calendar days.
- C. Contractor shall notify Owner each day in a manner set by Owner regarding when and where Contractor is working on Owner's properties. At no time shall Contractor be on Owner's property or working on or around Owner's system without Owner's knowledge of said fact.

4.03 *Reference Points*

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SC-4.03 Add the following paragraph immediately after Paragraph 4.03.A.

- B. Engineer will provide staking for the Project as defined in the General Requirements, Staking and Layout Section.

ARTICLE 5—SITE, SUBSURFACE AND PHYSICAL CONDITIONS, HAZARDOUS ENVIRONMENTAL CONDITIONS

5.03 Subsurface and Physical Conditions

SC-5.03 Add the following new paragraphs immediately after Paragraph 5.03.D:

- E. The following table lists the reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data, and specifically identifies the Technical Data in the report upon which Contractor may rely:

Report Title	Date of Report	Technical Data
No reports of explorations or tests of subsurface conditions at or adjacent to the Site are known to the Owner or Engineer.		None

- F. The following table lists the drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data, and specifically identifies the Technical Data upon which Contractor may rely:

Drawings Title	Date of Drawings	Technical Data
No drawings showing existing physical conditions at or adjacent to the Site are known to the Owner or Engineer.		None

- G. Contractor may examine copies of reports and drawings identified in SC-5.03.E and SC-5.03.F that were not included with the Bidding Documents at the office of the Engineer during regular business hours, or may request copies from Engineer.

5.05 Underground Facilities

SC-5.05.A Delete Paragraph 5.05.A.3 and insert the following in its place:

3. verifying the actual location of those Underground Facilities that are shown or indicated in the Contract Document and other such facilities that are identified by the utility locates

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required by Paragraph 5.05.G as being within the area affected by the Work, by exposing such Underground Facilities during the course of construction.

SC-5.05.G Add the following new paragraph immediately after Paragraph 5.05.F.

- G. All existing utilities must be located before any excavation is started. Regardless of other utility contacts, Contractor must notify One-Call of Iowa and Owner at least 48 hours before beginning work at any particular location.

5.06 Hazardous Environmental Conditions

SC-5.06 Add the following new paragraphs immediately after Paragraph 5.06.A.3:

4. The following table lists the reports known to Owner relating to Hazardous Environmental Conditions at or adjacent to the Site, and the Technical Data (if any) upon which Contractor may rely:

Report Title	Date of Report	Technical Data
No reports of Hazardous Environmental Conditions at or adjacent to the Site are known to the Owner or Engineer.		None

5. The following table lists the drawings known to Owner relating to Hazardous Environmental Conditions at or adjacent to the Site, and Technical Data (if any) contained in such Drawings upon which Contractor may rely: **[If there are no such drawings, so indicate in the table]**

Drawings Title	Date of Drawings	Technical Data
No drawings showing hazardous environmental conditions at or adjacent to the Site are known to the Owner or Engineer.		None

ARTICLE 6—BONDS AND INSURANCE

6.01 Performance, Payment, and Other Bonds

SC-6.01 Add the following paragraphs immediately after Paragraph 6.01.A:

1. *Required Performance Bond Form:* The performance bond that Contractor furnishes will be in the form of EJCDC® C-610, Performance Bond (2010, 2013, or 2018 edition). A sample of this form is included in Section 00610 of this Contract.

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2. *Required Payment Bond Form:* The payment bond that Contractor furnishes will be in the form of EJCDC® C-615, Payment Bond (2010, 2013, or 2018 edition). A sample of this form is included in Section 00615 of this Contract.

SC-6.01 Add the following paragraphs immediately after Paragraph 6.01.B:

1. The correction period specified as one year after the date of Substantial Completion in Paragraph 15.08.A of the General Conditions is hereby revised to be 2 years after Substantial Completion for damage caused by the Contractor to sewer lines. The correction period remains as one year for all other issues.

6.02 Insurance—General Provisions

SC-6.02 Add the following paragraph immediately after Paragraph 6.02.B:

1. Contractor may obtain worker's compensation insurance from an insurance company that has not been rated by A.M. Best, provided that such company (a) is domiciled in the state in which the Project is located, (b) is certified or authorized as a worker's compensation insurance provider by the appropriate state agency, and (c) has been accepted to provide worker's compensation insurance for similar projects by the state within the last 12 months.

6.03 Contractor's Insurance

SC-6.03 Supplement Paragraph 6.03 with the following provisions after Paragraph 6.03.C:

- D. Not Used
- E. *Workers' Compensation and Employer's Liability:* Contractor shall purchase and maintain workers' compensation and employer's liability insurance, including, as applicable, United States Longshoreman and Harbor Workers' Compensation Act, Jones Act, stop-gap employer's liability coverage for monopolistic states, and foreign voluntary workers' compensation (from available sources, notwithstanding the jurisdictional requirement of Paragraph 6.02.B of the General Conditions).

Workers' Compensation and Related Policies	Policy limits of not less than:
Workers' Compensation	
State	Statutory
Applicable Federal (e.g., Longshoreman's)	Statutory
Foreign voluntary workers' compensation (employer's responsibility coverage), if applicable	Statutory
Employer's Liability	
Each accident	\$1,000,000
Each employee	\$1,000,000
Policy limit	\$1,000,000

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- F. *Commercial General Liability—Claims Covered:* Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against claims for:
1. damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees,
 2. damages insured by reasonably available personal injury liability coverage, and
 3. damages because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- G. *Commercial General Liability—Form and Content:* Contractor's commercial liability policy must be written on a 1996 (or later) Insurance Services Organization, Inc. (ISO) commercial general liability form (occurrence form) and include the following coverages and endorsements:
1. Products and completed operations coverage.
 - a. Such insurance must be maintained for three years after final payment.
 - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
 2. Blanket contractual liability coverage, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
 3. Severability of interests and no insured-versus-insured or cross-liability exclusions.
 4. Underground, explosion, and collapse coverage.
 5. Personal injury coverage.
 6. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 2010 and CG 2037 (together), editions 10/01, 07/04, or 04/13.
 7. For design professional additional insureds, ISO Endorsement CG 20 32 07 04 "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.
- H. *Commercial General Liability—Excluded Content:* The commercial general liability insurance policy, including its coverages, endorsements, and incorporated provisions, must not include any of the following:
1. Any modification of the standard definition of "insured contract" (except to delete the railroad protective liability exclusion if Contractor is required to indemnify a railroad or others with respect to Work within 50 feet of railroad property).
 2. Any exclusion for water intrusion or water damage.

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3. Any provisions resulting in the erosion of insurance limits by defense costs other than those already incorporated in ISO form CG 00 01.
4. Any exclusion of coverage relating to earth subsidence or movement.
5. Any exclusion for the insured's vicarious liability, strict liability, or statutory liability (other than worker's compensation).
6. Any limitation or exclusion based on the nature of Contractor's work.
7. Any professional liability exclusion broader in effect than the most recent edition of ISO form CG 22 79.

I. Commercial General Liability—Minimum Policy Limits

Commercial General Liability	Policy limits of not less than:
General Aggregate	\$2,000,000
Products—Completed Operations Aggregate	\$2,000,000
Personal and Advertising Injury	\$1,000,000
Bodily Injury and Property Damage—Each Occurrence	\$1,000,000

- J. Automobile Liability:** Contractor shall purchase and maintain automobile liability insurance for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy must be written on an occurrence basis.

Automobile Liability	Policy limits of not less than:
Bodily Injury	
Each Person	\$500,000
Each Accident	\$1,000,000
Property Damage	
Each Accident	\$1,000,000
or	
Combined Single Limit	
Combined Single Limit (Bodily Injury and Property Damage)	\$2,000,000

- K. Umbrella or Excess Liability:** Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the Paragraphs above. The coverage afforded must be at least as broad as that of each and every one of the underlying policies.

Excess or Umbrella Liability	Policy limits of not less than:
Each Occurrence	\$4,000,000
General Aggregate	\$4,000,000

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- L. *Using Umbrella or Excess Liability Insurance to Meet CGL and Other Policy Limit Requirements:* Contractor may meet the policy limits specified for employer's liability, commercial general liability, and automobile liability through the primary policies alone, or through combinations of the primary insurance policy's policy limits and partial attribution of the policy limits of an umbrella or excess liability policy that is at least as broad in coverage as that of the underlying policy, as specified herein. If such umbrella or excess liability policy was required under this Contract, at a specified minimum policy limit, such umbrella or excess policy must retain a minimum limit of \$3,000,000 after accounting for partial attribution of its limits to underlying policies, as allowed above.
- M. *Contractor's Pollution Liability Insurance:* Contractor shall purchase and maintain a policy covering third-party injury and property damage, including cleanup costs, as a result of pollution conditions arising from Contractor's operations and completed operations. This insurance must be maintained for no less than three years after final completion.

Contractor's Pollution Liability	Policy limits of not less than:
Each Occurrence/Claim	\$1,000,000
General Aggregate	\$1,000,000

- N. *Unmanned Aerial Vehicle Liability Insurance:* If Contractor uses unmanned aerial vehicles (UAV—commonly referred to as drones) at the Site or in support of any aspect of the Work, Contractor shall obtain UAV liability insurance in the amounts stated; name Owner, and Engineer as additional insureds; and provide a certificate to Owner confirming Contractor's compliance with this requirement. Such insurance will provide coverage for property damage, bodily injury or death, and invasion of privacy.

Unmanned Aerial Vehicle Liability Insurance	Policy limits of not less than:
Each Claim	\$1,000,000
General Aggregate	\$1,000,000

6.04 Builder's Risk and Other Property Insurance

SC-6.04.D Delete Paragraph 6.04.D and insert the following in its place:

D. All portions of the Work are subject to Partial Use or Utilization as soon as the wires, cable, equipment, and other materials are installed and energized by the Contractor.

SC-6.04.F Supplement Paragraph 6.04 of the General Conditions with the following provisions:

- F. *Builder's Risk Requirements:* The builder's risk insurance must:
1. be written on a builder's risk "all risk" policy form that at a minimum includes insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment stored and in transit, and must not exclude the coverage of the following

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risks: fire; windstorm; hail; flood; earthquake, volcanic activity, and other earth movement; lightning; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; and water damage (other than that caused by flood).

- a. Such policy will include an exception that results in coverage for ensuing losses from physical damage or loss with respect to any defective workmanship, methods, design, or materials exclusions.
 - b. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake, volcanic activity, and other earth movement; or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance will be provided through other insurance policies acceptable to Owner and Contractor.
2. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.
 3. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of contractors, engineers, and architects).
 4. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).
 5. extend to cover damage or loss to insured property while in transit.
 6. allow for the waiver of the insurer's subrogation rights, as set forth in this Contract.
 7. allow for partial use by Owner by endorsement, and without cancellation or lapse of coverage.
 8. include performance/hot testing and start-up, if applicable.
 9. be maintained in effect until the Work is complete, as set forth in Paragraph 15.06.D of the General Conditions, or until written confirmation of Owner's procurement of property insurance following Substantial Completion, whichever occurs first.
 10. include as named insureds the Owner, Contractor, Subcontractors (of every tier), and any other individuals or entities required by this Contract to be insured under such

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builder's risk policy. For purposes of Paragraphs 6.04, 6.05, and 6.06 of the General Conditions, and this and all other corresponding Supplementary Conditions, the parties required to be insured will be referred to collectively as "insureds."

11. include, in addition to the Contract Price amount, the value of the following equipment and materials to be installed by the Contractor but furnished by the Owner or third parties:

- a. Items identified in Bill of Material as being supplied by Owner
\$500,000

SC-6.04 Supplement Paragraph 6.04 of the General Conditions with the following provisions:

- G. *Builder's Risk and Other Property Insurance Deductibles:* The purchaser of any required builder's risk, installation floater, or other property insurance will be responsible for costs not covered because of the application of a policy deductible.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.03 Labor; Working Hours

SC-7.03 Add the following new subparagraphs immediately after Paragraph 7.03.C:

1. Regular working hours will be 7:00 AM to 7:00 PM, Monday through Friday.

SC-7.03 Add the following new paragraph immediately after Paragraph 7.03.C:

- D. Owner shall be responsible for the cost of any overtime pay or other expense incurred by the Owner, Engineer, Owner's representative, and construction observation services, occasioned by the performance of Work on Saturday, Sunday, any legal holiday, or as overtime on any regular work day.

7.10 Taxes

SC-7.10 Add a new paragraph immediately after Paragraph 7.10.A:

- B. The Owner is not exempt from State of Iowa Sales and Use tax for materials that are incorporated into an electric utility project. Contractor shall include all applicable taxes in the bid amount.

7.13 Safety and Protection

SC-7.13 Add a new paragraph immediately after Paragraph 7.13.J;

- K. Contractor will be required to follow all Owner's safety rules included in the Safety Manual for the City of Indianola. The pertinent safety rules are shown on page 14 of this manual, which is attached to and made a part of this Contract in Section 0850. The entire Safety Manual can be viewed at the IMU main office at 210 W Second Ave, Indianola, Iowa.

7.16 Submittals

SC-7.16 Delete Paragraphs 7.16.A, 7.16.B, 7.16.C, and 7.16.D, and insert the following in its place:

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- A. Shop drawings and samples will not be required for Contractor furnished materials, except for materials covered by Section 16403. See paragraphs 9.5 and 18.3 of Section 10000 and paragraph 7.0 of Section 16403.
- B. Not Used
- C. Not Used
- D. Not Used

ARTICLE 8—OTHER WORK AT THE SITE

There are no Supplementary Conditions referring to this Article.

ARTICLE 9—OWNER’S RESPONSIBILITIES

9.13 *Owner’s Site Representative*

SC-9.13 Add the following new paragraph immediately after Paragraph 9.12 of the General Conditions:

9.13 *Owner’s Site Representative*

- A. The Owner’s Site Representative will be an employee of the Owner and will be identified prior to the start of construction. The Owner’s Site Representative is not Engineer’s consultant, agent, or employee. The Owner’s Site Representative will:
 - 1. Be the primary day to day contact for the Contractor’s on-site project manager
 - 2. Coordinate the interaction between Contractor’s work and the Owner’s system
 - 3. Review and approve all proposed switching operations on the Owner’s system
 - 4. Review Contractor’s Work and notify Engineer of any concerns regarding the acceptability of the Work.
 - 5. Provide information to Engineer on the progress of the work as needed for Engineer to review Applications for Payment
 - 6. Authorize minor deviations from the Contract Documents or substitution of materials or equipment (including “or-equal” items) that will not change the Contract Price or Contract Times.
- D. The Owner’s Site Representative will not:
 - 1. Authorize any deviation from the Contract Documents.
 - 3. Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers; nor of Engineer (except as specifically listed above).
 - 4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction.

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- 5 Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.
6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
7. Provide any tools, equipment, or labor that is included in the Contractor's scope of responsibility.

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

There are no Supplementary Conditions referring to this Article.

ARTICLE 11—CHANGES TO THE CONTRACT

There are no Supplementary Conditions referring to this Article.

ARTICLE 12—CLAIMS

There are no Supplementary Conditions referring to this Article.

ARTICLE 13—COST OF WORK; ALLOWANCES, UNIT PRICE WORK

13.01 *Cost of the Work*

SC-13.01 Supplement Paragraph 13.01.B.5.c.(2) by adding the following sentence:

When Contractor's compensation (including the value of Extra Work) is determined in whole or in part by the hourly cost of equipment, the hourly rate shall not exceed the greater of the rate shown in the most current edition of the Rental Rate Blue Book for Construction Equipment, and the AED Green Book: Rental Rates & Specifications for Construction Equipment.

SC-13.01 Supplement Paragraph 13.01.C.2 by adding the following definition of small tools and hand tools:

- a. For purposes of this paragraph, "small tools and hand tools" means any tool or equipment whose current price if it were purchased new at retail would be less than \$500.

ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

There are no Supplementary Conditions referring to this Article.

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ARTICLE 15—PAYMENTS TO CONTRACTOR, SET OFFS; COMPLETIONS; CORRECTION PERIOD

15.01 *Progress Payments*

SC-15.01 Amend Paragraph 15.01.D.1 to read as follows:

Thirty days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

15.04 *Partial Use or Occupancy*

SC-15.04 Delete Paragraph 15.04 and insert the following in its place:

15.04 *Partial Use or Occupancy*

A. The Contractor acknowledges the intent of the Owner that all portions of the system are subject to partial use as soon as they are installed and energized by the Contractor, so long as such partial utilization will not damage or hinder the Contractor's Work.

B. Contractor is fully responsible for protecting the integrity of the portion of the distribution system that is being modified by this Contract, including damage from any cause commencing when on-site work begins on the project and continuing until substantial completion for each section of the project.

C. A line section will be considered substantially complete when all new cables, conductor, apparatus, and connections have been permanently installed and placed in normal service; and all poles, conductor, and apparatus to be removed have been completely removed from the work area, except that poles that have all Owner attachments removed may remain in place.

E. When the Contractor believes that a line section is substantially complete, Contractor shall notify Engineer and Owner in writing and request Engineer to issue a Certificate of Substantial Completion for that portion of the Work.

F. The Contractor's responsibility for protecting the integrity of that specific portion of the system will cease immediately upon approval by the Owner of the Certificate of Substantial Completion. This does not relieve the Contractor of other obligations related to final completion or warranty of Work. Contractor is responsible for coordinating insurance coverage in accordance with Paragraph 6.04 of the General Conditions.

15.06 *Final Payment*

SC-15.06.A Add the following new Paragraph 15.06.A.2.f:

f. A list of any and all third party claims that the Contractor has received or is otherwise aware of that relate in any manner to the work performed under the Contract (including claims described in Paragraph 5.02.A.2 or 7.13.D of the General Conditions), the status of each

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claim, and the potential liability related to any claims that have not been settled. Documentation must be provided to verify the resolution of each claim that has been settled.

SC-15.06.E Delete Paragraph 15.06.E and insert the following in its place:

- E. The balance of the amount due, less any sum to which Owner is entitled, including but not limited to set-offs allowed under the provisions of this Contract, and less the potential liability associated with any unresolved third party claims as described in Paragraph SC-15.06.A.2.f, will be paid no earlier than 31 days from final acceptance of the improvements by Owner, subject to the conditions and in accordance with the provisions of Chapter 384 and 573 of the Code of Iowa.
- F. If an amount is withheld from the final payment to cover the potential liability associated with third party claims as described in Paragraph SC-15.06.A.2.f, this amount will be paid within 30 days of Contractor providing evidence satisfactory to Owner and Engineer that all of the claim(s) have been resolved.

15.08 Correction Period

SC-15.08 Add the following new Paragraph 15.08.G:

- G. The correction period specified as one year after the date of Substantial Completion in Paragraph 15.08.A of the General Conditions is hereby revised to be the number of years set forth in SC-6.01.B.1.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

There are no Supplementary Conditions referring to this Article.

ARTICLE 17—FINAL RESOLUTIONS OF DISPUTES

17.02 Arbitration

SC-17.02 Add the following new paragraph immediately after Paragraph 17.01.

17.02 Arbitration

- A. All matters subject to final resolution under this Article will be settled by arbitration administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules (subject to the conditions and limitations of this Paragraph SC-17.02). Any controversy or claim in the amount of \$100,000 or less will be settled in accordance with the American Arbitration Association's supplemental rules for Fixed Time and Cost Construction Arbitration. This agreement to arbitrate will be specifically enforceable under the prevailing law of any court having jurisdiction.
- B. The demand for arbitration will be filed in writing with the other party to the Contract and with the selected arbitration administrator, and a copy will be sent to Engineer for information. The demand for arbitration will be made within the specific time required in Article 17, or if no specified time is applicable within a reasonable time after the matter in

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question has arisen, and in no event will any such demand be made after the date when institution of legal or equitable proceedings based on such matter in question would be barred by the applicable statute of limitations.

- C. The arbitrator(s) must be licensed engineers, contractors, attorneys, or construction managers. Hearings will take place pursuant to the standard procedures of the Construction Arbitration Rules that contemplate in-person hearings. The arbitrators will have no authority to award punitive or other damages not measured by the prevailing party's actual damages, except as may be required by statute or the Contract. Any award in an arbitration initiated under this clause will be limited to monetary damages and include no injunction or direction to any party other than the direction to pay a monetary amount.
- D. The Arbitrators will have the authority to allocate the costs of the arbitration process among the parties, but will only have the authority to allocate attorneys' fees if a specific Law or Regulation or this Contract permits them to do so.
- E. The award of the arbitrators must be accompanied by a reasoned written opinion and a concise breakdown of the award. The written opinion will cite the Contract provisions deemed applicable and relied on in making the award.
- F. The parties agree that failure or refusal of a party to pay its required share of the deposits for arbitrator compensation or administrative charges will constitute a waiver by that party to present evidence or cross-examine witness. In such event, the other party shall be required to present evidence and legal argument as the arbitrator(s) may require for the making of an award. Such waiver will not allow for a default judgment against the non-paying party in the absence of evidence presented as provided for above.
- G. No arbitration arising out of or relating to the Contract will include by consolidation, joinder, or in any other manner any other individual or entity (including Engineer, and Engineer's consultants and the officers, directors, partners, agents, employees or consultants of any of them) who is not a party to this Contract unless:
 - 1. the inclusion of such other individual or entity will allow complete relief to be afforded among those who are already parties to the arbitration;
 - 2. such other individual or entity is substantially involved in a question of law or fact which is common to those who are already parties to the arbitration, and which will arise in such proceedings;
 - 3. such other individual or entity is subject to arbitration under a contract with either Owner or Contractor, or consents to being joined in the arbitration; and
 - 4. the consolidation or joinder is in compliance with the arbitration administrator's procedural rules.
- H. The award will be final. Judgment may be entered upon it in any court having jurisdiction thereof, and it will not be subject to modification or appeal, subject to provisions of the Laws and Regulations relating to vacating or modifying an arbitral award.

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- I. Except as may be required by Laws or Regulations, neither party nor an arbitrator may disclose the existence, content, or results of any arbitration hereunder without the prior written consent of both parties, with the exception of any disclosure required by Laws and Regulations or the Contract. To the extent any disclosure is allowed pursuant to the exception, the disclosure must be strictly and narrowly limited to maintain confidentiality to the extent possible.

17.03 Attorneys' Fees

SC-17.03 Add the following new paragraph immediately after Paragraph 17.02. [Note: If there is no Paragraph 17.02, because neither arbitration nor any other dispute resolution process has been specified here in the Supplementary Conditions, then revise this to state "Add the following new Paragraph immediately after Paragraph 17.01" and revise the numbering accordingly].

17.03 Attorneys' Fees

- A. For any matter subject to final resolution under this Article, the prevailing party shall be entitled to an award of its attorneys' fees incurred in the final resolution proceedings, in an equitable amount to be determined in the discretion of the court, arbitrator, arbitration panel, or other arbiter of the matter subject to final resolution, taking into account the parties' initial demand or defense positions in comparison with the final result.

ARTICLE 18—MISCELLANEOUS

There are no Supplementary Conditions referring to this Article.

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EXHIBIT A—SOFTWARE REQUIREMENTS FOR ELECTRONIC DOCUMENT EXCHANGE

Item	Electronic Documents	Transmittal Means	Data Format	Note (1)
a.1	General communications, transmittal covers, meeting notices and responses to general information requests for which there is no specific prescribed form.	Email	Email	
a.2	Meeting agendas, meeting minutes, RFI's and responses to RFI's, and Contract forms.	Email w/ Attachment	PDF	(2)
a.3	Contractors Submittals (Shop Drawings, "or equal" requests, substitution requests, documentation accompanying Sample submittals and other submittals) to Owner and Engineer, and Owner's and Engineer's responses to Contractor's Submittals, Shop Drawings, correspondence, and Applications for Payment.	Email w/ Attachment	PDF	
a.4	Correspondence; milestone and final version Submittals of reports, layouts, Drawings, maps, calculations and spreadsheets, Specifications, Drawings and other Submittals from Contractor to Owner or Engineer and for responses from Engineer and Owner to Contractor regarding Submittals.	Email w/ Attachment or LFE	PDF	
a.5	Correspondence, reports and Specifications to be submitted to Owner for future word processing use and modification.	Email w/ Attachment or LFE	DOC	
a.6	Spreadsheets and data to be submitted to Owner for future data processing use and modification.	Email w/ Attachment or LFE	EXC	
Notes				
(1)	All exchanges and uses of transmitted data are subject to the appropriate provisions of Contract Documents.			
(2)	Transmittal of written notices is governed by Paragraph 18.01 of the General Conditions.			
Key				
Email	Standard Email formats (.htm, .rtf, or .txt). Do not use stationery formatting or other features that impair legibility of content on screen or in printed copies			
LFE	Agreed upon Large File Exchange method (FTP, CD, DVD, hard drive)			
PDF	Portable Document Format Version 4.1			
DOC	Microsoft® Word .docx format Version 2013			
EXC	Microsoft® Excel .xls or .xml format Version 2013			

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1.0 IMU Safety Requirements

- 1.1 See Supplementary Conditions Paragraph SC-7.13 and Paragraph 10.0 in Section 01000 See Paragraph xx in Section 001000 for additional requirements related to working with energized conductors and general safety considerations.
- 1.2 The following three pages contain the pertinent sections of the IMU Safety Manual. The requirements of this manual are incorporated into this Contract.
- 1.3 The complete IMU Safety Manual is available for viewing at the IMU office at 210 W. Second Ave, Indianola, Iowa.

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Outside Contractors

In hiring short-term contractors, the City of Indianola and/or Indianola Municipal Utilities will require the contractors to submit proof of their safety programs and successful safety training. Before a contractor commences work in the City of Indianola or Indianola Municipal Utilities workplace, the project coordinator and/or supervisor who controls the work area will be responsible for informing all outside contractors of the elements of all safety programs of the city/IMU that affect the project.

Contractors who fail to follow safety program requirements will be asked to leave the premises. Contractors with an insufficient program will not be allowed to begin work until their program meets or exceeds the requirements of this program.

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Basic Safety Rules

General Safety Rules

1. Each employee will be required to comprehend and abide by the contents of this safety program.
2. All accidents, incidents and near misses no matter how minor, shall be reported immediately to the supervisor.
3. All hazardous conditions, actions and/or practices shall be reported to the supervisor.
4. Work areas, including the inside and outside of vehicles and buildings, shall be kept clean and orderly at all times.
5. Employees are only to operate equipment/tools that they are trained and authorized to operate.
6. Smoking is prohibited in areas where there is a danger to equipment, materials, coworkers or buildings, or where "No Smoking" signs are posted.
7. Employees must use all safety devices and personal protective equipment provided for their protection.
8. Employees shall wear clothing and shoes suitable for the particular work they are doing.
9. Employees must use assisted lifting devices or obtain assistance from a coworker when lifting heavy objects.
10. Guards are never to be removed except when authorized to make repairs or adjustments. Replace guard immediately upon completion of work.
11. The use of drugs and alcohol during working hours is prohibited. Any employee reporting for work under the influence of alcohol or controlled substances is subject to disciplinary action.
12. Any employee taking prescription drugs or over-the-counter drugs that could impair assigned work shall report this fact to the supervisor.
13. Employees shall not engage in practical jokes or horseplay that could result in injury to themselves, others or cause property damage.

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Specific Safety Programs and Procedures

Employees will be trained on specific programs and procedures in their departments that may include the following:

- A. Personal Protective Equipment
- B. Respiratory Protection
- C. Hearing Conservation
- D. Lockout/Tagout
- E. Confined Spaces Entry
- F. Hazardous Communications
- G. Blood-Borne Exposure Control Plan

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1.0 PROJECT DESCRIPTION

- 1.1 The project Site is located within the city limits of Indianola, Iowa for the Indianola Municipal Utilities, Indianola, Iowa. This project includes furnishing all material (except that to be furnished by Owner), labor, tools, equipment, and other items necessary to complete the entire project as defined by these Contract Documents.

2.0 SCOPE OF WORK

- 2.1 Bidder shall make his proposal with the understanding that these Drawings and Specifications are intended to cover all of the materials, equipment, and work necessary to complete this project as described, except for those items that are specifically listed as being supplied or completed by Owner or by others. Any intended omissions must be stated by the proposer in writing in his proposal.
- 2.2 Work generally consists of the following major items of work but is not limited to the items listed below.
- a. Install underground conduit, including installation by directional boring and installation of concrete encased duct banks by open trenching.
 - b. Install primary (13 kV) and secondary (600 v) cable.
 - c. Install and connect pad mounted transformers, junction cabinets, pedestals, hand holes, and related equipment.
 - d. Install and connect group meter installations.
 - e. Convert building electrical services from overhead to underground.
 - f. Remove transformers and other equipment, and underground cable as shown on drawing E9790-200.
 - g. Furnish all material required for the completion of the Work, except that to be supplied by Owner.
- 2.3 Contractor will furnish all equipment and materials required to complete the Work, except for those items listed on the Bill of Material as being supplied by Owner.
- 2.4 The Base Bid includes all Work as defined by the Drawings and Specifications.
- 2.5 Contractor shall provide as built data for the system as installed. This shall include notations on drawings showing any field changes to footages, equipment locations, or connections.
- 3.0 WORK BY OWNER OR BY OTHERS**
- 3.1 The following work is not a part of this Contract and will be performed by the Owner or others.

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- a. Removal of wood poles and overhead conductors (including service drops to individual buildings).
- b. Removal of existing underground conductor, except for work by Contractor as shown on drawings E9790-200.
- c. Removal and replacement of alley surfacing within the scope of the StreetScape project, as shown on the drawings.

4.0 SCHEDULE

- 4.1 Contractor may begin work at any time after receiving a Notice to Proceed. The Notice to Proceed is expected to be issued on or about May 3, 2021. All Work must be substantially completed by December 1, 2022; with Final Completion by December 20, 2022.
- 4.2 All equipment provided by Owner is expected to be available for Contractor's use in meeting the schedule.
- 4.3 Contractor will not be allowed to install conduit or equipment pads during winter weather conditions when frozen ground precludes proper backfill and compaction. Cable and equipment installation that does not involve excavation may continue at the Contractor's option.
- 4.4 No open excavations, conduit stub-ups (except those against building walls), or exposed cable ends will be allowed to persist through the winter season. All locations must be backfilled and all barricades removed when excavation work is suspended for the winter.
- 4.5 Work hours will be restricted to Monday through Friday, 7:00 AM to 7:00 PM, unless arrangements are made in advance for specific tasks. See Paragraph 18 for scheduling of outages.
- 4.6 The work in the downtown alleys must be coordinated with the StreetScape Contractor, to be retained by the City of Indianola. For each Phase of the StreetScape work, the work will generally proceed with the following steps.
 - a. The StreetScape Contractor will remove the alley surface, install water mains, sewer lines, and other utilities that are generally below the elevation of the duct banks.
 - b. The IMU Contractor (this Contract) will excavate as required to install the concrete encased duct bank and conduit extensions that are within the limits of the alley paving, backfill and compact to prepare the alley for additional work by the StreetScape Contractor.
 - c. The StreetScape Contractor will complete the installation of below grade utilities and pavement.
 - d. The IMU Contractor (this Contract) will complete work required on individual buildings to convert the electric service from overhead to underground.

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- e. Owner will remove existing overhead service drops to individual buildings after the building service has been cut over to the new underground feed.
- 4.7 The expected start date and the allowed days for completion of each Phase of the concrete encased duct bank work is as follows. The geographical extent of each Phase is shown on the drawings. Dates are current estimates, and are subject to change based on the city contractor's schedule. The "allowed days" is the time span available to this Contractor to complete the installation of the concrete encased duct banks and related work, measured from the time the area is made available to the Contractor to start excavation to the time that the Contractor has completed all restoration work so the StreetScape contractor can resume work. The "allowed days" will be extended based on time that cannot be worked due to inclement weather or other conditions beyond the control of the Contractor.

Phase	Start Date	General Area	Allowed Days for Completion
Phase 1 & 1A	June 1, 2021	N-S alley west of Buxton from Salem to Ashland	28 calendar days
Phase 3	Aug. 15, 2021	Cross Ashland west of Buxton	10 calendar days
Phase 4 & Alt 1	March 1, 2022	E-W alley north of Ashland from Buxton to Howard	42 calendar days
Phase 5	July 15, 2022	E-W alley south of Salem from Buxton to Howard	42 calendar days

- 4.8 Specific restrictions and limitations on scheduling of customer cutovers include.
- A. No customers may be cut over to the new system prior to completion of sections of work as follows.
1. The downtown three phase primary loop from Location 081A to Location 001 (but not including radial taps off the loop to transformers at Locations 007A, 011, 013, 014, 015, 018, 019, 020, and 023) must be completed with all primary cable energized (and in a position to provide an alternate source in the event of a cable failure) before any customer load on that circuit is cut over to the new underground system.
 2. The single phase primary loop with sources at Location 048 must be completed with all transformers installed (so the new portion of the loop is in a position to provide an alternate source in the event of a cable failure) before cutting into the existing loop at Location 048.
- B. The sequence for energizing the three phase primary loop from Location 045 to Location 024 shall be as follows.
1. Install equipment and cable, and terminate cable to the extent possible, including terminated junction cabinets at Locations 027 and 032, terminated transformers at Locations 028 and 029, and cables pulled into existing equipment and terminated (but not connected) at Locations 024, 031, 054, 060, 043, and 045.

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2. Energize cable, but do not cut over load, from Location 024 through Locations 028 and 027 to Location 029.
3. Complete work at Location 031, energizing cable from Location 029 through Location 031 to Location 032.
4. Complete work and cutover at Location 047, with transformer fed from Location 045.
5. Complete work at Location 043, with transformer fed from Location 047.
6. Transfer transformers at Locations 054 and 060 to the new cable, completing the loop between Locations 045 and 024.
7. Cut over load at individual transformer locations.

5.0 SEQUENCE OF WORK

- 5.1 With the exception of the specific requirements in Paragraphs 4.6 through 4.8, the work sequence is at the discretion of the Contractor. Contractor must submit a general work plan for approval by the Owner prior to starting work on the Project.

6.0 OIL FILLED EQUIPMENT

- 6.1 Work to be performed under this contract will involve Contractor operations on or around existing oil filled equipment, some of which may contain PCB contaminants.
- 6.2 By submitting a proposal for this Work, Contractor certifies that he is familiar with the Environmental Protection Agency and Department of Transportation regulations concerning the handling and transport of oil filled electrical equipment. Furthermore, Contractor accepts responsibility for compliance with these regulations.
- 6.3 Contractor shall inspect all such equipment before commencing operations on or near same. If any equipment is found to be damaged or leaking, Contractor shall, prior to any operations, immediately notify Owner and allow Owner to evaluate the equipment and take such action as Owner may deem appropriate, including but not limited to undertaking removal and/or cleanup operations with its own forces.
- 6.4 In the event Contractor fails to notify Owner in the manner required in the above paragraph, all such damage and/or leakage shall be deemed to have occurred as a result of Contractor's operations, and Contractor shall bear sole responsibility and liability for all claims due to or arising out of such damage and/or leakage, whether they be claims for damage or injury, or claims of any other type whatsoever (including fines).
- 6.5 Should any such equipment become damaged and/or develop oil leakage during performance of the work, Contractor shall immediately notify Owner of such event. Such notice shall specify the location of the equipment, equipment involved, and size and nature of the spill (if any has occurred).

Concurrently, Contractor shall, to the maximum extent possible, contain or minimize the spill (if any), by means such as using oil absorbent materials to soak up any spilled oil or

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by constructing dikes to prevent the migration of oil and oil-contaminated water. Barricades shall be constructed around the spill area to prevent access by people, animals, or traffic.

Until such time as Owner's representative arrives on the scene, Contractor shall continue to undertake efforts to contain or minimize the spill. Owner will conduct such cleanup as may be necessary. If no spill has occurred, and there is merely damage to the equipment, Owner may either direct Contractor in the appropriate means of disposal, or undertake these efforts itself, at Owner's option. All claims due to or arising out of such damage and/or leakage, whether they be claims for damage or injury, or claims of any other type whatsoever (including fines) shall be the sole responsibility and liability of Contractor.

7.0 STORAGE OF MATERIAL AND EQUIPMENT

- 7.1 Owner will make available space for a construction trailer and limited material storage at the south water plant facility on the north side of West 17th Ave., east of K St.
- 7.2 Owner will make electric service available to Contractor's trailer at Contractor's expense.
- 7.3 Any additional storage space required by the Contractor must be arranged for by Contractor. Security of any additional storage sites is the sole responsibility of Contractor.
- 7.4 Storage area shall be subject to approval of Owner.

8.0 MATERIALS

- 8.1 Contractor is to furnish and pay for all materials necessary for the completion of the Work, except for those items that are listed as being provided by Owner in the Bill of Material or otherwise designated as being provided by Owner. All materials supplied by Contractor shall be new and unused.
- 8.2 Material provided by Owner will be made available to be picked up by Contractor at the Owner's storeroom.
- 8.3 Distances shown in the staking sheet or on drawings are estimated and are not guaranteed to be accurate. Distances shown shall not be used by the Contractor for ordering or cutting lengths without field verification.
- 8.4 If the total amount of cable or conduit, or the quantities of major equipment items actually installed differs from that shown in the Contract Documents an appropriate adjustment will be made in the final Contract Amount.

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- 8.5 The Bill of Material is provided solely as a reference and guide for Contractor. All material (except for those items that are listed as being provided by Owner) and labor that is required to complete the Work as described by the Contract Documents is to be provided by Contractor, regardless of whether or not any specific items are included in the Bill of Material and regardless of the quantities shown.
- 8.6 It is the responsibility of Contractor to verify all existing conductor information and data before ordering conductor sensitive hardware, including connectors, sleeves, lugs, terminals, etc. All hardware must be rated by the manufacturer for use with the specific conductor that it is installed on. It is the responsibility of Contractor to provide an adequate quantity of various lengths of bolts to meet all of the Work requirements. Owner makes no representation as to the required length of any bolts or other hardware that are indicated on the drawings or bill of material as “various lengths” or “as required”.
- 8.7 Contractor is responsible for supplying Owner with a list of all materials to be supplied for use on the project, complete with manufacturer and catalog number, within one week of the issuing of the Notice to Proceed. All substitutions and “Or-Equal” items shall be identified and presented as described in Paragraph 6.05 of the General Conditions. The Costs described in Paragraph 6.05.E. of the General Conditions will not be assessed for evaluation of substitutions that involve standard line hardware manufactured by well known and reputable suppliers.
- 8.8 Owner will dispose of all removed materials and cables.
- 8.8.1 All removed material (except for junk materials) is to remain property of Owner.
- 8.8.2 Contractor shall sort all reusable and salvageable equipment, material, wire, cables, and conductor as directed by Owner.
- 8.8.3 Not Used
- 8.8.4 Not Used.
- 8.9 Re-usable material is to be sorted by equipment type and category, and stacked or stored neatly in an area to be designated by Owner.
- 8.10 Removed concrete and waste dirt or rock is to be loaded, hauled to a site to be designated and provided by Owner, and unloaded by Contractor.
- 8.11 All oil filled equipment, including transformers, are to be returned to Owner, at a location to be designated.
- 8.12 Contractor is responsible for furnishing all required fill dirt and black dirt, loading, hauling, and handling all such materials.

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- 8.13 Contractor is responsible for cutting, patching, repairing, and replacing all disturbed surfacing (including concrete and asphalt) except for alley surface as described in Paragraph 4.6.
- 8.14 Contractor is responsible for cutting, patching, repairing, and replacing building surfaces and structures as required to complete conversion of electric services from overhead to underground, using persons or firms skilled in the specific trades involved. All sub-contractors providing work on roofs or building structural elements must be approved by Owner prior to starting work.

9.0 SITE AND OTHER AREAS

- 9.1 Contractor shall confine his operations to public right-of-way or to existing easements on private lands. Contractor shall cooperate with adjacent home owners and businesses to minimize the interference with normal operations. Contractor will be expected to exhibit reasonable flexibility in working with commercial and industrial customers to maintain access to drives and parking areas, and to accommodate work schedules and specific timing requests. This includes adjusting working hours to allow specific work to be completed either before or after normal hours.
- 9.2 Should Contractor elect to enter upon adjacent private lands to perform a portion of the work, he shall make his own arrangements with the property owner. All such agreements shall be reduced to writing and expressly release Owner from any and all liability arising out of Contractor's operations on the property. One copy of each such agreement shall be furnished to Owner before Contractor shall be permitted to enter the property.

10.0 ENERGIZED EQUIPMENT

- 10.1 Contractor acknowledges that Contractor's employees are aware of the potentially dangerous nature of electricity and are qualified to work on and in the vicinity of secondary (600 volt class) and primary (15kV class) electric facilities that have not been de-energized. The existing facilities shall remain in operation and energized at all times except when outages are scheduled on individual circuits. Contractor shall take whatever steps are necessary to protect the existing facilities and maintain them so that they do not interfere with or pose a danger to either the new construction, his operation, Owner's workers, or the general public. The cost of such actions shall be included in Contractor's prices as no separate payment will be made.
- 10.2 Contractor is to provide labor and equipment to install all grounds required to provide protection for Contractor's work crews.
- 10.3 In the event the work cannot be performed safely, Contractor shall notify Owner and Engineer, and shall cease work until arrangements are made to proceed safely.

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10.4 Contractor shall ensure that only qualified persons are permitted to work on or near energized facilities, and that all applicable standards and regulations are followed, including observance of approach boundaries as specified in NFPA 70E-2021.

10.5 See Supplementary Conditions Paragraph SC-7.13 and Contract Section 850 for Owner's safety requirements.

11.0 STAKING

11.1 Owner's Engineer will provide the staking for this project. The staking or layout will consist of visible markings (stakes, flags or paint marks) in the field which delineate the location of equipment and the underground cable circuit route to be followed by Contractor.

11.2 Contractor will be responsible for the preservation of such layout and will provide all necessary additional detailed layout required to perform the work.

11.3 Should any staking be lost or damaged, it will be replaced it upon notification and request by Contractor within a period of one working day after such request. All cost associated with such replacement will be deducted by Owner from amounts due Contractor in the performance of the work.

11.4 Contractor is responsible for obtaining underground locates in advance of the time set for staking in a given area. Contractor is to make available appropriate personnel to work with Owner and Engineer in developing the staking. These personnel must be qualified and authorized to assist in evaluating the preferred location for poles, cable, and pad mounted equipment. All decisions will be made by Engineer, after consideration of the input provided by Contractor.

11.5 Any work that is undertaken by Contractor without first arranging for staking will be done solely at the risk of Contractor. Any relocations or other extra work made necessary by failure to arrange for staking shall be done at Contractor's expense. If such extra work requires additional material that is furnished by Owner, the cost of this extra material will be deducted from amounts due Contractor.

11.6 The City of Indianola does not locate sewer service laterals nor are they locatable. The depth of these laterals varies by location. Should Contractor believe that a service lateral has been hit, Contractor shall notify Owner immediately. Contractor shall be responsible for any damage to sewer lines, including damage that is identified within 24 months of the final acceptance of the project by the Owner.

12.0 NOT USED

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13.0 REMOVAL WORK

- 13.1 Cable and equipment are to be removed as indicated on the drawings. All materials are to be promptly removed from the work Site and returned to the Owner.
- 13.2 Not Used.
- 13.3 Not Used
- 13.4 Not Used
- 13.5 Not Used
- 13.6 Not Used
- 13.7 Not Used
- 13.8 Not Used
- 13.9 Not Used
- 13.10 Grounds to be removed shall be completely removed or cut off at least 24" below grade.
- 13.11 Cables or conduits that are to be abandoned must be removed to and cut at a depth of at least 24" below grade. Where such cables or conduits are enclosed in equipment (such as the compartment of pad mounted transformers) that is to remain in service, the cables or conduits may be cut flush with entrance to the basement or pad.
- 13.12 Where cable that is designated for removal is installed in conduit, the cable shall be removed from the conduit and (if the conduit is being abandoned) the conduit shall be cut off a minimum of 24" below grade.
- 13.13 Direct buried cable that is designated for removal shall be cut off a minimum of 24" below grade.

14.0 COORDINATION WITH OTHER UTILITIES

- 14.1 Contractor will be responsible for providing locations of conduits and cables installed by Contractor to other contractors working in the area until such time as the Work on a line section is accepted as Substantially Complete by Owner. See Article 14 of the Supplementary Conditions (00800) for additional information on determining the Substantial Completion status for portions of the project. This does not include existing conduits or cables that are in the project area.

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15.0 TREE TRIMMING

- 15.1 Owner will perform all tree and brush trimming activities as needed to facilitate the project. Contractor shall request tree or brush trimming at each specific location at least 48 hours in advance.

16.0 TRAFFIC CONTROL

- 16.1 Contractor shall furnish and use signs and flagmen as required to protect the traveling public and the Contractor's personnel. All traffic control measures and devices shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) as published on the web site of the U.S. Department of Transportation, Federal Highway Administration at <http://mutcd.fhwa.dot.gov>.

17.0 PERMITS

- 17.1 Contractor is responsible for complying with all City requirements for any required sidewalk or street cuts. The City will work with the Contractor to facilitate inspections.
- 17.2 No other DOT or other governmental construction or inspection permits are expected to be required.

18.0 OUTAGES AND CUSTOMER NOTIFICATIONS

- 18.1 Contractor shall maintain a map of the project area showing the current area of construction and the area where construction is expected over the upcoming two week period. A base map will be provided in PDF and AutoCad format for the contractor's use. The map must be updated each week during all periods when construction activity is planned for the following two week period, and an 8.5" x 11" PDF of the updated map must be submitted to the Engineer by 12:00 Noon on Thursday. This map may be used by the Owner for customer communications and notifications. A map of the initial construction area must be prepared and submitted to the Engineer prior to beginning work on the project. No construction work can be started until the Engineer and City has approved the format and content of the initial map.
- 18.2 All customer outages required for the execution of the Work shall be kept to the shortest time duration possible. All customers that will be affected by an outage must be notified by Contractor by either a personal contact or by leaving appropriate notice at the customer's residence or place of business at least 24 hours prior to the start of the outage. This notice must specify the planned starting time and the expected duration of the outage. If the outage is rescheduled for another day, Contractor must provide an additional notification of the new schedule.
- 18.3 Customer outages may generally be scheduled during normal business hours, or immediately before or after normal business hours. Contractor will be expected to exhibit

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reasonable flexibility in working with commercial customers to accommodate work schedules and specific timing requests. This includes adjusting working hours to allow outages to be completed either before or after normal hours. It is expected that outages for some commercial customers, including restaurants, will require outages to be scheduled at night or on week ends.

- 18.4 Any and all required primary circuit outages shall be scheduled and coordinated with Owner's representative, well in advance of the expected date of the outage.

19.0 SWITCHING

- 19.1 All energized switching of cables and equipment being removed, installed, or modified under this Contract will be performed by the Contractor. This includes energizing cable, transformers, and junction cabinets. Contractor must notify the Owner before switching and shall keep the Owner apprised of the current system configuration.
- 19.2 If switching is required for distribution lines or equipment outside of the scope of the Contract area, the Contractor must identify all switching requirements and provide a written request to IMU at least two (2) working days prior to the intended switching time. The request must identify the circuits and devices involved, the purpose of the switching, any customer outages that will be caused by the switching operations, and the expected length of the outages.
- 19.3 Contractor is responsible for testing for potential before applying grounds, and for installing and removing all safety grounds required to perform the Work.
- 19.4 Contractor is responsible for installing hold tags and implementing all other safeguards required to establish de-energized work areas.

END OF SECTION 01000

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Section 16402 – Underground Construction

1.0 TRENCHING AND EXCAVATIONS

- 1.1 Open trenching will be allowed only where specifically shown on the drawings, at equipment entrance locations, and for trenches that are less than 30 ft end to end. Trenches and equipment installation pits shall be excavated as necessary to maintain the specified cover over the installed cable and conduit. If the bottom of the trench contains objectionable rocks or other hard, rough, or sharp materials, the trench shall be over-excavated and backfilled with a 6 inch layer of compacted fine clean dry soil or sand (for direct buried conduits) or crushed rock (for concrete encased duct) prior to the conduit being laid in place. This work has to be authorized by the Owner prior to commencing the work, and will be considered to be additional work.
- 1.2 The cable route followed by Contractor shall be as shown on the drawings and as staked by Engineer. All trenches shall follow as straight a line as practical. Rock may be removed by any means Contractor prefers, except blasting.
- 1.3 Contractor shall protect all trenches and other excavations from surface water runoff. Any water that has accumulated in the excavation shall be removed and any soft trench bottom removed and replaced prior to the installation of the duct or cables. This includes removal and replacement of sand backfill that has become contaminated with silt, rocks, mud, clay, etc. The removal of water and correction of soft ground conditions due to surface water will be the responsibility of Contractor.
- 1.4 Contractor must protect the public from all trenches and excavations by utilizing suitable barricades or other warning devices.
- 1.5 All existing utilities must be located before any excavation is started. Regardless of other utility contacts, Contractor must notify One-Call of Iowa and Owner at least 48 hours before beginning any work at any particular location.
- 1.6 All open trenches for direct buried conduit or cable are to be marked with plastic warning tape installed in the trench during backfilling. This tape shall be located approximately 1 foot above the conduit or cable depth. Tape to be 3" wide, red with black letters, marked "Caution – Buried Electric Lines Below", Seton 47586 or equivalent. Contractor shall furnish the warning tape.
- 1.7 Contractor shall document existing conditions of all areas to be excavated, and of areas that might be subject to damage from Contractor's equipment, including streets, driveways, sidewalks, and lawns in the work area. Documentation must include photos showing any prior damage. Photos must include meta-data showing the date and time the photo was taken.

2.0 CABLE AND CONDUIT INSTALLATION

- 2.1 See Paragraph 17.0 for requirements for concrete encased ducts.

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- 2.2 Conduits shall be sized as shown on the drawings and staking sheets. Any discrepancies or ambiguous entries must be brought to the attention of the Owner and resolved prior to installation.
- 2.3 The minimum cover over all direct buried cable and conduit shall be as follows, unless shown otherwise on the drawings or staking sheets.
- a. Primary power cable and conduit - 48 inches
 - b. Secondary power cable and conduit – 36 inches
 - c. Service laterals from pedestal or transformer to meter socket – 30"
- 2.4 Conduits installed by directional boring will be coilable polyethylene electrical plastic duct per NEMA standard TC7-2016 with SDR 13.5 wall thickness. All couplings and fittings required to utilize the conduit shall be supplied by the Contractor. All fittings shall be manufactured for the purpose and installed per the manufacturer's recommendations.
- 2.5 All PVC couplings and fittings must be assembled using solvent and procedures recommended by the conduit supplier.
- 2.6 Where transitions are made between PVC conduits with different wall thickness, the conduit with the thicker wall must be reamed to provide a smooth transition for cable pulling.
- 2.7 All transitions between PVC and HDPE conduits, and all couplings between HDPE conduits shall be made with mechanical clamps. Fittings that are bonded to the HDPE conduit by glue or solvent cement are not allowed.
- 2.7.1 Conduits with a nominal diameter of less than 2" shall be connected with DuraLine Split-Lock+ couplings, DuraLine Part No. 200039xx.
 - 2.7.2 Conduits with a nominal diameter of 2" or larger shall be connected with DuraLine MOR Clamps.
 - 1) 2" conduit – DuraLine Part No. 20002849
 - 2) 3" conduit – DuraLine Part No. 20001520
 - 3) 4" conduit – DuraLine Part No. 20002857
- 2.8 Conduits installed by open trenching, including all concrete encased duct and short sections of conduit between adjacent equipment or between equipment and riser poles shall be Sch 40 PVC per UL651 and NEMA TC-2, unless otherwise shown or with agreement of Owner.
- 2.8.1 Bid Alternate 1 – All concrete encased conduit may be DB-120 per NEMA TC-6 & TC-8 and ASTM F-512. Sch 40 couplings must be used to make all transitions between Sch 40 and DB-120 conduits. This does not change the requirements for any conduit that is not encased in a minimum 3" concrete envelope.
- 2.9 The portion of underground conduit that extends above grade (commencing a minimum of 6" below grade) must be PVC Sch 80. All HDPE conduit that terminates at a building or other

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above grade structure must be fitted with a Sch 40 PVC elbow with Sch 80 conduit stubbed to grade.

- 2.10 The bending radius of installed HDPE must be limited to no less than 10 ft., except that bends of no more than 30 deg for entrance into equipment pads or handholes may have a radius of no less than 5 ft. Tighter bends shall be made with fiberglass elbows cemented to straight sections of HDPE conduit.
- 2.11 Bends in direct buried Sch 40 PVC conduit shall be made as described in Paragraph 17.8.
- 2.12 The minimum radius of below grade elbows with greater than 15 deg angle shall be as follows.
 - a. Conduits for installation of fiber cables – 18"
 - b. Conduits for installation of secondary cables – 18"
 - c. Conduits for installation of 1/0 primary cable – 24"
 - d. Conduits for installation of 4/0 primary cable – 36"
- 2.13 Couplings and other fittings must be approved by the Owner prior to installation.
- 2.14 Polyethylene conduit for power cable must be uniformly red, or black with red stripe.
- 2.15 Polyethylene conduit for fiber must be orange.
- 2.16 A suitable pulling lubricant shall be used for all cable pulls. The pulling lubricant must be compatible with cable jacket and conduit materials, and must be approved by Owner prior to use. This applies to all cable runs, regardless of length or configuration. Cable must be carefully fed into the duct, with minimum back tension, and using suitable protection to avoid cable damage. Pulling tension for primary cable must be limited to no more than 50% of the value shown in Table 6 of AEIC Standard CG5-2015. Special care must be taken to avoid damage to duct or elbows where the pulling line exits from the conduit run.
- 2.17 The cable shall be protected at all duct ends with suitable bushings, end bells, or with nylon leader guards. All duct ends that are located below grade shall be sealed with expanding foam.
- 2.18 Cable ends shall be sealed whenever exposed to water or rain using protective caps specifically manufactured for the cable size and type being used. Taping cable ends instead of installing protective end caps is not permissible. Conduits that are terminated either temporarily or permanently above grade must be covered with a standard fabricated conduit cap matching the size and type of conduit. Caps shall be fitted dry (without solvent or glue) unless specifically directed by Owner.
- 2.19 The minimum bending radius of primary underground cable is twelve times the overall diameter of the cable, measured to the inside cable surface in the bend. Contractor shall take special care to avoid damaging cable by excessively sharp bends.

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3.0 TRENCHLESS INSTALLATIONS

- 3.1 Contractor shall install all conduit (except for concrete encased duct, at equipment entrance locations, and runs of less than 30 ft) by directional boring using equipment suitable for the conditions. Contractor shall install the bore at the depths as specified in the drawings or staking instructions. Installation by non-directional (non-steerable) boring equipment will not be allowed.
- 3.2 Installation shall be in accordance with all applicable requirements of IEEE Std 1333-1994, IEEE Guide for Installation of Cable Using the Guided Boring Method.
- 3.3 All drilling equipment must be fitted with an operational audible alarm system that will detect the approach of the drill head to an energized conductor. All personnel operating this equipment shall be provided with appropriate safety equipment and operating instructions.
- 3.4 The boring tool head shall be electronically trackable, with the capability for locating the depth and lateral position of the boring tool to within 2 inches at depths up to 12 feet.
- 3.5 Any cutting fluid employed for drilling must be totally inert and pose no environmental risk. The fluid cutting process must maintain bore stability and provide lubrication in order to reduce frictional drag while the conduit or cable is being pulled. A bentonite and water mixture is recommended for use. Voids or air pockets in the soil shall be minimal with no surface subsidence.
- 3.6 Upon completion of boring and conduit installation, Contractor shall remove all spoils from the boring pits and provide for proper disposal. All pits must be backfilled, tamped and restored as required by these specifications.
- 3.7 All conduits along a common run are to be installed in a single bore, with the bore large enough to accommodate all of the conduits to be installed without creating excessive sidewall pressure.

4.0 BACKFILL AND TAMPING

- 4.1 Backfill for trench or other excavation shall be mechanically tamped earth containing no objectionable stones, debris, organic or foreign material, in at least three separate lifts. Each lift shall be tamped before additional backfill is applied to a density of at least 90% of its standard proctor density for areas not under pavement, and 95% of its standard proctor density for areas under pavement.
- 4.2 Backfill under existing utilities shall comply with the requirements of the utility involved. All backfill, infill and fill materials shall be free of rocks.
- 4.3 Contractor shall be responsible for furnishing all required fill dirt and black dirt, loading, hauling, and handling all such materials. Contractor shall dispose of any unsuitable fill material.

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- 4.4 Backfill and compaction of trenches under paving (including all trenches in the downtown alleys) must comply with the applicable portions of Section 3010 (Trench Excavation and Backfill) of the SUDAS Standard Specifications, available at <https://intrans.iastate.edu/app/uploads/sites/15/2020/02/3010.pdf>
- 4.5 It is expected that all excavated materials will be suitable for backfilling. If the excavated material is not suitable, Contractor will be responsible for disposing of the unsuitable material and for providing suitable material in compliance with the referenced SUDAS specification. This will be considered as Extra Work.
- 4.6 Trench backfill above concrete encased duct, extending from the top of the concrete encasement to the local grade level, must comply with Sections 2.01 through 2.04, 3.01 through 3.04, 3.05A, and 3.05.E of the referenced SUDAS specification.
- 4.7 Contractor shall provide testing services in accordance with Section 3.06 of the referenced SUDAS Specifications for all backfill below street or alley paving. The cost of this testing is to be included in the Base Bid. No separate payment will be made.

5.0 UNDERGROUND CABLE TAGGING

- 5.1 The ends of all primary, and secondary cables (except for those secondary cables that are in or on buildings) must be tagged by Contractor with information designating their other end. This applies to both new cable that is being installed under this Contract and to existing cable that is being re-connected. Each cable shall be individually marked.
- 5.2 All cables are to be tagged using impressable aluminum tags, Emboss-o-tag industrial data markers (<https://www.embossotag.com/>). All lettering shall be neat and clearly readable.
- 5.3 All tags shall be marked in accordance with the following instructions. Additional details will be provided prior to construction.
- a. The type of the equipment or facility at the other end of the cable.
 - b. The location or address of the equipment or facility where the other end of the cable terminates, including the house number and the street name (abbreviated if necessary).
 - c. Each primary cable tag must indicate the phase of that cable. In addition, each primary cable in switchgear or three phase transformers must have the phase indicated by colored tape wrapped near the termination or elbow. Colors will be specified by Owner prior to installation.

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- d. The specifics of tag marking and installation must be coordinated with and approved by the Owner's representative.

- 5.5 Contractor shall report to Owner any discrepancies found in the field with respect to drawings of the underground system and/or existing cable markings. Any such discrepancies that are identified shall be corrected, and new cable tags installed as necessary.

6.0 CABLE SPLICING AND TERMINATING

- 6.1 All primary and secondary splices shall be made with the materials specified and installed per the manufacturer's instructions and recommendations. No taped splices will be permitted. Engineer reserves the right to inspect all splices before they are covered or concealed, and Contractor shall give sufficient notice to Engineer to allow such inspections. Contractor shall promptly correct any reported deficiencies to the satisfaction of Engineer.
- 6.2 No splices are to be located in conduits.
- 6.3 All primary splices and terminators are to be installed by carefully following the instructions of the device manufacturer. The cable preparation and device installation shall be done by workmen who are trained and experienced in such work. Special care must be taken to observe the existing installations and to comply with practices that have been standardized throughout the existing system. Any questions regarding preferred practices should be directed to the Owner before beginning work.
- 6.4 Before installing any primary cable splice or termination, the cables to be spliced shall be verified by inspection and by measurement with a diameter measuring tape for the following.
 - a. The conductors match the acceptable sizes and types as stamped on the compression sleeve or terminal lug.
 - b. The diameter over the insulation is within the acceptable range of diameters for the splice or terminator body or adapter being used.
- 6.5 The primary cable concentric neutral shall be grounded at each end of each cable run and at all splices. The cable jacket shall be sealed against moisture ingress at all openings.
- 6.6 A scrap primary cable end shall be prepared for splicing (this includes cable preparation only, no splice or termination shall be installed) by each workman who will be responsible for installing terminations or splices, and presented to Owner for approval before installing any splices or terminations. No worker shall prepare primary cable for termination or splicing unless that worker has received Owner's approval of a sample cable preparation. Such approval of a sample by Owner does not relieve Contractor of any responsibility for the proper preparation of cable ends or the proper installation of terminations or splices.

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- 6.7 All existing primary cables to be reused shall be inspected by Contractor for neutral corrosion or other damage or deterioration. If any existing cable is found to be damaged or deteriorated, Owner shall be notified before proceeding with splicing. Owner will determine if the cable is suitable for continued service or if it must be replaced. Any such replacement or other additional work caused or necessitated by the as-found condition of the cable will be treated as Extra Work. Cables must be exposed and inspected sufficiently ahead of scheduled outages to allow time for possible cable replacement or other additional work.
- 6.8 Secondary cable splices, taps, and terminations in pedestals shall be made using set screw type covered connectors. Cables shall be stripped to the length specified by the connector manufacturer. Connections shall be tightened to the torque value specified by the connector manufacturer.
- 6.9 Direct buried secondary splices and splices in handholes and pull boxes shall be made using compression sleeves and cold shrink covers. Compression sleeves shall be rated for use on the conductors being spliced, and shall be installed in strict accordance with the manufacturer's directions. The diameter of the cables and the compression sleeve shall be verified as suitable for the splice cover being used. Cables shall be clean and free of dirt and moisture before being spliced and covered.
- 6.10 Not Used

7.0 EQUIPMENT BASES

- 7.1 Contractor shall install a new pre-molded fiberglass box pad for each new pad mounted transformer (except where concrete pads are shown on drawings) and all switchgear. These pads shall be installed in accordance with the applicable details shown on the Drawings. The pad base must be set on a minimum 4" thick bed of pea gravel (rock to be supplied by Contractor). Conduit entries must be placed to facilitate cable pulling.
- 7.2 Junction cabinets shall be installed in accordance with the applicable details shown on the Drawings and in the manufacturer's instructions. The base must be set on a minimum 4" thick bed of pea gravel (rock to be supplied by Contractor). Conduit entries must be placed to facilitate cable pulling.
- 7.3 Where shown, three phase transformers are to be set on a poured in place concrete pad in accordance with the drawings. Concrete, reinforcing, and installation shall be in accordance with the ACI Manual of Concrete Practice (MCP) as published by the American Concrete Institute, including ACI Standard 301-10, Specifications for Structural Concrete.

8.0 TRANSFORMERS

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- 8.1 Owner will supply all pad-mounted transformers to be used in the Work. Contractor shall install and connect each transformer in accordance with the appropriate drawings and specifications.
- 8.2 The Owner will install identification stickers with Owner's name and telephone number on all pad-mounted equipment prior to issuing the equipment to the Contractor. Contractor shall verify that the identification on all installed equipment are readily visible.
- 8.3 All new single phase pad mounted transformers will be rated 7620 volt, with two loop feed primary bushings connected to the H₁ terminal of the primary winding, and the H₂ terminal solidly grounded to the transformer tank. The X0 bushing is grounded to the transformer tank by a removable ground strap. Contractor shall verify that the X0 ground strap is solidly connected on all transformers, except that the ground strap must be removed on the "power" transformer in open delta banks.
- 8.4 All new three phase pad mounted transformers will be rated 7620/13200 volts Grd Y, with two sets of three phase primary bushings. The H0 terminal is solidly grounded to the transformer tank. The X0 bushing is grounded to the transformer tank by a removable ground strap. Contractor shall verify that the X0 ground strap is solidly connected on all transformers.
- 8.5 Primary cables in pad mounted transformers are to be terminated with load break elbows. Sufficient slack shall be left in the cable and in the concentric neutral connections to allow free operation of the elbows. Sufficient excess cable shall be left in the basement of each transformer to allow any primary cable to be re-terminated once without splicing. Cables must be trained as directed by the Owner.
- 8.6 Grounding connections shall be made as indicated on the drawings. All factory installed bonding jumpers must remain in place (except for the X0 bushing on power transformers in pen delta banks). Concentric neutral tails are to be connected to the ground wire as shown on the drawings using copper compression connectors, leaving sufficient slack for normal cable operations.
- 8.7 Secondary connections in all single phase transformers are to be made with set screw type secondary connectors installed on threaded studs on the transformer. All set screw type terminations shall be torqued to the value recommended by the connector manufacturer.
- 8.8 Contractor shall inspect all externally removable transformer fuses, and verify the correct size fuse based on the transformer size and primary voltage rating using information supplied by the transformer manufacturer or by the Engineer.
- 8.9 All equipment shall be set squarely on the pad and shall be securely clipped and bolted to the pad. Notify Owner if any appreciable gap exists between the pad and the equipment.
- 8.10 At normally open points, a surge arrestor (supplied by Owner) shall be installed on the H1B bushing on single phase transformers, and on the H1B, H2B, and H3B bushings on three phase transformers.

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9.0 SWITCHGEAR

9.1 Not Used.

10.0 OTHER EQUIPMENT

10.1 Junction cabinets will be supplied by the Owner and installed by the Contractor as shown on the drawings.

10.2 The Owner will provide identification stickers with Owner's name and telephone number to Contractor for installation on all pad-mounted equipment. Stickers to be installed at locations and in the manner directed by Owner.

11.0 LINE ENERGIZING AND TESTING

11.1 Contractor shall be responsible for testing, energizing, and phasing all line sections and shall make any changes which said tests show to be necessary to fully meet the requirements of the Specifications.

11.2 All new primary cables shall be megger tested at 2500 volts (phase to neutral) after all splicing and terminating is completed, and prior to energizing. Cables must be isolated from transformers and surge arresters before testing. Voltage must be applied for a minimum of 60 seconds. Acceptance criteria is a minimum insulation resistance of 1,000 Megohms, with stable or increasing resistance at the end of the test period. Contractor shall document the date and time that each section of cable is tested, along with the final megger reading.

11.3 Phasing shall be verified before making parallel between circuits fed from different sources, and at each normally open switch point (including the open point of all loops), confirming by voltage measurement at the open that the same phase is present on each side of the switch or parked elbow.

12.0 FUSING

12.1 Contractor shall install fuses as shown on the drawings and staking instructions, or in other information provided by Owner.

13.0 NOT USED

14.0 RESTORATION

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- 14.1 Except as specifically allowed by other portions of the Contract Documents, all grade surfaces that are disturbed shall be restored to essentially original condition.
- 14.2 Grass areas shall be dressed with black dirt and seeded with a blue-grass/annual rye grass seed. Arrangements shall be made by the Contractor to water and protect all seeded areas until a well-developed stand of grass is present.
- 14.3 Hard surfaced areas shall be saw cut or broken out to an existing joint. All backfill under hard surfaced areas shall be compacted to a minimum of 95% of its Standard Proctor Density. The surfacing shall be replaced by the Contractor to match the existing. See special requirements in Paragraph 4.4 for backfill compaction in downtown alleys.
- 14.4 All excavated areas, including the area surrounding equipment and bell holes, are to be thoroughly compacted in accordance with these Specifications before surface restoration. Any significant settlement that occurs within one (1) year from the date of final acceptance of the Work will be considered to be conclusive evidence of Contractor's failure to provide proper compaction. The Contractor will be obligated to correct any such settlement by compacting the settled area, topping the area with black dirt, re-dressing the area, and reseeded in accordance with paragraph 14.2.
- 14.5 If streets are core drilled to locate existing utilities, repairs must be in accordance with City construction and inspection requirements. The evacuated hole must be filled with a thoroughly compacted granular fill to the bottom of the existing pavement material, then filled to the street surface with a 4000 psi concrete mix (Quikrete Product 1101 or equivalent).
- 15.0 REMOVAL WORK
- 15.1 See Paragraph 13.0 of Section 01000.
- 15.2 Cables that are removed from conduit will not be reused.
- 16.0 SERVICE RECONNECTIONS
- 16.1 Refer to Section 16403 for requirements related to service reconnections and other work on and in buildings.
- 16.2 The Contractor will remove and re-install revenue (kWhr) meters at services being converted to underground where the existing meter socket will be re-used or replaced in place. The Owner will provide meter seals to be installed by the Contractor when the meter is re-installed. Where a new meter socket is installed at a new location to facilitate conversion to underground, Owner will provide and install a new meter in the new meter socket after installation of the socket by the Contractor. Contractor is to remove the existing meter and return to Owner. All meter installations and removals shall be coordinated closely with the Owner.

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- 16.3 Contractor must document the reading of each meter prior to removing from its socket, or de-energizing the meter. This documentation must include a photo showing the current kWhr reading and meter number, tagged with meta-data showing the date and time the photo was taken, along with the address of the customer premise where the meter is located.
- 16.3 All work must be inspected and approved by the State of Iowa Electrical Inspector prior to being energized.

17.0 CONCRETE ENCASED DUCT

- 17.1 All conduits located under alley paving, except where shown otherwise on the drawings, shall be installed as concrete encased duct banks. Duct banks shall be installed by open trenching, with controlled spacing between individual conduits, and with entire conduit assembly encased in a concrete envelope with specified composition and strength.
- 17.1.1 Lateral extensions off the concrete encased duct shall be encased in concrete where under paving, or if the length of the extension beyond the paving limits is less than 5 ft. Concrete encasement is not required for the portion of extensions that are more than 5 ft from the paving edge.
- 17.1.2 Lateral extensions of less than 30 ft beyond the edge of the paving may be installed by open trenching.
- 17.1.3 Conduits that extend for more than 30 ft beyond the edge of paving shall be installed by directional boring unless open trenching is authorized by the Owner for specific locations.
- 17.2 All trenches shall be wide enough to provide ample room for workmen engaged in handling and installing ducts. When practical, excavation for duct banks shall precede duct bank installation by at least 50 lineal feet in order to allow adjustments to grades required by unknown underground obstructions.
- 17.3 Compact the bottom of the trench enough to insure a smooth level surface to support duct installation and to insure the required concrete cover thicknesses are met. If the bottom of the trench contains objectionable rocks or other hard, rough, or sharp materials, or if the trench bottom is too soft to provide adequate support for the duct the trench shall be over-excavated and backfilled with a 6 inch layer of crushed rock foundation material. This work has to be authorized by the Owner prior to commencing the work, and will be considered to be Extra Work.
- 17.4 All excavations and/or trenches shall be maintained in the dry. The Contractor shall provide, install, operate and maintain such dewatering capacities and systems that may be necessary. The cost for such dewatering shall be included in Contractor's proposal and no separate or additional compensation will be made.

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- 17.5 Contractor shall provide support for all utility lines that pass over the proposed duct bank. The support shall be satisfactory to the Owner and to the utility involved.
- 17.6 Warning tape shall be placed approximately 12" above the duct bank. Tape to be 3" wide, red with black letters, marked "Caution – Buried Electric Lines Below", Seton 47586 or equivalent. Contractor shall furnish the warning tape.
- 17.7 Under the Base Bid, all concrete encased conduit shall be Sch 40 PVC per UL651 and NEMA TC-2, unless otherwise shown or with agreement of Owner.
- 17.7.1 See Paragraph 2.7.1 for Bid Alternate 1
If Bid Alternate 1 is accepted, all concrete encased conduit may be DB-120 PVC per NEMA TC-6 & TC-8 and ASTM F-512. All conduit that is not concrete encased must be Sch 40 PVC. Sch 40 couplings must be used to make all transitions between Sch 40 and DB-120 conduits.
- 17.8 All PVC couplings and fittings must be assembled using solvent and procedures recommended by the conduit supplier.
- 17.9 All transitions between PVC and HDPE conduits, and all couplings between HDPE conduits shall be made with mechanical clamps. Fittings that are bonded to the HDPE conduit by glue or solvent cement are not allowed.
- 2.19.1 Conduits with a nominal diameter of 2" or smaller shall be connected with DuraLine Split-Lock+ couplings, DuraLine Part No. 200039xx.
- 2.19.2 Conduits with a nominal diameter of 2" or larger shall be connected with DuraLine MOR Clamps.
1) 2" conduit – DuraLine Part No. 20002849
2) 3" conduit – DuraLine Part No. 20001520
3) 4" conduit – DuraLine Part No. 20002857
- 17.10 Conduit elbows and bends shall be as follows. PVC elbows and couplings must match the size and type of the adjacent conduit. Fiberglass elbows must comply with all requirements of NEMA TC-14 for Thermosetting Resin Conduit (RTRC) and fittings and must be UL 2420 Listed for below-ground installation.
- 17.10.1 No field bending of conduits will be permitted except for long sweeping curves or as specifically authorized by Owner.
- 17.10.2 Changes in direction or alignment of up to 10 deg may be made with 5 deg PVC couplings matching the size and type of the adjacent conduit.

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17.10.3 Bends of 15 deg may be made using PVC sweep ells with a minimum radius of 36", matching the size and type of the adjacent conduit. All couplings must be PVC and must match the size and type of the adjacent conduit.

17.10.4 Bends of more than 15 deg must be made using fiberglass elbows, with a minimum radius as follows.

- a. Conduits for installation of fiber cables – 18"
- b. Conduits for installation of secondary cables – 18"
- c. Conduits for installation of 1/0 primary cable – 24"
- d. Conduits for installation of 4/0 primary cable – 36"

All fiberglass elbows must include factory installed PVC couplings bonded to the fiberglass material. Additional couplings may only be installed on fiberglass conduits or elbows in the field using materials and procedures recommended by the manufacturer of the fiberglass conduit, and only with the prior approval of the Owner.

17.11 The trench sides may be used for forming the concrete encasement when suitable. Excavation must be performed carefully to provide the required encasement without undue bulk that would impede the future installation of other utilities. If the excavated trench is not suitable for use as the concrete form, or when the duct bank is being installed in close proximity to existing foundations, utilities, duct lines, or future underground structures, the sides of the concrete encasement are to be formed.

17.12 A minimum of 3 inches of concrete cover must be maintained on all sides, top, and bottom of the duct bank. A minimum of 1.5" of clearance must be maintained between all adjacent conduits within the duct bank.

17.13 Factory-fabricated rigid PVC interlocking spacers shall be used to maintain spacing between conduits. Spacers shall be sized for the type and sizes of ducts with which used, and selected to provide the minimum duct spacings required while supporting ducts during concrete placement. Additional spacers and supports needed to accommodate non-standard combinations of sizes and arrangements may be fabricated from PVC shapes and must adequately secure the conduits. Minor deviations from the conduit arrangement shown in the drawings are allowable, as long as the required spacing and general arrangement of the conduits is maintained. Only non-metallic ties may be used to secure conduits to spacers.

17.14 The assembled duct bundle must be securely staked to the trench bottom to prevent floating during concrete placement. Steel or non-metallic posts or stakes may be used on both sides of the duct bank, with a single steel, copper, or non-metallic wire or tape between the stakes, over the top of the duct bundle. No metallic ties are allowed between individual ducts or below the duct bundle. All wood or fibrous materials must be removed prior to backfilling.

17.15 Duct spacers must be placed sufficiently close together to maintain the required clearances and to prevent sagging and deforming of ducts during concrete placement. The use of not less than 4 spacers per 20 feet of duct will generally be adequate, but additional spacers may be required in areas of conduit transitions or changes in duct alignment or elevation.

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- 17.16 Concrete must be placed carefully to avoid separation of aggregate or deformation of the conduit bundle. Concrete should be placed along the sides of the bundle and allowed to rise through the spaces between individual conduits to ensure full encasement. Power driven agitating equipment may be used, but extreme care must be taken to avoid damage to conduits.
- 17.17 Cold joints must be reinforced as shown in the drawings.
- 17.18 All conduits must be verified immediately after concrete placement by pulling a rigid mandrel sized for a minimum fill of 80% of the conduit area (based on the conduit nominal inside diameter) through each conduit. Any conduits that cannot be verified must be cleared or replaced to the satisfaction of the Owner.
- 17.19 A pulling tape must be installed in all ducts that are designated for fiber use, as spare, or for future use. Tape shall be polyester or aramid with a minimum width of 0.5" and a minimum breaking strength of 1250 lb.
- 17.20 Concrete encasement shall be a Controlled Low Strength Material (CLSM) with a 28 day compressive strength target value of 1000 psi. If an aggregate is used in the formulation, it shall be river rock with a maximum size of $\frac{3}{4}$ ".
- 17.17.1 One set of compressive test cylinders shall be made for the CLSM used in the project for the first batch delivered each day. Water shall not be added to the mix after the test cylinders have been made.
- 17.20.2 Each set of test cylinders shall consist of two specimens. The first cylinder shall be tested at three day's age. The second cylinder shall be tested at 28 day's age. All test reports must be submitted to the Owner immediately after the tests are completed.
- 17.20.3 If any of the three day tests indicate that the mix strength may deviate substantially from the target value, no additional concrete shall be installed until the cause of the deviation is identified and corrected, and agreement has been reached with the Owner on disposition of the potentially defective concrete.

End of Section 16402

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Section 16403 – Premise Wiring Modifications

1.0 General Requirements

- 1.1 This Section applies to all work under the Downtown Underground Conversion Project that is on or in individual buildings; that involves the installation, removal, or modification of meter sockets; conduits and conductors on the load side of meters; and the cables supplying individual meters or groups of meters. Underground conduits (including those conduits that are placed for the installation of cables covered by these specifications) are not covered by this section.
- 1.2 Work generally consists of the following major items of work but is not limited to the items listed below.
- a. Furnish and install meter sockets, conduit, wiring, and other electrical equipment to convert existing overhead electric services to underground supply and make other modifications to existing service equipment as shown on the drawings.
 - b. All temporary work to maintain service to customers during the construction sequence and to minimize the duration of outages required to cut over services to the new source.
 - c. Remove existing conduit and wiring as shown on the drawings.
- 1.3 This work must be coordinated with all other aspects of the conversion project.
- 1.4 The Contractor (or Sub-Contractor) responsible for this work must hold a current Electrical Contractor license issued by the State of Iowa and must be authorized to perform work in the City of Indianola.
- 1.5 The person or persons directly responsible for the work must hold a current Journeyman Electrician or Master Electrician license issued by the State of Iowa and must be on site at all times that work is being performed. Additional Apprentice Electricians may be utilized to perform appropriate portions of the work in compliance with State of Iowa regulations.
- 1.6 The Contractor will be required to furnish proof of compliance with the licensing requirements prior to beginning work.
- 1.7 Contractor shall document all existing conditions including the exterior and interior surfaces of buildings and the condition of existing equipment and wiring prior to beginning work at any premise. Documentation shall include photos with meta-data showing the date and time the photo was taken.

2.0 Installation Requirements

- 2.1 The Contractor is responsible for the Work listed in Items 2.1.a. through f. below, and must ensure that all service connections and reconnections required under this project

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meet all applicable requirements of the current NEC (NFPA 70-2020) and the standards of good electrical practice.

- a. The Contractor shall furnish, install, and connect new meter sockets, conduit, conductors, and related materials, and perform other work as shown.
- b. Meter riser conduits that are not exposed to severe physical damage may be Sch 80 PVC. All other conduit must be EMT or where indicated on drawings or where exposed to severe physical damage Rigid Galvanized Conduit or Intermediate Metal Conduit.
- c. Conductors installed in above grade conduit shall be copper with type THWN insulation. Single conductor cables installed in below grade conduit shall be copper with type XHHW insulation, except where shown otherwise on the drawings. Aluminum TX or QD installed in below grade conduits will be supplied by the Owner for installation by the Contractor. All other cable will be supplied by the Contractor. See Paragraph 3.0 of Section 16922 for substitution of below grade copper conductors with aluminum conductors under Bid Alternate 2.
- d. Existing conduits that penetrate building soffits or roofs shall not be removed unless specifically shown on the drawings. Care must be taken to avoid damaging existing weather seals. All new roof penetrations and any existing roof penetrations that are modified or disturbed must be completed by a roofing contractor that has been approved by the Owner.
- e. All customer outages required for the execution of the Work shall be kept to the shortest time duration possible, and must be scheduled with the affected customers. Under no circumstances is a customer to be left without service over night.

2.2 The Contractor is specifically NOT TO PERFORM the following tasks related to the reconnection or modification of electrical services or service entrances.

- a. Remove service knobs, eyebolts, or other attachments, the removal of which could provide access to the customer's structure for weather or vermin, unless the opening is re-sealed in a manner that is approved by the property owner.
- b. Repair, replace or modify customer service wiring or service entrance equipment beyond the minimum required to provide safe reconnection unless specifically shown on the drawings.

Nothing in this section shall be construed to prohibit the Contractor from recommending additional repairs or modifications to customer wiring or service entrance equipment, so long as such repairs are covered by a separate written contract between the customer and the Contractor, which clearly states that such

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additional work is not part of, nor a requirement of, Indianola Municipal Utility's Contract for the reconnection or modification of the customer's service entrance.

- 2.3 Conductor in-line splices below grade, in ground sleeves or cabinets, or in pull boxes or meter sockets, shall be made using an in-line compression connector (Burndy YS-L series or equivalent for copper conductors or YS-A series or equivalent for aluminum and for aluminum to copper, of the correct size for the conductors being joined. Splice sleeves shall be insulated using either heat shrink (Raychem WCSM series or equivalent) or cold shrink (3M 482X series or equivalent), unless alternate methods are shown on the drawings or approved by the Owner prior to installation.
- 2.4 Taps shall be made using compression connectors (Burndy YC-C or equivalent for copper conductors and YC-A or equivalent for aluminum conductors). Tap connectors must be insulated (when required) using Burndy Type CC covers or equivalent.
- 2.5 No tape insulated splices will be permitted.
- 3.0 Codes and Standards
- 3.1 The following are made part of this document by reference.
- a. National Electrical Code, NFPA 70-2020
 - b. Handbook for Electrical Safety in the Workplace, NFPA 70E-2021
- 4.0 Permits and Inspections
- 4.1 Contractor is responsible for obtaining and paying for permits for all Work covered by this Section, and for scheduling inspections and obtaining final approval for all Work. Copies of approved final inspections must be provided with invoices covering the Work at each location.
- 5.0 Materials
- 5.1 Contractor will furnish all material except for items specifically shown as being furnished by the Owner.
- 5.2 Meter sockets shall be furnished by the Contractor as follows. Any substitutions must be approved prior to installation.
- a. Meter-main, single phase, 200 A, with breaker size as shown on the drawings and schedules – Milbank U5168 series.
 - b. Meter-main, three phase, 200 A, with breaker size as shown on the drawings and schedules, Milbank U5750-RXL-200-BL
 - b. Meter stacks and multi-meter settings, as identified on drawings and schedules.

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Construction Specifications
Section 16403 – Premise Wiring Modifications

- 1) Eaton Type 1MM with 125 A or 200 A ringless meter sockets and feeder breakers (as shown on schedules), NEMA 3R, 800A aluminum horizontal bus, with aluminum main terminal box, 42kAIC.
 - 2) Eaton Type 1MP self-contained meter stack with main lugs, 125 A or 200 A ringless meter sockets and feeder breakers (as shown on schedules), NEMA 3R, 42 kAIC
 - 3) Multi-meter setting, Milbank U5882-X, with 200 A ringless meter sockets and feeder breakers as shown on schedules, NEMA 3R, 22 kAIC.
- c. Enclosed circuit breakers
- 1) 200 Amp, Sq D type Q2, in type Q2-3225NRB NEMA 3R enclosure
 - 2) 400 Amp, Sq D type LAL, in type LA400R NEMA 3R enclosure

6.0 Energized Equipment

6.1 See Paragraph 10.0 of Section 01000.

7.0 Shop drawings and submittals

7.1 The Contractor must submit shop drawings for all meter sockets, circuit breakers, panelboards, and similar equipment for approval prior to purchase.

8.0 Pre-construction inspection

8.1 The Contractor must complete an initial inspection of all portions of the work, and prepare a detailed mark-up of the drawings to show all conduit and wire sizes, and any modifications or clarifications of the conduit routes, equipment locations, or other changes from the drawings. A copy of the marked up drawings, along with cut sheets for all materials and equipment to be provided by the Contractor, must be submitted to the Engineer for review and approval.

8.2 The Contractor may propose changes in the installation, based on one or more of the following criteria.

- a. Reduced cost
- b. Shorter outage time
- c. Improved appearance
- d. Reduced impact on buildings or structures
- e. Code compliance issues or additional requirements imposed by the electrical inspector.

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Construction Specifications
Section 16910 – Materials

1.0 PROJECT MATERIAL

- 1.1 The Bill of Material included with this section is a general list of material for the project. See the Materials paragraph in Section 01000 General Requirements for additional material requirements.
- 1.2 The Bill of Material is provided solely as a reference and guide for Contractor. All material (except for those items that are listed as being provided by Owner) that is required to complete the Work as described by the Contract Documents is to be provided by Contractor, regardless of whether or not any specific items are included in the Bill of Material and regardless of the quantities shown.
- 1.3 Conduit fittings and accessories (including fiberglass sweeps) that are required to install a complete conduit system are not listed in the Bill of Material.
- 1.4 The cable quantities shown are based on expected circuit length only, with an allowance for normal cutback at terminations. No additional cable has been included to account for reel lengths or construction waste. Distances shown shall not be used by the Contractor for ordering or cutting lengths without field verification.
- 1.5 Special care must be taken to plan and execute cable reel usage and pulling lengths to minimize waste. A cable and reel usage plan for primary (13 kV) cable must be approved by Owner prior to cable installation.
- 1.6 The manufacturer and catalog numbers listed for the hardware items and conductor related items are intended to set the minimum requirements for each item. Except where indicated otherwise, other manufacturers' materials may also be suitable for the application.
- 1.7 Certain items are listed in the module bills of material as generic items without specific sizes shown. These generic Item ID numbers are not listed in the Project Bill of Material, but the specific Item ID number for the sizes used in this Project are included in the Project Bill of Material.

**INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Construction Specifications
Section 16920 – Staking Sheets**

1.0 GENERAL

- 1.1 The following pages include staking sheets for the project and are identified as follows:
- Construction (Area 1) - Pages 1 through 70
- 1.2 Staking sheets are arranged by location numbers, corresponding to numbers shown on plan and detail drawings.
- 1.3 Module numbers listed on the staking sheets refer to the corresponding page numbers included in Section 16925.

2.0 BORE LENGTHS

- 2.1 The bore entries in the staking sheets are based on the requirement that all conduits along a common run are to be installed in a single bore. See Paragraph 3.7 in Section 16402.

3.0 DOWNTOWN AREA

- 3.1 Concrete encased duct, the related conduits, and work on premise buildings is not shown in the staking sheet. Cables to be installed in below grade conduits are included in the staking sheets, but conduit and cables to be installed in or on premise buildings are not listed in the staking sheets. Refer to the following Specification Sections for details of work in the downtown area.

Section 16921	Conduit Schedule
Section 16922	Building Service Schedule
Section 16923	Meter Stack Schedule

**INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Construction Specifications
Section 16921 – Conduit Schedule**

1.0 GENERAL

- 1.1** The following pages include a schedule of the following conduits to be installed under this Contract.

Pages 16921-02 through -0x Conduits to be used for fiber optic cable (all fiber cable installation is by others).
1) conduits in the downtown area that are part of the concrete encased duct banks and related extensions, not included in the staking sheets.
2) conduits installed outside of the downtown area that are included in the staking sheets.

Pages 16921-0x through -0x Conduits to be used for installation of secondary electric cables and that are part of the concrete encased duct banks and related extensions. These conduits are not included in the staking sheets.

Pages 16921-0x through -0x Conduits to be used for installation of primary electric cables and that are part of the concrete encased duct banks and related extensions. These conduits are not included in the staking sheets.

2.0 Work on Premise Buildings

- 2.1** See Section 16922 for conduit to be installed on or in premise buildings.

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Construction Specifications
Section 16922 – Secondary Cable Schedule

1.0 GENERAL

- 1.1 The following pages include a schedule of the secondary cables to be installed in below grade conduits in the downtown area. This schedule is provided for the convenience of the Contractor, as all of these cables are also shown in the Staking Sheets.

Pages 16922-02 through -0x

2.0 STAKING SHEETS

- 2.1 The cables shown in the BASE BID columns of this Schedule are also included in the Staking Sheets (Section 16920) and are listed in the Project Bill of Material (Section 16910).

2.0 BASE BID

- 2.1 The cost to furnish and install the cables shown in the BASE BID columns are to be included in the proposed BASE BID lump sum price in Paragraph 3.01 of Section 00410.

3.0 BID ALTERNATE 2

- 3.1 The cables shown in the BID ALTERNATE 2 columns are to be installed only if the Owner accepts BID ALTERNATE 2. The proposal lump sum deduct amount for BID ALTERNATE 2 shall be shown in Paragraph 3.01 of Section 0041. This deduct amount shall be the reduction in proposed cost to furnish and install cables shown in the BID ALTERNATE 2 columns instead of the cables shown in the BASE BID columns. Note that there is no change in the cables to be installed on or in premise buildings. There are no changes in conduit size or circuit lengths associated with BID ALTERNAE 2, but additional splices will be required at the building interface to transition from aluminum to copper conductors.

**INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Construction Specifications
Section 16923 – Building Service Schedule**

1.0 GENERAL

- 1.1 The following pages include a schedule identifying work to be performed in or on premise buildings that is covered by this Contract.

Pages 16922-02 through -0x

2.0 DRAWINGS AND SPECIFICATIONS

- 2.1 See Section 16403 for Specifications related to work on or in premise buildings.
- 2.2 See drawings E9790-800 through -818 for additional details related to this work.

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Construction Specifications
Section 16924 – Meter Stack Schedule

1.0 GENERAL

- 1.1 The following pages include a schedule identifying requirements for grouped meter installations.

Pages 16924-02 through -0x

2.0 DRAWINGS AND SPECIFICATIONS

- 2.1 See Section 16402 and 16403 for Specifications related to installation of metering equipment.

- 2.2 See the following drawings for additional details related to this work.
- | | |
|------------------------|--------------------------|
| E9790-800 through -818 | Service Entrance Details |
| E9790-451 through -456 | Detail One-Line drawings |
| E9790-701 through -709 | Detail Plan drawing |

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Construction Specifications
Section 16925 – Construction Modules

1.0 CONSTRUCTION MODULES

- 1.1 The construction modules listed on index page E9790-020 provide details for the installation of the equipment and material.
- 1.2 Drawings for all of the listed modules follow the index page. Each module drawing includes a related bill of material showing materials included in that module.

2.0 MAJOR LABOR UNITS

- 2.1 Pages E9790-019 lists major project labor units. Note that the quantity shown represents all instances of the module, while the distance represents the total sum of the quantity included in all instances. For example, if there were three trenching locations listed in the staking sheets, with lengths of 50, 200, and 100 feet; the summary page would include a line for Module 900 with a quantity of 3 and a length of 350.
- 2.2 This list is provided as a convenience for the bidders, and includes only major labor units that are identified by a Module Number in the Staking Sheets. It is not intended and cannot be relied on to include all labor units that are necessary for the completion of the project.
- 2.3 The following Labor Units are NOT included in the staking sheets and are not included in the summary on page E9790-019.
 - A. Concrete encased duct bank and related lateral conduits in the downtown area. The details of this Work in this area is shown on the drawings. The length, size, and type of each conduit to be installed in the downtown area is shown in Section 16921, along with a summary of the total lengths.
 - B. Work on or in premise buildings. The details of this work is shown on the drawings. The size and type of each conduit and the related cables are shown in Section 16923.



INDIANOLA MUNICIPAL UTILITIES
DOWNTOWN UNDERGROUND CONVERSION PROJECT
DRAWING INDEX

	ISSUE	ATT	DRAWING	REV	SIZE	TITLE
>>>	PNC	X	E9790-001	A	11X17	COVER SHEET
>>>	PNC	X	E9790-200	A	11X17	EXISTING CIRCUIT REMOVAL MAP
>>>	PNC	X	E9790-201	A	11X17	PROPOSED CIRCUIT MAP
>>>	PNC	X	E9790-400	A	11X17	PROPOSED CIRCUIT PLAN - INDEX
>>>	PNC	X	E9790-401	A	11X17	PROPOSED CIRCUIT PLAN
>>>	PNC	X	E9790-402	A	11X17	PROPOSED CIRCUIT PLAN
>>>	PNC	X	E9790-403	A	11X17	PROPOSED CIRCUIT PLAN
>>>	PNC	X	E9790-450	A	11X17	PROPOSED CIRCUIT DETAILS
>>>	PNC	X	E9790-451	A	11X17	PROPOSED CIRCUIT DETAILS
>>>	PNC	X	E9790-452	A	11X17	PROPOSED CIRCUIT DETAILS
>>>	PNC	X	E9790-453	A	11X17	PROPOSED CIRCUIT DETAILS
>>>	PNC	X	E9790-454	A	11X17	PROPOSED CIRCUIT DETAILS
>>>	PNC	X	E9790-455	A	11X17	PROPOSED CIRCUIT DETAILS
>>>	PNC	X	E9790-456	A	11X17	PROPOSED CIRCUIT DETAILS

	ISSUE	ATT	DRAWING	REV	SIZE	TITLE
>>>	PNC	X	E9790-600	A	11X17	CONDUIT DETAILS AND SECTIONS CUTS - INDEX
>>>	PNC	X	E9790-601	A	11X17	CONDUIT DETAILS AND SECTION CUTS
>>>	PNC	X	E9790-602	A	11X17	CONDUIT DETAILS AND SECTION CUTS
>>>	PNC	X	E9790-603	A	11X17	CONDUIT DETAILS AND SECTION CUTS
>>>	PNC	X	E9790-611	A	11X17	CONDUIT DETAILS AND SECTION CUTS
>>>	PNC	X	E9790-612	A	11X17	CONDUIT DETAILS AND SECTION CUTS
>>>	PNC	X	E9790-613	A	11X17	CONDUIT DETAILS AND SECTION CUTS
>>>	PNC	X	E9790-621	A	11X17	CONDUIT DETAILS AND SECTION CUTS
>>>	PNC	X	E9790-622	A	11X17	CONDUIT DETAILS AND SECTION CUTS
>>>	PNC	X	E9790-623	A	11X17	CONDUIT DETAILS AND SECTION CUTS
>>>	PNC	X	E9790-631	A	11X17	CONDUIT DETAILS AND SECTION CUTS
>>>	PNC	X	E9790-632	A	11X17	CONDUIT DETAILS AND SECTION CUTS
>>>	PNC	X	E9790-633	A	11X17	CONDUIT DETAILS AND SECTION CUTS
>>>	PNC	X	E9790-642	A	11X17	CONDUIT DETAILS AND SECTION CUTS
>>>	PNC	X	E9790-643	A	11X17	CONDUIT DETAILS AND SECTION CUTS
>>>	PNC	X	E9790-653	A	11X17	CONDUIT DETAILS AND SECTION CUTS
>>>	PNC	X	E9790-663	A	11X17	CONDUIT DETAILS AND SECTION CUTS
>>>	PNC	X	E9790-670	A	11X17	CONDUIT SECTION
>>>	PNC	X	E9790-671	A	11X17	CONDUIT SECTION
>>>	PNC	X	E9790-672	A	11X17	CONDUIT SECTION
>>>	PNC	X	E9790-673	A	11X17	CONDUIT SECTION
>>>	PNC	X	E9790-674	A	11X17	CONDUIT SECTION
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>>>	PNC	X	E9790-678	A	11X17	CONDUIT SECTION
>>>	PNC	X	E9790-679	A	11X17	CONDUIT SECTION
>>>	PNC	X	E9790-680	A	11X17	CONDUIT PROFILE
>>>	PNC	X	E9790-681	A	11X17	CONDUIT PROFILE
>>>	PNC	X	E9790-682	A	11X17	CONDUIT PROFILE
>>>	PNC	X	E9790-683	A	11X17	CONDUIT PROFILE
>>>	PNC	X	E9790-684	A	11X17	CONDUIT PROFILE
>>>	PNC	X	E9790-690	A	11X17	FIBER CONDUIT LAYOUT
>>>	PNC	X	E9790-691	A	11X17	FIBER CONDUIT LAYOUT

	ISSUE	ATT	DRAWING	REV	SIZE	TITLE
>>>	PNC	X	E9790-701	A	11X17	DETAIL PLANS
>>>	PNC	X	E9790-702	A	11X17	DETAIL PLANS
>>>	PNC	X	E9790-703	A	11X17	DETAIL PLANS
>>>	PNC	X	E9790-704	A	11X17	DETAIL PLANS
>>>	PNC	X	E9790-705	A	11X17	DETAIL PLANS
>>>	PNC	X	E9790-706	A	11X17	DETAIL PLANS
>>>	PNC	X	E9790-707	A	11X17	DETAIL PLANS
>>>	PNC	X	E9790-708	A	11X17	DETAIL PLANS
>>>	PNC	X	E9790-709	A	11X17	DETAIL PLANS
>>>	PNC	X	E9790-710	A	11X17	DETAIL PLANS
>>>	PNC	X	E9790-711	A	11X17	DETAIL PLANS
>>>	PNC	X	E9790-800	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-801	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-801A	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-802	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-803	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-803A	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-804	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-805	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-806	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-806A	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-807	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-808	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-809	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-810	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-810A	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-811	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-812	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-813	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-813A	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-814	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-815	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-816	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-817	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-818	A	11X17	SERVICE ENTRANCE - DETAILS
>>>	PNC	X	E9790-901	A	11X17	EASEMENTS
>>>	PNC	X	E9790-902	A	11X17	EASEMENTS
>>>	PNC	X	E9790-903	A	11X17	EASEMENTS

ISSUE FOR BIDDING
03/22/2021

LEGEND

>>> - REVISED THIS ISSUE
X - ATTACHED COPIES
E - ELECTRONIC-ONLY DRAWING
RD - RECORD DOCUMENTATION
PNC - DRAWING IS PRELIMINARY IN NATURE AND MAY CHANGE DURING THE DESIGN PROCESS
IF NO LETTER OR NUMBER IS SHOWN, THE DRAWING HAS NOT BEEN ISSUED YET

IFC - DRAWING HAS BEEN ISSUED FOR CONSTRUCTION
IFP - DRAWING HAS BEEN ISSUED FOR PERMIT
IFR - DRAWING HAS BEEN ISSUED FOR REVIEW

{ P & E ENGINEERING CO.
{ POWER SYSTEM ANALYSIS AND DESIGN
245 S. 5th
P.O. Box 620
Carlisle, IA 50047
Office: 515-989-3083
FAX: 515-989-3138
peengr@peengr.com

REV
A
DRAWING NAME
E9790-001

NOTICE OF HEARING AND LETTING
Downtown Underground Conversion Project
Construction Contract

Sealed proposals will be received by the Board of Trustees of Indianola Municipal Utilities (IMU), Indianola, Iowa, (Owner) at the Indianola City Hall at 110 N. First St., Indianola, Iowa until 2:00 P.M. local time on April 20, 2021 for a project identified as DOWNTOWN UNDERGROUND CONVERSION PROJECT, and as described in detail in the specifications for the project now on file in the office of the City Clerk/CFO. Proposals will be opened in public session at that time. Proposals will be acted upon by the Board of Trustees at a meeting to be held in the Council Chambers of the Indianola City Hall at 110 N. First St, Indianola, Iowa at 5:30 P.M. local time on April 26, 2021 or at such later time and place as may then be fixed. At that time and place a hearing will be held on the proposed plans, specifications, form of contract and estimate of cost for the improvements, and at the hearing any interested person may appear and file objections to the project or to the cost of the improvements.

The extent of the improvements is generally bounded by First St., B.St., First Ave., and Euclid Ave., all within the city limits of Indianola and in Warren County, Iowa.

The Work includes the installation of new underground conduit and concrete encased duct banks, 13 kV class and 600 volt class underground distribution cable, and related pad mounted equipment; and conversion of existing building wiring to accommodate the change from overhead to underground service.

Each proposal shall be sealed in an envelope marked "BIDS FOR DOWNTOWN UNDERGROUND CONVERSION PROJECT". Each bid must be accompanied in a separate envelope by a bid bond, certified check or cashier's check drawn on a State of Iowa or federally chartered bank, or a certified share draft on a State of Iowa or federally chartered credit union, in an amount not less than five per cent (5%) of the total value of the Proposal, and made payable to the Owner as a security that the bidder will enter into a contract for the Work within ten (10) days after the award of the contract to such bidder.

Bidders shall not be permitted to withdraw their bids for a period of thirty (30) days after they are opened.

Payment will be made to the contractor in an amount of 95% of the completed contract value, upon acceptance of the improvements by IMU. The balance of the amount due the successful bidder will be paid not earlier than 31 days from the final acceptance of the improvements by IMU, subject to the conditions and in accordance with the provisions of Chapter 384 and 573 of the Code of Iowa

Payment to the Contractor for completion of the improvements will be made in cash derived from available cash on hand from revenue and such other sources as may be available to IMU. The City of Indianola shall not incur any general obligation for the Improvements. The contract for the furnishing of the improvements shall not constitute a general obligation of the City of Indianola nor be payable in any manner by taxation.

The successful bidder will be required to furnish a performance bond and a payment bond in an amount equal to 100% of the contract price, the bonds to be issued by a responsible surety approved by IMU, and shall guarantee the faithful performance of the contract and the terms and conditions contained in it, and save harmless IMU from claims and damages of any kind caused by the operations of the Contractor.

If the successful bidder fails to enter into a contract with IMU for the Improvements or furnish bonds as required by law, then the certified check or cashier's check deposited by the Contractor shall be cashed, or the bid bond declared forfeited, and proceeds retained by IMU as agreed liquidated damages.

Work is to commence on or about May 1, 2021, unless an earlier start date is negotiated between the Owner and the successful bidder. Work must be substantially complete by December 1, 2022 with all work completed by December 20, 2022.

Plans and specifications governing the proposed improvements have been prepared by P&E Engineering Co., 245 South Fifth Street, P.O. Box 620, Carlisle, Iowa 50047. The plans and specifications, prior proceedings of IMU referring to and defining the improvements and a proposed contract are hereby made a part of this notice by reference. The proposed contracts shall be executed in accordance with them. Copies of the plans and specifications may be obtained from P & E Engineering Co.

By virtue of statutory authority a preference will be given to products and provisions grown and produced within the State of Iowa and Iowa domestic labor.

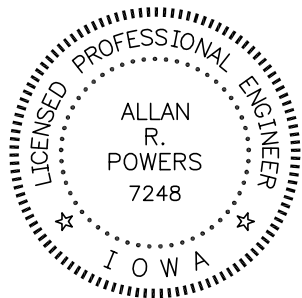
IMU reserves the right to reject any or all proposals and to waive informalities. Published upon order of the Board of Trustees Indianola Municipal Utilities, Indianola, Iowa.

ANDY LENT
City Clerk / CFO

INDIANOLA MUNICIPAL UTILITIES

Downtown Underground Conversion Project MATERIAL PROCUREMENT CONTRACT

CONSTRUCTION SPECIFICATIONS AND DRAWINGS



I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT
WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL
SUPERVISION AND THAT I AM A DULY LICENSED PRO-
FESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

(signature)

(date)

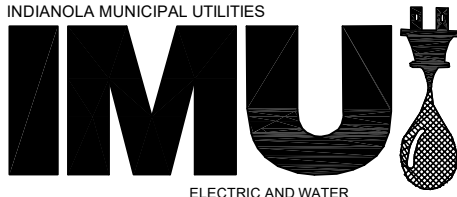
ALLAN R. POWERS, IOWA REG. NO. 07248

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2022

PAGES OR SHEETS COVERED BY THIS SEAL:

As listed on Index Page 00000-1

INDIANOLA MUNICIPAL UTILITIES



ISSUED FOR BIDDING
March 22, 2021

P & E ENGINEERING CO.
POWER SYSTEM ANALYSIS AND DESIGN

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract

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16100	Secondary (600 volt) Cable in Conduit Specification
16101	Secondary (600 volt) Cable Specification
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16201	Three Phase Pad Mounted Transformer Specification
16400	Steel Street Light Pole Specification

NOTICE OF HEARING AND LETTING
Downtown Underground Conversion Project
Material Procurement Contract

Sealed proposals will be received by the Board of Trustees of Indianola Municipal Utilities (IMU), Indianola, Iowa, (Owner) at the Indianola City Hall at 110 N. First St., Indianola, Iowa until 2:00 P.M. local time on April 20, 2021 for the procurement of materials for a project identified as DOWNTOWN UNDERGROUND CONVERSION PROJECT, and as described in detail in the specifications for the project now on file in the office of the City Clerk/CFO. Proposals will be opened in public session at that time. Proposals will be acted upon by the Board of Trustees at a meeting to be held in the Council Chambers of the Indianola City Hall at 110 N. First St, Indianola, Iowa at 5:30 P.M. local time on April 26, 2021 or at such later time and place as may then be fixed. At that time and place a hearing will be held on the proposed plans, specifications, form of contract and estimate of cost for the purchase, and at the hearing any interested person may appear and file objections to the proposed purchase or to the cost thereof.

The extent of the work involved is the furnishing of materials that are generally described as follows:

- a. Primary (15 kV class) and secondary (600 volt class) electric distribution cable
- b. Electric power cable accessories
- c. Pad mounted transformers, single and three phase (15 kV class)
- d. Box pads
- e. Steel street and area lighting poles and luminaires
- f. Pedestals and handholes
- g. Junction cabinets

Each proposal shall be sealed in an envelope marked "BIDS FOR MATERIALS FOR DOWNTOWN UNDERGROUND CONVERSION PROJECT". Each bid must be accompanied in a separate envelope by a bid bond, certified check or cashier's check drawn on a State of Iowa or federally chartered bank, or a certified share draft on a State of Iowa or federally chartered credit union, in an amount not less than five per cent (5%) of the total value of the Proposal, and made payable to the Owner as a security that the bidder will enter into a contract for the Work within ten (10) days after the award of the contract to such bidder.

Bidders shall not be permitted to withdraw their bids for a period of thirty (30) days after they are opened.

Payment to the Contractor for the purchased materials will be made in cash derived from available cash on hand from revenue and such other sources as may be available to IMU. The City of Indianola shall not incur any general obligation for the Improvements. The contract for the furnishing of the improvements shall not constitute a general obligation of the City of Indianola nor be payable in any manner by taxation.

Seller shall submit his normal application for payment or invoice directly to Buyer following the delivery of materials. Buyer will pay Seller within 30 days after satisfactory delivery and acceptance of materials and receipt of the application for payment or invoice.

Plans and specifications governing the furnishing of the materials have been prepared by P&E Engineering Co., 245 South Fifth Street, P.O. Box 620, Carlisle, Iowa 50047. The plans and specifications, prior proceedings of IMU referring to and defining the improvements and a proposed contract are hereby made a part of this notice by reference. The proposed contracts shall be executed in accordance with them. Copies of the plans and specifications may be obtained from P & E Engineering Co.

By virtue of statutory authority a preference will be given to products and provisions grown and produced within the State of Iowa and Iowa domestic labor.

IMU reserves the right to reject any or all proposals and to waive informalities. Published upon order of the Board of Trustees Indianola Municipal Utilities, Indianola, Iowa.

ANDY LENT
City Clerk / CFO

**INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
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SECTION 00200 – Instructions to Bidders**

ARTICLE 1—ISSUING OFFICE

- A. *Issuing Office*—The office from which the Bidding Documents are to be issued, and which registers plan holders. The Issuing Office for this project will be P & E Engineering Co., 245 S. 5th Street, PO Box 620, Carlisle, IA 50047.

ARTICLE 2—BIDDING DOCUMENTS

- 2.01 Bidder shall obtain a complete set of Bidding Requirements and proposed Contract Documents (together, the Bidding Documents). See the Index for a list of the Contract Documents. It is Bidder's responsibility to determine that it is using a complete set of documents in the preparation of a Bid. Bidder assumes sole responsibility for errors or misinterpretations resulting from the use of incomplete documents, by Bidder itself or by its prospective Subcontractors and Suppliers.
- 2.02 Bidder may register as a plan holder and obtain complete sets of Bidding Documents in printed or electronic (digital) format (compact disk, USB, or direct transmittal) from the Issuing Office. Bidders may rely that sets of Bidding Documents obtained from the Issuing Office are complete, unless an omission is blatant. Registered plan holders will receive Addenda issued by Owner.
- 2.03 Plan rooms (including construction information subscription services, and electronic and virtual plan rooms) may distribute the Bidding Documents, or make them available for examination. Those prospective bidders that obtain an electronic (digital) copy of the Bidding Documents from a plan room are encouraged to register as plan holders from the Issuing Office. Owner is not responsible for omissions in Bidding Documents or other documents obtained from plan rooms, or for a Bidder's failure to obtain Addenda from a plan room.
- 2.04 *Electronic Documents*
- A. Bidding Documents will be made available as Electronic Documents in the following manner.
1. Bidding Documents will be provided in Adobe PDF (Portable Document Format) (.pdf) Version 1.4. It is the intent of the Engineer and Owner that such Electronic Documents are to be exactly representative of the paper copies of the documents. However, because the Owner and Engineer cannot totally control the transmission and receipt of Electronic Documents nor the Contractor's means of reproduction of such documents, the Owner and Engineer cannot and do not guarantee that Electronic Documents and reproductions prepared from those versions are identical in every manner to the paper copies.
- B. The Bidder may use and rely upon complete sets of Electronic Documents of the Bidding Documents, described in Paragraph 2.06.A above. However, Bidder assumes all risks associated with differences arising from transmission/receipt of Electronic Documents versions of Bidding Documents and reproductions prepared from those versions and, further, assumes all risks, costs, and responsibility associated with use of the Electronic Documents versions to derive information that is not explicitly contained in printed paper versions of the documents, and for Bidder's reliance upon such derived information.

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ARTICLE 3—QUALIFICATIONS OF BIDDERS

- 3.01 To demonstrate Bidder's qualifications to perform the Work, after submitting its Bid and within five (5) days of Owner's request, Bidder must submit the following information:
- A. Written evidence establishing its qualifications such as financial data, previous experience, and present commitments.
 - B. A written statement that Bidder is authorized to do business in the state where the Project is located, or a written certification that Bidder will obtain such authority prior to the Effective Date of the Contract.
 - C. Bidder's state or other contractor license number, if applicable.
 - D. Subcontractor and Supplier qualification information.
 - E. Other required information regarding qualifications.
- 3.02 A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.
- 3.03 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.

ARTICLE 4—PRE-BID CONFERENCE

- 4.01 No pre-bid conference will be held for this Contract.

ARTICLE 5—NOT USED

ARTICLE 6—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

- 6.01 *Express Representations and Certifications in Bid Form, Agreement*
- A. The Bid Form that each Bidder will submit contains express representations regarding the Bidder's examination of Project documentation, and preparation of the Bid, and certifications regarding lack of collusion or fraud in connection with the Bid. Bidder should review these representations and certifications, and assure that Bidder can make the representations and certifications in good faith, before executing and submitting its Bid.
 - B. If Bidder is awarded the Contract, Bidder (as Contractor) will make similar express representations and certifications when it executes the Agreement.

ARTICLE 7—INTERPRETATIONS AND ADDENDA

- 7.01 Owner on its own initiative may issue Addenda to clarify, correct, supplement, or change the Bidding Documents.
- 7.02 Bidder shall submit all questions about the meaning or intent of the Bidding Documents via email to arpowers@peengr.com and must include "Question related to IMU Project" in the subject line.

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Confirm the email has been received by calling Al Powers at 515-558-8412 (O) or 515-979-7496 (C).

- 7.03 Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all registered plan holders. Questions received less than seven days prior to the date for opening of Bids may not be answered.
- 7.04 Only responses set forth in an Addendum will be binding. Oral and other interpretations or clarifications will be without legal effect. Responses to questions are not part of the Contract Documents unless set forth in an Addendum that expressly modifies or supplements the Contract Documents.

ARTICLE 8—BID SECURITY

- 8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of **5** percent of Bidder's maximum Bid price (determined by adding the extended price for all line items that are being bid) and in the form prescribed in the NOTICE TO BIDDERS AND NOTICE OF PUBLIC HEARING.
- 8.02 The Bid security of each apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture will be Owner's exclusive remedy if Bidder defaults.
- 8.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of 7 days after the Effective Date of the

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Contract or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.

- 8.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within 7 days after the Bid opening.

ARTICLE 9—CONTRACT TIMES

- 9.01 All materials are to be delivered within the quoted lead time, calculated from the date of issuing a Notice of Award.

ARTICLE 10—SUBSTITUTE AND “OR EQUAL” ITEMS

- 10.01 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, or substitutes that are presented as alternates by the bidder and accepted by the Owner.

ARTICLE 11—SUBCONTRACTORS, SUPPLIERS, AND OTHERS

- 11.01 The apparent Successful Bidder, and any other Bidder so requested, must submit to Owner a list of the Suppliers proposed for any portion of the Work within five days after Bid opening:

ARTICLE 12—PREPARATION OF BID

- 12.01 The Bid Form is included with the Bidding Documents, and will also be made available to bidders in an Excel (.xlsx) format.
- A. All blanks on the Bid Form must be either completed in ink on a paper copy of the Bid Form, or filled in on the Excel (.xlsx) format and printed. All submitted Bid Forms must be signed in ink. Erasures or alterations must be initialed in ink by the person signing the Bid Form. A Bid price must be indicated for each line item for which a bid is being submitted. Line items for which a bid is not being submitted must be marked as “NO BID”.
- 12.02 A Bid by a corporation must be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation must be shown.
- 12.03 A Bid by a partnership must be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership must be shown.
- 12.04 A Bid by a limited liability company must be executed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm must be shown.
- 12.05 A Bid by an individual must show the Bidder’s name and official address.

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- 12.06 A Bid by a joint venture must be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The joint venture must have been formally established prior to submittal of a Bid, and the official address of the joint venture must be shown.
- 12.07 All names must be printed in ink below the signatures.
- 12.08 The Bid must contain an acknowledgment of receipt of all Addenda, the numbers of which must be filled in on the Bid Form.
- 12.09 Postal and e-mail addresses and telephone number for communications regarding the Bid must be shown.
- 12.10 The Bid must contain evidence of Bidder's authority to do business in the state where the Project is located, or Bidder must certify in writing that it will obtain such authority within the time for acceptance of Bids and attach such certification to the Bid.
- 12.11 If Bidder is required to be licensed to submit a Bid or perform the Work in the state where the Project is located, the Bid must contain evidence of Bidder's licensure, or Bidder must certify in writing that it will obtain such licensure within the time for acceptance of Bids and attach such certification to the Bid. Bidder's state contractor license number, if any, must also be shown on the Bid Form.

ARTICLE 13—BASIS OF BID

- 13.01 *Line Item Unit Price*
 - A. Bidders must submit a Bid on a unit price basis for each line item for which a bid is being submitted, including the quantity to be provided, the unit price, and the extended price for that line item.
 - B. Discrepancies between the multiplication of unit quantity and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

ARTICLE 14—SUBMITTAL OF BID

- 14.01 The Bidding Documents include one separate unbound copy of the Bid Form, and, if required, the Bid Bond Form. The unbound copy of the Bid Form is to be completed and submitted with the Bid security and the other documents required to be submitted under the terms of Article 2 of the Bid Form. See Paragraph 12.02 for Bid Documents that are received as Electronic Documents
- 14.02 A Bid must be received no later than the date and time prescribed and at the place indicated in NOTICE TO BIDDERS AND NOTICE OF PUBLIC HEARING and must be enclosed in a plainly marked package with the Project title, and, if applicable, the designated portion of the Project for which the Bid is submitted, and the name and address of Bidder. This package shall be plainly labeled

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“BID ENCLOSED.” The package must contain two sealed opaque envelopes, one for the Bid and other required documents and one for the Bid Security.

- 14.03 The sealed envelope containing the Bid and all required documents (except for the bid security) must be plainly marked with the notation “BID ENCLOSED”.
- 14.04 The sealed envelope containing the bid security must be plainly marked with the notation “BID SECURITY ENCLOSED”.
- 14.05 A Bid sent by mail shall be addressed to:

Indianola Municipal Utilities
Attn: Ms. Chris Longer
PO Box 356
Indianola, Iowa 50125
Phone 515-962-5302

- 14.06 A bid sent by delivery service or hand delivered shall be delivered to:

Indianola City Hall
Attn: Mr. Andy Lent
110 N. First St.
Indianola, Iowa 50125
Phone 515-961-9410

- 14.07 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened.

ARTICLE 15—MODIFICATION AND WITHDRAWAL OF BID

- 15.01 An unopened Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.
- 15.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 15.01 and submit a new Bid prior to the date and time for the opening of Bids.
- 15.03 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, the Bidder may withdraw its Bid,

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and the Bid security will be returned. Thereafter, if the Work is rebid, the Bidder will be disqualified from further bidding on the Work.

ARTICLE 16—OPENING OF BIDS

- 16.01 Bids will be opened at the time and place indicated in the NOTICE TO BIDDERS AND NOTICE OF PUBLIC HEARING and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the Bids will be made available to Bidders after the opening of Bids.

ARTICLE 17—BIDS TO REMAIN SUBJECT TO ACCEPTANCE

- 17.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 18—EVALUATION OF BIDS AND AWARD OF CONTRACT

- 18.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner also reserves the right to waive all minor Bid informalities not involving price, time, or changes in the Work.
- 18.02 Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible.
- 18.03 If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, whether in the Bid itself or in a separate communication to Owner or Engineer, then Owner will reject the Bid as nonresponsive.
- 18.04 If Owner awards the contract for the Work, such award will be to the responsible Bidder whose bid is considered to be in the best interest of the Owner.
- 18.05 *Evaluation of Bids*
- A. In evaluating Bids, Owner will consider whether the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.
 - B. For the determination of the apparent low Bidder when unit price bids are submitted, Bids will be compared on the basis of the total of the product of the estimated quantity of each item and unit price Bid for that item.
- 18.06 In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for

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those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.

- 18.07 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.

ARTICLE 19—BONDS AND INSURANCE

- 19.01 Article 8, Bid Security, of these Instructions, addresses the requirement for providing bid bonds as part of the bidding process.

ARTICLE 20—SIGNING OF AGREEMENT

- 20.01 See Paragraph 13 of Section 00550 (Contract Conditions).

ARTICLE 21—SALES AND USE TAXES

- 21.01 Owner is subject to state and local sales and use taxes on materials and equipment to be provided under this Contract. Refer to Paragraph 8.0 of Section 00550 (Contract Conditions) for additional information.

ARTICLE 22—NOT USED

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Section 00300 – Bid Proposal Form

PROJECT IDENTIFICATION

This Contract covers the procurement of electrical distribution materials for the Downtown Underground Conversion Project.

THIS BID IS SUBMITTED TO (Buyer):

Indianola Municipal Utilities
210 W Second Ave.
Indianola, Iowa 50125

THIS BID IS SUBMITTED BY (Bidder):

1.01 The undersigned Bidder proposes and agrees, if this Bid is accepted, to accept Buyer's Purchase Order to furnish all Goods as specified or indicated in the Purchase Order for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions in the Bidding Documents.

2.01 Bidder accepts all terms and conditions of the Contract Conditions, and the NOTICE TO BIDDERS AND NOTICE OF PUBLIC HEARING, including without limitation those dealing with the disposition of Bid Security. The Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Buyer.

3.01 In submitting this Bid, Bidder represents that:

- A. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of all which is hereby acknowledged.

Addendum No.

Addendum Date

- B. Bidder declares that he has examined to his own satisfaction the Drawings, Specifications, and other Bidding Documents, the character, quality and quantity of materials to be supplied, and other matters which can affect the work under this contract; and that this proposal is made with full knowledge of the intent and purpose of the same. He further declares that in respect to these matters he is not relying upon any representation made to him by any officer, agent, or employee of the Buyer, or by any other person on behalf of Buyer, but that he relies solely upon his own investigation.

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- C. The undersigned certifies that the bid prices contained herein have been carefully checked and are submitted as correct and final. It is proposed to furnish Goods at the prices set out for each item.

5.01 A Bid Security in the amount of 5% of the total amount of the bid has been furnished with this Proposal Form, enclosed in a separate sealed envelope that is marked "Bid Security". In case of default or failure on the part of the undersigned to accept a purchase order for the goods, it is hereby agreed that the accompanying Bid Security may be cashed and deposited with the Buyer, and it is further agreed that in that case the Sum of

_____ Dollars (\$_____) which is the amount of the Bid Security accompanying this proposal, is the fair measure of the amount of the damages that the City of Webster City will sustain in case the undersigned shall fail or refuse to accept a Purchase Order if said Contract is awarded to him.

6.01 A completed Iowa Department of Labor Bidder Status Form (309-6001) regarding the Contractor's resident status within the State of Iowa must be submitted with this Bid Form.

7.01 Bid prices are shown on the following pages 00300-3 through 00300-8. Items for which no bid is being submitted are marked with "No Bid".

Submitted on _____, 2021

Firm Name _____

Type of Firm _____
(corporation, partnership, individual, or joint venture)

By _____
(typed or printed)

(individual's signature)

Title _____

Business address _____

Phone No. _____

Email Address _____

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Line	Item Number	Quantity	U/M	Description	Specified Manufacturer and Cat. No.	Quoted Manufacturer and Cat. No.	Quantity to be Supplied	Quoted Unit Price	Total Price	Quoted Lead Time or Delivery Date
1	03000	21	ea	Pole, Steel street light, with arm, direct embedded, 25 ft mountng height, per specification section 16400						
2	03000 Alternate									
1	03002	4	ea	Pole, Steel street light, with arm and tenon, direct embedded, 30 ft mountng height, per specification section 16400						
2	03002 Alternate									
1	03003	2	ea	Pole, Steel street light, with tenon, direct embedded, 30 ft mountng height, per specification section 16400						
2	03003 Alternate									
3	05514	3,000	ft	Cable, 1/0-1/0-#2 Al URD TX, 600V, per specification section 16101	Brenau					
4	05514 Alternate									
5	05520	3,000	ft	Cable, 4/0-4/0-2/0 Al URD TX, 600V, per specification section 16101	Sweetbriar					
6	05520 Alternate									
7	05523	6,000	ft	Cable, 350-350-4/0 Al URD TX, 600V, per specification section 16101	Wesleyan					
8	05523 Alternate									
11	05531	2,000	ft	Cable, #4/0-4/0-4/0-1/0 Al URD QD, per specification section 16101	Wake Forest					
12	05531 Alternate									
13	05532	1,400	ft	Cable, 350-350-350-4/0 Al URD QD, per specification section 16101	Slippery Rock					
14	05532 Alternate									
15	05612	7,200	ft	Cable, 15kV, #1/0 solid Al, 220 mil, per specification section 16102						
16	05612 Alternate									

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Line	Item Number	Quantity	U/M	Description	Specified Manufacturer and Cat. No.	Quoted Manufacturer and Cat. No.	Quantity to be Supplied	Quoted Unit Price	Total Price	Quoted Lead Time or Delivery Date
17	05614	45,000	ft	Cable, 15kV, #4/0 str Al, 220 mil, per specification section 16102						
18	05614 Alternate									
19	05801	3,000	ft	Cable, 600 volt, 2-#8 Cu in 3/4" HDPE duct (CDC), per specification section 16100						
20	05801 Alternate									
21	10401	72	ea	Rod, ground, 1/2" X 10' copperweld	Eritech 611200611200					
22	10401 Alternate									
23	14702	25	ea	Connector, stud, sec, 5/8", 6x 350 kcmil	ABB/T&B CSW6350-SLCCSW6350-SLC					
24	14702 Alternate									
25	14703	3	ea	Connector, stud, sec, 5/8", 8x 350 kcmil	ABB/T&B CSW8350-SLC					
26	14703 Alternate									
27	14710	36	ea	Connector, stud, sec, 1", 6x 350 kcmil	CSW 6350-1-SLC					
28	14710 Alternate									
31	14902	24	ea	Connector, submersible, 4 port, #10-500 kcmil	RAB-45C					
32	14902 Alternate									
33	14903	7	ea	Connector, submersible, 6 port, #10-500 kcmil	RAB-65C					
34	14903 Alternate									
35	18303	43	ea	Arrester, surge, 8.4 kV MCOV, 15 kV elbow	167ESA-10					
36	18303 Alternate									
37	30020	25	ea	Luminaire, LED, Street Lighting, 8,180 Lumen, 4000K color	Lumec RFM-72W32LED4K-G2-R3M-UNV-DMG-RCD-GY3					
38	30020 Alternate									

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Line	Item Number	Quantity	U/M	Description	Specified Manufacturer and Cat. No.	Quoted Manufacturer and Cat. No.	Quantity to be Supplied	Quoted Unit Price	Total Price	Quoted Lead Time or Delivery Date
37	30066	6	ea	Luminaire, LED Area, slip fitter mount, 22K Lumen, 4000K color	Cree OSQL-B-22L-40K7-4M-UL-AA-Q9					
38	30066 Alternate									
39	30301	31	ea	Photocell, twist lock, 120 v	DLL 127-1.5					
40	30301 Alternate									
41	40012	70	ea	Elbow, 200 amp, 15 kV, 1/0 Sol 220 mils, with test point	ABB/T&B 162LR-B5230					
42	40012 Alternate									
43	40015	150	ea	Elbow, 200 amp, 15 kV, 4/0 Str 220 mils, with test point	ABB/T&B 162LR-C5270					
44	40015 Alternate									
45	40030	225	ea	Seal, cable jacket, cold shrink, 1.94" ID	3M 8452					
46	40030 Alternate									
47	40060	7	ea	Cap, 200 amp load break, 15 kV	ABB/T&B 160DRG					
48	40060 Alternate									
49	40070	4	ea	Stand off bushing, insulated, 200 amp, 15 kV	ABB/T&B 161SOP					
50	40070 Alternate									
51	40078	27	ea	Junction, loadbreak, 3 point, 200 amp, 15 kV, with mtg straps	ABB/T&B 164J3-5					
52	40078 Alternate									
53	40079	3	ea	Junction, loadbreak, 4 point, 200 amp, 15 kV, with mtg straps	ABB/T&B 164J4-5BX					
54	40079 Alternate									
55	40211	5	ea	Splice, cable, cold-shrink, 1/0 sol, 175-220 mil 15 kV	3M 5415A-1AL					
56	40211 Alternate									

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Line	Item Number	Quantity	U/M	Description	Specified Manufacturer and Cat. No.	Quoted Manufacturer and Cat. No.	Quantity to be Supplied	Quoted Unit Price	Total Price	Quoted Lead Time or Delivery Date
57	40501	60	ea	Flt ind, 1 ph, elbow test point mounted, 200 amp, w/ small rmt ind, 400A trip	SEL TPR#D272					
58	40501 Alternate									
59	40517	6	ea	Flt ind, 3 ph, elbow tst pt mtd, 200 amp, w/ small rmt ind, 800 A trip	SEL TPR#8C78					
60	40517 Alternate									
61	52313	7	ea	Transformer, 1 ph pad mtd, 7.x kV-240/120V, 25kVA						
62	52313 Alternate									
63	52315	4	ea	Transformer, 1 ph pad mtd, 7.x kV-240/120V, 50kVA						
64	52315 Alternate									
65	52316	2	ea	Transformer, 1 ph pad mtd, 7.x kV-240/120V, 75kVA						
66	52316 Alternate									
67	52317	6	ea	Transformer, 1 ph pad mtd, 7.x kV-240/120V, 100kVA						
68	52317 Alternate									
69	52318	7	ea	Transformer, 1 ph pad mtd, 7.x kV- 240/120V, 167kVA						
70	52318 Alternate									
71	54311	3	ea	Transformer, 3 ph pad mtd, 12/13kV-120/208V, 75kVA						
72	54311 Alternate									
73	54312	2	ea	Transformer, 3 ph pad mtd, 12/13kV-120/208V, 150kVA						
74	54312 Alternate									
75	54314	3	ea	Transformer, 3 ph pad mtd, 12/13kV-120/208V, 300kVA						
76	54314 Alternate									

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Downtown Underground Conversion Project
Material Procurement Contract
Material Bid Form

Line	Item Number	Quantity	U/M	Description	Specified Manufacturer and Cat. No.	Quoted Manufacturer and Cat. No.	Quantity to be Supplied	Quoted Unit Price	Total Price	Quoted Lead Time or Delivery Date
77	58001	13	ea	Pad, box, preformed, for single phase transformer, 37"x43"x24"	Nordic CBP-37-43-24A-MG-22x24					
78	58001 Alternate									
79	58002	13	ea	Pad, box, preformed, for single phase transformer, 37"x48"x32"	Nordic GS-37-48-32A-CE-2-26x31					
80	58002 Alternate									
81	58064	7	ea	Pad, box, preformed, for three phase transformer, 67"x59"x30"	Nordic GS-72-62-36RT-MG-52x18					
82	58064 Alternate									
83	58100	15	ea	Handhole, 13"x24"x18"; Tier 22, bolted one piece cover with FIBER OPTIC logo	Hubbell PG1324BA18 with PG1324HH00-21 cover					
84	58100 Alternate									
83	58101	15	ea	Handhole, 19"x14"x12"; HDPE, 5K load rating, with blank HDPE cover	Hubbell PE14HDH00009					
84	58101 Alternate									
85	58125	21	ea	Handhole, 30"x48"x48"; Tier 22, bolted one piece cover with FIBER OPTIC logo	Hubbell PG3048BA48 with PG3048HH00-21 cover					
86	58125 Alternate									
87	58135	7	ea	Handhole, 36"x60"x36"; Tier 22, open bottom, bolted two piece cover with ELECTRIC logo	Hubbell PG3660BA36 with PG3660HH00-17 cover					
88	58135 Alternate									
89	58147	9	ea	Handhole, 24"x36"x42" Tier 22, open bottom, bolted one piece cover with FIBER OPTIC logo	Hubbell PG2436BA42 with PG2436HH00-21 cover					
90	58147 Alternate									
91	58149	2	ea	Handhole, 24"x36"x36", Tier 22, open bottom, bolted one piece cover with ELECTRIC logo	Hubbell PG2436BA36 with PG3660HH00-17 cover					
92	58149 Alternate									
103	58199	1	ea	Pedestal, sec mtr, 1 ph CT, 6 term (Form 4S) with TS07-0105 test switch, and stabilizing foot	Milbank S4083-O (6 term) w/ TS07-0105 and K5961					
104	58199 Alternate									

Indianola Municipal Utilities
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Line	Item Number	Quantity	U/M	Description	Specified Manufacturer and Cat. No.	Quoted Manufacturer and Cat. No.	Quantity to be Supplied	Quoted Unit Price	Total Price	Quoted Lead Time or Delivery Date
105	58202	24	ea	Pedestal, secondary, low profile	API 10x14WB with 3-6 port 350 kcmil connectors					
106	58202 Alternate									
107	58203	10	ea	Pedestal, 3 Ph secondary, 6 - 500 kcmil max/ph and neutral	API 16x28 with 6 port 500 kcmil covered connectors					
108	58203 Alternate									
109	58204	5	ea	Pedestal, 3 Ph secondary, 10 - 500 kcmil max/ph and neutral	Nordic ND-362442-MG-4HDB-X-X					
110	58204 Alternate									
111	58220	1	ea	Pedestal, secondary meter, 1 ph, 240 v, with 100 A MB	Milbank U5136-O-100S w/ UQFM-M					
112	58220 Alternate									
113	58601	10	ea	Cabinet, junction, 3 ph, 60", w/ grnd slv	Durham AM306018124-M w/ GS186018F					
114	58601 Alternate									
115	58611	2	ea	Cabinet, junction, 18"x30"x30"high, w/o ground sleeve	Durham AM303018222					
116	58611 Alternate									
117	58618	1	ea	Cabinet, junction, 24"x22"x30"high, w/o ground sleeve	Durham M302422221					
118	58618 Alternate									
Notes:										
1) All prices to be quoted exclusive of Iowa Sales and Use Taxes. Taxes are to be added at the appropriate rate as prescribed by law as a separate line item on all invoices submitted for payment.										
2) Furnish data required by Specifications on separate sheets										
3) Cable quantities shown are minimum, see specifications										

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract
Section 00550 – Contract Conditions

1.0 GENERAL

- 1.1 These Conditions apply to all aspects of the Purchase Contract, and constitute the terms and conditions of the Contract.

2.0 DEFINED TERMS

- 2.1 Terms used in the Contract Documents have the following definitions.

Buyer or Owner: Indianola Municipal Utilities

Engineer: P & E Engineering Co., Carlisle, Iowa

Seller: Successful Bidder for each line item

3.0 BONDS and SECURITIES

- 3.1 Each bid must be accompanied in a separate sealed envelope by either: (1) a certified check, or a cashier's check drawn on an Iowa bank, or a bank chartered under the laws of the United States, in an amount of 5% of bid amount; or (2) a certified share draft drawn on a credit union in Iowa or chartered under the laws of the United States, in an amount of 5% of bid amount; or (3) a bid bond executed by a corporation authorized to contract as a surety in the State of Iowa, in the penal sum of 5% of bid amount.

- 3.2 The bid security shall be made payable to the Indianola Municipal Utilities, Indianola, Iowa.

- 3.3 The bid security must not contain any conditions either in body or as an endorsement thereon. The bid security shall be forfeited to the City as liquidated damages in the event the successful bidder fails or refuses to enter into contract within ten (10) days after the award of contract and post bond satisfactory to the City insuring the faithful fulfillment of the contract and the maintenance of said work, if required, pursuant to the provisions of this notice and the other contract documents. The City will accept bid bond forms that meet the Requirements of Iowa Code, Section 26.8.

4.0 SCHEDULES

- 4.1 Bidders shall not be permitted to withdraw their bids for a period of thirty (30) days after they are opened.

- 4.2 Delivery of Goods and Special Services shall be completed as soon as possible and within the lead time quoted on bid form.

5.0 INSURANCE

- 5.1 Seller shall be responsible for determining minimum insurance coverages to protect the Seller, Buyer, and the Goods to be provided.

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract
Section 00550 – Contract Conditions

- 5.2 Seller shall be responsible for the Goods until delivered to and accepted by Buyer. In case any of the Goods becomes damaged through any cause before the time of acceptance of the same, the Seller must make good the same before the Goods will be accepted. This provision is not to prevent the Buyer from using such parts of the accepted Goods as are ready for use, and by the use of which the Seller's work will not be damaged or hindered.

6.0 SHIPMENT AND DELIVERY

- 6.1 Seller shall deliver the Goods F.O.B. the Point of Destination. Goods shall be delivered to:

Indianola Municipal Utilities
Attn: Mr. Ron Bowlin
1300 E Iowa Ave.
Indianola, Iowa 50125
Phone 515-250-4315

- 6.2 Deliveries will be accepted from 7:30 AM – 12:00 noon, and from 1:00 PM - 3:30 PM, Monday through Friday.
- 6.3 Seller shall select the carrier and bear all costs of packaging, transportation, insurance, special handling, and any other costs associated with shipment and delivery.
- 6.4 Buyer will be responsible for and bear all costs for unloading the Goods from carrier.
- 6.5 Buyer will assure that adequate facilities are available to receive delivery of the Goods during the times specified.
- 6.6 Seller shall require the carrier to give Buyer at least 24 hours notice by telephone prior to the anticipated hour of delivery.
- 6.7 Buyer or Engineer will inspect the Goods upon delivery solely for purposes of identifying the Goods and general verification of quantities and observation of apparent condition in order to provide a basis for a progress payment. Such inspection will not be construed as final or as receipt of any Goods that, as a result of subsequent inspections and tests, are determined to be non-conforming.

7.0 PAYMENTS

- 7.1 Seller shall submit his normal application for payment or invoice directly to Buyer following the delivery of materials. Iowa Sales and Use Tax must be shown as a separate line item on each invoice.
- 7.2 Buyer will pay Seller within 30 days after satisfactory delivery of materials and receipt of the application for payment or invoice.

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract
Section 00550 – Contract Conditions

8.0 TAXES

- 8.1 Bid prices shall be exclusive of Iowa Sales and Use tax. All state and local taxes will be added to the prices shown in the Bid at the rate prescribed by law, and must be shown as a separate line item on all invoices submitted for payment.

9.0 WARRANTY

- 9.1 Seller warrants and guarantees to Buyer that the title to the Goods conveyed shall be proper, its transfer rightful, and free from any security interest, lien, or other encumbrance.
- 9.2 Seller warrants and guarantees to Buyer that all Goods will conform with the Contract Documents, including any Samples approved by Engineer, and the Goods will be of merchantable quality. Engineer shall be entitled to rely on representation of Seller's warranty and guarantee.
- 9.3 Minimum warranty shall be one year from the date the Goods are delivered, unless defined otherwise in the individual equipment specification pages.
- 9.4 Seller's warranty and guarantee hereunder excludes defects or damage caused by abuse, improper modification or improper maintenance or operation by persons other than Seller, or normal wear and tear under normal usage.

10.0 QUANTITIES

- 10.1 For all items except for cable, quantities shall be quoted exactly as requested in the Contract Documents, but alternate quotes (in addition to the base quote) on alternate quantities corresponding to standard package quantities are encouraged.
- 10.2 Quantities shown for cable are the minimum acceptable lengths. Bidders should indicate the tolerance on shipment quantities compared to quoted quantities. Payment will be made on a unit cost basis for cable actually shipped that is within the tolerance stated in the proposal.
- 10.3 Buyer may make minor adjustments in quantities following receipt of bids and before issuing purchase order, without any change in the unit price quoted by the Bidder. Subject to agreement between Buyer and Seller as to any such revised quantity, the quantities delivered shall be exactly as shown on the purchase order.

11.0 COMPARISON OF BIDS

- 11.1 Bidders may submit proposals for any or all bid line items. One or more line items may be awarded to each successful bidder.
- 11.2 All prices quoted are to be firm for the schedules defined in Section 4.0.
- 11.3 For determination of the apparent low Bidder for each item, Bids will be compared on the basis of the respective quoted quantity multiplied by the Bidder's unit price. Bid items will

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract
Section 00550 – Contract Conditions

be evaluated on an item by item basis. Mathematical errors by the bidder may be corrected by the Buyer before making the bid comparison.

- 11.4 Prices quoted must be all inclusive (except for taxes as described in Paragraph 8.0), including all delivery costs.

12.0 COMPLIANCE WITH SPECIFICATIONS

- 12.1 The Contract, if awarded, will be on the basis of material and equipment specified or described in the Bidding Documents, or those “or-equal” or alternate materials and equipment approved by Engineer. The materials and equipment described in the Bidding documents establish a standard of required type, function, and quality to be met by any proposed “or-equal” item. The burden of proof of the merit of the proposed item is upon Bidder. If requested, Bidder shall supply catalog pages, data sheets, test reports, or other descriptive information sufficient to allow for evaluation of proposed “or-equal” items by Engineer. Engineer’s decision of approval or disapproval of a proposed item will be final.
- 12.2 Buyer shall have the right to perform, or cause to be performed, reasonable inspections and require reasonable tests of the Goods. Seller shall allow Buyer a reasonable time to perform such inspections or tests.
- 12.3 Buyer shall bear all expenses, except for travel, lodging, and subsistence expenses of Seller’s representatives, for inspections and tests at the Point of Destination, but buyer shall be entitled to reimbursement from Seller for Buyer’s expenses for re-inspection or re-testing if, on the basis of an initial inspection or test, the Goods are determined to be non-conforming.
- 12.4 Buyer will give Seller timely notice of all specified tests, inspections, and approvals of the Goods.
- 12.5 Neither payments made by Buyer to Seller prior to any tests or inspections, nor any tests or inspections shall constitute acceptance of non-conforming Goods, or prejudice Buyer’s rights under the Contract.

13.0 CONTRACT AGREEMENT

- 13.1 A Purchase Order will be issued to the Successful Bidder(s) by the Buyer as the form of Agreement. Acceptance of the Purchase Order by the Bidder shall signify acceptance of and agreement to all provisions of the Contract.
- 13.2 The Purchase Order shall be deemed as having been awarded when formal notice of award has been duly served upon the intended awardee by the Buyer or an agent or officer duly authorized to give such notice.

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14.0 SPECIAL REQUIREMENTS

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

INDIANOLA MUNICIPAL UTILITIES
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Material Procurement Contract
Section 16100 – Specifications for Secondary (600 volt) Cable in Conduit

1.0 SCOPE

This specification covers the physical and electrical characteristics of secondary (600 volt) assemblies of cable in conduit suitable for direct burial.

2.0 STANDARDS

The cable must meet all applicable requirements of UL Standards 44 and 854, and NEMA WC-70-2009/ICEA S-95-658-2009.

The conduit must meet all applicable requirements of ASTM F 2160, ASTM D 3035, and NEMA TC-7.

The assembly must meet all applicable requirements of UL Standard 1990

3.0 CABLE

Conductors shall be #8 AWG copper, Class B stranded, with UL listed type RHW/USE-2 insulation rated 600 volts.

4.0 CONDUIT

Conduit shall be black HDPE, 3/4" nominal diameter, with Sch 40 wall thickness (EPEC-40-HDPE).

5.0 ASSEMBLY

Two conductors shall be factory installed in a continuous length of conduit, with one conductor having black and one having white insulation.

6.0 SHIPPING LENGTHS

Conduit/cable assembly is to be shipped on non-returnable wood reels, with each reel no larger than 42" overall width and 66" flange diameter. The maximum length per reel is approximately 4000 ft.

End of Section

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract
Section 16101 – Specifications for Secondary (600 volt) Cable

1.0 SCOPE

This specification covers the physical and electrical characteristics of secondary (600 volt) cable assemblies suitable for direct burial or installation in conduit.

2.0 STANDARDS

The cable must meet all applicable requirements of ANSI/ICEA S-81-570-2005 for Ruggedized Design conductor assemblies.

3.0 CONDUCTORS

Conductors shall be 1350 H-19 or H-26 aluminum.

Item 05514 - Brenau
1/0-1/0-#2 AI URD TX (twisted cable assembly)

Item 05520 - Sweetbriar
4/0-4/0-2/0 AI URD TX (twisted cable assembly)

Item 05523 - Wesleyan
350-350-4/0 AI URD TX (twisted cable assembly)

Item 05530 – Norte Dame
1/0-1/0/-1/0-#2 AI URD QD (twisted cable assembly)

Item 05531 – Wake Forest
4/0-4/0/-4/0-2/0 AI URD QD (twisted cable assembly)

Item 05532 – Slippery Rock
350-350-350-4/0 AI URD QD (twisted cable assembly)

4.0 INSULATION

Insulation shall meet all requirements of ANSI/ICEA S-81-570-2012 for 600 Volt Rated Cables of Ruggedized Design and shall be suitable for operation at 90° C. The insulation on the outer layer of the phase conductors shall be uniformly black. The insulation on the outer layer of the neutral conductor shall be black with three extruded yellow stripes.

5.0 SHIPPING LENGTHS

Cable is to be shipped on non-returnable wood reels, with a maximum size as shown below. Specific cut lengths applicable to an individual order may be shown on the inquiry or purchase order.

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Section 16101 – Specifications for Secondary (600 volt) Cable

Item 05514 (1/0-1/0-#2 URD TX) is to be wound with one continuous length on each reel, with each reel no larger than 36.5" overall width and 50" flange diameter. The maximum length per reel is approximately 3000 ft.

Item 05520 (4/0-4/0-2/0 URD TX) is to be wound with one continuous length on each reel, with each reel no larger than 42" overall width and 66" flange diameter. The maximum length per reel is approximately 3000 ft.

Item 05523 (350-350-4/0 URD TX) is to be wound with one continuous length on each reel, with each reel no larger than 42" overall width and 66" flange diameter. The maximum length per reel is approximately 2000 ft.

Item 05530 – (1/0-1/0-1/0-#2 URD QD) is to be wound with one continuous length on each reel, with each reel no larger than 36.5" overall width and 50" flange diameter. The maximum length per reel is approximately 2000 ft.

Item 05531 (4/0-4/0-4/0-2/0 URD QD) is to be wound with one continuous length on each reel, with each reel no larger than 42" overall width and 66" flange diameter. The maximum length per reel is approximately 2000 ft.

Item 05532 (350-350-350-4/0 URD QD) is to be wound with one continuous length on each reel, with each reel no larger than 42" overall width and 66" flange diameter. The maximum length per reel is approximately 1400 ft.

End of Section

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract
Section 16102 – Specification for Primary (15 kV) Cable

1.0 SCOPE

This specification covers the physical and electrical characteristics of jacketed concentric neutral power cable for use on an alternating current, three-phase, 13.2 kV nominal, 60 Hertz power system at the 133% insulation level. Cable must be “Discharge-Free” as defined by ANSI/ICEA S-94-649-2004.

2.0 STANDARDS

Except as modified by these specifications, the cable must meet all applicable requirements of ANSI/ICEA S-94-649-2013 and AEIC Standard CS-8-13.

3.0 GENERAL

Cable insulation shall be Ethylene Propylene Rubber (EPR).

4.0 PHASE CONDUCTOR

The phase conductor shall be solid or compressed stranded 1350 H-19 aluminum, with sizes as follows

Item No.	Conductor
05612	1/0 AWG, solid
05614	4/0 AWG, 19 strand (Class B stranding)
05618	1000 kcmil, 61 strand (Class B stranding)

A sealant shall be incorporated in the interstices of stranded phase conductors to prevent longitudinal water penetration.

5.0 INSULATION

The insulation shall consist of 220 mils (nominal thickness) of ethylene propylene rubber (EPR).

6.0 SEMI-CONDUCTING INSULATION SHIELD

The insulation shield shall be extruded directly over the insulation, and shall be free stripping within the requirements of ANSI/ICEA S-94-649-2013.

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Section 16102 – Specification for Primary (15 kV) Cable

7.0 NEUTRAL

The concentric neutral shall be sized as follows and, where indicated, in accordance with the referenced table in ANSI/ICEA S-94-649-2013.

Item No	Phase Conductor	Neutral	Reference
05612	1/0 AWG	Full	Table 6-2
05614	4/0 AWG	One-third	Table 6-3
05618	1000 kcmil	One-sixth	Table G-4

8.0 JACKET

The overall cable jacket shall consist of a layer of insulating chlorosulfonated polyethylene, or linear low density polyethylene extruded-to-fill in accordance with ANSI/ICEA S-94-649-2013.

9.0 DIMENSIONS

All insulation and shield dimensions shall be in accordance with the requirements of Appendix C of ANSI/ICEA S-94-649-2013.

10.0 BASIS OF QUOTE

Cable length is specified and is to be quoted on a cable foot basis, regardless of packaging method. For cable that is packaged with three parallel lengths on a reel, the specified cable length will be three times the required circuit length.

11.0 SHIPPING REELS

Cable is to be shipped on non-returnable wood reels, with a maximum size as shown below. Specific cut lengths applicable to an individual order may be shown on the inquiry or purchase order.

Item 05612 (1/0 Aluminum conductor) is to be wound with one continuous length on each reel, with each reel no larger than 43" overall width and 66" flange diameter. The maximum length per reel is approximately 3600 ft.

Item 05614 (4/0 Aluminum conductor) is to be wound with one continuous length on each reel, with each reel no larger than 43" overall width and 66" flange diameter. The maximum length per reel is approximately 3000 ft. The total length of cable purchased must be divided into three equivalent sets of reels to facilitate the use of the cable for three phase circuits.

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Section 16102 – Specification for Primary (15 kV) Cable

Item 05618 (1000 kcmil Aluminum conductor) is to be shipped on non-returnable wood reels no larger than 62" overall width and 96" flange diameter. One continuous length shall be wound on each reel. The maximum length per reel is approximately 3750 ft. The total length of cable purchased must be divided into three equivalent sets of reels to facilitate the use of the cable for three phase circuits.

INDIANOLA MUNICIPAL UTILITIES
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Material Procurement Contract
Section 16200 – Single Phase Padmounted Transformer Specification

1.0 SCOPE

- 1.1 Transformers covered by this specification are to be single phase, dead front, loop feed, pad mounted units rated 25 through 167 kVA, for operation on a 60 Hz power system. All transformers are to be suitable for installation outdoors on a pad, and are to be oil filled and self-cooled. The transformers must meet all applicable requirements of IEEE Standards C57.12.00-2015, C57.12.28-2014, C57.12.38-2014 and C57.12.28-2014.

2.0 PRIMARY VOLTAGE

- 2.1 13,200 Grd Y/7,620 volts, no taps, 95 kV BIL

3.0 SECONDARY VOLTAGE

- 3.1 240/120 volts, 3 wire, 30 kV BIL

4.0 THROUGH CAPACITY

- 4.1 The continuous kVA capacity for each transformer will be specified on the inquiry or purchase order, and is to be rated at a 65° C rise above ambient.

5.0 DIMENSIONS

- 5.1 All bushing arrangements and dimensions shall be in accordance with ANSI C57.12.38-2014 for the Type 2 arrangement with 8.3 kV high voltage connectors. The compartment and door must be arranged to provide free access to and clear space for the removal of the primary separable connectors, primary fuses, and the secondary cables.
- 5.2 The dimensions of transformers shall not exceed the following. Height is maximum height above the pad. Width and depth are overall footprint dimensions (not including cooling fins, radiators, or other appurtenances that do not contact the pad).

	Height	Width	Depth
25 through 75 kVA	26"	34"	35"
100 kVA	32"	36"	40"
167 kVA	32"	36"	47"

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
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Section 16200 – Single Phase Padmounted Transformer Specification

6.0 FUSES

6.1 Fuses are to be provided in the transformer, connected between the primary bushings and the transformer windings. The transformer must be shipped with the fuses installed ready for operation. The fusing shall consist of an externally removable under oil expulsion fuse in series with an internal isolation link.

6.2 The fuse holder shall be a bayonet holder with flapper valve. Acceptable fuse holders are as follows.

Manufacturer	Catalog No.
Cooper Power Systems	4000361C99FV
ABB	1C10775G02

6.3 A dual (load) sensing expulsion fuse link shall be installed in each bayonet holder. An isolation link shall be installed in series with the bayonet holder, sized for the bayonet fuse as recommended by the fuse manufacturer. The expulsion fuse shall be in accordance with the following table.

Eaton/Cooper Power Systems

<u>Transformer Size, kVA</u>	<u>Bayonet Expulsion Fuse</u>
25	4000358C05
37.5	4000358C08
50	4000358C08
75	4000358C10
100	4000358C10
167	4000358C12

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Section 16200 – Single Phase Padmounted Transformer Specification

7.0 BUSHINGS AND TERMINALS

- 7.1 The transformer shall include two primary bushing wells that are externally clamped to the tank. The bushing wells shall conform to IEEE Std 386-2016, with the interface conforming to bushing well interface Fig. 3 of the referenced standard. All bushing wells shall have a replaceable copper stud.
- 7.2 A load break insert rated 8.3/14.4 kV shall be installed in each primary bushing well. Inserts shall meet all applicable requirements of IEEE Std 386-2016, designed to mate with the bushing well specified above, and shall have an all-copper current path. Inserts shall be manufactured by ABB/Thomas & Betts, Hubbell, or Eaton/Cooper Power Systems.
- 7.3 The low voltage bushings (including the neutral bushing) shall be externally clamped to the tank. Low voltage terminals shall be threaded tinned copper studs in accordance with Figure 7 of IEEE C57.12.38-2014, with a copper alloy or bronze contact nut installed on each stud. Bushing studs for transformers rated 25 through 75 kVA shall have 5/8" threads. Bushing studs for transformers rated 100 and 167 kVA shall have 1" threads.
- 7.4 The high voltage neutral shall be securely grounded to the tank internally. This connection shall be independent of all other connections. The low voltage neutral shall have a removable ground strap connected to the ground pad.

8.0 CORE AND COIL ASSEMBLY

- 8.1 The final core and coil assembly shall result in a rigid assembly that will maintain full mechanical, electrical, and dimensional stability under fault conditions.

9.0 SWITCHES

- 9.1 No loop feed or on-off switches are to be provided in the transformer.

INDIANOLA MUNICIPAL UTILITIES
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Material Procurement Contract
Section 16200 – Single Phase Padmounted Transformer Specification

10.0 CONSTRUCTION

- 10.1 The manufacturer shall provide a high quality coating system in compliance with ANSI C57.12.28-2005. The top coat color shall be Munsell 7GY3.29/1.5 padmount green.
- 10.2 A combination automatic and manual pressure relief valve shall be furnished in the secondary compartment. Manual operation of the valve shall not require a special tool unique to the valve.
- 10.3 The enclosure must comply with ANSI C57.12.28-2014. The doors shall be pad lockable, and must also be secured by a penta-head latch that is only accessible after removing the pad lock. The penta-head lock assembly must be easily operable, with sufficient length of bolt threads and sufficient free movement in the floating captive female threads to allow the doors to be closed, latched, and locked when subject to normal mis-alignment due to settling or shifting of the transformer or transformer pad.
- 10.4 The transformers must meet the sound levels specified in NEMA TR1-2013.
- 10.5 The primary compartment shall include provisions for customer's installation of a fault indicator. Mounting holes shall be punched in the door for installation of the fault indicator, with studs attached to the front of the transformer tank wall and the underside of the top of the transformer door (extending into the termination compartment) for securing the fault indicator leads, as shown in Fig. 1.

The mounting holes shall be located 4" below the plane of the top surface of the door, except this dimension should be increased if necessary to assure that the center line of the mounting holes is 1 ½" below the point on tangent where the front plane of the door meets the rolled top edge.

Transformers are to be shipped with a cover plate arranged to fully close the door opening, finished the same as the transformer enclosure, and bolted to the inside of the compartment door. The cover plate shall be securely held in place by two (2) 5/16" x 1" stainless steel carriage bolts with lock washers and nuts on the interior of the compartment.

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Section 16200 – Single Phase Padmounted Transformer Specification

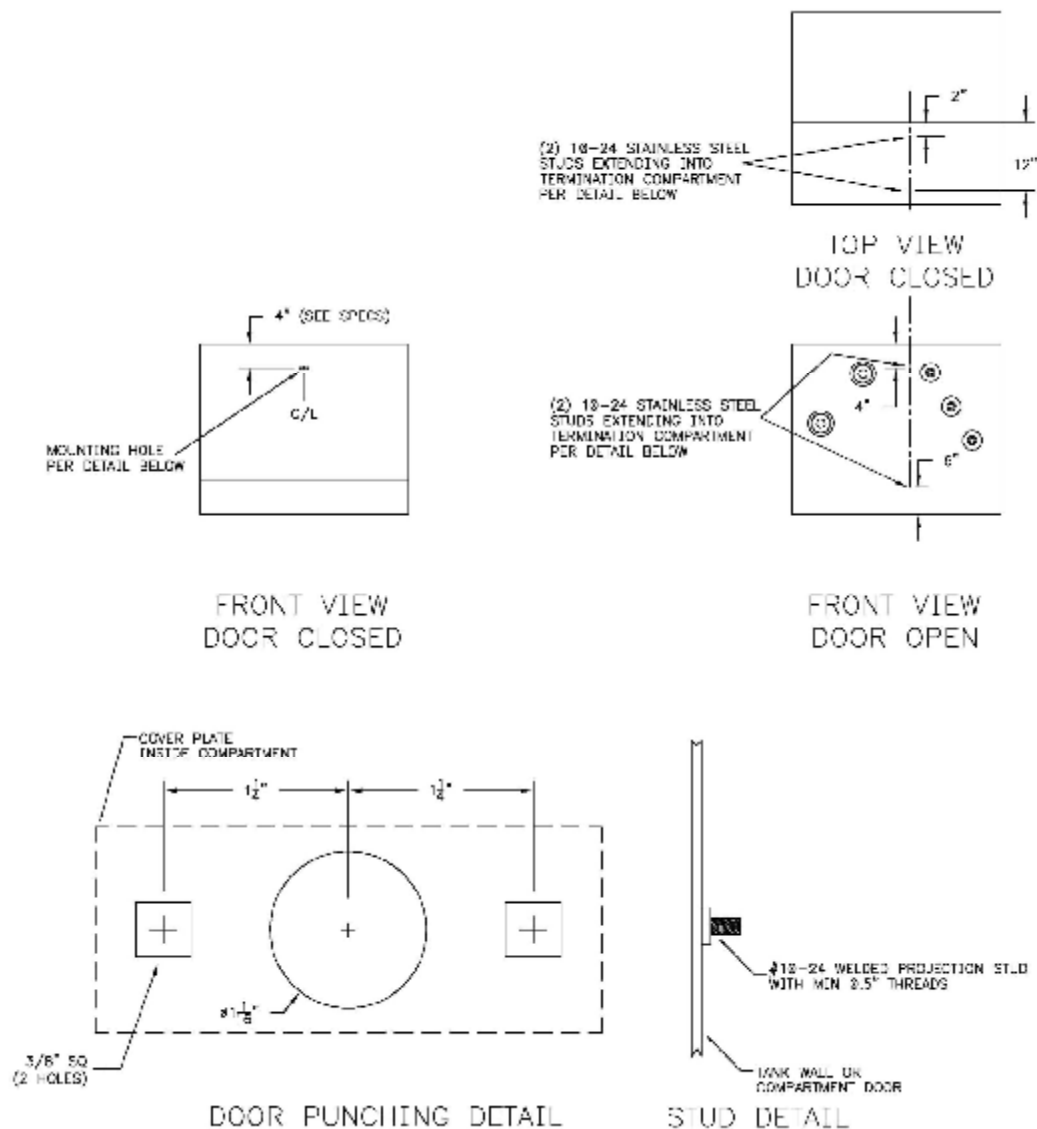


Fig. 1

INDIANOLA MUNICIPAL UTILITIES
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Material Procurement Contract
Section 16200 – Single Phase Padmounted Transformer Specification

- 10.6 The nameplate must not be mounted on a removable part. In addition to the information required by the IEEE standards, the nameplate shall include the following information.
- a. month and year of manufacture (special date codes are not acceptable)
 - b. statement that the tank is factory filled with dielectric fluid having less than 1 ppm of PCB
- 10.7 All transformers shall have a drip shield placed under the bayonet fuse holder to divert any fluid seepage resulting from removal of the fuse elements away from the high voltage bushings and connected cables.
- 10.8 Transformers shall include an access hole sized for a 2" conduit fitting, located in the front transformer sill on the secondary side of the transformer, as shown in Fig. 2. It shall be closed with a tamper resistant resealable cover.

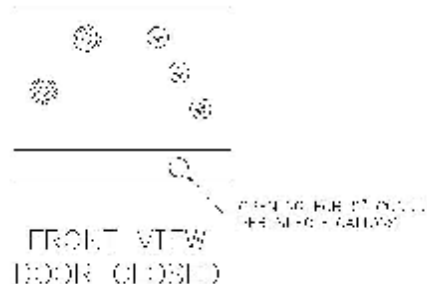


Fig. 2

- 10.9 Two hold down clips shall be provided with each transformer.
- 10.10 The manufacturer shall provide and install decals as follows. Decals must be sufficiently durable to remain legible for the life of the transformer, and shall meet all applicable requirements of NEMA 260-1996 and UL 969-1982.
- a. A non-PCB decal on the exterior of the enclosure. The decal shall be a minimum of 1" x 2" indicating "No PCBs" or "Non PCB" in blue letters on white background
 - b. Not Used.

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract
Section 16200 – Single Phase Padmounted Transformer Specification

- c. A danger label in accordance with Fig. 4-2 of NEMA 260-1996 in cable termination compartment of the transformer, at a location that will be clearly visible when the compartment door is open.
- d. Purchaser will furnish and install a custom Warning Label on the outside of the enclosure.

11.0 DIELECTRIC FLUID

- 11.1 All transformers are to be shipped filled with Type I or Type II insulating oil meeting all applicable requirements of ASTM D3487-82a, with a minimum breakdown value of 28 kV per ASTM D1816-84a and a PCB content of less than 1 ppm.

12.0 EFFICIENCY

- 12.1 Transformer must meet the DOE efficiency requirements for liquid filled distribution transformers as published in 10 CFR 431, Subpart K.

13.0 IMPEDANCE

- 13.1 The percent impedance voltage shall be between 2% and 4%.

14.0 TESTS

- 14.1 Each transformer shall be individually tested for actual no load and load losses, percent impedance, exciting current at 100% of rated voltage, and turns ratio. Test values for no load and load loss measurements shall be corrected to 85° C. Certified reports of actual test data (including certification that transformer meets the specified efficiency requirements) shall be prepared and submitted to Indianola Municipal Utilities. Payment of the invoices for the purchase cost of the transformer will not be made until the test report is received.
- 14.2 The vendor shall supply verifications that the transformer design has passed the short circuit criteria in IEEE C57.12.00-2015.

15.0 DRAWINGS

- 15.1 Drawings shall be furnished with each transformer purchased. The drawings are to be provided as soon as possible after receipt of purchase order, and must show the dimensions, weights, accessories, and nameplate information for the transformer, including the manufacturer,

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract
Section 16200 – Single Phase Padmounted Transformer Specification

type, rating, and catalog number of the bayonet fuse holder, expulsion fuse, and isolation link.

16.0 QUOTES

16.1 The following information is to be provided with each quote.

- a. Total purchase price for each unit
- b. Outline drawing showing overall dimensions and bushing locations
- c. Estimated delivery lead time
- d. Guaranteed no-load and load losses
- e. Estimated percent impedance
- f. Any exceptions to these specifications

End of Specification

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract
Section 16201 – Three Phase Padmounted Transformer Specification

1.0 SCOPE

- 1.1 Transformers covered by this specification are to be three phase, dead front, loop feed, pad mounted units rated 75 through 2,500 kVA, for operation on a 60 Hz power system. All transformers are to be suitable for installation outdoors on a pad, and are to be oil filled and self-cooled. The transformers must meet all applicable requirements of IEEE Standards C57.12.00-2015, C57.12.34-2015 and C57.12.28-2014.

2.0 PRIMARY VOLTAGE

- 2.1 13,200 Grd Y/7,620 volts, no taps, 95 kV BIL

3.0 SECONDARY VOLTAGE

- 3.1 As shown on the inquiry or purchase order, either
a. 208 Y / 120 volts, no taps, 30 kV BIL, or
b. 480 Y / 277 volts, no taps, 30 kV BIL

4.0 THROUGH CAPACITY

- 4.1 The continuous kVA capacity for each transformer will be specified on the inquiry or purchase order, and is to be rated at a 65° C rise above ambient.
- 4.2 Transformers will be restricted to the following kVA sizes.

Secondary voltage
208 Y / 120 volts - 75 to 1000 kVA
480 Y / 277 volts - 75 to 2500 kVA

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract
Section 16201 – Three Phase Padmounted Transformer Specification

5.0 DIMENSIONS

- 5.1 All bushing arrangements and dimensions shall be in accordance with Figures 8(a), 12, 16, 19, and 20 of IEEE Std C57.12.34-2015. These are the specific dimensions in the IEEE standard with the secondary bushings arranged in a staggered pattern.
- 5.2 The compartment doors must be arranged to provide free access to and clear space for the removal of the primary separable connectors, primary fuses, and the secondary cables.
- 5.3 The compartment and overall footprint dimensions shall be within the limits shown in the following table. The footprint dimensions exclude fins, radiators, and other appurtenances that do not contact the pad.

	Cable Termination Compartment				Overall Footprint			
	Width		Depth		Width		Depth	
Transformer Rating	Min	Max	Min	Max	Min	Max	Min	Max
75-300 kVA	58"	68"	18"	22"	N/S	68"	N/S	58"
500-750 kVA	58"	72"	18"	22"	N/S	72"	N/S	61"
Larger than 750 kVA	Not Specified		24"		Not Specified			

(N/S = Not Specified)

- 5.5 The dimensions for transformers rated larger than 750 kVA are not specified, except for the minimum depth of the cable termination compartment and as required by the referenced IEEE standard.

6.0 FUSES

- 6.1 Fuses are to be provided in the transformer, connected between the primary bushings and the transformer windings. The transformer must be shipped with the fuses installed ready for operation. The fusing shall consist of an externally removable under oil expulsion fuse in series with an internal isolation link.

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract
Section 16201 – Three Phase Padmounted Transformer Specification

- 6.2 The fuse holder shall be a bayonet holder with flapper valve. For transformers rated 1,000 kVA or larger it shall have silver plated contacts. Acceptable fuse holders are as follows.

Manufacturer	Less than 1000 kVA	1000 kVA and larger
Cooper Power Systems	4000361C99FV	4038804B03M
ABB	1C10775G02	1C10775G07

- 6.3 A dual (load) sensing expulsion fuse link shall be installed in each bayonet holder. An isolation link shall be installed in series with the bayonet holder, sized for the bayonet fuse as recommended by the fuse manufacturer. The expulsion fuse shall be in accordance with the following tables.

<u>Transformer Size, kVA</u>	<u>Eaton/Cooper Power Systems Bayonet Expulsion Fuse</u>
75	4000358C05
112.5	4000358C08
150	4000358C08
225	4000358C10
300	4000358C10
500	4000358C12
750	4038361C03CB
1000	4038361C04CB
1500	4038361C04CB
2000	4038361C05CB
2500	4038361C05CB

7.0 BUSHINGS AND TERMINALS

- 7.1 The transformer shall include six primary bushing wells that are externally clamped to the tank. The bushing wells shall conform to ANSI/IEEE Standard 386-2016, with the interface conforming to bushing well interface Fig. 3 of the referenced standard. All bushing wells shall have a replaceable copper stud.
- 7.2 A load break insert rated 8.3/14.4 kV shall be installed in each primary bushing well. Inserts shall meet all applicable requirements of IEEE Std 386-2016, designed to mate with the bushing well specified above, and shall have an all-copper current path. Inserts shall be manufactured by ABB/Thomas & Betts, Hubbell, or Eaton/Cooper Power Systems.

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract
Section 16201 – Three Phase Padmounted Transformer Specification

- 7.3 The low voltage bushings (including the neutral bushing) shall be externally clamped to the tank. Low voltage terminals shall be in accordance with Figure 20 of IEEE Std C57.12.34-2015, per the following table. All spade terminals shall be tinned copper. Ten hole spades shall incorporate additional support at the outer end as required by the referenced standard.

Low Voltage Rating	Size Range, kVA	Terminal Type
208Y/120	75 through 300	4 hole spade
	500	6 hole spade
	750 through 1000	10 hole spade
480Y/277	75 through 500	4 hole spade
	750 through 1000	6 hole spade
	1500 through 2500	10 hole spade

Note that the 10 hole spade for 1500 kVA, 480Y/277 volt transformer is a specific requirement in excess of the referenced standard

- 7.4 The high voltage neutral shall be securely grounded to the tank internally. This connection shall be independent of all other connections. The low voltage neutral shall be insulated and isolated except for a removable ground strap connected to the ground pad.

8.0 CORE AND COIL ASSEMBLY

- 8.1 The final core and coil assembly shall result in a rigid assembly that will maintain full mechanical, electrical, and dimensional stability under fault conditions.
- 8.2 The transformers shall be designed and constructed with a triplexed core or a 4 or 5 legged core to prevent excessive tank heating under single phase supply or other unbalanced conditions.

9.0 SWITCHES

- 9.1 No loop feed or on-off switches are to be provided in the transformer.

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract
Section 16201 – Three Phase Padmounted Transformer Specification

10.0 CONSTRUCTION

- 10.1 The manufacturer shall provide a coating system in compliance with IEEE Std C57.12.28-2014. The top coat color shall be Munsell 7GY3.29/1.5 padmount green.
- 10.2 A combination automatic and manual pressure relief valve shall be furnished in the secondary compartment. Manual operation of the valve shall not require a special tool unique to the valve.
- 10.3 The enclosure must comply with IEEE Std C57.12.28-2014. The doors shall be pad lockable, and must also be secured by a penta-head latch that is only accessible after removing the pad lock.
- 10.4 The transformers must meet the sound levels specified in NEMA TR1-2013.
- 10.5 The nameplate must not be mounted on a removable part. In addition to the information required by the ANSI standards, the nameplate shall include the following information.
 - a. month and year of manufacture (special date codes are not acceptable)
 - b. statement that the tank is factory filled with dielectric fluid having less than 1 ppm of PCB
- 10.6 A drip shield shall be placed under the bayonet fuse holders to divert any oil seepage resulting from removal of the fuse elements away from the high voltage bushings and connected cables.
- 10.7 Transformers shall include an access hole sized for a 2" conduit fitting, located in the side transformer sill of the secondary compartment. It shall be closed with a tamper resistant re-sealable cover.
- 10.8 The door sill must be removable to allow the transformer to be slid into place over cables. The door sill must not interfere with the operation of the primary separable connectors.
- 10.9 The high voltage and low voltage segments shall be separated by a metallic barrier in accordance with the referenced standard.

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract
Section 16201 – Three Phase Padmounted Transformer Specification

- 10.10 All door hinges shall be stainless steel.
- 10.11 The upper filling plug or cap, the liquid level gauge, and the drain plug or cap shall be located in the low voltage compartment.
- 10.12 An oil level gauge shall be located in the secondary compartment.
- 10.13 The primary compartment shall include provisions for customer's installation of a fault indicator. Mounting holes shall be punched in the door for installation of the fault indicator, with studs attached to the left side wall of the primary compartment for securing the fault indicator leads, as shown in Fig. 1.

Transformers are to be shipped with a cover plate arranged to fully close the door opening, finished the same as the transformer enclosure, and bolted to the inside of the compartment door. The cover plate shall be securely held in place by two (2) 5/16" x 1" stainless steel carriage bolts with lock washers and nuts on the interior of the compartment.

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract
Section 16201 – Three Phase Padmounted Transformer Specification

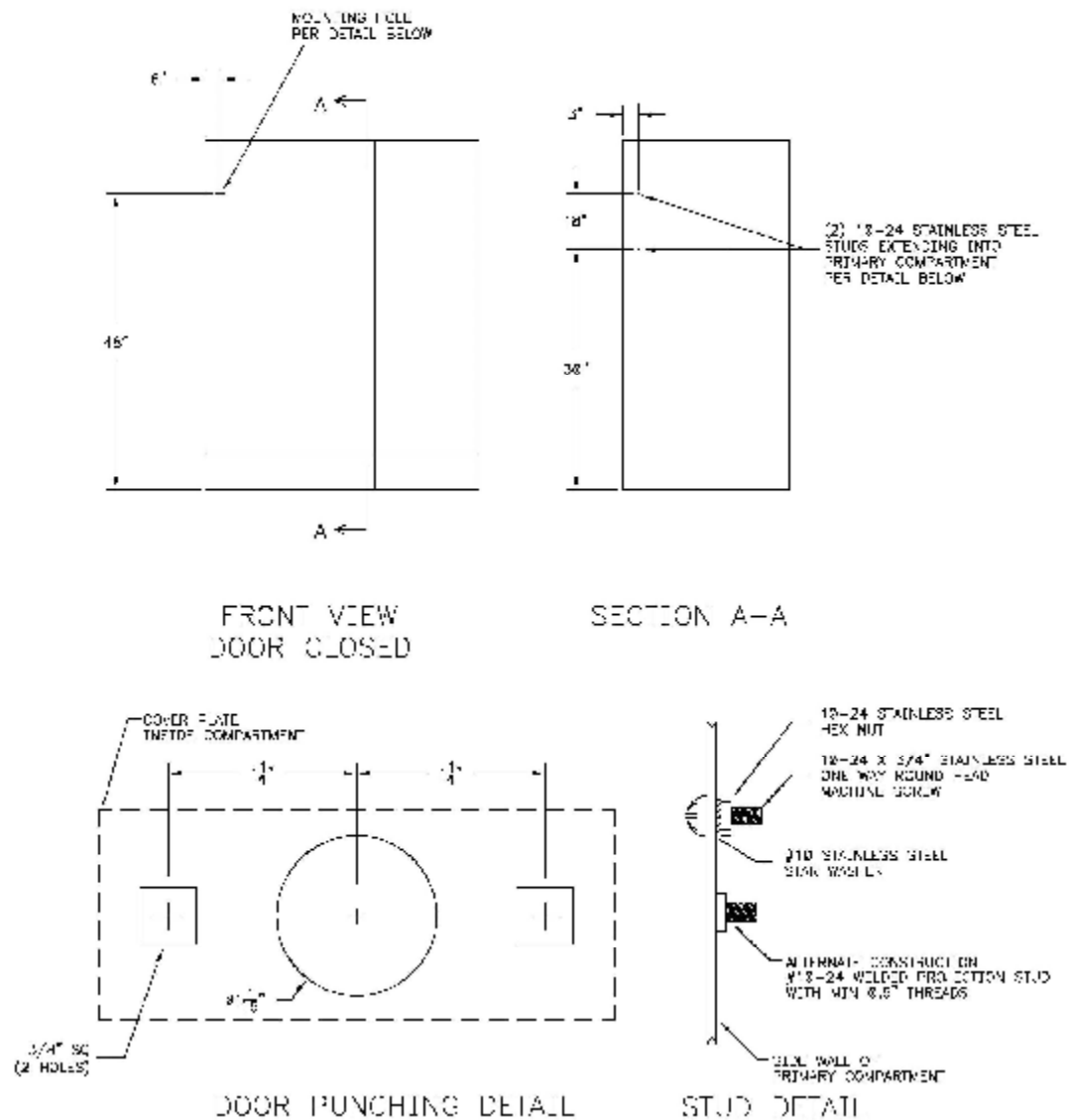


Fig. 1

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract
Section 16201 – Three Phase Padmounted Transformer Specification

10.13 The manufacturer shall provide and install decals as follows. Decals must be sufficiently durable to remain legible for the life of the transformer, and shall meet all applicable requirements of NEMA 260-1996 and UL 969-1982.

- a. A non-PCB decal on the exterior of the enclosure. The decal shall be a minimum of 1" x 2" indicating "No PCBs" or "Non PCB" in blue letters on white background
- b. Not Used.
- c. A danger label in accordance with Fig. 4-2 of NEMA 260-1996 in both the primary and secondary compartments of the transformer, at locations that will be clearly visible when either compartment door is open.
- d. Purchaser will furnish and install a custom Warning Label on the outside of the enclosure.

11.0 DIELECTRIC FLUID

11.1 All transformers are to be shipped filled with Type I or Type II insulating oil meeting all applicable requirements of ASTM D3487-82a, with a minimum breakdown value of 28 kV per ASTM D1816-84a and a PCB content of less than 1 ppm.

12.0 EFFICIENCY

12.1 Transformer must meet the DOE efficiency requirements for liquid filled distribution transformers as published in 10 CFR 431, Subpart K.

13.0 IMPEDANCE

13.1 The percent impedance voltage shall be as specified in paragraphs 5.1 and 5.2 IEEE C57.12.34.2015.

<u>kVA Rating</u>	<u>Nominal Percent Impedance Voltage</u>
75	2.70 - 5.75
112.5 - 300	3.10 - 5.75
500	4.35 - 5.75
750 - 2500	5.75

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract
Section 16201 – Three Phase Padmounted Transformer Specification

14.0 TESTS

- 14.1 Each transformer shall be individually tested for actual no load and load losses, percent impedance, exciting current at 100% of rated voltage, and turns ratio. Test values for no load and load loss measurements shall be corrected to 85° C. Certified reports of actual test data (including certification that transformer meets the specified efficiency requirements) shall be prepared and submitted to Indianola Municipal Utilities. Payment of the invoices for the purchase cost of the transformer will not be made until the test report is received.
- 14.2 The vendor shall supply verifications that the transformer design has passed the short circuit criteria in IEEE C57.12.00-2015.

15.0 DRAWINGS

- 15.1 Drawings shall be furnished with each transformer purchased. The drawings are to be provided as soon as possible after receipt of purchase order, and must show the dimensions, weights, accessories, and nameplate information for the transformer, including the manufacturer, type, rating, and catalog number of the bayonet fuse holder, expulsion fuse, and isolation link.

16.0 QUOTES

- 16.1 The following information is to be provided with each quote.
- a. Total purchase price for each unit
 - b. Outline drawing showing overall dimensions and bushing locations
 - c. Estimated delivery lead time
 - d. Guaranteed no-load and load losses
 - e. Any exceptions to these specifications

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract
Section 16400 – Specifications for Steel Street Light Poles

1.0 SCOPE

This specification covers galvanized steel street light poles with mating arm, intended for direct embedment.

2.0 DIMENSIONS

Pole dimensions shall be in accordance with the following table.

Item ID	Mounting Height	Embedment	Arm Length	Taper	Ground Line Dia	Tenon
03000	25 ft	5 ft	6 ft	0.14"/ft	6.5"	No
03002	25 ft	5 ft	6 ft	0.14"/ft	6.5"	Yes
03005	30 ft	6 ft	6 ft	0.14"/ft	7.25"	No
03007	30 ft	6 ft	6 ft	0.14"/ft	7.25"	Yes

The nominal mounting height will be specified on the inquiry or purchase order.

3.0 CONSTRUCTION

- 3.1 Pole shall be round, tapered, one piece construction, galvanized, fabricated from minimum 11 ga steel, in accordance with ASTM A595 Grade-A.
- 3.2 Each pole shall include a handhole to provide access to the interior of the pole for installation of wiring. The handhole shall be approximately 4" x 6.5", located 18" above ground level, and shall include a reinforced oval rim. The handhole cover shall be galvanized steel, with two hex head attachment bolts, designed to provide clear access to the pole for wiring. The handhole shall be oriented 90° clockwise (viewed from the top of the pole) from the arm attachment.
- 3.3 A ground lug utilizing a ½-13 threaded bolt or nut and suitable for attaching a #6 solid copper ground wire shall be provided at a location accessible through the handhole. The ground attachment shall be welded to the interior of the pole.
- 3.4 A ground line sleeve shall be provided.
- 3.5 All structural fasteners shall be galvanized steel. Other fasteners may be galvanized or stainless steel.
- 3.6 Provide a cable entrance opening 24 - 30" below ground line, adequate to accommodate a 2" Sch 40 PVC conduit, oriented 0° from the arm attachment

INDIANOLA MUNICIPAL UTILITIES
Downtown Underground Conversion Project
Material Procurement Contract
Section 16400 – Specifications for Steel Street Light Poles

4.0 LUMINAIRE ARM

The luminaire arm shall be 6 ft, upswept, and shall be attached to the pole with a single bolt simplex connection. It shall be fabricated from 2" schedule 40 steel pipe, and galvanized.

4.0 TENON

The luminaire arm shall be 6 ft, upswept, and shall be attached to the pole with a single

5.0 LOADING

The pole and arm shall be designed to withstand 100 mph winds, with appropriate allowance for gust factor and safety factors, with an attached luminaire having an effective projected area of 2.0 square ft and a maximum weight of 70 pounds.

6.0 TOP CAP

- 6.1 When a tenon is not specified, the pole shall be fitted with a plain removable top cap. The top cap shall be galvanized steel, and shall be attached to the pole shaft with three set screws.
- 6.2 When a tenon is specified, the pole top shall be fitted with a 2" Schedule 80 (2.38" O.D.) tenon extending a minimum of 4" above the top of the pole. Tenon shall be welded to the pole shaft before galvanizing. A galvanized steel closing cap shall be provided and assembled to the tenon.

NOTICE OF HEARING AND LETTING
Downtown Underground Conversion Project
Material Procurement Contract

Sealed proposals will be received by the Board of Trustees of Indianola Municipal Utilities (IMU), Indianola, Iowa, (Owner) at the Indianola City Hall at 110 N. First St., Indianola, Iowa until 2:00 P.M. local time on April 20, 2021 for the procurement of materials for a project identified as DOWNTOWN UNDERGROUND CONVERSION PROJECT, and as described in detail in the specifications for the project now on file in the office of the City Clerk/CFO. Proposals will be opened in public session at that time. Proposals will be acted upon by the Board of Trustees at a meeting to be held in the Council Chambers of the Indianola City Hall at 110 N. First St, Indianola, Iowa at 5:30 P.M. local time on April 26, 2021 or at such later time and place as may then be fixed. At that time and place a hearing will be held on the proposed plans, specifications, form of contract and estimate of cost for the purchase, and at the hearing any interested person may appear and file objections to the proposed purchase or to the cost thereof.

The extent of the work involved is the furnishing of materials that are generally described as follows:

- a. Primary (15 kV class) and secondary (600 volt class) electric distribution cable
- b. Electric power cable accessories
- c. Pad mounted transformers, single and three phase (15 kV class)
- d. Box pads
- e. Steel street and area lighting poles and luminaires
- f. Pedestals and handholes
- g. Junction cabinets

Each proposal shall be sealed in an envelope marked "BIDS FOR MATERIALS FOR DOWNTOWN UNDERGROUND CONVERSION PROJECT". Each bid must be accompanied in a separate envelope by a bid bond, certified check or cashier's check drawn on a State of Iowa or federally chartered bank, or a certified share draft on a State of Iowa or federally chartered credit union, in an amount not less than five per cent (5%) of the total value of the Proposal, and made payable to the Owner as a security that the bidder will enter into a contract for the Work within ten (10) days after the award of the contract to such bidder.

Bidders shall not be permitted to withdraw their bids for a period of thirty (30) days after they are opened.

Payment to the Contractor for the purchased materials will be made in cash derived from available cash on hand from revenue and such other sources as may be available to IMU. The City of Indianola shall not incur any general obligation for the Improvements. The contract for the furnishing of the improvements shall not constitute a general obligation of the City of Indianola nor be payable in any manner by taxation.

Seller shall submit his normal application for payment or invoice directly to Buyer following the delivery of materials. Buyer will pay Seller within 30 days after satisfactory delivery and acceptance of materials and receipt of the application for payment or invoice.

Plans and specifications governing the furnishing of the materials have been prepared by P&E Engineering Co., 245 South Fifth Street, P.O. Box 620, Carlisle, Iowa 50047. The plans and specifications, prior proceedings of IMU referring to and defining the improvements and a proposed contract are hereby made a part of this notice by reference. The proposed contracts shall be executed in accordance with them. Copies of the plans and specifications may be obtained from P & E Engineering Co.

By virtue of statutory authority a preference will be given to products and provisions grown and produced within the State of Iowa and Iowa domestic labor.

IMU reserves the right to reject any or all proposals and to waive informalities. Published upon order of the Board of Trustees Indianola Municipal Utilities, Indianola, Iowa.

ANDY LENT
City Clerk / CFO

Indianola Municipal Utilities
RESOLUTION NO 2021-

**RESOLUTION SETTING PUBLIC HEARINGS ON PROPOSED PLANS, SPECIFICATIONS, FORM
OF CONTRACT, AND ESTIMATE OF COST AND LETTING DATES FOR THE DOWNTOWN
UNDERGROUND CONVERSION PROJECT**

WHEREAS, the Indianola Municipal Utilities Board of Trustees desires to engage in an underground conversion project around the Square; and

WHEREAS, the project includes both construction and material procurement; and

WHEREAS, a letting date for the acceptance of bids for construction and/or material procurement should be held and a time and place for the lettings thereon should be fixed; and

WHEREAS, a public hearing upon the proposed plans, specifications, form of contract and estimate of cost for construction and material procurement should be held and a time and place for the hearings thereon should be fixed.

NOW, THEREFORE, BE IT RESOLVED BY THE INDIANOLA MUNICIPAL UTILITIES BOARD OF TRUSTEES:

1. That the letting date for the acceptance of bids shall be held at the Indianola City Hall, 110 N 1st Street, Indianola, Iowa, at 2:00 p.m. on April 20, 2021, at which time sealed proposals will be opened and bids tabulated.
2. That the Chairperson and Clerk be and hereby are authorized and instructed to give notice to bidders.
3. That a public hearing be held by the Indianola Board of Trustees on the proposed plans, specifications, form of contract and estimate of cost at the Indianola City Hall, 110 N 1st Street, Indianola, Iowa, at 5:30 p.m. on April 26, 2021, at which time the Board of Trustees will consider any objections to the proposed projects and will hear all interested persons.
4. That the Chairperson and Clerk be and hereby are authorized and instructed to give notice of said public hearings, as required by law.

Passed and Approved this 22nd day of March 2021.

Adam Voigts, Chairperson

Jackie Raffety, Deputy Clerk

IMU Regular Downstairs
Meeting Date: 03/22/2021

7. A.

Information

Subject
North 8th St Water Main Improvements

Information

Fiscal Impact

Attachments

No file(s) attached.

IMU Regular Downstairs
Meeting Date: 03/22/2021

7. A. 1.

Information

Subject

Public Hearing on the plans, specifications, form of contract and estimate of costs on the North 8th Street Water Main Improvements.

Information

The plans and specifications are on file with the IMU General Manager and the Deputy Clerk. To view the documents, please contact IMU at 515-961-9444 or email cdesplanques@indianolaiowa.gov

The Chairperson will open the Public Hearing.

Fiscal Impact

Attachments

No file(s) attached.

IMU Regular Downstairs

7. A. 2.

Meeting Date: 03/22/2021

Information

Subject

Resolution approving the plans, specifications, form of contract and estimate of costs on the North 8th Street Water Main Improvements.

Information

Roll call is in order.

Fiscal Impact

Attachments

Resolution Approving Plans

Indianola Municipal Utilities
RESOLUTION NO. 2021-

**RESOLUION ADOPTING PLANS, SPECIFICATIONS, FORM OF CONTRACT AND ESTIMATE OF COST
FOR THE NORTH 8TH STREET WATER MAIN IMPROVEMENTS**

WHEREAS, the Indianola Municipal Utilities Board of Trustees deems it advisable and necessary to make certain public improvements for the Municipal Utilities described in general as North 8th Street Water Main Improvements and has caused to be prepared plans, specifications and form of contract together with an estimate of costs which are now on file in the office of the Indianola City Clerk and are deemed suitable for public improvements; and

WHEREAS, the plans, specifications and form of contract and estimate of cost may be adopted in a contract for the making of public improvements.

NOW, THEREFORE, BE IT RESOLVED by Indianola Municipal Utilities Board of Trustees that the plans, specifications, form of contract and estimate of cost for the North 8th Street Water Main Improvements are hereby approved.

PASSED this 22nd day of March 2021.

Adam Voigts, Chaiperson

ATTEST:

Jackie Raffety, Deputy Clerk

IMU Regular Downstairs
Meeting Date: 03/22/2021

7. A. 3.

Information

Subject

Resolution awarding contract.

Information

Roll call is in order.

Fiscal Impact

Attachments

Recommendation of Award
Bid Tabulation
Resolution Awarding Contract



March 16, 2021

Chris DesPlanques
Indianola Municipal Utilities
210 West 2nd Avenue
Indianola, Iowa 50125

INDIANOLA MUNICIPAL UTILITIES
INDIANOLA, IOWA
N. 8TH STREET WATER MAIN IMPROVEMENTS
RECOMMENDATION OF AWARD

The Indianola Municipal Utilities received bids until 2:00 P.M., Tuesday, March 16, 2021 for the N. 8th Street Water Main Improvements project. A total of seven bids were received as follows:

<u>Contractor</u>	<u>Total Bid</u>
K M King, Inc.	\$171,770.00
Morris Enterprises, Inc.	\$197,831.00
KLC Construction LLC	\$198,295.00
Lawson Construction LLC	\$217,130.00
J&K Contracting, LLC	\$222,222.00
GM Contracting, Inc.	\$291,972.63
Synergy Contracting, LLC	\$316,740.00

The apparent low bid was submitted by K M King, Inc. from Burlington, Iowa, in the amount of \$171,770.00.

The engineer's estimate of cost for construction of the project was \$230,000.00.

We recommend the Indianola Municipal Utilities award the contract to K M King, Inc. in the amount of \$171,770.00.

Enclosed is a copy of our tabulation of bids.

Chris DesPlanques

March 16, 2021

Page 2

If you have any questions or comments, please contact us at 225-8000.

VEENSTRA & KIMM, INC.



Forrest S. Aldrich

FSA:kld

285104

Enclosure

cc: Lou Elbert, Indianola Municipal Utilities
Jackie Raffety, City of Indianola

BID TABULATION
INDIANOLA MUNICIPAL UTILITIES
INDANOLA, IOWA
N. 8TH STREET WATER MAIN IMPROVEMENTS

1. Construct N. 8th Street Water Main Improvements for the following unit and lump sum prices:				K M King, Inc. 4765 Summer Street Burlington, Iowa 52601		Morris Enterprises, Inc. 2967 275th Street Clutier, Iowa 52217		KLC Construction LLC 2235 Payton Road Corydon, Iowa 50060		Lawson Construction LLC 29032 State Highway 11 Kirksville, Missouri 63501		J&K Contracting, LLC 10703 Justin Drive Urbandale, Iowa 50322		GM Contracting, Inc. 19810 515th Avenue P.O. Box 736 Lake Crystal, Minnesota 56055		Synergy Contracting, LLC 108 5th Avenue SW Altoona, Iowa 50009	
ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE
1.1	Traffic Control	LS	1	\$ xxxxx	\$ 3,500.00	\$ xxxxx	\$ 13,000.00	\$ xxxxx	\$ 3,000.00	\$ xxxxx	\$ 4,000.00	\$ xxxxx	\$ 17,163.00	\$ xxxxx	\$ 44,000.00	\$ xxxxx	\$ 2,700.00
1.2	Construction Staking	LS	1	xxxxx	500.00	xxxxx	10,000.00	xxxxx	5,000.00	xxxxx	500.00	xxxxx	7,085.00	xxxxx	6,400.00	xxxxx	6,500.00
1.3	Water Main Directional Bored, PVC, 8"	LF	1,010	55.00	55,550.00	65.00	65,650.00	65.00	65,650.00	68.00	68,680.00	62.00	62,620.00	77.15	77,921.50	98.00	98,980.00
1.4	Water Main Directional Bored, DIP, 8"	LF	80	80.00	6,400.00	115.00	9,200.00	100.00	8,000.00	135.00	10,800.00	94.00	7,520.00	103.48	8,278.40	189.00	15,120.00
1.5	Vertical Bends, 45°, 8"	EA	6	225.00	1,350.00	1,100.00	6,600.00	1,500.00	9,000.00	580.00	3,480.00	643.00	3,858.00	469.52	2,817.12	980.00	5,880.00
1.6	Horizontal Bends, 45°, 8"	EA	2	225.00	450.00	1,100.00	2,200.00	2,000.00	4,000.00	580.00	1,160.00	622.00	1,244.00	450.19	900.38	980.00	1,960.00
1.7	Horizontal Bends, 90°, 6"	EA	1	225.00	225.00	960.00	960.00	2,000.00	2,000.00	420.00	420.00	579.00	579.00	410.63	410.63	980.00	980.00
1.8	Tee, 8" x 6"	EA	1	350.00	350.00	625.00	625.00	2,000.00	2,000.00	750.00	750.00	1,098.00	1,098.00	511.56	511.56	1,190.00	1,190.00
1.9	Tee, 8" x 8"	EA	2	375.00	750.00	728.00	1,456.00	2,000.00	4,000.00	850.00	1,700.00	1,048.00	2,096.00	573.68	1,147.36	1,260.00	2,520.00
1.10	Cross, 8" x 8"	EA	1	450.00	450.00	950.00	950.00	2,000.00	2,000.00	1,000.00	1,000.00	938.00	938.00	472.91	472.91	1,330.00	1,330.00
1.11	Tapping Sleeve & Valve, 6"	EA	1	4,500.00	4,500.00	3,000.00	3,000.00	6,000.00	6,000.00	1,810.00	1,810.00	3,121.00	3,121.00	3,041.52	3,041.52	7,840.00	7,840.00
1.12	Reducer, 8" x 4"	EA	1	350.00	350.00	400.00	400.00	2,000.00	2,000.00	260.00	260.00	741.00	741.00	400.96	400.96	700.00	700.00
1.13	Reducer, 8" x 6"	EA	2	350.00	700.00	400.00	800.00	2,000.00	4,000.00	275.00	550.00	660.00	1,320.00	393.28	786.56	770.00	1,540.00
1.14	Valve, 6"	EA	1	1,200.00	1,200.00	1,200.00	1,200.00	2,000.00	2,000.00	1,760.00	1,760.00	1,550.00	1,550.00	2,351.47	2,351.47	1,750.00	1,750.00
1.15	Valve, 8"	EA	5	1,500.00	7,500.00	1,700.00	8,500.00	2,000.00	10,000.00	2,135.00	10,675.00	1,848.00	9,240.00	2,703.69	13,518.45	2,240.00	11,200.00
1.16	Hydrant Assembly	EA	2	4,500.00	9,000.00	4,300.00	8,600.00	4,500.00	9,000.00	5,665.00	11,330.00	5,018.00	10,036.00	5,010.23	10,020.46	7,420.00	14,840.00
1.17	Water Service, Same Side, Open Cut	EA	7	600.00	4,200.00	250.00	1,750.00	700.00	4,900.00	250.00	1,750.00	924.00	6,468.00	1,636.34	11,454.38	1,540.00	10,780.00
1.18	Water Service, Opposite Side, Directional Bored	EA	10	1,200.00	12,000.00	950.00	9,500.00	1,000.00	10,000.00	1,800.00	18,000.00	2,131.00	21,310.00	2,933.86	29,338.60	4,690.00	46,900.00
1.19	Water Service Connection	EA	17	450.00	7,650.00	600.00	10,200.00	400.00	6,800.00	645.00	10,965.00	422.00	7,174.00	1,246.26	21,186.42	1,540.00	26,180.00
1.20	Curb Stop and Box	EA	17	400.00	6,800.00	500.00	8,500.00	400.00	6,800.00	380.00	6,460.00	439.00	7,463.00	398.75	6,778.75	490.00	8,330.00
1.21	Connection to Existing System	EA	5	3,200.00	16,000.00	1,000.00	5,000.00	1,000.00	5,000.00	4,500.00	22,500.00	1,630.00	8,150.00	3,386.49	16,932.45	4,900.00	24,500.00
1.22	Pavement, PCC, Remove and Replace, 8"	SY	65	125.00	8,125.00	130.00	8,450.00	95.00	6,175.00	120.00	7,800.00	175.00	11,375.00	124.60	8,099.00	96.00	6,240.00
1.23	Sidewalk, PCC, Remove and Replace	SY	167	100.00	16,700.00	110.00	18,370.00	70.00	11,690.00	100.00	16,700.00	127.00	21,209.00	94.25	15,739.75	60.00	10,020.00
1.24	Detectable Warnings	SF	48	40.00	1,920.00	20.00	960.00	65.00	3,120.00	60.00	2,880.00	47.00	2,256.00	42.00	2,016.00	60.00	2,880.00
1.25	Sod	SQ	56	100.00	5,600.00	35.00	1,960.00	110.00	6,160.00	200.00	11,200.00	118.00	6,608.00	133.00	7,448.00	105.00	5,880.00
TOTAL BID (Items 1.1 - 1.25)				\$171,770.00		\$197,831.00		\$198,295.00		\$217,130.00		\$222,222.00		\$291,972.63		\$316,740.00	

I hereby certify that this is a true tabulation of
bids received on March 16, 2021 by the
Indianola Municipal Utilities.


Forrest S. Aldrich, P.E.
Iowa License No. 12248
My license renewal date is December 31, 2021



Board Member _____ introduced the following resolution entitled "RESOLUTION AWARDING CONTRACT FOR THE NORTH 8th STREET WATER MAIN IMPROVEMENT PROJECT" and moved for its adoption. Board Member _____seconded the motion to adopt. The roll was called, and the vote was:

AYES:

NAYS:

Whereupon, the Chairperson declared the following Resolution duly adopted:

RESOLUTION NO. 2021-
RESOLUTION AWARDING CONTRACT FOR THE NORTH 8th STREET WATER MAIN
IMPROVEMENT PROJECT

BE IT RESOLVED BY THE INDIANOLA MUNICIPAL UTILITIES BOARD OF TRUSTEES THAT:

Section 1. The bid of KM King, Inc in the amount of \$171,770 for the North 8th Street Water Main Improvements project for the Indianola Municipal Utilities described in the plans and specifications previously adopted by the Board of Trustees on the 22nd day of March 2021, is accepted, it being the lowest responsible bid for the work and materials.

Section 2. The Chairperson and the IMU General Manager are hereby authorized and directed to execute a contract with the contractor for the construction of the public improvement subject to receipt of the contract and bond approved as to form by the IMU Attorney and certificate of insurance acceptable to IMU staff.

PASSED AND APPROVED this 22nd day of March 2021.

Adam Voigts, Chairperson

ATTEST:

Jackie Raffety, Deputy Clerk

IMU Regular Downstairs
Meeting Date: 03/22/2021

10. A.

Information

Subject

Receive and file the Fiscal Year 20 Audit.

Information

IMU's auditor, Robert Endriss, will present the FY20 audit.

Simple motion to receive and file the audit is in order.

Fiscal Impact

Attachments

Audit

**Indianola Municipal Utilities
Indianola, Iowa**

FINANCIAL REPORT

June 30, 2020

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**Indianola Municipal Utilities
OFFICIALS**

<u>Name</u>	<u>Title</u>	<u>Term Expires</u>
Mike Rozga	Chairperson	January 2024
Jim McClymond	Trustee	January 2021
Lesley Forbush	Trustee	January 2022
Adam Voigts	Trustee	January 2023
Vacant		
Chris DesPlanques	General Manager	
Chris Longer	Finance and HR Director	



INDEPENDENT AUDITOR'S REPORT

Board of Trustees
Indianola Municipal Utilities
Indianola, Iowa

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities, each major fund, and the aggregate remaining fund information of the Indianola Municipal Utilities (the Utilities), a component unit of the City of Indianola, Iowa, as of and for the year ended June 30, 2020, and the related notes to financial statements, which collectively comprise the Utilities' basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Utilities' preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Utilities' internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the business-type activities, each major fund, and the aggregate remaining fund information of the Indianola Municipal Utilities as of June 30, 2020, and the respective changes in financial position and its cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, budgetary comparison schedule, the schedule of the Utilities' proportionate share of the net pension liability, the schedule of Utilities pension contributions and the schedule of changes in the Utilities total OPEB liability, related ratios and notes on pages 6-9 and 34-40, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Indianola Municipal Utilities' basic financial statements. The schedule of operating expenses is presented for purposes of additional analysis and is not a required part of the basic financial statements.

The schedule of operating expenses is the responsibility of management and is derived from the related directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of operating expenses is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated March 8, 2020, on our consideration of the Utilities' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Utilities' internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Utilities' internal control over financial reporting and compliance.



DENMAN & COMPANY, LLP

West Des Moines, Iowa
March 8, 2020

INDIANOLA MUNICIPAL UTILITIES

Management's Discussion and Analysis

As management of Indianola Municipal Utilities (the Utilities), we offer readers of Utilities' financial statements this narrative overview and analysis of the financial performance for the fiscal year ended June 30, 2020 and 2019. We encourage readers to consider this information with Indianola Municipal Utilities' financial statements that follow this section.

FINANCIAL HIGHLIGHTS

- Operating revenues increased by 3.63% to \$20,377,475. Increase was driven by an increase in Fiber Telecommunication Utility services.
- Operating expenses increased by 3.77% to \$19,817,666. Increase was driven by an increase in depreciation expense.
- Cash and other current assets increased by 20.08% to \$20,826,213
- Unrestricted net position increased by \$5,163,413 to \$12,477,199.

OVERVIEW OF THE FINANCIAL STATEMENTS

This annual report includes this management discussion and analysis, the independent auditor's report, and the basic financial statements of Utilities. The financial statements also include notes that explain in more detail some of the information in the financial statements. Additional supplementary information is also in schedule form and begins after the notes to financial statements.

REQUIRED FINANCIAL STATEMENTS

The financial statements report information about the Utilities using accounting methods similar to those used by private sector companies. These statements offer short-term and long-term information about its activities. The Statement of Net Position includes all of the Utilities' assets and liabilities and provides information about types and amounts of investments in resources (assets) and the obligations to the Utilities' creditors (liabilities). It also provides the basis for evaluating the Utilities' liquidity, financial flexibility, and overall financial health of the agency.

All of the current year and prior year's revenues and expenses are accounted for in the Statement of Revenues, Expenses and Changes in Net Position. These statements measure the success of the Utilities' operations over the past year and can be used to determine whether the organization has covered all its costs through its utility fees and other charges.

The final required financial statement is the Statement of Cash Flows. This statement reports cash receipts, cash payments, and net changes in cash resulting from operating, investing, and capital and related financing activities. It also provides answers to such questions as where did cash come from, what was cash used for, and what was the change in the cash balance during the reporting period.

ANALYSIS OF THE UTILITIES FINANCIAL POSITION

Is the Utilities' financial position as a whole better off or worse off as a result of this year's activities? The Statement of Net Position and the Statement of Revenues, Expenses, and Changes in Net Position report information about the net position of Indianola Municipal Utilities and the changes in them. The Utilities' net position (the difference between assets and liabilities) is one way to measure the organization's financial health or financial position. Over time, increases or decreases in the Utilities' net position is one indicator of whether its financial health is improving or deteriorating. However, one will need to consider other non-financial factors such as changes in economic conditions, population growth, and new or changed government regulations.

NET POSITION

To begin our analysis, a summary of the Utilities' Statements of Net Position is presented below

Condensed Statements of Net Position

	<u>2020</u>	<u>2019</u> (not restated)	<u>Change</u>	<u>% Change</u>
Cash and other current assets	\$20,826,213	\$17,343,976	\$3,482,237	20.08%
Restricted assets	614,671	1,550,622	(935,951)	(60.36)%
Capital assets	<u>52,162,926</u>	<u>51,960,999</u>	<u>201,927</u>	<u>0.39%</u>
Total assets	<u>73,603,810</u>	<u>70,855,597</u>	<u>2,748,213</u>	<u>3.73%</u>
Deferred outflows of resources	<u>868,364</u>	<u>594,372</u>	<u>273,992</u>	<u>46.10%</u>
Current liabilities	3,329,385	3,008,487	320,898	10.67%
Noncurrent liabilities	<u>21,332,930</u>	<u>19,014,690</u>	<u>2,318,240</u>	<u>12.19%</u>
Total liabilities	<u>24,662,315</u>	<u>22,023,177</u>	<u>2,639,138</u>	<u>11.98%</u>
Deferred inflows of resources	<u>271,651</u>	<u>(2,305)</u>	<u>273,956</u>	<u>(11885.29)%</u>
Net position				
Net investment in capital assets	36,231,851	40,649,682	(4,417,831)	(10.87)%
Restricted	829,158	1,465,629	(636,471)	(43.43)%
Unrestricted	<u>12,477,199</u>	<u>7,313,786</u>	<u>5,163,413</u>	<u>70.60%</u>
Total net position	<u>\$49,538,208</u>	<u>\$49,429,097</u>	<u>\$ 109,111</u>	<u>0.22%%</u>

The table above shows that net position increased approximately \$100,000 in 2020. The increase was due to net operating income in electric utility, offset in part from operating losses in the fiber telecommunications utility. The largest portion of the Utilities' net position is net investment in capital assets (e.g. land, infrastructure, buildings and equipment), less the related debt. Restricted net position represents resources subject to external restrictions or enabling legislation as to how they may be used. Unrestricted net position, the part of net position that can be used to finance day-to-day operations without constraints, was \$12,477,199 as of June 30, 2020.

Condensed Statements of Revenues, Expenses and Changes in Net Position

	<u>2020</u>	<u>2019</u> (not restated)	<u>Change</u>	<u>% Change</u>
Operating revenues				
Utility service revenues	\$18,623,723	\$17,576,447	\$1,047,276	5.96%
Other operating revenues	<u>1,753,752</u>	<u>2,086,695</u>	<u>(332,943)</u>	<u>(15.96)%</u>
Total operating revenues	<u>20,377,475</u>	<u>19,663,142</u>	<u>714,333</u>	<u>3.63%</u>
Operating expense				
Operating expense	17,207,482	16,731,064	476,418	2.85%
Depreciation	<u>2,610,184</u>	<u>2,366,096</u>	<u>244,088</u>	<u>10.32%</u>
Total operating expenses	<u>19,817,666</u>	<u>19,097,160</u>	<u>720,506</u>	<u>3.77%</u>
Income from operations	<u>559,809</u>	<u>565,982</u>	<u>(6,173)</u>	<u>(1.09)%</u>
Nonoperating revenues (expenses)	(711,513)	(387,152)	(324,361)	83.78%
Capital contributions	<u>361,577</u>	<u>276,630</u>	<u>84,947</u>	<u>30.71%</u>
Change in net position	209,873	455,460	(245,587)	(53.92)%
Beginning net position	<u>49,328,335</u>	<u>48,973,637</u>	<u>354,698</u>	<u>0.72%</u>
Ending net position	<u>\$49,538,208</u>	<u>\$49,429,097</u>	<u>\$ 109,111</u>	<u>0.22%</u>

While the Statements of Net Position show the change in net position, the Statements of Revenues, Expenses, and Changes in Net Position provide answers as to the nature and source of these changes. Operating revenues increased 3.63% in fiscal year 2020 while operating expenses increased 3.77%. The increase in operating revenues was driven by growth in the Utilities' Fiber Telecommunication services, which also saw corresponding increases in operating expenses.

INDIVIDUAL MAJOR FUND ANALYSIS

Electric Utility

The Electric Utility experienced a decrease in operating revenues of 4.04% in fiscal year 2020, however, it experienced a corresponding decrease in operating expenses of 1.46%. The decrease in both revenues and expenses was the result of a decrease in utility consumption during the fiscal year. The net position of the Electric Utility increased by approximately \$1.2 million in 2020, compared to approximately \$1.8 million in the prior year.

Water Utility

Operating revenues of the water utility decreased by 7.60% in fiscal year 2020, due to a decrease in consumption. Operating expenses of the utility similarly decreased by 5.83% from the prior year. The net position of the Water Utility increased by approximately \$123,000 in 2020, compared to approximately \$450,000 in the prior year.

Fiber Telecommunications Utility

Operating revenues of the fiber telecommunications utility increased by over \$2.1 million to \$2.6 million in the current year, as 2020 was the first full year of operations for the Utility. Operating expenses also increased significantly, from \$2.0 million to \$3.4 million in 2020. The Utility reported a net loss of \$1.1 million in 2020, compared to \$1.8 million in the prior year. Management anticipates the Utility will begin to generate net operating margins in future years as more residents utilize the service.

BUDGETARY HIGHLIGHTS

In accordance with the Code of Iowa, the Board of Trustees annually adopts a budget on the cash basis following required public notice and hearing for all funds. The annual budget may be amended during the year utilizing similar statutorily prescribed procedures. Formal and legal budgetary control is based on the total of all four utilities as a whole. During 2020, there was one budget amendment to increase expenses by \$263,000.

CAPITAL ASSET AND DEBT ADMINISTRATION

Capital Assets

The Utilities has capital assets of \$52.2 million, net of accumulated depreciation. The total includes \$33.6 million in the Electric Utility, \$13.3 million in the Water Utility, \$4.9 million in the Fiber Telecommunication Utility and \$348,000 in the Joint Utility.

Capital improvements from 2020 included development and implementation of a new Utilities operating system, installation of fiber customer equipment, and developer contributions of infrastructure additions.

Long-Term Debt

Following is a summary of the Utilities' debt obligations:

	June 30	
	2020	2019
General obligation bonds	\$ 239,600	\$ 287,600
Revenue bonds/notes, net of unamortized premiums	7,076,583	7,106,445
Direct borrowings	12,539,000	11,013,671
Installment contract payable	<u>392,569</u>	<u>268,000</u>
	<u>\$20,247,752</u>	<u>\$18,675,716</u>

During the fiscal year ended June 30, 2020, the Utilities drew down on previously issued direct borrowings totaling \$2,376,329. Additionally, the Utilities drew an additional \$200,000 on a long-term installment contract for the development and implementation of the Utilities' operating system.

The Utilities issued \$4,316,781 of long-term debt during the year ended June 30, 2019.

S&P Global Ratings has issued a rating of A- on the Utilities' Series 2017C Electric Revenue Capital Loan Notes.

CONTACTING THE UTILITIES' FINANCIAL MANAGEMENT

This financial report is designed to present users with a general overview of Indianola Municipal Utilities' finances and to demonstrate the Utilities' accountability for the funds generated. If you have questions about the report or need additional financial information, please contact the Finance Department, Indianola Municipal Utilities, 210 W 2nd Avenue, Indianola, Iowa 50125.

Indianola Municipal Utilities
STATEMENT OF NET POSITION
June 30, 2020

	<u>Electric Utility</u>	<u>Water Utility</u>	<u>Fiber Telecommunication Utility</u>	<u>Nonmajor enterprise fund Joint Utility</u>	<u>Total</u>
CURRENT ASSETS					
Cash and investments	\$10,745,257	\$ 2,339,263	\$ 681,093	\$ 1,115,299	\$14,880,912
Accounts receivable	2,967,590	384,714	89,546	5,240	3,447,090
Due from other governments	200,883	99,001	105,599	66,000	471,483
Prepaid expenses	—	—	30,411	—	30,411
Inventories	1,694,785	68,535	232,997	—	1,996,317
Total current assets	<u>15,608,515</u>	<u>2,891,513</u>	<u>1,139,646</u>	<u>1,186,539</u>	<u>20,826,213</u>
RESTRICTED ASSETS					
Revenue note and interest sinking funds	588,753	—	25,918	—	614,671
Total restricted assets	<u>588,753</u>	<u>—</u>	<u>25,918</u>	<u>—</u>	<u>614,671</u>
CAPITAL ASSETS	62,619,902	25,172,228	6,363,830	353,920	94,509,880
Less accumulated depreciation and amortization	<u>29,019,809</u>	<u>11,871,388</u>	<u>1,449,858</u>	<u>5,899</u>	<u>42,346,954</u>
Net capital assets	<u>33,600,093</u>	<u>13,300,840</u>	<u>4,913,972</u>	<u>348,021</u>	<u>52,162,926</u>
Total assets	<u>49,797,361</u>	<u>16,192,353</u>	<u>6,079,536</u>	<u>1,534,560</u>	<u>73,603,810</u>
DEFERRED OUTFLOWS OF RESOURCES					
Pension related deferred outflows	269,992	112,063	115,595	97,405	595,055
Deferred outflows of resources on advanced refunding of debt	<u>273,309</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>273,309</u>
Total deferred outflows of resources	<u>543,301</u>	<u>112,063</u>	<u>115,595</u>	<u>97,405</u>	<u>868,364</u>
CURRENT LIABILITIES					
Accounts payable	935,176	49,769	112,519	9,245	1,106,709
Due to other governments	52,377	3,921	—	528,859	585,157
Accrued payroll and employee benefits	97,918	50,114	49,813	38,413	236,258
Customer deposits	54,083	—	—	83,244	137,327
Accrued interest payable	59,595	433	33,119	—	93,147
General obligation bonds payable, current	—	48,800	—	—	48,800
Direct borrowings, current	776,000	—	215,000	—	991,000
Investment contract payable, current	—	—	9,886	121,101	130,987
Total current liabilities	<u>1,975,149</u>	<u>153,037</u>	<u>420,337</u>	<u>780,862</u>	<u>3,329,385</u>
NONCURRENT LIABILITIES					
General obligation bonds payable	—	190,800	—	—	190,800
Revenue notes payable	7,076,583	—	—	—	7,076,583
Direct borrowings	2,571,000	—	8,977,000	—	11,548,000
Installment contract payable	—	—	28,763	232,819	261,582
Net pension liability	761,311	315,990	325,949	274,657	1,677,907
Total OPEB liability	<u>262,281</u>	<u>108,862</u>	<u>112,293</u>	<u>94,622</u>	<u>578,058</u>
Total noncurrent liabilities	<u>10,671,175</u>	<u>615,652</u>	<u>9,444,005</u>	<u>602,098</u>	<u>21,332,930</u>
Total liabilities	<u>12,646,324</u>	<u>768,689</u>	<u>9,864,342</u>	<u>1,382,960</u>	<u>24,662,315</u>
DEFERRED INFLOWS OF RESOURCES					
Pension related deferred inflows	123,255	51,158	52,771	44,467	271,651
Total deferred inflows of resources	<u>123,255</u>	<u>51,158</u>	<u>52,771</u>	<u>44,467</u>	<u>271,651</u>
NET POSITION					
Net investment in capital assets	23,176,510	13,061,240	—	(5,899)	36,231,851
Restricted					
Debt service	529,158	—	—	—	529,158
Economic development	—	—	—	300,000	300,000
Unrestricted	<u>13,865,415</u>	<u>2,423,329</u>	<u>(3,721,982)</u>	<u>(89,563)</u>	<u>12,477,199</u>
Total net position	<u>\$37,571,083</u>	<u>\$15,484,569</u>	<u>\$ (3,721,982)</u>	<u>\$ 204,538</u>	<u>\$49,538,208</u>

See Notes to Financial Statements.

Indianola Municipal Utilities
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
Year ended June 30, 2020

	Electric Utility	Water Utility	Fiber Telecommunication Utility	Nonmajor enterprise fund Joint Utility	Eliminations	Total
OPERATING REVENUES						
Utility service sales	\$14,148,935	\$ 2,084,294	\$ 2,390,494	\$ —	\$ —	\$18,623,723
Capacity contract fees	664,697	—	—	—	—	664,697
Transmission revenue	466,186	—	—	—	—	466,186
Connection fees	60,768	20,132	—	—	—	80,900
Telecommunications advertising	—	—	35,380	—	—	35,380
Other charges for service	67,104	35,459	2,368	823,606	(760,727)	167,810
Rental income	368,000	50,148	173,811	—	(368,000)	223,959
Miscellaneous	92,891	2,967	15,410	3,552	—	114,820
Total operating revenues	<u>15,868,581</u>	<u>2,193,000</u>	<u>2,617,463</u>	<u>827,158</u>	<u>(1,128,727)</u>	<u>20,377,475</u>
OPERATING EXPENSES						
Plant operations and programming	146,322	597,226	2,506,857	—	(368,000)	2,882,405
Plant maintenance	422,818	47,874	—	—	—	470,692
Purchased energy	9,420,781	—	—	—	—	9,420,781
Depreciation	1,573,060	616,433	414,792	5,899	—	2,610,184
Distribution operation	149,938	235,050	—	—	—	384,988
Distribution maintenance	985,742	—	—	—	—	985,742
Transmission operation and maintenance	11,880	—	—	—	—	11,880
Meter reading	31,718	29,165	—	—	—	60,883
Administrative and general	<u>1,873,836</u>	<u>552,066</u>	<u>486,233</u>	<u>838,703</u>	<u>(760,727)</u>	<u>2,990,111</u>
Total operating expenses	<u>14,616,095</u>	<u>2,077,814</u>	<u>3,407,882</u>	<u>844,602</u>	<u>(1,128,727)</u>	<u>19,817,666</u>
Income (loss) from operations	<u>1,252,486</u>	<u>115,186</u>	<u>(790,419)</u>	<u>(17,444)</u>	<u>—</u>	<u>559,809</u>
NONOPERATING REVENUES (EXPENSES)						
Interest on investments	190,847	39,164	—	1,904	—	231,915
Loss on disposal of capital assets	(16,968)	(170,937)	—	—	—	(187,905)
Interest expense	<u>(393,388)</u>	<u>(9,154)</u>	<u>(352,981)</u>	<u>—</u>	<u>—</u>	<u>(755,523)</u>
Total nonoperating revenues (expenses)	<u>(219,509)</u>	<u>(140,927)</u>	<u>(352,981)</u>	<u>1,904</u>	<u>—</u>	<u>(711,513)</u>
Income (loss) before contributions and transfers	1,032,977	(25,741)	(1,143,400)	(15,540)	—	(151,704)
Capital contributions	<u>205,682</u>	<u>148,910</u>	<u>6,985</u>	<u>—</u>	<u>—</u>	<u>361,577</u>
Change in net position	<u>1,238,659</u>	<u>123,169</u>	<u>(1,136,415)</u>	<u>(15,540)</u>	<u>—</u>	<u>209,873</u>
NET POSITION, beginning of year, restated	<u>36,332,424</u>	<u>15,361,400</u>	<u>(2,585,567)</u>	<u>220,078</u>	<u>—</u>	<u>49,328,335</u>
NET POSITION, end of year	<u>\$37,571,083</u>	<u>\$15,484,569</u>	<u>\$ (3,721,982)</u>	<u>\$ 204,538</u>	<u>\$ —</u>	<u>\$49,538,208</u>

See Notes to Financial Statements.

**Indianola Municipal Utilities
STATEMENT OF CASH FLOWS**

	Electric Utility	Water Utility	Fiber Telecommunication Utility	Nonmajor enterprise fund Joint Utility	Total
CASH FLOWS FROM OPERATING ACTIVITIES					
Cash received from customers	\$15,443,820	\$ 2,209,938	\$ 2,366,057	\$ 673,294	\$20,693,109
Cash received from rental activities	368,000	50,148	173,811	—	591,959
Cash paid to suppliers for goods and services	(11,795,815)	(590,869)	(1,932,681)	(199,358)	(14,518,723)
Cash paid to employees for services	(1,395,183)	(663,741)	(659,050)	(585,382)	(3,303,356)
Cash received (paid) for interfund utility services	<u>(397,408)</u>	<u>(181,660)</u>	<u>(181,659)</u>	<u>760,727</u>	<u>—</u>
Net cash flows from operating activities	<u>2,223,414</u>	<u>823,816</u>	<u>(233,522)</u>	<u>649,281</u>	<u>3,462,989</u>
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES					
Principal payments on direct borrowings	(756,000)	—	(95,000)	—	(851,000)
Principal payments on general obligation bonds	—	(48,000)	—	—	(48,000)
Principal payments on notes payable	—	—	(12,205)	—	(12,205)
Principal payments on internal loan	—	(250,917)	—	—	(250,917)
Proceeds from issuance of direct borrowings	—	—	2,376,329	—	2,376,329
Interest and other fiscal charges	(425,159)	(9,221)	(342,315)	—	(776,695)
Acquisition of capital assets	<u>(500,360)</u>	<u>(434,333)</u>	<u>(1,425,942)</u>	<u>—</u>	<u>(2,360,635)</u>
Net cash flows from capital and related financing activities	<u>(1,681,519)</u>	<u>(742,471)</u>	<u>500,867</u>	<u>—</u>	<u>(1,923,123)</u>
CASH FLOWS FROM INVESTING ACTIVITIES					
Interfund loan principal received	250,917	—	—	—	250,917
Interest received	<u>221,630</u>	<u>45,521</u>	<u>651</u>	<u>1,904</u>	<u>269,706</u>
Net cash flows from investing activities	<u>472,547</u>	<u>45,521</u>	<u>651</u>	<u>1,904</u>	<u>520,623</u>
NET CHANGE IN CASH AND CASH EQUIVALENTS	<u>1,014,442</u>	<u>126,866</u>	<u>267,996</u>	<u>651,185</u>	<u>2,060,489</u>
CASH AND CASH EQUIVALENTS					
Beginning	<u>10,319,568</u>	<u>2,212,397</u>	<u>439,015</u>	<u>464,114</u>	<u>13,435,094</u>
Ending	<u>\$11,334,010</u>	<u>\$ 2,339,263</u>	<u>\$ 707,011</u>	<u>\$ 1,115,299</u>	<u>\$15,495,583</u>
RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH FLOWS FROM OPERATING ACTIVITIES					
Operating income (loss)	\$ 1,252,486	\$ 115,186	\$ (790,419)	\$ (17,444)	\$ 559,809
Adjustments to reconcile operating income to net cash flows from operating activities					
Depreciation expense	1,573,060	616,433	414,792	5,899	2,610,184
Changes in assets, deferred outflows, liabilities and deferred inflows of resources					
Accounts receivable	(110,844)	67,086	(77,595)	(5,240)	(126,593)
Due from other governments	(17,884)	(11,286)	(32,518)	(6,839)	(68,527)
Prepaid expenses	—	—	(30,411)	—	(30,411)
Inventories	(92,384)	(25,988)	222,237	—	103,865
Deferred outflows of resources	(87,638)	(46,222)	(20,928)	(52,459)	(207,247)
Accounts payable	(649,851)	(831)	(36,520)	5,615	(681,587)
Due to other governments	52,377	3,921	—	528,859	585,157
Accrued compensation	(449)	(7,428)	9,057	(621)	559
Customer deposits	54,083	—	—	83,244	137,327
Net pension liability	92,210	28,253	16,496	47,794	184,753
Total OPEB liability	40,719	35,008	63,056	8,460	147,243
Deferred inflows of resources	<u>117,529</u>	<u>49,684</u>	<u>29,231</u>	<u>52,013</u>	<u>248,457</u>
Net cash flows from operating activities	<u>\$ 2,223,414</u>	<u>\$ 823,816</u>	<u>\$ (233,522)</u>	<u>\$ 649,281</u>	<u>\$ 3,462,989</u>

See Notes to Financial Statements.

Indianola Municipal Utilities
STATEMENT OF CASH FLOWS (continued)
Year ended June 30, 2020

	<u>Electric Utility</u>	<u>Water Utility</u>	<u>Fiber Telecommunication Utility</u>	<u>Nonmajor enterprise fund Joint Utility</u>	<u>Total</u>
RECONCILIATION OF CASH AND CASH EQUIVALENTS AT YEAR END TO SPECIFIC ASSETS INCLUDED ON THE STATEMENT OF NET POSITION					
Current assets					
Cash and investments	\$10,745,257	\$ 2,339,263	\$ 681,093	\$ 1,115,299	\$14,880,912
Restricted assets – cash and investments					
Revenue note and interest sinking funds	<u>588,753</u>	<u>—</u>	<u>25,918</u>	<u>—</u>	<u>614,671</u>
	<u>\$11,334,010</u>	<u>\$ 2,339,263</u>	<u>\$ 707,011</u>	<u>\$ 1,115,299</u>	<u>\$15,495,583</u>
NONCASH CAPITAL AND RELATED FINANCING ACTIVITIES					
Capital contributions from developers and customers	<u>\$ 190,076</u>	<u>\$ —</u>	<u>\$ 171,500</u>	<u>\$ —</u>	<u>\$ 361,576</u>
Capital asset acquisition financed through installment contract	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 250,000</u>	<u>\$ 250,000</u>

See Notes to Financial Statements.

Indianola Municipal Utilities
NOTES TO FINANCIAL STATEMENTS

NOTE 1 SIGNIFICANT ACCOUNTING POLICIES

Indianola Municipal Utilities (the Utilities) was formed in 1973 and is chartered under Iowa Code Section 388. The Utilities is a component unit of the City of Indianola, Iowa and provides electric, water and fiber telecommunication services to the residents of the City. The Utilities is governed by a five member board of trustees who are appointed by the mayor and approved by City Council, each serving staggering six-year terms.

Reporting Entity

For financial reporting purposes, the Utilities has included all funds, organizations, account groups, agencies, boards, commissions and authorities. The Utilities has also considered all potential component units for which it is financially accountable, and other organizations for which the nature and significance of their relationship with the Utilities are such that exclusion would cause the Utilities' financial statements to be misleading or incomplete. The Governmental Accounting Standards Board has set forth criteria to be considered in determining financial accountability. These criteria include appointing a voting majority of an organization's governing body, and (1) the ability of the Utilities to impose its will on that organization or (2) the potential for the organization to provide specific benefits to, or impose specific financial burdens on the Utilities. The Utilities has no component units which meet the Governmental Accounting Standards Board criteria.

Measurement Focus and Basis of Accounting

The accounting policies of the Utilities conform to accounting principles generally accepted in the United States of America as applicable to governments. The accounting systems of the Utilities are organized on the basis of funds, each of which is considered an accounting entity having a self-balancing set of accounts for recording its assets, deferred outflows of resources, liabilities, deferred inflows of resources, net position, revenues and expenses. The financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. The Utilities has no governmental or fiduciary funds.

The Utilities' accounts are organized as enterprise funds. The enterprise funds are used to account for operations (a) that are financed and operated in a manner similar to private business enterprises, where the intent of the governing body is that the costs (expense, including depreciation) of providing goods and services to the general public on a continuing basis be financed or recovered primarily through user charges or (b) where the governing body has decided that the periodic determination of revenues earned, expenses incurred and/or changes in net position is appropriate for capital maintenance, public policy, management control, accountability or other purposes.

The Utilities distinguishes operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with the Utilities' principal ongoing operations. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

When an expense is incurred which can be paid using either restricted or unrestricted resources, the Utilities' policy is generally to first apply the expense toward restricted resources and then to less-restrictive classifications.

**Indianola Municipal Utilities
NOTES TO FINANCIAL STATEMENTS**

NOTE 1 SIGNIFICANT ACCOUNTING POLICIES (continued)

Cash and Cash Equivalents

The cash balances of most Utilities funds are pooled and invested. Interest earned is allocated to each fund on the fund's proportionate share of total cash. Cash equivalents are readily convertible to known amounts of cash and, at the day of purchase, have a maturity date no longer than three months.

The City of Indianola also holds on behalf of the Utilities funds in excess of operating needs, which are invested based on the City's investment policies. Funds held by the City on behalf of the Utilities as of June 30, 2020 was \$1,227,103.

Restricted Assets

Certain assets are required to be segregated from other assets due to various bond indenture agreements. These assets are legally restricted for specific purposes such as debt service.

Accounts Receivable - Customers

Accounts receivable are recorded at the time the service is billed. Unbilled usage for services consumed between periodic scheduled billing dates is estimated and is recognized as revenue in the period in which the service is provided.

Due from Other Governments

The Utilities participates in the City of Indianola, Iowa's partially self-funded health insurance plan. To self-fund health care expenditures, the Utilities' makes monthly payments to the City's Internal Service Health Pool Fund. The Utilities share of the Health Pool's fund balance at June 30, 2020 was \$465,036.

Inventories

Inventories, which consist of fuel oil and supplies, are stated at the lower of cost (average cost basis) or net realizable value. Inventories are recorded as expenses when consumed rather than when purchased.

Capital Assets

Capital assets are accounted for at historical cost or estimated historical cost where historical cost is not available. Contributed capital assets are recorded at estimated fair value at the date of contribution. Depreciation and amortization of all exhaustible capital assets is charged as an expense against operations. Depreciation is provided over the estimated useful life of each class of depreciable asset and is computed on the straight-line method using these asset lives:

Service territory	20 to 30 years
Generating units	25 years
Transmission system	40 years
Distribution system	10 to 40 years
Plant and buildings	20 to 50 years
Wells and towers	10 to 50 years
Mains, hydrants and meters	20 to 50 years
Computer equipment and software	5 to 15 years
Equipment	5 to 15 years
Vehicles	10 years

The cost of repairs and maintenance is charged to expense, while the cost of renewals or substantial betterments is capitalized. The cost and accumulated depreciation and amortization of assets disposed of are deleted, with any gain or loss recorded in current operations.

**Indianola Municipal Utilities
NOTES TO FINANCIAL STATEMENTS**

NOTE 1 SIGNIFICANT ACCOUNTING POLICIES (continued)

Compensated Absences

Utilities employees accumulate a limited amount of earned but unused vacation and sick leave hours for subsequent use or for payment upon termination, death or retirement. The cost of vacation and sick leave accumulations are recorded as liabilities and expenses. The compensated absences liability, included in accrued payroll and employee benefits, has been computed based on rates of pay in effect at June 30, 2020.

Customer Deposits

Customer deposits consist of amounts paid by customers in advance of their utility service charges and will be applied to future utility services.

Net Pension Liability

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Iowa Public Employees' Retirement System (IPERS) and additions to/deductions from IPERS' fiduciary net position have been determined on the same basis as they are reported by IPERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Total OPEB Liability

For purposes of measuring the total OPEB liability, information has been determined based on the Utilities' actuary report. For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms.

Deferred Outflows of Resources

Deferred outflows of resources represent a consumption of net position that applies to a future period(s) and will not be recognized as an outflow of resources (expense) until then. Deferred outflows of resources consist of unrecognized items not yet charged to pension expense and contributions from the employer after the measurement date but before the end of the employer's reporting period and deferred outflows from debt refunding.

Deferred Inflows of Resources

Deferred inflows of resources represent an acquisition of net position that applies to a future period(s) and will not be recognized as an inflow of resources (revenue) until that time. Deferred inflows of resources in the statement of net position consists of the unamortized items related to the Utilities' pension plan.

Indianola Municipal Utilities
NOTES TO FINANCIAL STATEMENTS

NOTE 1 SIGNIFICANT ACCOUNTING POLICIES (continued)

Net Position

Net position is presented in the following three components:

Net investment in Capital Assets

Net investment in capital assets consists of capital assets, net of accumulated depreciation and amortization and reduced by liabilities that are attributable to the acquisition, construction, or improvement of those assets.

Restricted

This component of net position consists of constraints placed on net position use through external constraints imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments or constraints imposed by law through constitutional provisions or enabling legislation.

Unrestricted

Unrestricted net position has no externally imposed restrictions on use.

Accounting Estimates and Assumptions

The preparation of financial statements in accordance with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

Budgetary Information

In accordance with the Code of Iowa, the Board of Trustees annually adopts a budget on the cash basis following required public notice and hearing for all funds. The annual budget may be amended during the year utilizing statutorily prescribed procedures. During 2020, there was one amendment to the budget.

NOTE 2 CASH AND INVESTMENTS

The Utilities' deposits in banks at June 30, 2020 were entirely covered by federal depository insurance or the State Sinking Fund in accordance with Chapter 12C of the Code of Iowa. This chapter provides for additional assessments against the depositories to insure there will be no loss of public funds.

The Utilities is authorized by statute to invest public funds in obligations of the United States government, its agencies and instrumentalities; certificates of deposit or other evidences of deposit at federally insured depository institutions approved by the Board of Directors; prime eligible bankers acceptances; certain high rated commercial paper; perfected repurchase agreements; certain registered open-end management investment companies; certain joint investment trusts; and warrants or improvement certificates of a drainage district.

Interest Rate Risk

The Utilities' investment policy limits the investment of operating funds (funds expected to be expended in the current budget year or within 15 months of receipt) in instruments that mature within 397 days. Funds not identified as operating funds may be invested in instruments with maturities longer than 397 days, provided that the maturities are consistent with the needs and use of the Utilities.

Indianola Municipal Utilities
NOTES TO FINANCIAL STATEMENTS

NOTE 3 CAPITAL ASSETS

During the year ended June 30, 2020, capital asset additions and disposals by type were as follows:

	<u>Balance July 1, 2019</u>	<u>Additions</u>	<u>Disposals</u>	<u>Transfers</u>	<u>Balance June 30, 2020</u>
<u>Electric Utility</u>					
Capital assets not being depreciated					
Land	\$ 359,207	\$ —	\$ —	\$ —	\$ 359,207
Total capital assets not being depreciated	<u>359,207</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>359,207</u>
Capital assets being depreciated					
Service territory	446,000	—	—	—	446,000
Generating units	15,161,374	—	—	—	15,161,374
Distribution system	34,439,239	385,562	—	—	34,824,801
Transmission system	4,332,203	—	—	—	4,332,203
Plant and buildings	4,240,476	—	(37,376)	—	4,203,100
Computer equipment and software	617,169	101,327	(123,144)	—	595,352
Equipment	1,459,243	163,055	(78,903)	—	1,543,395
Vehicles	<u>1,319,422</u>	<u>74,154</u>	<u>(188,611)</u>	<u>(50,495)</u>	<u>1,154,470</u>
Total capital assets being depreciated	<u>62,015,126</u>	<u>724,098</u>	<u>(428,034)</u>	<u>(50,495)</u>	<u>62,260,695</u>
Less accumulated depreciation					
Service territory	296,025	22,300	—	—	318,325
Generating units	13,118,474	344,740	—	—	13,463,214
Distribution system	10,565,944	862,745	—	—	11,428,689
Transmission system	628,956	108,305	—	—	737,261
Plant and buildings	1,129,180	75,011	(12,342)	—	1,191,849
Computer equipment and software	356,040	26,620	(123,144)	—	259,516
Equipment	737,253	69,179	(78,903)	—	727,529
Vehicles	<u>1,058,382</u>	<u>64,160</u>	<u>(179,677)</u>	<u>(49,439)</u>	<u>893,426</u>
Total accumulated depreciation	<u>27,890,254</u>	<u>1,573,060</u>	<u>(394,066)</u>	<u>(49,439)</u>	<u>29,019,809</u>
Total capital assets being depreciated, net	<u>34,124,872</u>	<u>(848,962)</u>	<u>(33,968)</u>	<u>(1,056)</u>	<u>33,240,886</u>
Total capital assets, net	<u>\$34,484,079</u>	<u>\$ (848,962)</u>	<u>\$ (33,968)</u>	<u>\$ (1,058)</u>	<u>\$33,600,093</u>

Indianola Municipal Utilities
NOTES TO FINANCIAL STATEMENTS

NOTE 3 CAPITAL ASSETS (continued)

	<u>Balance July 1, 2019</u>	<u>Additions</u>	<u>Disposals</u>	<u>Transfers</u>	<u>Balance June 30, 2020</u>
<u>Water Utility</u>					
Capital assets not being depreciated					
Land	\$ 227,441	\$ —	\$ —	\$ —	\$ 227,441
Construction in progress	<u>—</u>	<u>192,389</u>	<u>—</u>	<u>—</u>	<u>192,389</u>
Total capital assets not being depreciated	<u>227,441</u>	<u>192,389</u>	<u>—</u>	<u>—</u>	<u>419,830</u>
Capital assets being depreciated					
Service territory	328,412	—	—	—	328,412
Plant and buildings	7,860,911	—	(888,683)	—	6,972,228
Wells and towers	4,880,733	134,701	(1,123,323)	—	3,892,111
Mains, hydrants, and meters	12,892,429	201,653	(44,288)	—	13,049,794
Computer equipment and software	—	60,428	—	—	60,428
Equipment	625,033	—	(403,135)	—	221,898
Vehicles	<u>280,998</u>	<u>35,474</u>	<u>(42,692)</u>	<u>(46,253)</u>	<u>227,527</u>
Total capital assets being depreciated	<u>26,868,516</u>	<u>432,256</u>	<u>(2,502,121)</u>	<u>(46,253)</u>	<u>24,752,398</u>
Less accumulated depreciation					
Service territory	157,533	10,947	—	—	168,480
Plant and buildings	4,266,394	174,056	(773,756)	—	3,666,694
Wells and towers	2,660,534	126,627	(1,071,300)	—	1,715,861
Mains, hydrants, and meters	5,762,345	275,882	(40,301)	—	5,997,926
Computer equipment and software	—	1,007	—	—	1,007
Equipment	572,897	8,564	(403,135)	—	178,326
Vehicles	<u>171,287</u>	<u>19,350</u>	<u>(42,692)</u>	<u>(4,851)</u>	<u>143,094</u>
Total accumulated depreciation	<u>13,590,990</u>	<u>616,433</u>	<u>(2,331,184)</u>	<u>(4,851)</u>	<u>11,871,388</u>
Total capital assets being depreciated, net	<u>13,277,526</u>	<u>(184,177)</u>	<u>(170,937)</u>	<u>(41,402)</u>	<u>12,881,010</u>
Total capital assets, net	<u>\$13,504,967</u>	<u>\$ 8,212</u>	<u>\$ (170,937)</u>	<u>\$ (41,402)</u>	<u>\$13,300,840</u>
<u>Fiber Telecommunications Utility</u>					
Capital assets being depreciated					
Distribution system	\$ 974,471	\$ 495,819	\$ —	\$ —	\$ 1,470,290
Plant and buildings	1,123,979	—	—	—	1,123,979
Computer equipment and software	317,680	—	—	—	317,680
Equipment	2,473,549	814,584	(36,844)	—	3,251,289
Vehicles	<u>103,844</u>	<u>—</u>	<u>—</u>	<u>96,748</u>	<u>200,592</u>
Total capital assets being depreciated	<u>4,993,523</u>	<u>1,310,403</u>	<u>(36,844)</u>	<u>96,748</u>	<u>6,363,830</u>
Less accumulated depreciation					
Distribution system	186,471	73,550	—	—	260,021
Plant and buildings	36,436	28,099	—	—	64,535
Computer equipment and software	14,028	31,768	—	—	45,796
Equipment	731,949	266,166	—	—	998,115
Vehicles	<u>15,576</u>	<u>15,209</u>	<u>(3,684)</u>	<u>54,290</u>	<u>81,391</u>
Total accumulated depreciation	<u>984,460</u>	<u>414,792</u>	<u>(3,684)</u>	<u>54,290</u>	<u>1,449,858</u>
Total capital assets being depreciated, net	<u>4,009,063</u>	<u>895,611</u>	<u>(33,160)</u>	<u>42,458</u>	<u>4,913,972</u>
Total capital assets, net	<u>\$ 4,009,063</u>	<u>\$ 895,611</u>	<u>\$ (33,160)</u>	<u>\$ 42,458</u>	<u>\$ 4,913,972</u>

Indianola Municipal Utilities
NOTES TO FINANCIAL STATEMENTS

NOTE 3 CAPITAL ASSETS (continued)

	<u>Balance July 1, 2019</u>	<u>Additions</u>	<u>Disposals</u>	<u>Transfers</u>	<u>Balance June 30, 2020</u>
<u>Joint Utility</u>					
Capital assets being depreciated					
Computer equipment and software	\$ 103,920	\$ 250,000	\$ —	\$ —	\$ 353,920
Total capital assets being depreciated	<u>103,920</u>	<u>250,000</u>	<u>—</u>	<u>—</u>	<u>353,920</u>
Less accumulated depreciation					
Computer equipment and software	—	5,899	—	—	5,899
Total accumulated depreciation	<u>—</u>	<u>5,899</u>	<u>—</u>	<u>—</u>	<u>5,899</u>
Total capital assets being depreciated, net	<u>103,920</u>	<u>244,101</u>	<u>—</u>	<u>—</u>	<u>348,021</u>
Total capital assets, net	<u>\$ 103,920</u>	<u>\$ 244,101</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 348,021</u>

NOTE 4 LONG-TERM LIABILITIES

A summary of the changes in long-term liabilities for the year ended June 30, 2020 is as follows:

	<u>Balance beginning of year</u>	<u>Increases</u>	<u>Decreases</u>	<u>Balance end of year</u>	<u>Due within one year</u>
General obligation bonds/notes	\$ 287,600	\$ —	\$ 48,000	\$ 239,600	\$ 48,800
Revenue bonds/notes	6,680,000	—	—	6,680,000	—
Direct borrowings	11,013,671	2,376,329	851,000	12,539,000	991,000
Installment contract payable	268,000	200,000	75,431	392,569	130,987
Total OPEB liability	430,815	147,243	—	578,058	—
Net pension liability	1,592,987	84,920	—	1,677,907	—
Unamortized bond premiums	<u>426,445</u>	<u>—</u>	<u>29,862</u>	<u>396,583</u>	<u>—</u>
Totals	<u>\$20,699,518</u>	<u>\$2,808,492</u>	<u>\$1,004,293</u>	<u>\$22,503,717</u>	<u>\$1,170,787</u>

General Obligation Bonds Payable

In May 2012, the City issued \$3,875,000 of General Obligation Bonds, a portion of which was used to finance water main improvements. Although the bonds are a general obligation of the City and the City has authority to levy property taxes to pay the bonds and related interest, as payments come due, it is the intention of the City Council that the payments of \$572,700 of the bond principal and related interest be financed by the operations of the Municipal Water Utility. Accordingly, that portion of the bonds are reported as a liability and the interest payments are reported as an expense of the Utilities in these financial statements. The total principal and interest remaining on the bonds is \$255,300.

Revenue Capital Loan Notes

The Utilities has pledged future electric customer receipts, net of specified operating disbursements, to repay \$6,680,000 of Electric Revenue Capital Loan Notes. Proceeds from the notes provided financing for infrastructure improvements. The Notes are payable solely from electric customer net receipts and are payable through 2037. The total principal and interest remaining to be paid on the notes is \$9,798,950. For the current year, principal and interest paid and total customer net revenues (operating income plus depreciation/amortization expense) were \$270,550 and \$2,825,546, respectively.

Indianola Municipal Utilities
NOTES TO FINANCIAL STATEMENTS

NOTE 4 LONG-TERM LIABILITIES (continued)

Direct Borrowings

The Utilities has pledged future electric customer receipts, net of specified operating disbursements, to repay \$7,241,000 of Electric Revenue Capital Loan Refunding Notes. Proceeds from the notes refunded Electric Capital Loan Notes issued in 2010 and 2011. The Notes are payable solely from electric customer net receipts and are payable through 2032. The total principal and interest remaining to be paid on the notes is \$3,575,046. For the current year, principal and interest paid and total customer net revenues (operating income plus depreciation/amortization expense) were \$862,680 and \$2,825,546, respectively. The Notes carry a stated interest rate of 2.60 percent through May 1, 2022 at which time the interest rate will be adjusted to a rate equal to 1.65 percent above the Federal Home Loan Bank of Des Moines Two-Year Fixed Rate Advance with a ceiling of 7.00 percent.

The Utilities' has pledged future fiber communications customer receipts, net of specified operating disbursements, to repay \$9,287,000 of Communications Utility Revenue Capital Loan Notes. Proceeds from the Notes provided financing for improvements and extensions to the Municipal Communications Utility. The Notes are payable solely from fiber communications customer net receipts and are payable through 2032. The total principal and interest remaining to be paid on the notes is \$12,144,580. For the current year, principal and interest paid and total customer net loss (operating loss plus depreciation/amortization expense) were \$496,480 and \$(375,627), respectively.

The Notes carry a stated interest rate of 4.00 and 5.00 percent, respectively, through June 1, 2024 at which time the rates will be adjusted to a rate equal to 2.50 and 3.50 percent, respectively, over the 7 year U.S. Treasury Constant Maturities, as released by the Board of Governors of the Federal Reserve System.

The resolutions providing for the issuance of the revenue capital loan notes include the following provisions:

- a. The notes will only be redeemed from the future earnings of the enterprise activity and the note holders hold a lien on the future earnings of the funds.
- b. Sufficient monthly transfers shall be made to separate electric and fiber revenue note sinking accounts within the enterprise funds for the purpose of making the note principal and interest payments when due.
- c. All funds remaining after payment of all maintenance and operating expenses and the transfers to the restricted accounts noted above can be used to retire any subordinate obligations, to pay for extraordinary repairs and replacements to the electric and Fiber systems, or pay or redeem any notes or bonds, and then can be used for any lawful purpose.
- d. The enterprise fund will maintain net revenues of at least 110% of the amount of principal and interest due on the Notes in the same year. This provision is not applicable to the telecommunications utility until the fiscal year ending June 30, 2021.

The Utilities did not hold sufficient funds in its telecommunications utility sinking fund account to comply with the loan resolutions as of June 30, 2020.

Indianola Municipal Utilities
NOTES TO FINANCIAL STATEMENTS

NOTE 4 LONG-TERM LIABILITIES (continued)

Installment Contract Payable

The Utilities has entered into an installment contract with a vendor for the purchase and development of a new Utilities operations system. The total amount of the installment contract was \$521,600 of which \$392,569 remained outstanding as of June 30, 2020. The installment contract is due in monthly installments of \$10,916 through August 2023.

Details of the Utilities' general obligation, revenue capital loan notes and direct borrowings as of June 30, 2020 are as follows:

<u>Issue</u>	<u>Date of issue</u>	<u>Interest rates</u>	<u>Maturity date</u>	<u>Annual payments</u>	<u>Amount of original issue</u>	<u>Outstanding June 30, 2020</u>
Water Utility						
General Obligation 2012B	May 1, 2012	1.90-2.40%	June 1, 2025	\$ 37,000 – 52,000	\$ 572,700	\$ 239,600
Electric Utility						
Revenue Refunding Capital Loan Note Series 2015	March 9, 2015	2.60%	May 1, 2025	120,000 – 838,000	7,241,000	3,347,000
Revenue Capital Loan Note Series 2017C	September 13, 2017	4.00-5.00%	May 1, 2037	335,000 – 645,000	6,680,000	6,680,000
Fiber Telecommunications Utility						
Revenue Capital Loan Note Series 2017A	August 10, 2017	4.00%	June 1, 2032	140,000 – 699,000	6,287,000	6,217,000
Revenue Capital Loan Note Series 2017B	August 10, 2017	5.00%	June 1, 2032	75,000 – 334,000	3,000,000	2,975,000

A summary of the bond/note principal and interest maturities by type of bond/note is as follows:

<u>Year ending June 30</u>	<u>General Obligation</u>			<u>Capital Loan Notes</u>		
	<u>Principal</u>	<u>Interest</u>	<u>Total</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2021	\$ 48,800	\$ 5,200	\$ 54,000	\$ –	\$ 270,550	\$ 270,550
2022	50,300	4,300	54,600	–	270,550	270,550
2023	51,000	3,200	54,200	–	270,550	270,550
2024	52,500	2,100	54,600	–	270,550	270,550
2025	37,000	900	37,900	335,000	270,550	605,550
2026-2030	–	–	–	2,285,000	1,092,800	3,377,800
2031-2035	–	–	–	2,790,000	596,800	3,386,800
2036-2037	–	–	–	1,270,000	76,600	1,346,600
	<u>239,600</u>	<u>15,700</u>	<u>255,300</u>	<u>6,680,000</u>	<u>3,228,950</u>	<u>9,798,950</u>
Plus unamortized premium	<u>–</u>	<u>–</u>	<u>–</u>	<u>396,583</u>	<u>–</u>	<u>396,583</u>
	<u>\$ 239,600</u>	<u>\$ 15,700</u>	<u>\$ 255,300</u>	<u>\$7,076,583</u>	<u>\$3,118,950</u>	<u>\$10,195,533</u>

**Indianola Municipal Utilities
NOTES TO FINANCIAL STATEMENTS**

NOTE 4 LONG-TERM LIABILITIES (continued)

Year ending June 30	Direct Borrowings			Installment Contract
	Principal	Interest	Total	
2021	\$ 991,000	\$ 484,452	\$ 1,746,002	\$ 130,992
2022	1,199,000	454,926	1,924,426	130,992
2023	1,518,000	416,080	2,204,580	119,880
2024	1,570,000	364,668	2,205,168	10,705
2025	884,000	311,360	1,800,860	—
2026-2030	4,355,000	1,017,080	8,749,880	—
2031-2032	<u>2,022,000</u>	<u>132,060</u>	<u>5,540,860</u>	<u>—</u>
	<u>\$12,539,000</u>	<u>\$3,180,626</u>	<u>\$15,719,626</u>	<u>\$ 392,569</u>

NOTE 5 COMPENSATED ABSENCES

Utilities employees accumulate vacation hours, compensating time off and sick leave for subsequent use. Unused vacation hours and compensating time off are payable upon termination, retirement or death. These amounts are included in accrued payroll and employee benefits as of June 30, 2020. Accrued sick leave benefits as of June 30, 2020 of approximately \$435,000 are payable only when used and have not been accrued.

NOTE 6 PENSION PLAN

Plan Description

IPERS is a cost-sharing multiple employer defined benefit pension plan administered by Iowa Public Employees' Retirement System. Membership is mandatory for employees of the Utilities, except for those covered by another retirement system. IPERS issues a stand-alone financial report which is available to the public by mail at P.O. Box 9117, Des Moines, Iowa 50306-9117 or at www.ipers.org.

IPERS benefits are established under Iowa Code Chapter 97B and the administrative rules thereunder. Chapter 97B and the administrative rules are the official plan documents. The following brief description is provided for general informational purposes only. Refer to the plan documents for more information.

Pension Benefits

A regular member may retire at normal retirement age and receive monthly benefits without an early-retirement reduction. Normal retirement age is age 65, any time after reaching age 62 with 20 or more years of covered employment, or when the member's years of service plus the member's age at the last birthday equals or exceeds 88, whichever comes first. These qualifications must be met on the member's first month of entitlement to benefits. Members cannot begin receiving retirement benefits before age 55. The formula used to calculate a regular member's monthly IPERS benefit includes:

- A multiplier (based on years of service).
- The member's highest five-year average salary. (For members with service before June 30, 2012, the highest three-year average salary as of that date will be used if it is greater than the highest five-year average salary.)

If a member retires before normal retirement age, the member's monthly retirement benefit will be permanently reduced by an early-retirement reduction. The early-retirement reduction is calculated differently for service earned before and after July 1, 2012. For service earned before July 1, 2012, the reduction is 0.25% for each month that the member receives benefits before the member's earliest normal retirement age. For service earned starting July 1, 2012, the reduction is 0.50% for each month that the member receives benefits before age 65.

**Indianola Municipal Utilities
NOTES TO FINANCIAL STATEMENTS**

NOTE 6 PENSION PLAN (continued)

Pension Benefits (continued)

Generally, once a member selects a benefit option, a monthly benefit is calculated and remains the same for the rest of the member's lifetime. However, to combat the effects of inflation, retirees who began receiving benefits prior to July 1990 receive a guaranteed dividend with their regular November benefit payments.

Disability and Death Benefits

A vested member who is awarded federal Social Security disability or Railroad Retirement disability benefits is eligible to claim IPERS benefits regardless of age. Disability benefits are not reduced for early retirement. If a member dies before retirement, the member's beneficiary will receive a lifetime annuity or a lump-sum payment equal to the present actuarial value of the member's accrued benefit or calculated with a set formula, whichever is greater. When a member dies after retirement, death benefits depend on the benefit option the member selected at retirement.

Contributions

Contribution rates are established by IPERS following the annual actuarial valuation, which applies IPERS' Contribution Rate Funding Policy and Actuarial Amortization Method. State statute limits the amount rates can increase or decrease each year to 1 percentage point. IPERS Contribution Rate Funding Policy requires that the actuarial contribution rate be determined using the "entry age normal" actuarial cost method and the actuarial assumptions and methods approved by the IPERS Investment Board. The actuarial contribution rate covers normal cost plus the unfunded actuarial liability payment based on a 30-year amortization period. The payment to amortize the unfunded actuarial liability is determined as a level percentage of payroll, based on the Actuarial Amortization Method adopted by the Investment Board.

In fiscal year 2020, pursuant to the required rate, regular members contributed 6.29% of covered payroll and the Utilities contributed 9.44% for a total rate of 15.73%.

The Utilities' contributions to IPERS for the years ended June 30, 2020 were \$209,544.

Net Pension Liability, Pension Expense, Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At June 30, 2020, the Utilities reported a liability of \$1,677,907, for its proportionate share of the net pension liability. The Utilities' net pension liability was measured as of June 30, 2019, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of those dates. The Utilities' proportion of the net pension liability was based on the Utilities' share of contributions to the pension plan relative to the contributions of all IPERS participating employers. The following table summarizes the change in the Utilities' proportionate share:

	Measurement Date		Change
	June 30		
	2019	2018	
Utilities' proportionate share	0.028976%	0.025173%	0.003803%

**Indianola Municipal Utilities
NOTES TO FINANCIAL STATEMENTS**

NOTE 6 PENSION PLAN (continued)

Net Pension Liability, Pension Expense, Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions (continued)

For the years ended June 30, 2020, the Utilities recognized pension expense of \$346,695. At June 30, 2020, the Utilities reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Pension Related</u> <u>Outflows of</u> <u>Resources</u>	<u>Deferred</u> <u>Inflows of</u> <u>Resources</u>
Difference between expected and actual experience	\$ 4,652	\$ 60,329
Change in assumptions	179,728	—
Net difference between projected and actual earnings on pension plan investments	—	189,080
Change in proportion and difference between Utilities contributions and proportionate share of contributions	201,131	22,242
Utilities contributions subsequent to the measurement date	<u>209,544</u>	<u>—</u>
Totals	<u>\$ 595,055</u>	<u>\$ 271,651</u>

\$209,544 reported as deferred outflows of resources related to pensions resulting from the Utilities contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ending June 30,

2021	\$ 74,059
2022	(2,615)
2023	16,748
2024	10,423
2025	<u>15,245</u>
Totals	<u>\$ 113,860</u>

There were no non-employer contributing entities at IPERS.

Indianola Municipal Utilities
NOTES TO FINANCIAL STATEMENTS

NOTE 6 PENSION PLAN (continued)

Actuarial Assumptions

The total pension liability in the June 30, 2019 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Rate of inflation (effective June 30, 2017)	2.60% per annum.
Rates of salary increase (effective June 30, 2017)	3.25 to 16.25% average, including inflation. Rates vary by membership group.
Long-term investment rate of return (effective June 30, 2017)	7.00% compounded annually, net of investment expense, including inflation.
Wage growth (effective June 30, 2017)	3.25% per annum, based on 2.60% inflation and 0.65% real wage inflation.

The actuarial assumptions used in the June 30, 2019 valuation were based on the results of an economic assumption study dated March 24, 2017 and a demographic assumption study dated June 28, 2018.

Mortality rates used in the 2019 valuation were based on the RP-2014 Employee and Healthy Annuitant Tables with MP-2017 generational adjustments.

The long-term expected rate of return on IPERS' investments was determined using a building-block method in which best-estimate ranges of expected future real rates (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

<u>Asset Class</u>	<u>Asset Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
Core Plus Fixed Income	27.0%	1.71%
Domestic Equity	22.0	5.60
International Equity	15.0	6.08
Private Equity	11.0	10.13
Private Real Assets	7.5	4.76
Public Real Assets	7.0	2.81
Public Credit	3.5	3.32
Private Credit	3.0	3.01
Global Smart Beta equity	3.0	5.82
Cash	<u>1.0</u>	(0.21)
Total	<u>100.0%</u>	

Discount Rate

The discount rate used to measure the total pension liability was 7.0%. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the contractually required rate and that contributions from the Utilities will be made at contractually required rates, actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

**Indianola Municipal Utilities
NOTES TO FINANCIAL STATEMENTS**

NOTE 6 PENSION PLAN (continued)

Sensitivity of the Utilities' Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents the Utilities' proportionate share of the net pension liability calculated using the discount rate of 7.0%, as well as what the Utilities' proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1% lower (6.0%) or 1% higher (8.0%) than the current rate.

	1% Decrease (6.0%)	Discount Rate (7.0%)	1% Increase (8.0%)
Utilities' proportionate share of the net pension liability	<u>\$2,979,421</u>	<u>\$1,677,907</u>	<u>\$ 586,211</u>

Pension Plan Fiduciary Net Position

Detailed information about the pension plan's fiduciary net position is available in the separately issued IPERS financial report which is available on IPERS' website at www.ipers.org.

NOTE 7 RISK MANAGEMENT

The Utilities is exposed to various risks of loss related to torts; theft, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters. These risks are covered by the purchase of commercial insurance. Settled claims from these risks have not exceeded commercial insurance coverage in any of the past three fiscal years. The Utilities assumes liability for any deductibles and claims in excess of coverage limitations.

The Utilities is a member of the Iowa Communities Assurance Pool, as allowed by Chapter 670.7 of the Code of Iowa. The Iowa Communities Assurance Pool (Pool) is a local government risk-sharing pool whose 779 members include various governmental entities throughout the State of Iowa. The Pool was formed in August 1986 for the purpose of managing and funding third-party liability claims against its members. The Pool provides coverage and protection in the following categories: general liability, automobile liability, automobile physical damage, public officials' liability, police professional liability, property, inland marine, and boiler/machinery. There have been no reductions in insurance coverage from prior years.

Each member's annual casualty contributions to the Pool fund current operations and provide capital. Annual casualty operating contributions are those amounts necessary to fund, on a cash basis, the Pool's general and administrative expenses, claims, claims expenses and reinsurance expenses estimated for the fiscal year, plus all or any portion of any deficiency in capital. Capital contributions are made during the first six years of membership and are maintained at a level determined by the Board not to exceed 300% of basis rates.

Indianola Municipal Utilities
NOTES TO FINANCIAL STATEMENTS

NOTE 7 RISK MANAGEMENT (continued)

The Pool also provides property coverage. Members who elect such coverage make annual property operating contributions which are necessary to fund, on a cash basis, the Pool's general and administrative expenses, reinsurance premiums, losses and loss expenses for property risks estimated for the fiscal year, plus all or any portion of any deficiency in capital. Any year end operating surplus is transferred to capital. Deficiencies in operations are offset by transfers from capital and, if insufficient, by the subsequent year's member contributions.

The Utilities' contributions to the risk pool are recorded as expenditures from its operating funds at the time of payment to the risk pool. The Utilities' contributions to the Pool for the year ended June 30, 2020 were \$110,475.

The Pool uses reinsurance and excess risk-sharing agreements to reduce its exposure to large losses. The Pool retains general, automobile, police professional, and public officials' liability risks up to \$500,000 per claim. Claims exceeding \$500,000 are reinsured through reinsurance and excess risk-sharing agreements up to the amount of risk-sharing protection provided by the Utilities' risk-sharing certificate. Property and automobile physical damage risks are retained by the Pool up to \$250,000 each occurrence, each location. Property risks exceeding \$250,000 are reinsured through reinsurance and excess risk-sharing agreements up to the amount of risk-sharing protection provided by the Utilities' risk-sharing certificate.

The Pool's intergovernmental contract with its members provides that in the event a casualty claim, property loss or series of claims or losses exceeds the amount of risk-sharing protection provided by the Utilities' risk-sharing certificate, or in the event a casualty claim, property loss or series of claims or losses exhausts the Pool's funds and any excess risk-sharing recoveries, then payment of such claims or losses shall be the obligation of the respective individual member against whom the claim was made or the loss was incurred.

The Utilities does not report a liability for losses in excess of reinsurance or excess risk-sharing recoveries unless it is deemed probable such losses have occurred and the amount of such loss can be reasonably estimated. Accordingly, at June 30, 2020, no liability has been recorded in the Utilities' financial statements. As of June 30, 2020, settled claims have not exceeded the risk pool or reinsurance coverage since the Pool's inception.

Members agree to continue membership in the Pool for a period of not less than one full year. After such period, a member who has given 60 days' prior written notice may withdraw from the Pool. Upon withdrawal, payments for all casualty claims and claims expenses become the sole responsibility of the withdrawing member, regardless of whether a claim was incurred or reported prior to the member's withdrawal. Upon withdrawal, a formula set forth in the Pool's intergovernmental contract with its members is applied to determine the amount (if any) to be refunded to the withdrawing member.

The Utilities also carries commercial insurance purchased from other insurers for coverage associated with workers compensations in the amount of \$1,000,000. The Utilities assumes liability for any deductibles and claims in excess of coverage limitations. Settled claims resulting from these risks have not exceeded commercial insurance coverage in any of the past three fiscal years.

NOTE 8 OTHER POSTEMPLOYMENT BENEFITS OTHER THAN PENSION (OPEB)

Plan Description

The Utilities administers a single-employer benefit plan which provides medical and prescription drug benefits to retired employees and their dependents under certain conditions. Group insurance benefits are established under Iowa Code Chapter 509A.13. No assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75.

**Indianola Municipal Utilities
NOTES TO FINANCIAL STATEMENTS**

NOTE 8 OTHER POSTEMPLOYMENT BENEFITS OTHER THAN PENSION (OPEB) (continued)

OPEB Benefits

Individuals who are employed by the Utilities and are eligible to participate in the group health plan are eligible to continue healthcare benefits upon retirement. Retirees under age 65 pay the same premium for the medical and prescription drug benefits as active employees, which results in an implicit rate subsidy and an OPEB liability.

Retired participants must be age 55 or older at retirement. At June 30, 2020, the following employees were covered by the benefit terms.

Inactive employees or beneficiaries currently receiving benefit payments	3
Active employees	<u>32</u>
Total	<u>35</u>

OPEB Liability

The Utilities' total OPEB liability of \$578,058 was measured as of June 30, 2020, and was determined by an actuarial valuation as of June 30, 2020.

Actuarial Assumptions

The OPEB liability as of June 30, 2020 was determined using the following actuarial assumptions and the entry age normal actuarial cost method, applied to all periods included in the measurement.

Rate of inflation	2.60% per annum
Rates of salary increase	3.25% per annum
Discount rate	2.66% per annum
Healthcare cost trend rate	8.0% initial rate decreasing by .50% annually to an ultimate rate of 4.5%

The discount rate used to measure the OPEB liability was 2.66% which reflects the index rate for 20-year tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher as of the measurement date.

Mortality rates were based on the 50A Mortality Table fully generational using PUB-2010 General Headcount Weighted Scale MP-2019.

Annual retirement probabilities are based on varying rates by age and turnover probabilities which mirror those used by IPERS.

Changes in OPEB Liability

	<u>OPEB Liability</u>
OPEB liability, July 1, 2019	\$ 430,815
Changes for the year	
Service cost	19,391
Interest cost	15,115
Difference between expected and actual experience	133,829
Change in assumptions	18,399
Benefit payments	<u>(39,491)</u>
OPEB liability, June 30, 2020	<u>\$ 578,058</u>

**Indianola Municipal Utilities
NOTES TO FINANCIAL STATEMENTS**

NOTE 8 OTHER POSTEMPLOYMENT BENEFITS OTHER THAN PENSION (OPEB) (continued)

Sensitivity of the Utilities' OPEB Liability to Changes in the Discount Rate

The following presents the OPEB liability of the Utilities, as well as what the Utilities' OPEB liability would be if it were calculated using a discount rate that is 1% lower (1.66%) or 1% higher (3.66%) than the current discount rate.

	1% Decrease (1.66%)	Discount Rate (2.66%)	1% Increase (3.66%)
Utilities' OPEB liability	\$ <u>612,468</u>	\$ <u>578,058</u>	\$ <u>545,658</u>

Sensitivity of the Utilities' OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the OPEB liability of the Utilities, as well as what the Utilities' OPEB liability would be if it were calculated using healthcare cost trend rates that are 1% lower (7.0% to 3.5%) or 1% higher (9.0% to 5.5%) than the current healthcare cost trend rates.

	1% Decrease (7.0% to 3.5%)	Healthcare Cost Trend Rate (8.0% to 4.5%)	1% Increase (9.0% to 5.5%)
Utilities' OPEB liability	\$ <u>534,187</u>	\$ <u>578,058</u>	\$ <u>629,096</u>

OPEB Expense

For the year ended June 30, 2020, the Utilities recognized OPEB expense of \$152,228.

NOTE 9 JOINTLY GOVERNED ORGANIZATIONS

The Indianola Municipal Utilities is a member-owner of the Municipal Energy Agency of Nebraska (MEAN), a joint action agency organized as a body corporate and politic under the laws of the State of Nebraska. MEAN's Power Supply System consists of ownership and contractual rights and interests in various electric generating and transmission resources and supplies. MEAN uses these to provide wholesale power supply, transmission, and ancillary services to its 65 participating municipal utilities. Each MEAN participant has entered into the Electrical Resources Pooling Agreement (ERPA) with MEAN, which provides for various service schedules.

The Utilities elected in 2009 to become a Total Requirements Participant and as such receives all power and energy from MEAN and entered Service Schedule M of the ERPA. As such, the Utilities has agreed to purchase its power and energy at rates sufficient (together with other MEAN revenues) to enable MEAN to pay all its net costs of MEAN's Power Supply System. Annual costs to be recovered and associated rates are evaluated annually by the MEAN Board of Directors. If imposed, the Utilities is also subject to a Purchased Energy Adjustment clause based on MEAN's actual cost of energy compared to those budgeted and collected through base rates during its fiscal year which ends March 31st.

The Utilities' pro-rata share of net at-risk annual costs borne by Schedule M participants is subject to annual fluctuation based on demand and energy and are explicitly categorized as annual operating expenditures of the Utilities. Long-term Power Supply Contracts are currently set to expire in 2041, after the final maturity of MEAN's 2008 Series A Bonds in 2039. The Utilities' obligation to MEAN beyond that date is contingent on its approval of any new debt to be issued by MEAN with a maturity date beyond that date.

**Indianola Municipal Utilities
NOTES TO FINANCIAL STATEMENTS**

NOTE 9 JOINTLY GOVERNED ORGANIZATIONS (continued)

The Indianola Municipal Utilities became a participant in the Central Minnesota Municipal Power Agency (CMMPA) Brookings-Twin Cities Transmission Project (CMMPA-Brookings Project) in 2011. CMMPA is a joint action agency formed under the laws of the State of Minnesota. The CMMPA-Brookings Project consists of 15 municipal utilities that agreed to pay pro-rated annual costs, net of transmission tariff revenue collected, related to CMMPA's fractional assigned ownership of transmission facilities commonly referred to as the CAPX2020 Brookings-Twin Cities Development Project. The Utilities' Election Share is 3.34% of the CMMPA-Brookings Project, which in total is 3.6% of the total CAPX2020 Brookings-Twin Cities Development Project. Any net costs associated with the Utilities' participation are explicitly categorized as annual operating expenditures.

NOTE 10 FIBER TELECOMMUNICATIONS INFRASTRUCTURE LEASE

The fiber telecommunications utility leases from the electric utility access to the electric utility's fiber infrastructure on a month-to-month basis. The fiber telecommunications utility paid \$368,000 to the electric utility in the year ended June 30, 2020 under the terms of this lease.

NOTE 11 RELATED PARTY TRANSACTIONS

The Utilities make payments in lieu of taxes to the City of Indianola, Iowa. In addition, the Utilities pays to the City the Utilities' share of information technology, human resources, and clerk services. Total expenses for the year ended June 30, 2020 were as follows:

Payments in lieu of taxes	\$ 804,264
Information technology	106,400
Human resources	23,700
Clerk services	<u>119,300</u>
	<u>\$1,053,664</u>

Included in due to other governments on the accompanying statement of net position is \$49,851 which was due and outstanding for these above services at June 30, 2020.

The Utilities collects on behalf of the City utility payments for the City's wastewater, stormwater and recycling services and remits payments received monthly to the City. At June 30, 2020 the Utilities owed to the City \$528,859 for utilities collected on the City's behalf but not yet remitted to the City. The City paid to the Utilities \$62,880 for utility billing services during the year ended June 30, 2020.

The Utilities participates in the City's partially self-funded health insurance plan. To self-fund health care expenditures, the Utilities' makes monthly payments to the City's Internal Service Health Pool Fund. The Utilities' share of the Health Pool's fund balance at June 30, 2020 was \$465,036. The City also holds on behalf of the Utilities funds in excess of operating needs, which are invested based on the City's investment policies. Funds held by the City on behalf of the Utilities as of June 30, 2020 was \$1,227,103.

NOTE 12 DEFICIT BALANCE

At June 30, 2020, the Fiber Telecommunications Utility fund had a deficit fund balance of \$3,721,982. The deficit is the result of start-up costs incurred to initiate the utility service. The deficit will be eliminated in future periods through net customer charges.

Indianola Municipal Utilities
NOTES TO FINANCIAL STATEMENTS

NOTE 13 RESTATEMENTS

The Utilities has restated its beginning net position to correct various prior fiscal year reporting errors, as follows:

	<u>Electric</u>	<u>Water</u>	<u>Fiber Telecommunication</u>	<u>Joint</u>	<u>Total</u>
Net position, as previously reported	\$36,264,138	\$15,273,685	\$ (2,269,643)	\$ 160,917	\$49,429,097
Restated unamortized bond premiums	(114,713)	—	—	—	(114,713)
Restated net pension liability	—	—	(262,036)	—	(262,036)
To recognize prior period expense capitalized in error	—	—	(126,969)	—	(126,969)
To recognize amounts due from other governments	<u>182,999</u>	<u>87,715</u>	<u>73,081</u>	<u>59,161</u>	<u>402,956</u>
Beginning net position, as restated	<u>\$36,332,424</u>	<u>\$15,361,400</u>	<u>\$ (2,585,567)</u>	<u>\$ 220,078</u>	<u>\$49,328,335</u>

REQUIRED SUPPLEMENTARY INFORMATION

Indianola Municipal Utilities
BUDGETARY COMPARISON SCHEDULE
OF RECEIPTS, DISBURSEMENTS, AND CHANGES IN BALANCES -
BUDGET AND ACTUAL (CASH BASIS)
Required Supplementary Information
Year ended June 30, 2020

	<u>Actual</u>	<u>Budgeted amounts</u>		<u>Variance</u>
		<u>Original</u>	<u>Final</u>	
Receipts				
Use of money and property	\$ 739,631	\$ 691,000	\$ 691,000	\$ 48,631
Charges for service	21,220,727	21,154,100	21,154,100	66,627
Miscellaneous	499,339	841,900	841,900	(342,561)
Total receipts	<u>22,459,697</u>	<u>22,687,000</u>	<u>22,687,000</u>	<u>(227,303)</u>
Disbursements				
Business type activities	<u>22,657,308</u>	<u>23,423,900</u>	<u>23,686,900</u>	<u>1,029,592</u>
Excess of receipts over (under) disbursements	(197,611)	(736,900)	(999,900)	802,289
Other financing sources	<u>2,217,072</u>	<u>1,659,000</u>	<u>1,659,000</u>	<u>558,072</u>
Excess of receipts and other financing sources over (under) disbursements and other financing uses	2,019,461	922,100	659,100	1,360,361
Balances, beginning of year	<u>13,435,094</u>	<u>11,033,307</u>	<u>11,033,307</u>	<u>2,401,787</u>
Balances, end of year	<u>\$15,454,555</u>	<u>\$11,955,407</u>	<u>\$11,692,407</u>	<u>\$3,762,148</u>

See accompanying independent auditor's report.

Indianola Municipal Utilities
NOTES TO REQUIRED SUPPLEMENTARY INFORMATION – BUDGETARY REPORTING
Required Supplementary Information
Year ended June 30, 2020

In accordance with the Code of Iowa, the Board of Trustees, with the approval of the City Council, annually adopts a budget on the cash basis following required public notice and hearing for all funds except Internal Service Funds and Fiduciary Funds. The annual budget may be amended during the year utilizing statutorily prescribed procedures.

Formal and legal budgetary control is based upon classes of disbursements known as functions not by fund. The Utilities' disbursements are budgeted in the business-type activities function.

During the year ended June 30, 2020, one budget amendment increased budgeted disbursements by \$263,000. This budget amendment is reflected in the final budgeted amounts. Disbursements did not exceed the amount budgeted during the fiscal year.

Indianola Municipal Utilities
SCHEDULE OF THE UTILITIES' PROPORTIONATE SHARE OF THE NET PENSION LIABILITY
Iowa Public Employees' Retirement System
(In Thousands)
Required Supplementary Information

	June 30					
	2020	2019	2018	2017	2016	2015
Utilities' proportion of the net pension liability	.028976%	.025173%	.019030%	.018187%	.018879%	.019396%
Utilities' proportionate share of the net pension liability	\$1,678	\$1,593	\$1,268	\$1,145	\$933	\$769
Utilities' covered payroll	\$2,220	\$2,205	\$1,845	\$1,643	\$1,517	\$1,502
Utilities' proportionate share of the net pension liability as a percentage of its covered payroll	76%	72%	69%	70%	62%	51%
IPERS' net position as a percentage of the total pension liability	85%	84%	82%	81%	85%	88%

*In accordance with GASB Statement No. 68, the amounts presented for each fiscal year were determined as of June 30 of the preceding fiscal year.

See accompanying notes to required supplementary information - pension liability.

Indianola Municipal Utilities
SCHEDULE OF UTILITIES PENSION CONTRIBUTIONS
Iowa Public Employees' Retirement System
(In Thousands)
Required Supplementary Information

	Year ended June 30			
	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
Statutorily required contribution	\$ 210	\$ 208	\$ 165	\$ 147
Contributions in relation to the statutorily required contribution	<u>210</u>	<u>208</u>	<u>165</u>	<u>147</u>
Contribution deficiency (excess)	\$ <u><u>—</u></u>	\$ <u><u>—</u></u>	\$ <u><u>—</u></u>	\$ <u><u>—</u></u>
Utilities' covered payroll	\$2,220	\$2,205	\$1,845	\$1,643
Contributions as a percentage of covered payroll	9.5%	9.4%	8.9%	8.9%

See accompanying notes to required supplementary information - pension liability.

Year ended June 30					
<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>
\$ 135	\$ 134	\$ 131	\$ 125	\$ 112	\$ 93
<u>135</u>	<u>134</u>	<u>131</u>	<u>125</u>	<u>112</u>	<u>93</u>
\$ <u>—</u>	<u>—</u>	\$ <u>—</u>	\$ <u>—</u>	\$ <u>—</u>	\$ <u>—</u>
\$1,517	\$1,502	\$1,472	\$1,437	\$1,387	\$1,340
8.9%	8.9%	8.9%	8.7%	8.1%	6.9%

Indianola Municipal Utilities
NOTES TO REQUIRED SUPPLEMENTARY INFORMATION – PENSION LIABILITY
Year ended June 30, 2020

CHANGES OF BENEFIT TERMS

There are no significant changes in benefit terms

CHANGES OF ASSUMPTIONS

The 2018 valuation implemented the following refinements as a result of a demographic assumption study dated June 28, 2018:

- Changed mortality assumptions to the RP-2014 mortality tables with mortality improvements modeled using Scale MP-2017.
- Adjusted retirement rates.
- Lowered disability rates.
- Adjusted the probability of a vested Regular member electing to receive a deferred benefit.
- Adjusted the merit component of the salary increase assumption.

The 2017 valuation implemented the following refinements as a result of an experience study dated March 24, 2017:

- Decreased the inflation assumption from 3.00% to 2.60%.
- Decreased the assumed rate of interest on member accounts from 3.75% to 3.50% per year.
- Decreased the discount rate from 7.50% to 7.00%.
- Decreased the wage growth assumption from 4.00% to 3.25%.
- Decreased the payroll growth assumption from 4.00% to 3.25%.

The 2014 valuation implemented the following refinements as a result of a quadrennial experience study:

- Decreased the inflation assumption from 3.25% to 3.00%.
- Decreased the assumed rate of interest on member accounts from 4.00% to 3.75% per year.
- Adjusted male mortality rates for retirees in the Regular membership group.
- Moved from an open 30 year amortization period to a closed 30 year amortization period for the Unfunded Actuarial Liability (UAL) beginning June 30, 2014. Each year thereafter, changes in the UAL from plan experience will be amortized on a separate closed 20 year period.

Indianola Municipal Utilities
SCHEDULE OF CHANGES IN THE UTILITIES' TOTAL OPEB LIABILITY, RELATED RATIOS AND NOTES
Required Supplementary Information
For the last three years

	<u>2020</u>	<u>2019</u>	<u>2018</u>
Service cost	\$ 19,391	\$ 25,760	\$ 29,982
Interest cost	15,115	17,601	13,139
Differences between expected and actual experience	133,829	(37,790)	81,522
Changes in assumptions or other inputs	18,399	10,934	(11,224)
Benefit payments	<u>(39,491)</u>	<u>(29,190)</u>	<u>(13,769)</u>
Net change in OPEB liability	<u>147,243</u>	<u>(12,685)</u>	<u>99,650</u>
OPEB liability, beginning of year	<u>430,815</u>	<u>443,500</u>	<u>343,850</u>
OPEB liability, end of year	<u>\$ 578,058</u>	<u>\$ 430,815</u>	<u>\$ 443,500</u>
Covered-employee payroll	<u>\$2,271,642</u>	<u>\$2,345,471</u>	<u>\$2,271,642</u>
OPEB liability as a percentage of covered-employee payroll	25.45%	18.37%	19.52%

NOTES TO SCHEDULE

Changes in benefit terms

There were no significant changes in benefit terms.

Changes in assumptions

Changes in assumptions and other inputs reflect the effects of changes in the discount rate each period. The following are the discount rates used in each period.

Year ended June 30, 2017	3.58%
Year ended June 30, 2018	3.87%
Year ended June 30, 2019	3.51%
Year ended June 30, 2020	2.66%

See accompanying independent auditor's report.

SUPPLEMENTARY INFORMATION

Indianola Municipal Utilities
SCHEDULE OF OPERATING EXPENSES
Year ended June 30, 2020

	Electric Utility	Water Utility	Fiber Telecommunication Utility	Nonmajor enterprise fund Joint Utility	Eliminations	Total
Plant operations						
Salaries	\$ 43,203	\$ 239,606	\$ 461,972	\$ —	\$ —	\$ 744,781
Payroll taxes	20,597	28,824	32,869	—	—	82,290
IPERS	10,836	69,584	66,972	—	—	147,392
Other employee benefits	900	5,700	3,900	—	—	10,500
Utilities	27,761	144,991	23,108	—	—	195,860
Material and supplies	25,889	89,676	119,789	—	—	235,354
Maintenance and repair	15,721	11,462	125,968	—	—	153,151
Training	605	2,112	2,189	—	—	4,906
Communication services and programming	—	—	827,315	—	—	827,315
Telecommunication infrastructure lease	—	—	368,000	—	(368,000)	—
Professional fees	810	—	411,304	—	—	412,114
Other	—	5,271	63,471	—	—	68,742
Total plant operations	<u>146,322</u>	<u>597,226</u>	<u>2,506,857</u>	<u>—</u>	<u>(368,000)</u>	<u>2,882,405</u>
Plant maintenance						
Salaries	159,545	—	—	—	—	159,545
Payroll taxes	4,084	—	—	—	—	4,084
IPERS	8,920	—	—	—	—	8,920
Fuel	180,458	—	—	—	—	180,458
Material and supplies	—	2,563	—	—	—	2,563
Maintenance and repair	54,600	42,152	—	—	—	96,752
Other	<u>15,211</u>	<u>3,159</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>18,370</u>
Total plant maintenance	<u>422,818</u>	<u>47,874</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>470,692</u>
Purchased energy	<u>9,420,781</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>9,420,781</u>
Depreciation	<u>1,573,060</u>	<u>616,433</u>	<u>414,792</u>	<u>5,899</u>	<u>—</u>	<u>2,610,184</u>
Distribution operation						
Salaries	100,997	191,644	—	—	—	292,641
Payroll taxes	7,504	2,393	—	—	—	9,897
IPERS	9,638	3,242	—	—	—	12,880
Other employee benefits	2,111	—	—	—	—	2,111
Utilities	9,502	—	—	—	—	9,502
Material and supplies	9,040	18,753	—	—	—	27,793
Maintenance and repair	—	15,962	—	—	—	15,962
Training	6,591	—	—	—	—	6,591
Professional fees	—	3,056	—	—	—	3,056
Other	<u>4,555</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>4,555</u>
Total distribution operation	<u>149,938</u>	<u>235,050</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>384,988</u>
Distribution maintenance						
Salaries	636,014	—	—	—	—	636,014
Payroll taxes	37,209	—	—	—	—	37,209
IPERS	137,034	—	—	—	—	137,034
Other employee benefits	5,524	—	—	—	—	5,524
Material and supplies	108,552	—	—	—	—	108,552
Maintenance and repair	<u>61,409</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>61,409</u>
Total distribution maintenance	<u>985,742</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>985,742</u>

See accompanying independent auditor's report.

Indianola Municipal Utilities
SCHEDULE OF OPERATING EXPENSES (continued)
Year ended June 30, 2020

	<u>Electric Utility</u>	<u>Water Utility</u>	<u>Fiber Telecommunication Utility</u>	<u>Nonmajor enterprise fund Joint Utility</u>	<u>Eliminations</u>	<u>Total</u>
Transmission operation and maintenance						
Salaries	3,593	—	—	—	—	3,593
Payroll taxes	89	—	—	—	—	89
IPERS	512	—	—	—	—	512
Maintenance and repair	3,121	—	—	—	—	3,121
Other	4,565	—	—	—	—	4,565
Total transmission operation and maintenance	<u>11,880</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>11,880</u>
Meter reading						
Salaries	27,921	25,589	—	—	—	53,510
Payroll taxes	1,658	1,562	—	—	—	3,220
IPERS	2,139	2,014	—	—	—	4,153
Total meter reading	<u>31,718</u>	<u>29,165</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>60,883</u>
Administration and general						
Salaries	—	—	—	426,257	—	426,257
Payroll taxes	—	—	—	31,739	—	31,739
IPERS	—	—	—	85,919	—	85,919
Other employee benefits	2,277	798	629	6,551	—	10,255
Utilities	—	—	—	11,317	—	11,317
Material and supplies	47	6,924	—	6,771	—	13,742
Maintenance and repair	50,013	16,003	—	43,413	—	109,429
Training	190	—	270	846	—	1,306
Office	—	—	47,879	100,839	—	148,718
Other	1,608	—	16,557	—	—	18,165
Accounting and collections – transfers to Joint Utility	397,408	181,660	181,659	—	(760,727)	—
Payments in lieu of property taxes	708,035	65,834	30,395	—	—	804,264
Transfers to City for Clerk's operations	184,100	42,400	22,900	—	—	249,400
Insurance	115,444	30,624	15,402	7,934	—	169,404
Group insurance	260,651	140,794	157,102	83,264	—	641,811
Professional fees	59,978	66,023	1,299	—	—	127,300
Legal fees and publications	11,748	1,006	784	18,220	—	31,758
Dues and subscriptions	71,089	—	2,694	694	—	74,477
Energy efficiency programs	9,417	—	—	—	—	9,417
Miscellaneous	1,831	—	8,663	14,939	—	25,433
Total administrative and general	<u>1,873,836</u>	<u>552,066</u>	<u>486,233</u>	<u>838,703</u>	<u>(760,727)</u>	<u>2,990,111</u>
Total operating expenses	<u>\$14,616,095</u>	<u>\$ 2,077,814</u>	<u>\$ 3,407,882</u>	<u>\$ 844,602</u>	<u>\$ (1,128,727)</u>	<u>\$19,817,666</u>

See accompanying independent auditor's report.



**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON
AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE
WITH GOVERNMENT AUDITING STANDARDS**

Board of Trustees
Indianola Municipal Utilities
Indianola, Iowa

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the business-type activities, each major fund, and the aggregate remaining fund information of Indianola Municipal Utilities as of and for the year ended June 30, 2020, and the related notes to financial statements, which collectively comprise the Utilities' basic financial statements, and have issued our report thereon dated March 8, 2021.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered Indianola Municipal Utilities' internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Utilities' internal control. Accordingly, we do not express an opinion on the effectiveness of the Utilities' internal control.

Our consideration of internal control was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses or, significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that have not been identified. However, as described in the accompanying schedule of findings, we did identify certain deficiencies in internal control that we consider to be material weaknesses and significant deficiencies.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the Utilities' financial statements will not be prevented, or detected and corrected on a timely basis. We consider the deficiencies described in the accompanying schedule of findings as items 2020-006 through 2020-009 to be material weaknesses.

A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. We consider the deficiencies described in the accompanying schedule of findings as items 2020-001 through 2020-005 to be significant deficiencies.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Indianola Municipal Utilities' financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*. However, we noted certain immaterial instances of noncompliance that are described in the accompanying schedule of findings.

Comments involving statutory and other legal matters about the Utilities' operations for the year ended June 30, 2020 are based exclusively on knowledge obtained from procedures performed during our audit of the financial statements of the Utilities. Since our audit was based on tests and samples, not all transactions that might have had an impact on the comments were necessarily audited. The comments involving statutory and other legal matters are not intended to constitute legal interpretations of those statutes.

Indianola Municipal Utilities' Responses to the Findings

The Utilities' responses to the findings identified in our audit are described in the accompanying schedule of findings. The Utilities' responses were not subject to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on them.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Utilities' internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Utilities' internal control and compliance. Accordingly, this communication is not suitable for any other purpose.


DENMAN & COMPANY, LLP

West Des Moines, Iowa
March 8, 2021

**Indianola Municipal Utilities
SCHEDULE OF FINDINGS
Year ended June 30, 2020**

Part I—Findings Related to the Financial Statements

INTERNAL CONTROL DEFICIENCIES

**2020-001 SEGREGATION OF DUTIES
Significant deficiency**

Criteria

Management is responsible for establishing and maintaining internal control. A good system of internal control provides for adequate segregation of duties so no one individual handles a transaction from its inception to completion. In order to maintain proper internal control, duties should be segregated so the authorization, custody and recording of transactions are not under the control of the same employee. This segregation of duties helps prevent losses from employee error or dishonesty and maximizes the accuracy of the Utilities' financial statements.

Condition

One staff member is responsible for signing checks and reconciling the bank statement. The staff member is also responsible for general ledger maintenance and can generate checks. These are considered incompatible duties.

Cause

The Utilities has a limited number of employees and procedures have not been designed to adequately segregate duties or provide compensating controls through additional oversight of transactions and processes.

Effect

Inadequate segregation of duties could adversely affect the Utilities' ability to prevent or detect and correct misstatements, errors or misappropriation of assets on a timely basis by employees in the normal course of performing their assigned functions.

Recommendation

Management should strive to segregate incompatible duties to the extent possible with available staff. Mitigating controls, such as an independent review of bank reconciliations may further support adequate segregation of duties.

Response

Staff will extend the review and documentation processes and put controls into place that will limit the incompatible duties noted above.

Conclusion

Response accepted.

Indianola Municipal Utilities
SCHEDULE OF FINDINGS (continued)
Year ended June 30, 2020

SECTION I – FINANCIAL STATEMENT FINDINGS

INTERNAL CONTROL DEFICIENCIES

2020-002 CREDIT CARDS
Significant deficiency

Criteria

Internal controls over safeguarding assets constitutes a process, effected by an entity's governing body, management and other personnel designated to provide reasonable assurance regarding prevention or timely detection of unauthorized transactions and safeguarding assets from error or misappropriation. Such processes include establishing policies addressing proper asset use and proper support documentation.

Condition

We identified the following conditions pertaining to the Utilities' usage of credit cards:

- In one of ten transactions reviewed, supporting documentation provided was not sufficient for the auditor to understand the corporate purpose of the expenditure.
- In seven of ten transactions reviewed, evidence of supervisory review was not maintained. Auditor noted that the lack of such evidence may be a result of system limitations with the Utilities' credit card recordkeeping system.
- In one of ten transactions reviewed, the transaction's public purpose was not documented. It was further noted that the Utilities' does not have a public purpose policy in which to evaluate the transaction.
- Of the ten transactions reviewed, three were for employee meals while on Utilities business. Of the three meals reviewed, one of the meals was at a cost in excess of the Utilities' approved meal policy.
- Processes pertaining to credit card usage and approval do not provide the Finance Department sufficient opportunity to review and approve transactions.

Cause

The Utilities' processes pertaining to purchases made by credit card are not sufficient to ensure adequate compliance with Utilities' policies or financial reporting.

Effect

Utilities expenditures may not be sufficiently supported. Expenditures may have occurred which are not in compliance with Utilities policies.

Recommendation

The Utilities should implement additional controls over credit card usage, including a review of transactions for appropriateness and support by the finance department. Additional training may be necessary for staff to understand Utilities policies pertaining to meal purchases. The Utilities should consider implementing a public purpose policy statement.

Response

The utility will institute additional independent review by Finance staff and implement organization-wide training to ensure compliance with utility policies. Additionally, the utility will adopt a public purpose policy

Conclusion

Response accepted.

**Indianola Municipal Utilities
SCHEDULE OF FINDINGS (continued)
Year ended June 30, 2020**

SECTION I – FINANCIAL STATEMENT FINDINGS

INTERNAL CONTROL DEFICIENCIES

**2020-003 REVIEW OF MANUAL UTILITY ACCOUNT ADJUSTMENTS
Significant deficiency**

Criteria

In certain instances it may be necessary for Utilities staff to manually adjust customer's account balances. Such manual adjustments should be reviewed periodically by an independent person for propriety and approved.

Condition

Utilities staff are not currently producing or reviewing a report of manual adjustments to customer's accounts.

Cause

Lack of review of such information is the result of staff oversight.

Effect

Adjustments or corrections to a customer's account may occur without sufficient oversight. Trends in customer account corrections may not be identified by management timely.

Recommendation

A report of manual adjustments to customer balances should be produced periodically and reviewed by an independent person for propriety.

Response

This deficiency has been addressed with a change in staff oversight and by adding an additional layer of review outside of the original transaction department.

Conclusion

Response accepted.

**Indianola Municipal Utilities
SCHEDULE OF FINDINGS (continued)
Year ended June 30, 2020**

SECTION I – FINANCIAL STATEMENT FINDINGS

INTERNAL CONTROL DEFICIENCIES

2020-004 APPROVED UTILITY RATES
Significant deficiency

Criteria

Utility rates are set by City Council Ordinance (for wastewater, storm water, and recycling fees) and by Board of Trustee Resolution (for electric, water, and telecommunication services). Staff are responsible for enacting and charging customer's the rates approved by the applicable governing body.

Condition

Rate increases approved by the City Council and Board of Trustees applicable for customers' July 2020 invoice were not enacted by staff as of the date approved by the governing bodies.

Cause

Error was the result of staff oversight.

Effect

Customers were under billed for utility services. The Utilities and the City of Indianola may have lost out on revenue.

Recommendation

Processes should be implemented to ensure that utility rates are enacted in accordance with the Ordinances and Resolutions approved by the governing bodies.

Response

The utility has implemented additional training for responsible staff and has added an additional layer of review by staff outside of the original transaction department.

Conclusion

Response accepted.

**Indianola Municipal Utilities
SCHEDULE OF FINDINGS (continued)
Year ended June 30, 2020**

SECTION I – FINANCIAL STATEMENT FINDINGS

INTERNAL CONTROL DEFICIENCIES

**2020-005 ELECTRICAL INSTALLATION INVOICING
Significant deficiency**

Criteria

The Electrical Utility installs electrical infrastructure for new City developments and bills the developer for the installation. Administrative staff are responsible for tracking the status of outstanding invoices and ensuring payments are made timely by developers and unpaid balances are pursued.

Condition

We identified one instance in which an electrical installation was invoiced to a developer in November 2019, totaling approximately \$70,000, which remained unpaid as of the date of our audit testing in December 2020. Staff were unaware of the unpaid balance and do not appear to have an established process to monitor outstanding invoices or follow-up on unpaid balances.

Cause

Processes have not been established to provide staff a mechanism to monitor electrical installation invoices and ensure the timely and accurate payment of these invoices.

Effect

The Utilities may not receive payment for services performed.

Recommendation

We recommend procedures be established to monitor outstanding electrical installation invoices to ensure timely and accurate payment. The responsibility for this process should be assigned to specific staff members and sufficient oversight should be provided from management to ensure staff are completing this function.

Response

This oversight is related to previous system limitations. The utility's current system has an established process to monitor outstanding invoices and follow-up on unpaid balances. Accounts Receivable staff will review outstanding balances on a periodic basis.

Conclusion

Response accepted.

**Indianola Municipal Utilities
SCHEDULE OF FINDINGS (continued)
Year ended June 30, 2020**

SECTION I – FINANCIAL STATEMENT FINDINGS

INTERNAL CONTROL DEFICIENCIES

**2020-006 USAGE AUDIT LOG REVIEW
Material weakness**

Criteria

Staff should review customer utility usage for reasonableness to ensure obvious irregularities are identified and corrected prior to billings being submitted to customers.

Condition

Usage audit logs were not reviewed, or the review was not effective, for several months during the fiscal year, resulting in some instances in which inaccurate bills were submitted to customers. In one instance, a customer was erroneously charged, and funds were withdrawn from the customer's account, totaling approximately \$178,000 in excess of the customer's actual utility usage.

Cause

Staff were not adequately trained on these review processes. There were not sufficient compensating controls to ensure usage logs were reviewed prior to billings being finalized.

Effect

In certain instances, customers received inaccurate utility bills and the Utilities collected from customers incorrect utility charges.

Recommendation

Additional training may be necessary for staff to ensure all material review processes are performed prior to billings being submitted to customers for payment. Additional controls should be implemented to prevent bills being submitted without the completion of such review procedures.

Response

The utility has formalized processes and training in the new billing system that will help prevent similar occurrences in the future. More effective review is now in place where electric and water staff are involved in ensuring that bills are reflective of the meters' reported usage.

Conclusion

Response accepted.

**Indianola Municipal Utilities
SCHEDULE OF FINDINGS (continued)
Year ended June 30, 2020**

SECTION I – FINANCIAL STATEMENT FINDINGS

INTERNAL CONTROL DEFICIENCIES

**2020-007 DAILY TRANSACTION RECONCILIATION
Material weakness**

Criteria

To ensure payments are posted correctly to customer accounts, a transaction log is generated at the end of each day for all payments received on customer's accounts, which is reconciled to the daily bank deposit and payments posted to the Utilities' financial system.

Condition

We reviewed eight daily transaction reconciliations during our audit procedures and noted consistent reconciling discrepancies which were not identified and cleared through the reconciliation process. In addition, we identified instances in which the daily reconciliation was not performed timely or the reconciliation was not performed/retained and one instance in which a customer's payment was applied to the customer's account twice.

Cause

Staff performing the reconciliation were not sufficiently reviewing the reconciliation to validate its accuracy. Staff may not have adequately understood the control purpose of the procedure being performed.

Effect

The Utilities cannot provide evidence in all instances customer payments were applied accurately or timely. Customer's billings may have inaccuracies due to incorrectly applied payments.

Recommendation

Transaction logs should be reconciled daily and all reconciling discrepancies investigated and cleared. The reconciliations should be reviewed by an independent person to ensure the process is being performed timely and is working as intended.

Response

The daily reconciliation process has been improved by having staff outside of the cash collection process reviewing and reconciling system reports to deposit transactions. Additionally, we have set process expectations to ensure accuracy and to identify any discrepancies in a timely manner.

Conclusion

Response accepted.

**Indianola Municipal Utilities
SCHEDULE OF FINDINGS (continued)
Year ended June 30, 2020**

SECTION I – FINANCIAL STATEMENT FINDINGS

INTERNAL CONTROL DEFICIENCIES

**2020-008 FINANCIAL SYSTEM
Material weakness**

Criteria

Governmental entities frequently utilize fund accounting, which segregates accounting transactions by function or purpose into distinct, self-balancing sets of accounts. Government accounting systems frequently utilize a separate pooled cash fund in order to record transactions among and between each of the governmental entity's reported funds. However, the pooled cash fund does not report any distinct transactions itself as it is merely utilized as a clearing account.

Condition

Entries were posted to the accounting system which did not balance at the individual fund level.

In addition, within the Utilities' pooled cash accounts, financial transactions were recorded which were not recorded to any of the Utilities' reportable funds.

Cause

The Utilities underwent a financial system conversion in the current year. The new accounting system was developed in a manner which did not prevent staff from posting entries which did not balance at the fund level.

In addition, during development, financial transactions were mapped in a manner to report transactions within the pooled cash fund without an offsetting recording to a reportable fund.

Effect

The Utilities' financial statements did not balance prior to adjustments and corrections recommended by the audit. In addition, material transactions were being excluded from the Utilities' internal financial statements prior to proposed audit corrections.

Recommendation

The developers should make adjustments to the financial system's source code to prevent staff from having the ability to post financial transactions which do not balance at the fund level.

No transactions should be mapped to the pooled cash fund without an offsetting transaction also being recorded within a reportable fund. Adjustments to the Utilities' financial system will be necessary to ensure the accurate reporting of future transactions.

Response

This deficiency has been addressed with the system developer and updates have been applied to prevent similar instances from occurring in the future.

Conclusion

Response accepted

**Indianola Municipal Utilities
SCHEDULE OF FINDINGS (continued)
Year ended June 30, 2020**

SECTION I – FINANCIAL STATEMENT FINDINGS

INTERNAL CONTROL DEFICIENCIES

**2020-009 CASH TO ACCRUAL ADJUSTMENTS
Material Weakness**

Criteria

The Utilities reports its financial statements in accordance with generally accepted accounting principles, which reports transactions as of the date the transaction occurred, as opposed to the date in which cash is transacted. The Utilities retains its internal financial statements on the cash basis and provides the auditor information sufficient to post the entries necessary to migrate the Utilities' financials from the cash basis to the accrual basis of accounting.

Condition

Accrual information provided to the auditor was frequently inaccurate or not available until audit inquiry. Staff were not maintaining the financial records necessary to report the Utilities' financial statements on the full accrual basis of accounting.

Cause

The Utilities' current financial reporting processes and controls pertaining to accrual basis information is not sufficient to ensure the completeness and accuracy of the information. The Utilities may not have staff within its financial department who are sufficiently trained in generally accepted accounting principles to ensure the completeness and accuracy of this financial data.

Effect

The Utilities' internal financial statements were materially misstated.

Recommendation

We would recommend the Utilities begin reporting on the full-accrual basis of accounting within its internal financial statements. Until that process can be achieved, the Utilities should develop additional procedures to ensure the timely and accurate accumulation of accrual-basis financial records. Additional training may be necessary for staff in order to achieve this objective.

Response

The process to move to full-accrual basis of accounting and financial reporting is now underway with additional education and training of generally accepted accounting principles occurring concurrently with the transition. Education and training for staff will be ongoing.

Conclusion

Response accepted.

INSTANCES OF NONCOMPLIANCE

No matters were noted.

**Indianola Municipal Utilities
SCHEDULE OF FINDINGS (continued)
Year ended June 30, 2020**

Part II—Findings Related to Required Statutory Reporting

20-II-A CERTIFIED BUDGET

Disbursements during the year ended June 30, 2020 did not exceed the amounts budgeted.

20-II-B QUESTIONABLE EXPENSES

No disbursements that may not meet the requirements of public purpose as defined in an Attorney General's Opinion dated April 25, 1979 were noted.

20-II-C TRAVEL EXPENSE

No expenditures of Utilities money for travel expenses of spouses of Utilities officials or employees were noted.

20-II-D BUSINESS TRANSACTIONS

We noted no business transactions between the Utilities and Utilities' officials or employees in excess of \$1,500.

20-II-E RESTRICTED DONOR ACTIVITY

No transactions were noted between the Utilities, Utilities' officials, Utilities' employees and restricted donors, in compliance with Chapter 65B of the Code of Iowa.

20-II-F BOND COVERAGE

Surety bond coverage of Utilities officials and employees is in accordance with statutory provisions. The amount of coverage should be reviewed annually to ensure that the coverage is adequate for current operations.

20-II-G BOARD MINUTES

We noted no transactions requiring Trustee approval which had not been approved in the Trustee minutes

20-II-H DEPOSITS AND INVESTMENTS

No instances of noncompliance with the deposit and investment provisions of Chapters 12B and 12C of the Code of Iowa and the Utilities' investment policy were noted.

**Indianola Municipal Utilities
SCHEDULE OF FINDINGS (continued)
Year ended June 30, 2020**

Part II—Findings Related to Required Statutory Reporting (continued)

20-II-I REVENUE BONDS AND NOTES

No instances of noncompliance with the revenue bond and note resolutions were noted, except as follows:

The Fiber Telecommunication's sinking fund was underfunded by approximately \$40,000 as of June 30, 2020.

Recommendation

The Utilities should transfer funds to the Fiber Telecommunication sinking fund to ensure it is in compliance with the bond documents. Utilities staff should review the balances of the sinking fund on an ongoing basis to ensure future compliance.

Response

A sinking fund will be established and will be reviewed on an ongoing basis.

Conclusion

Response accepted.

20-II-J TELECOMMUNICATIONS SERVICES

No instances of noncompliance with Chapter 388.10 of the Code of Iowa were noted.

20-II-K FINANCIAL CONDITION

At June 30, 2020, the Utilities' Fiber Telecommunication fund held a deficit fund balance of \$3,721,982.

Recommendation

The Utilities should investigate alternatives to eliminate the deficit and return the fund to a sound financial position.

Response

This deficit balance was expected in the start-up status and is less than the business plan projection at this time. Staff continues to budget effectively and appropriately to improve the fiscal position with an emphasis on developing a positive fund balance. This is expected to take several years.

Conclusion

Response accepted.

Information

Subject

Enter into closed session in accordance with Iowa Code Section 21.5 (1)(i) to evaluate the professional competency of an individual whose appointment, hiring, performance, or discharge is being considered when necessary to prevent needless and irreparable injury to that individual's reputation and that individual requests a closed session.

Information

Roll call to enter and exit closed session is in order.

Fiscal Impact

Attachments

No file(s) attached.
