PROPOSAL SUBMITTED BY:		
Brandt Excavating Inc.		
Contractor's Name		
385 E Hoover St		
Street		P.O. Box
Morris	IL	60450
	State	Zip Code



CITY OF AURORA KANE, DUPAGE, KENDALL, & WILL COUNTIES STATE OF ILLINOIS

PROPOSAL AND SPECIFICATIONS FOR

2022 WATER & SEWER DIVISION EMERGENCY REPAIR PROGRAM Bid 21-71

AURORA, ILLINOIS

Bids Due October 27, 2021

PREPARED BY CITY OF AURORA DIVISION of ENGINEERING 77 S. BROADWAY AVENUE AURORA, ILLINOIS 60505

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City of Aurora Bid 21-71 NOTICE TO BIDDERS

Time and Place of Opening of Bids

Sealed proposals for the improvement described below will be received at the office of the Purchasing Division, 44 E. Downer Place, Aurora, IL 60507 until 2:00 o'clock P.M., October 27, 2021. Quotes will not be opened publicly.

Description of Work

Name: 2022 Water & Sewer Division Emergency Repair Program

Location: Various locations.

<u>Proposed Improvement:</u> The Water & Sewer Repair contract will be for on-call services to repair storm, sanitary, combined sewers, and water main during 2022 at various locations throughout the City of Aurora. Multiple contractors will be prequalified based on their areas of expertise and contract unit prices

Bidder Instructions

- 1. Plans and proposal forms will be available on Monday, October 11th, 2021 and may be obtained at the Purchasing Office, 44 East Downer Place, Aurora, Illinois 60507 during normal business hours, by calling 630-256-3550 or online at: https://www.aurora-il.org/bids.aspx. Contact Person: Kurt Muth (630) 256-3200.
- 2. The Awarding Authority reserves the right to waive technicalities and to reject any or all proposals as provided in the Special Provisions for Bidding Requirements and Conditions for Contract Proposals contained in the "Supplemental Specifications and Recurring Special Provisions".
- 3. Any bidder who owes the City money may be disqualified at the City's discretion.
- 4. The City encourages minority business firms to submit proposals and encourages the successful contract bidder to utilize minority businesses as subcontractors for supplies, equipment, services, and construction.
- 5. Submission of a bid shall be conclusive assurance and warranty the bidder has examined the plans and understands all requirements for the performance of work. The bidder will be responsible for all errors in the proposal resulting from failure or neglect to conduct an in depth examination. The Awarding Authority will, in no case be responsible for any costs, expenses, losses or changes in anticipated profits resulting from such failure or neglect of the bidder.
- 6. The City of Aurora has a local preference ordinance that would apply to this contract.

By Order of City Clerk City of Aurora

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CITY OF AURORA SPECIAL PROVISIONS

The following Special Provisions supplement the "General Specifications," the "IDOT Standard Specifications For Road and Bridge Construction," the City of Aurora's "Standard Specifications for Improvements," the "Supplemental Specifications and Recurring Special Provisions," the "Standard Specifications for Water And Sewer Main Construction in Illinois, Current Edition," the "Standard Specifications for Traffic Control Items," and the latest edition of the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways" in effect on the date of invitation for proposals. These special provisions apply to and govern the proposed improvement designated as the 2022 Water & Sewer Emergency Repair Program, Bid 21-71 and in case of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and shall govern.

SP 1 - DESCRIPTION OF PROJECT:

This project consists of the installation of sanitary or water main improvements at various locations throughout the City. The purpose of this bidding process is to establish a Contractors availability list with set per item costs to enable the City to complete projects which can't be performed in-house as the need arises based on competitive bidding and timely response to the need. Plans, grades, and strategies for each improvement shall be prepared by the City of Aurora Engineering Department and coordinated with the Contractor prior to the performance of any such work.

It should be noted that "The submission of this proposal shall not bind the Contractor to the performance of work under this proposal. The Contractor(s) deemed to be in the best interests of the City, for whatever specific project the City may be considering, shall be given an opportunity to accept or decline projects on a case by case basis."

SP 2 - RESPONSIBILITY OF WORK:

During the progress of the work the Contractor shall assume total risk and liability, and will be responsible of any and all damages to the work, or to persons, or to public or private property caused by, or in any way resulting from doing the work, including actions of Subcontractors or Material Suppliers.

SP 3 - WATER FOR CONSTRUCTION PURPOSES:

City water for construction purposes will be available to the Contractor at his cost according to the prevailing rates in effect at the time of usage. The Contractor shall secure a city water meter from the Water and Sewer Maintenance Department at 649 South River Street, Aurora, Illinois by leaving a deposit of \$1,750.00 in the form of a check. The use of city water without a city issued meter is illegal. The Contractor will be fined \$1,000.00 for each unauthorized use of city water.

SP 4 - TRAFFIC CONTROL:

Traffic control shall be in accordance with the applicable sections of the "IDOT Standard Specifications for Road and Bridge Construction," the "Recurring Special Provisions and Supplemental Specifications," the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways," and any special details and Highway Standards contained herein and in the Traffic Specifications or Highway Specifications. Special attention is called to Article 107.09 of the "Standard Specifications for Road and Bridge Construction."

All orange signs used shall be fluorescent orange in color. Deteriorated, damaged, or signs with non-original material on the front surface will not be allowed.

Prior to the start of work the Contractor shall have a sufficient number of barricades, signs, and flagmen at the jobsite for the scheduled work. If satisfactory traffic control as determined by the Engineer is not in place, the Engineer shall order the work to be halted. Traffic control devices shall not be removed without prior written notice and approval of the Engineer.

The Contractor shall obtain, erect, maintain, and remove all signs, barricades, flagmen, and other traffic control devices as may be necessary for the purposes of regulating, warning, or guiding traffic.

This work shall be paid for at the contract unit prices per day for "Arrowboard", "Barricades, Type 2 w/ Steady Burn Lights", "Advanced Warning Signs" and per hour for "Flagger".

SP 5 - PUBLIC SAFETY AND CONVENIENCE:

The Contractor shall maintain drives, entrances, and side roads along the proposed improvement to allow emergency and local vehicle access to all adjacent properties. This access should not allow the passage of non-local vehicular traffic, which should abide by the approved traffic control plan. Interference with traffic movements and inconvenience to abutting property owners and the public shall be kept to a minimum. The Contractor shall maintain at least one lane open to traffic at all times for emergency vehicles on all streets affected by the construction of these improvements. Adequate use of flaggers and other traffic control devices shall be used to permit such arrangements during working hours.

<u>SP 6 - RESPONSIBILITY FOR CONSTRUCTION SAFETY, SHORING AND CONSTRUCTION</u> METHODS:

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions for the safety of; and shall provide the necessary protection to prevent damage, injury or loss to:

- (a) All employees on the work and other persons who may be affected thereby.
- (b) All work and materials or equipment to be incorporated therein, whether in storage on or off the site.
- (c) Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

The Contractor shall be responsible for complying with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss. The Contractor shall be responsible for erecting and maintaining, as required by the conditions and progress of the work, all necessary safeguards for its safety and protection, including tight sheeting or shoring of the trench. He shall notify owners of adjacent utilities when prosecution of the work may affect them. All damage, injury, or loss to any property referred to in paragraph (a) or (b) caused, directly or indirectly, in whole or in part, by any Contractor or Subcontractor or anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, shall be remedied by the Contractor. The Contractor's duties and responsibilities for the safety and protection of all work shall continue until such time as all the work is completed and acceptable. Any damages shall be repaired in a timely manner. Any and all interruptions of essential utilities such as water, electricity, or gas shall be corrected that same day and before the foreman leaves the site. (See Guarantee & Maintenance of Work for time of acceptance.)

SP 7 - WATERMAIN AND WATER SERVICE CROSSINGS:

Crossing of storm sewers with water mains and services shall comply with Sections 31-1.02C(1), and 31-1.02C(2), and Section 20-2.16 of the "Standard Specifications for Water and Sewer Main Construction in Illinois." In the event of a break in the water main, the Contractor shall replace said main with new Ductile Iron Pipe Class 52 (cement lined) across the full width of the trench and an additional distance on each side of the trench so that the connection to the existing main is on solid ground. However, in no case shall this additional distance on each side of the trench for said connections be less than eighteen inches (18"). All connections shall be made using a cast iron transition sleeve with transition gaskets for varying outside diameters of pipe complying with mechanical joint cast iron fittings ANSI-A21.10 and AWWA C-110 Specifications, and said fittings shall not be less than twelve inches (12") in length.

SP 8 - SAW CUTTING:

When called for on the plans or where directed by the Engineer, the Contractor shall saw-cut existing bituminous concrete and/or Portland cement concrete pavement full depth to penetrate the base and sub-base, so as to completely separate the existing pavement to be removed from that to remain. It is the Contractor's responsibility to determine the thickness of the existing pavement and whether or not it contains reinforcement.

The work shall be performed in such a manner that a straight, vertical joint will be obtained. The saw cutting shall be done prior to the commencement of removal operations. Care shall also be taken by the Contractor so as not to damage the remaining pavement or surface directly adjacent to the pavement or surface to be removed. Any damage to the existing pavement or surface resulting from removal operations shall be repaired at the Contractor's expense, as directed by the Engineer.

The saw cutting shall be performed on both sides of the trenches for the proposed underground utilities. This work shall be performed prior to the commencement of the installation of the improvements as specified. It shall be the Contractor's responsibility to lay out the locations for the proposed saw cuts.

This work shall not be paid for separately, but shall be considered incidental to the contract unit prices. Saw cutting required for items not listed above or designated elsewhere in the special provisions shall be considered incidental to the project.

SP 9 - SANITARY SEWER ADJUST 8" OR LESS:

This work shall consist of the removal and replacement of existing sanitary services, enabling the installation of the proposed utilities, in accordance with the details and as directed by the Engineer in the field.

The locations for this work may or may not be shown on the plans. In the event that an unforeseen conflict may occur between the proposed work and an existing sanitary sewer or service, the Contractor will not be entitled to any additional compensation other than as provided within this special provision.

The replacement of the sanitary service shall be with PVC (polyvinyl chloride) pipe, SDR 26, with C-900 joints, of the size matching the existing sanitary service, but not less than six-inch (6") diameter. The replacement of the sanitary service shall include the supplying and installation of non-shear mission couplings as shown on the detail on the plans, and any PVC fittings that may be necessary.

This work shall be paid for at the contract unit price per LINEAL FOOT for SANITARY SEWER ADJUST 8" OR LESS, and shall include all excavation, dewatering, and/or by-pass pumping required to perform the work as specified.

SP 10 - SANITARY SEWER ADJUST OVER 8":

This work shall consist of the removal and replacement of existing sanitary services, enabling the installation of the proposed utilities, in accordance with the details and as directed by the Engineer in the field.

The locations for this work may or may not be shown on the plans. In the event that an unforeseen conflict may occur between the proposed work and an existing sanitary sewer or service, the Contractor will not be entitled to any additional compensation other than as provided within this special provision.

The replacement of the sanitary sewer shall be with PVC (polyvinyl chloride) pipe, SDR 26, with C-900 joints, of the size matching the existing sanitary sewer, but not less than eight-inch (8") diameter. The replacement of the sanitary sewer shall include the supplying and installation of non-shear mission couplings as shown on the detail on the plans, and any PVC fittings that may be necessary.

Backfill and bedding shall be in accordance with "Excavation & Backfill of Sanitary Sewer Detail" shown within these plans.

This item shall be paid for at contract unit price per LINEAL FOOT for SANITARY SEWER ADJUST OVER 8", measured in place, which price shall be payment in full for all labor, materials, and equipment necessary to complete this item in accordance with the plans and specifications.

SP 11 – RCP (REINFORCED CONCRETE PIPE) STORM SEWERS:

This item shall consist of the supplying and installation of reinforced concrete pipe (RCP) conforming to ASTM C-76 and AASHTO M 170M, Class IV specifications by methods and with materials conforming to Articles 550 and 1040 of the "Standard Specifications for Road and Bridge Construction" and Section 31 of the "Standard Specifications for Water and Sewer Construction in Illinois."

<u>Laying of Pipe</u>: The pipe shall be installed so that the entire length of pipe shall have full bearing. The bedding shall be shaped such that the pipe is uniformly supported over its entire length.

Installation of the pipe shall be accomplished to line and grade in the trench only after the bedding has been completely de-watered and is free of mud, loose silt, or foreign material. All foreign material, sedimentation, and soil erosion shall be kept out of the pipe.

Dirt or other foreign material shall be prevented from entering the pipe or pipe joint during handling or laying operations and any pipe that has been installed with dirt or foreign material in it shall be thoroughly cleaned. At times when pipe laying is not in progress, and at the end of each working day, the open ends of the pipe shall be closed by a water-tight plug to ensure cleanliness inside the pipe and prevent sediment or soil erosion from entering and flowing downstream in the pipe.

Installation of RCP shall be paid according to the fill height over the top of the pipe and fill height shall be either a) 5' and less or b) greater than 5'.

<u>Joints:</u> Unless otherwise specified, joints for RCP shall be tongue and groove and shall be fitted with a rubber "O" ring gasket in conformance with ASTM C-361.

Measurement and Payment: This item shall be paid for at the contract unit price bid per LINEAL FOOT for RCP (Reinforced Concrete Pipe) of the diameter and depth as specified above, measured in place, which price shall be payment in full for all labor, materials, and equipment necessary to complete this item in accordance with the plans and specifications.

SP 12 - MANHOLE TYPE A, 4' - 6' DIAMETER:

Manholes for storm sewers shall be precast reinforced concrete.

Each structure shall have four (4) two and one-half $(2\frac{1}{2})$ diameter weep holes, evenly spaced as shown on the details included in the plans. A twelve-inch (12") square of drainage fabric shall be placed over each weep hole on the outside of the structure.

Payment will be made at the contract unit price per VERTICAL FOOT for each MANHOLE, of the type and size specified, measured in place from the base to top of structure but not including adjusting rings and frame, which price shall be payment in full for all labor, materials and equipment necessary to complete this item in accordance with the plans and specifications.

SP 13 - CATCH BASIN TYPE B, 2' - 4' DIAMETER:

Catch basins for storm sewers shall be precast reinforced concrete.

Each structure shall have four (4) two and one-half $(2\frac{1}{2})$ diameter weep holes, evenly spaced. A twelve inch (12) square section of drainage fabric shall be placed over each weep hole on the outside structure.

This item shall be paid for at contract unit price per VERTICAL FOOT for each CATCH BASIN, of the type and size specified, measured in place from the base to top of structure but not including adjusting rings and frame, which price shall be payment in full for all labor, materials and equipment necessary to complete this item in accordance with the plans and specifications.

SP 14 - DISPOSAL OF DEBRIS AND EXCAVATED MATERIAL:

The Contractor shall be responsible for removal and disposal of all waste material, asphalt, grindings, concrete, stone, dirt or debris generated in the course of the work to a facility permitted to accept such waste. The Contractor shall load the removed pieces of curb and gutter, sidewalk, street pavements, etc. directly onto trucks, haul it away and dispose of it. The temporary storing of excavated materials on the parkway and/or street and re-handling them later for disposal will not be allowed.

This work shall not be paid for separately, but shall be considered incidental to the project.

SP 15 - HAULING MATERIAL:

Periodically the City of Aurora Water and Sewer Department will need spoils transported from various staging areas throughout City to a licensed landfill or CCDD facility.

This work shall be performed as needed utilizing the "Equipment and Labor Hourly Rates" submitted within this proposal, and as approved by the Director of the Water and Sewer Department.

SP 16 - FIRE HYDRANT RELOCATE:

This item shall consist of the cutting of the feeder line, removal of the existing fire hydrant and auxiliary valve as an integral unit and installation of the same unit at new location, and flushing of hydrant at the location directed by the Engineer.

The Contractor shall add additional length of water main as required to locate the fire hydrant to within two (2') to three (3') feet from the back of curb and adjust the fire hydrant to the new elevation required by proposed improvement. Any additional water main and the vertical adjustment will not be paid for separately but shall be considered incidental to Fire Hydrant Relocate.

This item shall be paid for at the contract unit price EACH for FIRE HYDRANT RELOCATE, which shall be payment in full for all labor, materials, and equipment necessary to complete this item in accordance with the plans and specifications.

SP 17 - WATER MAIN (D.I.P. CLASS 52):

Specification references made herein for manufactured materials such as pipe, fittings, valves and hydrants refer to designations for AWWA, or to ANSI, as effective on the date of call for bids.

This item shall consist of the installation of ductile iron water mains, Class 52, as indicated on the plans, including: all excavation; furnishing and installing pipe, joint materials, and polyethylene wrap; thrust blocks; bedding; cover; backfilling; hydrostatic testing; disinfecting; removal of surplus excavated material; and all cleanup as described herein.

Ductile Iron Pipe (DIP) shall be used for all water mains in this project. Ductile iron pipe for water mains shall conform to ANSI Specification A21.51 or AWWA C151. Class 52, thickness designation, casting, marking, testing, etc. shall be provided in accordance with applicable ANSI or AWWA standards. All ductile iron pipe shall be protected against corrosion with polyethylene wrapping as herein specified.

Cement lining shall be included in accordance with ANSI A21.4 (AWWA C-104). All pipe, specials and fittings shall be cement mortar lined in the shop with centrifugally spun lining in accordance with AWWA C205-85 or cement mortar lined mechanically in accordance with AWWA C602-83. Use ASTM C150, Type II cement for

lining. Field joints shall be made in accordance with AWWA C205, Appendix A.

All fittings shall conform to the latest ANSI specifications A21.10 for short body fittings, twelve inches (12") and less, and AWWA C110 for fittings fourteen inches (14") and larger.

Joints shall be either mechanical or push-on (rubber gasket) type as recommended by the pipe manufacturer. Restrained joints shall be of the type recommended by the pipe manufacturer and approved by the Engineer. Backfilling and bedding shall be accomplished in accordance with "Trench Details" shown within these plans.

This item shall consist of the installation of water mains (D.I.P. Class 52) by open cut method including: all excavation; furnishing and installing pipe, and polyethylene liner; thrust blocks; bedding; cover; backfilling; testing; disinfecting; protection; removal of surplus excavated material; and cleanup.

Measurement and Payment: D.I.P. water main shall be paid for at the contract unit price per LINEAL FOOT for the size specified for WATER MAIN (D.I.P. CLASS 52), measured in place, which price shall be payment in full for all labor, materials, and equipment necessary to complete this item in accordance with the plans and specifications. Fittings shall be paid for separately.

SP 18 - HANDLING OF PIPE:

All pipe shall be handled in such a manner as will prevent damage to the pipe or coating. Damaged pipe, specials and other accessories shall be rejected and replaced to the satisfaction of the Engineer. The methods of handling shall be corrected to prevent further damage.

The Contractor shall inspect the pipe and fittings for defects while they are suspended above grade.

Soil, organic matter, and other heavy material typically contain bacteria and can prevent even high concentrations of chlorine from contacting and killing the organisms. These bacteria can cause failure of bacteriological sampling. Preventing these types of materials from entering water main pipe either during or before installation is critical. Preventive measures are described in detail in AWWA Standard C651-14 Section 4.8. At a minimum, the following preventive measures shall be followed during water main pipe installation:

- 1. Keep pipe clean and dry. The interiors of pipes, fittings, and valves shall be protected from contamination. All openings in the pipeline shall be closed watertight or with rodent-proof plugs when pipe laying is stopped at the close of the day's activities or for other reasons.
- 2. Joints. Joints of all pipe in the trench shall be completed before work is stopped.
- 3. Cleaning and swabbing. If dirt or other foreign material enters the pipe, it shall be removed and the interior of the pipe surface swabbed with a 1 to 5% sodium hypochlorite (NaOCl) disinfecting solution. If in the opinion of the City of Aurora Engineering Division, or its designated representative, the foreign material in the pipe will not be removed by preliminary flushing activities, the interior of the pipe shall be cleaned using mechanical means at no additional cost to the City of Aurora and then swabbed as described above.

At times when pipe laying is not in progress, and at the end of each working day, the open ends of the pipe shall be closed by a water-tight plug to ensure absolute cleanliness inside the pipe.

SP 19 - LAYING OF PIPE:

The pipe shall be installed so that the entire length of pipe shall have full bearing. The bedding shall be shaped such that the pipe is uniformly supported over its entire length.

Installation of the water main pipe shall be accomplished to line and grade in the trench only after the bedding has been completely de-watered and is free of mud, loose silt, or foreign material. All foreign material shall be kept out of the pipe.

Dirt or other foreign material shall be prevented from entering the pipe or pipe joint during handling or laying

operations and any pipe or fitting that has been installed with dirt or foreign material in it shall be thoroughly cleaned. At times when pipe installation is not in progress, and at the end of each working day, the open ends of the pipe shall be closed by a water-tight plug to ensure absolute cleanliness inside the pipe.

Water Main Restraint - Mechanical Joint Restraint

In lieu of thrust blocking, joint restraint systems such as a mechanical joint fitting or a joint restraint gasket can be utilized for restraining the system and shall be installed to the lengths specified in the "Minimum Restraint Length (ft) on both sides of the Fitting" detail located in the improvement plans. Field Lok 350 Gaskets or an approved equal shall be utilized for the joint restraint gaskets. Restraints not specifically required to attach fittings shall be installed to the lengths identified in the detail and be paid for separately for the type and size of restraint specified.

Water Main Restraint - Thrust Blocking

In lieu of joint restraint, thrust blocking can be utilized to prevent movement of lines under pressure at bends eleven and one-quarter (11½) degrees and greater, tees, caps, valves and hydrants shall be precast or poured Portland cement concrete, rated at 3500 psi, a minimum of twelve (12") thick. Stainless steel tie rods are to be used in addition to blocking on all fittings and shall be anchored in such a manner that pipe and fitting joints will be accessible for repairs. Poured concrete shall not hinder access to metal fittings and bolts or hydrant drainage. All nuts, bolts, and threaded rod shall be stainless steel. When used for restraint, the thrust blocking and tie rods shall be considered included in the cost of the water main.

Installation of Mechanical Joints for Ductile Iron Pipe

The outside of the spigot and the inside of the bell of mechanical joint pipe shall be thoroughly cleaned to remove all foreign matter from the joint. The cast iron gland shall then be slipped on to the spigot end of the pipe with lip extension of the gland toward the socket or bell end. The rubber gasket shall be placed on the spigot end with the thick edge toward the gland. The pipe shall be pushed forward to completely seat the spigot end in the bell. The gasket shall then be pressed into place within the bell, being careful to have the gasket evenly located around the entire joint. The cast iron gland shall then be moved along the pipe into position and bolted.

Nuts spaced 180 degrees shall be tightened alternately to AWWA C-600 Standards in order to produce an equal pressure on all parts of the gland.

Jointing Gasket Joint Pipe (AWWA C111, AWWA C900, AWWA C200, ASTM F477, AWWA C950)

The inside of the bell shall be thoroughly cleaned to remove all foreign matter from the joint. The gasket shall be inserted in the gasket seat provided.

A thin film of gasket lubricant shall be applied to inside surface of the gasket. Gasket lubricant shall be a solution of vegetable soap or other solution supplied by the pipe manufacturer and approved by the Owner. The spigot end of the pipe shall be cleaned and entered into the rubber gasket in the bell, using care to keep the joint from contacting the ground. The joint shall then be completed by forcing the plain end to the seat of the bell. Care must be taken not to damage exterior or interior lining when joining the pipe. Field cut pipe lengths shall be beveled to avoid damage to the gasket and facilitate making the joint.

All pipe shall be furnished with a depth mark to assure that the spigot end is inserted to the full depth of the joint.

SP 20 - FLUSHING:

Sections of pipe adjacent to the repair shall be disinfected first according to SP 18 - HANDLING OF PIPE. The section of main repaired shall then be flushed through the nearest hydrant under the direction of the Water & Sewer Maintenance Division to remove any solids or contaminated material that may have become lodged in the pipe. After flushing as directed by the Water & Sewer Maintenance Division (typically 20-30 minutes), the contractor shall assist the Water & Sewer Maintenance Division with testing the chlorine and turbidity levels of the flushed water. Flushing and testing should be repeated as necessary until satisfactory results are achieved.

This work shall not be paid for separately, but shall be considered incidental to the contract.

SP 21 - PROTECTION AGAINST CORROSION:

This covers material specifications and installation procedures for polyethylene wrapping of the underground installations of ductile iron pipe, and other related appurtenances or water main.

To ensure protection against corrosive soils, all ductile iron pipe installed as part of the public system shall include polyethylene encasement. The encasement shall be installed in accordance with the following specifications.

The materials used for the job shall be in accordance with the Table I as shown:

Table 1 - Raw Material Used to Manufacture Polyethylene Film

All Characteristics	In accordance with ASTM Standard Specification D-1238-68	
Type	1	
Class	A (Natural Color) or C (Black)	
Grade	E-1	
Flow Rate (Melt Index)	0.4 Maximum	
Thickness	0.008 inch (8 mils) Minimum	
Volume Resistivity	Minimum Ohm-cm^3 = 10^15	
Tensile Strength	1200 psi Minimum	
Elongation	300% Minimum	
Dielectric Strength	800 Volts per mil Minimum	

<u>Thickness Tolerance</u>: Polyethylene film shall have a minimum thickness of 0.008 inch (8 mils). The minimum thickness tolerance is ten percent (10%) of the nominal thickness.

Tube or sheet size for each pipe diameter shall be as listed in the following Table II as shown.

Table II – Minimum Polyethylene Width

Tuble II Millimitan Folyoniy tono 11 fatt.			
Nominal Diameter of Pipe (Inch)	Flat Tube	Sheet	
6	21	48	
8	24	48	
10	27	54	
12	30	60	
16	37	74	
24	54	108	
30	67	134	
36	81	162	

General Installation: The polyethylene encasement shall prevent contact between the pipe and the surrounding backfill and bedding material but is not intended to be a completely air and water tight enclosure. Overlaps shall be secured by the use of adhesive tape, plastic string, or other material capable of holding the polyethylene encasement in place until backfilling operations are completed.

<u>Pipe Wrapping:</u> The standard includes three different methods for the installation of polyethylene encasement on pipe. For polyethylene supplied in tubes, use Methods A and B. Method C is for use with polyethylene sheets.

METHOD A:

Cut polyethylene tube to a length approximately two feet (2') longer than that of the pipe section. Slip the tube around the pipe, centering it to provide a one foot (1') overlap on each adjacent pipe section, and bunching it

accordion fashion length-wise until it clears the pipe ends.

Lower the pipe into the trench and make up the pipe joint with the preceding section of pipe. A shallow bell hole must be made at joints to facilitate installation to the polyethylene tube.

After assembling the pipe joint, make the overlap of the polyethylene tube. Pull the bunched polyethylene from the preceding length of pipe, slip it over the end of the new length of pipe and secure in place. Then slip the end of the polyethylene from the new pipe section over the end of the first wrap until it overlaps the joint at the end of the preceding length of pipe.

Secure the overlap in place. Take up the slack width to make a snug, but not tight fit along the barrel of the pipe, securing the fold at quarter point.

Repair any rips, punctures, or other damage to the polyethylene with adhesive tape or with a short length of polyethylene tube cut open, wrapped around the pipe and secured in place. Proceed with installation of the next section of pipe in the same manner.

METHOD B:

Cut polyethylene tube to length approximately one foot (1') shorter than that of the pipe section. Slip the tube around the pipe, centering it to provide six inches (6") of bare pipe at each end. Make polyethylene snug, but not tight; secure ends as described elsewhere.

Before making up a joint, slip a three foot (3') length of polyethylene tube over the end of the preceding pipe section, bunching it accordion fashion lengthwise. After completing the joint, pull the three foot (3') length of polyethylene tube over the joint, overlapping the polyethylene previously installed on each adjacent section of pipe by at least one foot (1'); make snug and secure each end as described elsewhere.

Repair any rips, punctures, or other damage to the polyethylene. Proceed with installation of the next section of pipe in the same manner.

METHOD C:

Cut polyethylene sheet to a length approximately two feet (2") longer than that of the pipe section. Center the cut length to provide a one foot (1') overlap on each adjacent pipe section, bunching it until it clears the pipe ends. Wrap the polyethylene around the pipe. Secure the cut edge of polyethylene sheet at intervals of approximately three feet (3').

Lower the wrapped pipe into the trench and make up the pipe joint with the preceding section of pipe. A shallow bell hole must be made at joints to facilitate installation of the polyethylene. After completing the joint, make the overlap as described above.

Repair any rips, punctures or other damage to the polyethylene. Proceed with installation of the next section in the same manner.

<u>Pipe Shaped Appurtenances Wrapping:</u> Cover bends, reducers, offsets, and other pipe-shaped appurtenances with polyethylene in the same manner as the pipe.

Odd Shaped Appurtenances Wrapping: When valves, tees, crosses, and other odd-shaped pieces cannot be wrapped practically in a tube, wrap with a flat sheet or split length of polyethylene tube by passing the sheet under the appurtenance and bringing it up around the body. Make seams by bringing the edges together, folding over twice, and taping down. Handle width and overlaps at joints as described above. Tape polyethylene securely in place at valve stem and other penetrations.

This work shall not be paid for separately, but shall be considered incidental to the contract

SP 22 - FIRE HYDRANT ASSEMBLY:

These items shall consist of the installation of new fire hydrant assemblies, including: all excavation; furnishing and installing the fire hydrant, tees, fittings, up to 15 lineal feet of six inch (6") D.I.P. pipe, auxiliary gate valve, cast iron valve box with lid, thrust blocks, drainage system and appurtenances; testing; disinfecting; protection; removal of surplus excavated material; and clean-up. The fire hydrant shall be red in color.

These specifications are to be used in conjunction with the AWWA Standard C502 for fire hydrants for ordinary water works service. All materials used in the production of fire hydrants for ordinary service shall conform to the specifications designated for each material listed in AWWA Standard C502.

The hydrant shall be Waterous Pacer WB-67 (5¼" barrel) of a pattern approved by the Engineer. The seat must be bronze. The name or mark of the manufacturer, size of the valve opening shall be plainly cast in raised letters and so placed on the hydrant barrel as to be visible after the hydrant has been installed.

As a minimum requirement, all hydrants shall be designed for a working pressure of 150 psi. Workmanship, design and material shall conform to the AWWA Standard C502. The hydrant bodies shall be cast iron, fully mounted with approved non-corrodible metals. All wearing surfaces shall be either bronze or some other approved non-corrodible material and there shall be no moving bearing or contact surfaces of iron in contact with iron or steel. All contact surfaces shall be finished or machined in the best workman like manner and all wearing surfaces shall be easily renewable.

The design of the hydrant shall be such that all working parts may be removed through the top of the hydrant and shall have the required AWWA specified number of turns of the stem to open the R/W and are equal to the area of the valve opening. Any change in area of the water passage through the valve must have an easy curve, and all outlets must have round corners of good radius.

Lugs, if required for harnessing the hydrant to the connection pipe from the main in the street, shall be provided on the bell of the elbow or on the hydrant bottom casting. A drawing of the lug construction shall be submitted for approval, on request of the Engineer.

Hydrants shall be provided with a sidewalk flange. Breaking devices shall be at the sidewalk flange, which will allow the hydrant barrel to separate at this point with a minimum breakage of hydrant parts in case of damage. The operating stem shall have a safety stem coupling at the flange point that will also shear at the time of impact. The breakaway flange is to be just above the proposed ground level per manufacturer specifications.

All hydrants shall be equipped with O-Ring stem seals.

Construction Details: Hydrants shall be plumb and shall be set so that the center of the hydrant port is eighteen (18") to twenty-four (24") inches above the surrounding finished grade, which shall ensure the breakaway flange is at proper ground height. All hydrants shall be inspected in the field upon delivery to the job to insure proper operation before installation. A minimum of 1/4 cubic yard of "washed" course stone as well as polyethylene wrapping shall be placed at and around the base of the hydrant to insure proper drainage of the hydrant after use. The blocking of the hydrant shall consist of a wedge of Portland cement concrete of not less than 1/4 cubic yard extending from the hydrant to undisturbed soil. This concrete block shall be so placed as to form a barrier adjacent to the hydrant base top to counteract the pressure of water exerted thereon. Care shall be taken to insure that weep holes are not covered by concrete. The hydrant shall be set on a concrete block to insure a firm bearing for the hydrant base. Stainless steel rods shall interconnect the hydrant valve and tee.

This work shall be paid for at the contract unit price per EACH for FIRE HYDRANT ASSEMBLY.

SP 23 - VALVE BOXES FOR WATER MAINS:

This section applies to the construction of standard cast iron valve boxes, all in accordance with the "City of Aurora Standard Specifications for Improvements."

Valve boxes must be free of debris, vertical, and centered over the operating nut so that the nut is easily keyable. Valve boxes and extensions must be cast iron only (no plastic). Valve boxes shall be Model F2452 as manufactured by Clow Corporation, or equal.

Ring and Cover and Valve Box Castings: Castings with cast iron ring and cover, and cast iron parts of valve boxes, shall conform to the requirements of Standard Specifications for Gray Iron Castings, ASTM Designation A-48.

Cast Iron Valve Boxes: Adjustable cast iron valve boxes shall be slide type and shall set to position during backfilling operations so they will be in a vertical alignment to the valve operating stem. The slide type valve box shall be adjustable by sliding the upper section over the lower section. The lower casting of the unit shall be installed first in such a manner as to be snuggly settled upon the body of the valve. The upper casting of the unit shall then be placed into proper alignment at such an elevation that its top will be at final grade. If necessary, extension sections shall be furnished to increase the length of the slide type valve box to ensure the top of the box will be at final grade. CA-6 crushed stone shall be utilized to backfill around the valve and valve box.

SP 24 - GATE VALVE WITH VALVE BOX:

This item shall consist of gate valve and box including: all excavation, furnishing and installing the gate valve; the valve box and appurtenances; furnishing and installing the valve tie downs; testing; disinfecting; protection; removal of surplus material; and clean-up.

<u>Gate Valve</u>: Gate valves shall be resilient wedge with cast iron body, fully bronze mounted, non-rising stem with upper and lower thrust collars. Waterways shall be smooth. All valves shall open by turning counterclockwise. Valves shall meet or exceed AWWA C-500. Valves shall be Clow or Waterous. All nuts, bolts, and threaded rods shall be stainless steel. All nuts and bolts used for jointing shall be stainless steel, Grade 304 bolts, and Grade 316 nuts.

End Connections: End connections of all valves shall consist of one of the following types:

- 1. Mechanical Joints
- 2. Push-on (Rubber Gasket) Joints

<u>Valve Stem Seals</u>: All gate valves shall be furnished with O-Ring Stem Seals. Number, size and design shall conform to the AWWA Standard for R/W valve O-Ring Stem Seals.

The minimum requirements for all valves shall, in design, material and workmanship, conform to the standards of the latest AWWA C509-87, and C504. All materials used in the manufacture of waterworks valves shall conform to the AWWA standards designed for each material listed.

Manufacture and Marking: The valves shall be standard pattern and shall have the name or mark of the manufacturer, size and working pressure plainly cast in raised letters on the valve body.

Valve with valve box will be paid for at the contract unit price bid per EACH for specified diameter GATE VALVE WITH VALVE BOX.

SP 25 - GATE VALVE WITH VALVE VAULT:

This item shall consist of specified size gate valve and specified diameter valve vault installed according to the details enclosed within these plans including: all excavation, furnishing and installing the gate valve; the valve vault; frame and closed lid and appurtenances; furnishing and installing the valve tie downs; testing; disinfecting; protection; removal of surplus material; and clean-up.

Gate Valve: Gate valves shall be resilient wedge with cast iron body, fully bronze mounted, non-rising stem with upper and lower thrust collars. Waterways shall be smooth. All valves shall open by turning counterclockwise. Valves shall meet or exceed AWWA C-500. Valves shall be Clow or Waterous. All nuts, bolts, and threaded rods shall be stainless steel. All nuts and bolts used for jointing shall be stainless steel, Grade 304 bolts, and Grade 316

End Connections: End connections of all valves shall consist of one of the following types:

- 1. Mechanical Joints
- 2. Push-on (Rubber Gasket) Joints

<u>Valve Stem Seals</u>: All gate valves shall be furnished with O-Ring Stem Seals. Number, size and design shall conform to the AWWA Standard for R/W valve O-Ring Stem Seals.

The minimum requirements for all valves shall, in design, material and workmanship, conform to the standards of the latest AWWA C509-87, and C504. All materials used in the manufacture of waterworks valves shall conform to the AWWA standards designed for each material listed.

Valve Vaults: Valve Vaults shall be 5' in diameter for 6"-10" valves and 6' in diameter for 12"-16" valves.

<u>Manufacture and Marking:</u> The valves shall be standard pattern and shall have the name or mark of the manufacturer, size and working pressure plainly cast in raised letters on the valve body.

Valve with valve vault will be paid for at the contract unit price bid per EACH for specified diameter GATE VALVE WITH VALVE VAULT.

SP 26 – WATER SERVICE CONNECTIONS:

This item shall consist of service connections, including: all excavation, furnishing, and installing service taps and saddles, connections to existing water services, coupling, fittings, service pipe; testing; disinfecting; protection; and clean-up.

Water service connections will be measured per EACH, determined near side or far side regardless of the length of service piping required.

Water service connections will be paid for at the contract unit price bid per EACH for 1-INCH WATER SERVICE CONNECTIONS NEAR SIDE or 1-INCH WATER SERVICE CONNECTIONS FAR SIDE.

SP 27 – FITTINGS:

This item consists of furnishing and installing fittings as shown on the plans, profiles, or as directed by the Engineer.

All fittings shall be ductile iron conforming to the latest ANSI specifications A21.10 for short body fittings, twelve inches (12") or less, and AWWA C110 for fittings fourteen inches (14") or larger.

Joints for all fittings shall be mechanical joints with Mega Lug set screw retaining glands, or approved equal.

All nuts and bolts used for jointing shall be stainless steel, Grade 304 bolts, and Grade 316 nuts.

Measurement and Payment: Fittings shown on the plans or profiles shall be paid for at the contract unit price per POUND for FITTINGS. The weight of each fitting shall be determined by the weight shown for Mechanical Joint Ductile Iron Fittings in AWWA Standard C110. Stainless steel nuts, bolts, and accessories shall be incidental to the cost of the fittings; their weight shall not be added to the weight of the fitting.

SP 28 - COMPACTION:

The Contractor shall control soil compaction during construction in order to provide the minimum percentage of maximum or relative density as specified for each area of classification indicated below:

Percentage of Maximum Density Requirements: Compact soil to not less than the following percentages of maximum density for soils which exhibit a well-defined moisture density relationship (cohesive soils) determined in accordance with ASTM D 1557; and not less than the following percentages of relative density, determined in accordance with ASTM D 2049, for soils which will not exhibit a well-defined moisture-density relationship (cohesionless soils).

<u>Pavement, Drives, and Sidewalks:</u> Compact the top twelve inches (12") of sub-grade and each layer of backfill material at 90% maximum density for cohesive material or 95% density for cohesionless material.

<u>Lawn or Unpaved Areas</u>: Compact the top six inches (6") of sub-grade and each layer of backfill material at 85% maximum density for cohesive soils and 90% relative density for cohesionless soils.

Moisture Control: Where sub-grade and each layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of sub-grade, or layer of soil material, to prevent free water appearing on surface during or subsequent to compaction operations.

SP 29 - BEDDING AND COVER:

Pipe bedding shall consist of over excavation of the trench bottom and refilling to proper grade with a minimum of four inches (4") of compacted stone or gravel in conformance with the standard details and specifications.

Pipe cover shall consist of tamped bedding material continued upward for the full width of the trench to the spring line for ductile iron pipe and to one foot (1') above the top of the pipe for PVC pipe.

Bedding and Pipe Cover shall be compacted to 95% Standard Proctor Density (ASTM 698).

SP 30 - SELECT TRENCH BACKFILL, TRENCH BACKFILL, PIPE BEDDING, AND COVER:

<u>Pipe Bedding:</u> Pipe bedding shall consist of over-excavation of the trench bottom and refilling to proper grade with a minimum of four inches (4") of compacted aggregate in accordance with the details and standard specifications and details.

The cost of supplying and installing the aggregate bedding shall not be paid for separately, but shall be considered incidental to the project.

<u>Cover:</u> Pipe cover shall consist of compacted aggregate for the full width of the trench to the spring line for the reinforced concrete pipe or ductile iron pipe and to one foot (1') above the top of the pipe for PVC pipe. Aggregate shall be in accordance with the standard specifications and details.

The cost of supplying and installing the aggregate cover shall not be paid for separately, but shall be considered incidental to the cost of the pipe.

<u>Trench Backfill:</u> Trench backfill shall be placed in accordance with the "Standard Specifications for Water and Sewer Main Construction in Illinois" and the Trench Backfill Detail as shown on the plans.

Place Trench Backfill material to required elevations, for each area classification listed below:

Under grassed areas:

Satisfactory excavated or borrow material, approved by the Engineer.

Under pavements:

Select Trench Backfill of compacted CA-6 crushed limestone or CA-6 crushed gravel.

Place backfill materials evenly adjacent to structures or piping to required elevations. Take care to prevent wedging action of backfill against structures or displacement of piping by carrying material uniformly around structure of piping to approximately same elevation in each lift.

Compaction Jetting and Water Soaking: The holes through which the water is injected in the backfill shall be centered over the trench backfill and at longitudinal intervals of not more than four feet (4'). Additional holes shall be provided if deemed necessary by the Engineer to insure adequate settlement. All holes shall be jetted and shall be carried to a point one foot (1') above the top of the pipe. Drilling the holes by means of augers of other mechanical means will not be permitted. Care shall be taken in jetting to prevent contact with or other disturbance to the pipe.

The water shall be injected at a pressure and rate sufficient to sink the holes at a moderate rate. After a hole has been jetted to the required depth, the water shall be injected until it begins to overflow the surface. Surface depressions resulting from backfill subsidence caused by jetting and water-soaking shall be filled and re-compacted by taming or rolling to the satisfaction of the Engineer.

<u>Measurement and Payment:</u> The cost of supplying and installing the CA-7 aggregate **bedding** shall <u>not</u> be paid for separately, but shall be considered incidental to the contract. The cost of supplying and installing the CA-7 aggregate **cover** shall <u>not</u> be paid for separately, but shall be considered incidental to the contract. Also, the cost for **compaction** shall <u>not</u> be paid for separately, but shall be considered incidental to the contract.

The cost of supplying and installing Trench Backfill shall be paid for at the contract unit price per TON.

SP 31 - WATERMAIN RELOCATE:

In the event that during the construction of a storm sewer a grade conflict occurs with a water main, the Contractor with the approval of the Engineer will have to relocate the said water main. The work will consist of adjusting the main to obtain a vertical separation of six inches (6") minimum with the sewer. Cast iron bends shall be no greater than twenty-two and one-half (22- ½) degrees. Tie rods, when used, shall be stainless steel. The main shall be Class 52 Ductile Iron Pipe (cement lined). Depth may vary but shall not exceed ten feet (10'). The trench backfill shall be in accordance with the details shown on the plans.

This work shall be paid for at the contract unit price bid per LINEAL FOOT for WATER MAIN RELOCATE, for the type and diameter found in the field.

SP 32 - PVC (POLYVINYL CHLORIDE) PIPE:

All PVC pipe and fittings shall conform to Type PSM in accordance with ASTM D-3034 for sizes six (6") through fifteen (15") inches. The Standard Dimension Ratio (SDR) for PVC pipe shall be 26 as a minimum. All PVC pipe shall have a cell classification of 12454-B.

Pipe lengths shall be joined utilizing elastomeric gaskets meeting the requirements of ASTM Standard D-3212.

PVC pipe shall be installed in accordance with the recommended practice for "Underground Installation of Flexible Thermoplastic Sewer Pipe," ASTM D-2321 and shall be paid according to the fill height over the top of the pipe and fill height shall be either a) 5' and less or b) greater than 5'.

This item shall be paid for at the contract unit price bid per LINEAL FOOT for PVC pipe, of the diameter and depth as specified above, measured in place, which price shall be payment in full for all labor, materials, proper bedding, sidefill, backfill and mechanical compaction to a minimum of 6" over top of pipe, and equipment necessary to complete this item in accordance with the plans and specifications.

SP 33 - ADS PERFORATED UNDERDRAIN:

All ADS pipe and fittings shall conform to ASTM F-405, "Standard Specifications for Corrugated Polyethylene Tubing and Fittings," and shall have a minimum cell classification of PE 334413 as defined in ASTM D-3350 "Polyethylene Plastics Pipe and Fittings Materials."

Pipe shall be installed in accordance with ASTM F-449 and shall include ADS Sock filter material.

This item shall be paid for at the contract unit price bid per LINEAL FOOT of the size specified, measured in place, which price shall be payment in full for all labor, materials, sock, proper bedding, sidefill, backfill and mechanical compaction to a minimum of six inches (6") over top of pipe, and equipment necessary to complete this item in accordance with the plans and specifications.

SP 34 - STRUCTURE TAP:

This item shall consist of saw cutting a clean hole in an existing structure in order to insert the proposed pipe. The hole should be just large enough to allow the proposed pipe to be inserted. The annular space shall then be sealed with brick and mortar.

This item shall be paid for at the contract unit price EACH for STRUCTURE TAP which shall be payment in full for all labor, materials, and equipment necessary to complete this item in accordance with the plans and specifications.

SP 35 - CONNECTION TO EXISTING STRUCTURE (CORE DRILLING):

This item shall consist of core drilling a circular clean hole in an existing structure in order to insert the proposed pipe. The hole should be just large enough to allow the proposed pipe to be inserted.

For sanitary sewers, a rubber boot in conformance with the Fox Metro Water Reclamation District requirements shall be installed.

For water mains and storm sewers the annular space shall then be sealed with brick and mortar.

This item shall be paid for at the contract unit price EACH for CONNECTION TO EXISTING STRUCTURE (CORE DRILLING) which shall be payment in full for all labor, materials, and equipment necessary to complete this item in accordance with the plans and specifications.

SP 36 - DOMESTIC WATER SERVICE ADJUSTMENT:

This work shall consist of the repair of water service lines in the event of breakage or conflict in grade in accordance with Section 610 of the Standard Specifications, as stated herein, as shown in the details, and as directed by the Engineer.

The Contractor shall remove the existing service line at the breakage point and install Type "K" copper line and necessary fittings to properly repair the line. All water services shall be restored before work is discontinued for the day. All fittings shall be flared. No compressions fittings shall be allowed.

This item shall be paid for at the contract unit price per LINEAL FOOT for DOMESTIC WATER SERVICE ADJUSTMENT, measured in place, which price shall be payment in full for all labor, materials, and equipment necessary to complete this item in accordance with the plans and specifications.

SP 37 - PCC SIDEWALK REMOVAL:

This item shall be paid for at the contract unit price per SQUARE FOOT for PCC SIDEWALK REMOVAL, measured in field, which price shall be payment in full for all labor, materials, and equipment necessary to excavate and remove concrete sidewalk in accordance with the plans and specifications.

SP 38 - PCC DRIVEWAY PAVEMENT REMOVAL:

This item shall be paid for at the contract unit price per SQUARE YARD for PCC DRIVEWAY PAVEMENT REMOVAL, measured in field, which price shall be payment in full for all labor, materials, and equipment necessary to excavate and remove concrete pavement in accordance with the plans and specifications.

SP 39 - CURB AND GUTTER REMOVAL:

This work consists of removing and disposing of the existing curb and gutter at places as directed by the Engineer.

This item shall be paid for at the contract unit price per LINEAL FOOT for CURB AND GUTTER REMOVAL, measured in field, which price shall be payment in full for all labor, materials, and equipment necessary to excavate and remove curb and gutter in accordance with the plans and specifications.

SP 40 - BITUMINOUS PAVEMENT REMOVAL:

This work shall consist of removing and disposing of the existing bituminous pavement at places as directed by the Engineer.

This item shall be paid for at the contract unit price per SQUARE YARD for BITUMINOUS PAVEMENT REMOVAL, measured in field, which price shall be payment in full for all labor, materials, and equipment necessary to excavate and remove bituminous pavement in accordance with the plans and specifications.

SP 41 - DIRECTIONAL BORING:

This work shall consist of the installation of pipe by the directional boring method. Typically this method shall be used for water services or mains when open trenching is restricted. Pipe materials for 1"- 3" shall be Type K copper. Pipe materials for 4", 6", and 8" shall be Class 52 ductile iron. Depth of bore for purposes of bidding shall not exceed six feet (6'). Any deviation in depth or material that may require a change in unit cost will be agreed upon prior to the performance of such work.

This item shall be paid for at the contract unit price per LINEAL FOOT for DIRECTIONAL BORING of the size specified, measured in field, which price shall be payment in full for all labor, materials, and equipment necessary to complete the work to the satisfaction of the Owner.

SP 42 - GUARANTEE & MAINTENANCE OF WORK:

If after the approval of final payment for each class of work and prior to the expiration of 1 year after the date of approval of said final payment, or such longer period of time as may be prescribed by law or by terms of any applicable special guarantee required by the Contract Documents, any work is found to be defective, the Contractor shall promptly, without cost to the Owner and in accordance with written directions of the Owner, remove it from the site and replace it with non-defective work.

Failure of the Contractor to complete or to remedy defective work within a reasonable time (not to exceed 30 days of notice to Contractor in any event) shall be deemed a default and the Owner may take steps as it deems necessary to complete or remedy said work and may deduct the cost thereof from any retainage due the Contractor.

SP 43 – MOBILIZATION:

This item consists of transportation and set up of various equipment necessary to complete the project, as well as the break down and removal of the same equipment.

This item shall be paid for at the contract unit price per LUMP SUM of MOBILIZATION. The price shall be payment in full for all labor, materials, and equipment necessary to mobilize for this work in accordance with the plans, details, and specifications.

SP 44 – EMERGENCY REPAIR ITEMS:

The prices submitted for items listed under the "Emergency Repair" section shall include cost plus overhead and profit. Prices for materials supplied shall not include any cost for labor or equipment. The prices shall be utilized within the "Example Job" in order to determine a "low bidder" for the project. This will set the order of precedence when determining who to call when there is an "emergency repair". The "low bidder" will be given

the first opportunity to mobilize. If the Contractor is not able to mobilize to perform the work, the City will move to the next "low bidder" on the list. Once a Contractor refuses to mobilize three times, their name may be removed from the list.

The City reserves the right to move to the next "low bidder" on the list if it deems it in the best of interest of the City to do so based on the nature of the repair and the unit prices submitted.

All materials supplied shall be in accordance with the Provisions of this Contract. If materials are supplied by the City, the contractor will not be compensated for the pay item supplied. Any material used that is not listed within the bid will be paid for based on the provisions listed within this contract.

SP 45 – BASIS OF AWARD:

The City will review all bids submitted based on the total bid and determine an order of precedence to be used by City Staff when calling upon Contractors to perform work. The City will award to the lowest six (6) bidders. The lowest bidder on the list will be given the first opportunity to mobilize. If this Contractor is not able to mobilize to perform the work, the City will move to the next lowest bidder on the list. The Contractor must mobilize to the jobsite and be prepared to work within two (2) hours from the first point of contact.

SP 46 – OPERATOR, LABORER, TEAMSTER:

The City will pay the appropriate unit price (i.e.: straight time 1, overtime 1.5, and overtime 2) to each classification of worker based on the rules stated in most current Illinois Prevailing Wage Rates Schedule for Kane County. The rules stated in the Prevailing Wage Rate schedule will only be utilized to determine when overtime or double time is to be paid. Overtime will be determined by verification of hours worked by each employee as stated in the certified payroll records. The unit prices shall include all costs associated with each classification of worker including but not limited to company profit and overhead.

SP 47 – EXCAVATOR, LOADER, SKID STEER:

The contractor shall submit unit prices for the type of machine they have within their equipment fleet and would typically use for the type of work being performed. Any equipment the City deems unnecessary or not properly sized to perform the work, will not be paid for. Mobilization of all equipment will not be paid for separately, but shall be paid for at the predetermined unit price for "MOBILIZATION".

SP 48 - UTILITY TRUCK W/ TOOLS:

The unit price for the Utility Truck w/ tools shall include the cost for miscellaneous small tools and equipment for which unit prices have not been provided for within the bid (i.e.: pumps, hoses, drills, saws, wrenches, hammers, etc....).

SP 49 – BARRICADES, TYPE 2 W/STEADY BURN LIGHTS:

This unit price for Barricades shall include the cost to deliver to and from jobsite up to 15 barricades for use in conjunction with the "emergency repair" work. This work shall be paid for at the unit price per day for "BARRICADES, TYPE 2 W/STEADY BURN LIGHTS" and shall include up to 15 barricades.

SP 50 – ADVANCED WARNING SIGNS:

The unit price for Advanced Warning Signs shall include the cost for delivering to and from the jobsite up to 4 advanced warning signs (i.e.: Road Construction Ahead, Left/Right Lane Closed Ahead, Merge, etc...). This work shall be paid for at the unit price per day for "ADVANCED WARNING SIGNS" and shall include up to 4 signs.

SP 51 - LINE STOP:

The Contractor shall furnish and install a permanent stainless steel tapping fitting, temporary line stopping device and permanent cap and plug at the location directed by the City. Before ordering the line stop device and fitting, the Contractor or City shall dig an exploratory pit to determine the exact outside diameter of the existing mains. The method of installation and the equipment for inserting the line stops shall be in strict accordance with the recommendations of the line stop manufacturer. The line stop shall make an effective temporary seal. Any excavation required to install the line stop a safe distance (to be determined by the Contractor and/or the Line Stop manufacturer) from the point of insertion shall be considered included in this pay item. Contractors may submit a bid for just the installation of this bid item if they do not typically perform excavation of the pit which may be done by the City.

SP 52 – INSERTION VALVE:

Insertion Valves shall be Advanced Valve Technologies, LLC EZ Valve, Hydra-stop Insta-Valve, or an engineer approved equal. Valves shall exceed AWWA C509/515 standards, be rated for a 250 psi working pressure, and maintain NSF 61 and ANSI 372 certification by UL. No water main shutdown shall be required for valve installation and the product shall provide a drip tight seal. The valve shall be installed by a qualified representative of the manufacturer. A one year warranty shall cover parts and labor for Equipment and Valves. Contractors may submit a bid for just the installation of this bid item if they do not typically perform excavation of the pit which may be done by the City.

State of Illinois DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION FOR EMPLOYMENT PRACTICES

In addition to all other labor requirements set forth in this proposal and in the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation, during the performance of work pursuant to the Plans and Specifications, the Contractor for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

I. SELECTION OF LABOR

The Contractor shall comply with all Illinois statutes pertaining to the selection of labor.

II. EQUAL EMPLOYMENT OPPORTUNITY

During the performance of work pursuant to the Plans and Specifications, the Contractor agrees as follows:

- (1) That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, ancestry, age, marital status, physical or mental handicap or unfavorable discharge from military service, and further that it will examine all job, classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
- That, if it hires additional employees in order to perform the work herein or any portion hereof, it will determine the availability of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.
- (3) That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, national origin, ancestry, age, marital status, physical or mental handicap or unfavorable discharge from military service.
- That it will send to each labor organization or representative of other workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any such labor organization or representative fails or refuses to cooperate with the Contractor in its efforts to comply with such Act and Rules and Regulations, the Contractor will promptly so notify the Illinois Department of Human Rights and the City of Aurora and will recruit employees from other sources when necessary to fulfill its obligations thereunder.
- (5) That it will submit reports as required by the Department of Human Rights Rules—and Regulations, furnish all relevant information as may from time to time be requested by the Department or the City of Aurora, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations.
- (6) That it will permit access to all relevant books, records, accounts and work sites by personnel of the City of Aurora and the Illinois Department of Human Rights for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.

(7) That it will include verbatim or by reference the provisions of this clause in every subcontract so that such provisions will be binding upon every such subcontractor. In the same manner as with other provisions herein, the Contractor will be liable for compliance with applicable provisions of this clause by all its subcontractors; and further it will promptly notify the contracting agency and the Illinois Department of Human Rights in the event any subcontractor fails or refuses to comply therewith. In addition, the Contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

State of Illinois Department of Transportation Bureau of Local Roads and Streets SPECIAL PROVISION FOR

WAGES OF EMPLOYEES ON PUBLIC WORKS

Effective: January 1, 1999 Revised: January 1, 2015

- 1. Prevailing Wages. All wages paid by the Contractor and each subcontractor shall be in compliance with The Prevailing Wage Act (820 ILCS 130), as amended, except where a prevailing wage violates a federal law, order, or ruling, the rate conforming to the federal law, order, or ruling shall govern. The Illinois Department of Labor publishes the prevailing wage rates on its website at www.state.il.us/agency/idol/rates/rates.htm. If the Illinois Department of Labor revises the prevailing wage rates, the revised prevailing wage rates on the Illinois Department of Labor's website shall apply to this contract and the Contractor will not be allowed additional compensation on account of said revisions. The Contractor shall review the wage rates applicable to the work of the contract at regular intervals in order to ensure the timely payment of current wage rates. The Contractor agrees that no additional notice is required. The Contractor shall be responsible to notify each subcontractor of the wage rates set forth in this contract and any revisions thereto.
- 2. Payroll Records. The Contractor and each subcontractor shall make and keep, for a period of not less than five years from the date of the last payment on a contract or subcontract, records of all laborers, mechanics, and other workers employed by them on the project; the records shall include each worker's employed by them on the project; the records shall include information required by 820 ILCS 130/5 for each worker. Upon seven business days' notice, the Contractor and each subcontractor shall make available for inspection and copying at a location within this State during reasonable hours, the payroll records to the public body in charge of the project, its officers and agents, the Director of Labor and his deputies and agents, and to federal, State, or local law enforcement agencies and prosecutors.
- 3. Submission of Payroll Records. The Contractor and each subcontractor shall ,no later than the 15th day of each calendar month, file a certified payroll for the immediately preceding month with the public body in charge of the project, except that the full social security number and home address shall not be included on weekly transmittals. Instead the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number). The certified payroll shall consist of a complete copy of the payroll records except starting and ending times of work each day may be omitted
 - The certified payroll shall be accompanied by a statement signed by the Contractor or subcontractor or an officer, employee, or agent of the contractor or subcontractor which avers that: (i) he or she has examined the certified payroll records required to be submitted by the Act and such records are true and accurate; (ii) the hourly rate paid to each worker is not less than the general prevailing rate of hourly wages required; and (iii) the Contractor or subcontractor is aware that filing a certified payroll that he or she knows to be false is a Class A misdemeanor.
- 4. Employees Interviews. The Contractor and each subcontractor shall permit his/her employees to be interviewed on the job, during working hours, by compliance investigators of the Department or the Department of Labor.

LR107-5 State of Illinois DEPARTMENT OF TRANSPORTATION Bureau of Local Roads & Streets SPECIAL PROVISION FOR SUBSTANCE ABUSE PREVENTION PROGRAM

Effective: January 1, 2008

In addition to all other labor requirements set forth in this proposal and in the Standard Specification for Road and Bridge Construction, adopted by the Department, during the performance of this contract, the Contractor for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

Substance Abuse Prevention Program. Before the Contractor and any Subcontractor commences work, the Contractor and any Subcontractor shall have in place a written Substance Abuse Prevention Program for the prevention of substance abuse among its employees which meets or exceeds the requirements in P. A. 95-0635 or shall have a collective bargaining agreement in effect dealing with the subject matter of P. A. 95-0635.

The Contractor and any Subcontractor shall file with a public body: a copy of the substance abuse prevention program along with a cover letter certifying that their program meets the requirements of the Act, or a letter certifying that the Contractor or a Subcontractor has a collective bargaining agreement in effect dealing with the subject matter of this Act.

CITY OF AURORA GENERAL SPECIFICATIONS SECTION 1 - DEFINITION OF TERMS

1.1 ADVERTISEMENT

The word Advertisement shall mean and refer to the official notice as published in the Aurora Beacon News, a daily newspaper published in the City of Aurora, Illinois, inviting bids for the construction of this improvement.

1.2 A.S.T.M.

Wherever the letters A.S.T.M. are herein used, they shall be understood to mean the American Society of Testing Materials.

1.3 ATTORNEY

Wherever the word Attorney is used in these specifications or in the contract, it shall be understood to mean the Corporation Counsel of the City or designee.

1.4 BIDDER

Wherever the word Bidder is used, it shall be understood to mean the individual, firm, or corporation formally submitting a proposal for the work contemplated, or any portion thereof, acting directly or through an authorized representative.

1.5 BOARD

Wherever the word Board or a pronoun in the place of it occurs in these specifications, it shall be interpreted to mean the Board of Local Improvements of the City of Aurora, Illinois, and any of its authorized representatives provided, however, that such persons shall be understood to represent said Board to the extent of the special duties delegated to such representatives.

1.6 CITY CLERK

Wherever the term City Clerk is used herein, it shall be understood to mean the City Clerk of the City of Aurora. Illinois.

1.7 CITY COUNCIL OR COUNCIL

Wherever the term City Council, or Council, appears in these specifications it shall be taken to mean the City Council of the City of Aurora, Illinois.

1.8 CONTRACT

The term Contract shall be understood to mean the agreement covering the performance of the work covered by these general specifications, including the advertisement for bids, instructions to bidders, bid proposal, performance bond, these general specifications, supplemental specifications, special provisions, general and detailed plans for the work, standard specifications referred to in the special provisions, all supplemental agreements entered into and all general provisions pertaining to the work or materials thereof, all of which are collectively referred to as the "Contract Documents".

1.9 CONTRACTOR

Wherever the word Contractor occurs in these specifications, it shall be interpreted to mean the person or persons, firm, or corporation who submits a proposal and thereafter enters into the contract governed by these specifications as party or parties of the second part, and the agents, employees, workmen,

heirs, executors, administrators, successors, or assignees thereof.

1.10 ENGINEER

Wherever the word Engineer is used in these specifications, it shall be interpreted to mean the City Engineer or his designee charged with directing and having charge of a portion of the project limited by the particular duties entrusted to him.

1.11 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

The MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, latest edition, as adopted by the Illinois Department of Transportation.

1.12 PLANS

Wherever the word plans is used in these specifications, it shall be understood to mean all drawings, sketches, and detailed plans or reproductions thereof pertaining to the construction involved.

1.13 PROPOSAL

Wherever the word Proposal is used, it shall be taken to mean the written proposal of the bidder on the form furnished for the work contemplated.

1 14 SPECIFICATIONS

Wherever the word Specifications is used it shall be understood to include all directions and requirements contained herein or referred to hereby, together with all special provisions and written agreements made or to be made pertaining to the work involved. All articles referred to in these general specifications when not qualified otherwise than by numbers, shall be understood to be articles from these general specifications.

1.15 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

The STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, latest edition, prepared by the Illinois Department of Transportation and adopted by said Department.

1.16 STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION

The STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, latest edition, as adopted by the Illinois Society of Professional Engineers.

1.17 STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS

The STANDARD TRAFFIC SIGNAL SPECIFICATIONS, latest edition, as adopted by the Illinois Department of Transportation.

1.18 STATE

Wherever the word State is used herein, it shall mean the State of Illinois.

1.19 SURETY

The word Surety shall be understood to mean the individuals who are, or the corporate body which is bound with and for the Contractor for the acceptable performance of the contract, and for his payment of all debts pertaining to the work.

1.20 WORK

Wherever the word "Work" is used, it shall mean the work including all materials, labor, tools, appliances, equipment, and appurtenance necessary and incidental thereto to perform and complete everything specified or implied in the plans, specifications, and in the contract documents, in full compliance with all the terms and conditions thereof and in a good and workmanlike manner.

SECTION 2 AWARD AND EXECUTION OF CONTRACT

2.1 PUBLIC OPENING OF PROPOSALS

Proposals will be opened at the time and place specified in the advertisement, or as soon thereafter as the business of the City Clerk permits. Bidders, their authorized agents, and other interested parties are invited to be present.

2.2 AWARD OF CONTRACT

The decision of the award of the contract will be made as may be decided upon by the Council after bids have been opened and tabulated. The Contract shall be governed by the laws of the State of Illinois. No contract shall provide for arbitration of the parties.

2.3 BONDS AND INSURANCE

The bidder to whom the award of contract is made will be required under this contract to furnish a Performance Bond acceptable to the Engineer in the amount of one hundred percent (100%) of the full contract price, a Payment Bond, Public Liability Insurance, and Workers Compensation Insurance; all of which shall be acceptable to the City of Aurora.

2.4 SUBLETTING OR ASSIGNMENT OF CONTRACT

The Contractor shall not sublet, sell, or assign all, or any portion of the contract, or of the work provided for therein, without the written consent and authorization of the City, and in no case shall such consent relieve said Contractor from either, any, or all of the obligations herein entered into, or change the terms of the obligations hereof.

2.5 FAILURE TO EXECUTE CONTRACT

In the event that said bidder fails or refuses to execute said contract and furnish said bonds within the period of ten (10) days after mailing notice of such award or within such additional number of days as the City may determine, then the sum deposited as a proposal guaranty by said bidder on the work so awarded may be retained by the City as liquidated damages and not a forfeiture. It is hereby agreed that said sum is a fair estimate of the amount of damages that the City will sustain in case said bidder fails to enter into the contract and furnish bonds as herein provided, said actual damages being uncertain in amount and difficult to determine in the event of such failure or refusal by the bidder.

2.6 TERMINATION

The City has the right to terminate this Contract, in whole or in part, for any reason or if sufficient funds have not been appropriated to cover the estimated requirement of the Services not yet performed, by providing Bidder with thirty (30) days' notice specifying the termination date. On the date specified, this Contract will end. If this Contract is terminated by the City, as provided herein, the City shall pay the Bidder only for services performed up the date of termination. After the termination date, Bidder has no further contractual claim against the City based upon this Contract and any payment so made to the Bidder upon termination shall be in full satisfaction for Services rendered. Bidder shall deliver to the City all finished and unfinished documents, studies and reports and shall become the property of the City.

2.7 VENUE FOR LEGAL ACTION

The venue for any legal action that may arise from this agreement shall be in Kane County, Illinois.

2.8 WAIVER OF TRIAL BY JURY

The Contractor agrees to waive trial by jury for itself and all of its contracts with sub-Contractors shall contain a provision waiving trial by jury in the event of any legal action which may arise from this agreement with the City of Aurora as a party litigant.

SECTION 3 SCOPE OF THE WORK

3.1 INTENT OF PLANS AND SPECIFICATIONS

The true intent of the plans and these specifications is to provide for the erection and completion in every detail of the work described herein, and it is understood that the Contractor will furnish all labor, materials, equipment, tools, transportation, and necessary supplies, such as may reasonably be required to execute the contract in a satisfactory and workmanlike manner and in accordance with the plans, specifications, and terms of the contract. Both parties must stipulate any deviation from these requirements in writing.

3.2 SPECIAL WORK

Should any construction conditions which are not covered by the plans and these specifications be anticipated or encountered during construction, Supplemental Specifications for such work will be prepared by the Engineer and shall be considered a part of these specifications, the same as though contained fully herein.

3.3 INCREASED OR DECREASED QUANTITIES

The right is reserved, without impairing the contract, to make such increase or decrease in the quantities of the work as may be considered necessary to complete fully and satisfactorily the work included in the contract. The compensation to the Contractor for such changes shall be adjusted as provided herein.

3.4 ALTERATIONS IN PLANS AND SPECIFICATIONS

The City reserves the right to make such changes in the plans and in the character of the work as may be necessary or desirable to insure completion in the most satisfactory manner, provided such changes do not materially alter the original plans and specifications. Such changes shall not be considered as waiving or invalidating any conditions or provisions of the contract.

3.5 EXTRA WORK

The City reserves the right, without impairing the contract, to order the performance of such work, of a class not contemplated in the proposal as may be considered necessary to complete fully and satisfactorily the work included in the contract. The Contractor shall do such extra work when ordered and authorized in writing by the Engineer, and the Contractor shall be compensated for such extra work on the basis and in the amount as provided herein.

3.6 EASEMENTS, PERMITS, AND REGULATIONS

The Contractor shall keep himself fully informed of all Federal, State, Municipal and local regulations, private contracts, grants, easements, and permits, in any manner affecting the work herein specified and provided for. He shall at all times observe and comply with and cause all his Subcontractors, agents, and employees to observe and comply with each and all of the same. The Contractor does hereby assume any and all liability under the same and shall protect and indemnify the City and its officers and employees against any and all claims or liabilities arising from or based on the violation of, or failure to comply with either or all of the same.

3.7 FINAL CLEANING UP

Upon completion and before final acceptance of the work, the Contractor shall, in addition to the detailed work of grading, restoring ground surfaces, repairing roadways and pavements, and all other work specifically provided for in these specifications, remove all falsework, excess or useless excavated materials, rejected materials, rubbish, temporary buildings, temporary foundations, replace or renew any fences damaged, and restore in an acceptable manner all property, both public and private, which may

have been damaged during the prosecution of the work, and shall leave the site of the work in a neat and presentable condition satisfactory to the Engineer.

SECTION 4 CONTROL OF THE WORK

4.1 AUTHORITY OF THE ENGINEER

The Engineer shall decide any and all questions which may arise as to the quality and acceptability of materials furnished and work performed, and as to the manner of performance and rate of progress of the work, and shall decide all questions which may arise as to the interpretation of the plans and specifications, and all questions as to the acceptable fulfillment of the terms of the contract.

4.2 PLANS AND WORKING DRAWINGS

General drawings, showing such details as are necessary to give a comprehensive idea of the construction contemplated, will be shown in the general plans, but the Contractor shall submit to the Engineer for approval such additional detailed shop drawings or working drawings, together with a detailed structural analysis of all component parts, as may be required for the construction of any part of the work and prior to the approval of such plans, any work done or material ordered shall be at the Contractor's risk.

The contract price shall include the cost of furnishing all working drawings and the Contractor will be allowed no extra compensation for such drawings.

4.3 DEVIATIONS FROM THE PLANS

No deviation from the general plans or the approved working drawings will be permitted without the written order of the Engineer. No allowance shall be made for work done other than is shown on the plans, profiles and drawings, and provided for in the specifications.

4.4 COORDINATION OF SPECIFICATIONS AND PLANS

In the event of any discrepancy between the plans and figures written thereon, the figures are to be considered as correct. In the case of any discrepancy between the plans and the specifications, the Engineer shall determine which are to govern. If there is a discrepancy between the general specifications and the supplemental specifications, the supplemental specifications are to govern.

The Contractor shall take no advantage of any apparent error or omission in the plans or specifications, but the Engineer shall be permitted to make such corrections and interpretations as may be deemed necessary for the fulfillment of the intent of the plans and specifications.

4.5 ORDER OF WORK

The order of sequence of the execution and/or conduct of the work shall be subject to the approval and/or direction of the Engineer, which approval and/or direction shall not in any way relieve the Contractor of any responsibility in connection with the prosecution to completion of the work under contract.

4.6 COOPERATION BY CONTRACTOR

The Contractor shall conduct his operation so as to interfere as little as possible with those of other Contractors, Subcontractors, the public, or adjoining property owners on or near the work site. The Contractor shall at all times during his absence from the work site have a competent superintendent or foreman capable of reading and thoroughly understanding the plans and specifications, as his agent on the work, who shall receive instructions from the Engineer or his authorized representative. The superintendent or foreman shall have full authority to execute the order and/or directions of the Engineer without delay and to promptly supply such materials, tools, plant equipment, and labor as may be required. The superintendent or foreman shall have a copy of the plans and specifications on the job at all time.

4.7 CONSTRUCTION STAKES

Reference lines and grade points for the location, alignment, and elevation of each structure will be determined and established by the Engineer, but the Contractor shall assume full responsibility for the alignment, elevations, and dimensions of each and all parts of the work with reference to the lines, points, and grades as established by the Engineer. For all structures, the Engineer shall furnish the Contractor with centerline and/or center points and such benchmarks or other points as are necessary to lay out the work correctly. The Contractor shall check all lines, points, and grades which may be given by the Engineer supplementary to the centerline, points, and control bench marks aforesaid, and shall be responsible for the accuracy of all measurements for grades and alignment of the work with reference to the centerline and/or points and bench marks established by the Engineer.

The Contractor shall exercise proper care in the preservation of alignment, grade, and reference stakes set for his use, or that of the Engineer. If such stakes are injured, lost, or removed by the Contractor's operations, they shall be reset at his expense.

4.8 INSPECTION

The Engineer or his representative shall be allowed access to all parts of the work at all times and shall be furnished such information and assistance by the Contractor as may be required to make a complete and detailed inspection thereof. Such inspection may include mill, plant, or shop inspection and any material furnished under these specifications is subject to such inspection.

SECTION 5 CONTROL OF MATERIALS

5.1 SPECIFICATIONS FOR MATERIALS

All materials used in this work shall conform in all respects to the specifications therefore as herein set forth. Where a specification for material to be used in this work is not specifically set forth in these specifications, such material shall conform in all respects to the specifications as set forth in the A.S.T.M. Standards and/or Tentative Standards adopted and in effect on the date of receiving bids.

5.2 SUBSTITUTION OF MATERIALS AND EQUIPMENT

Wherever in these specifications or on the plans for this work, materials or equipment are specified by trade names or catalog numbers of certain manufacturers, it is done for the purpose of establishing a standard of quality, durability, and/or efficiency, and not for any purpose of limiting competition. Wherever such definite reference is made in these specifications to any such material or equipment, is understood that any equivalent material or equipment may be provided, however, that the written approval and acceptance of the Engineer of such equivalent material or equipment must be obtained prior to its purchase and/or incorporation in any part of the work.

5.3 THE METHODS OF TESTING

All tests of materials or equipment used in the work shall be made in accordance with the methods described in these specifications or the method of test prescribed in any specification for material or equipment herein specifically referred to and designated to govern the quality of any material or equipment.

Where a method of test for any material or equipment is not specifically provided for, such material or equipment shall be tested in accordance with the methods prescribed and set forth in the A.S.T.M. Standards and Tentative Standards adopted and in effect on the date of receiving bids.

5.4 DEFECTIVE MATERIALS

All materials not conforming to the requirements of these specifications shall be considered as defective and all such materials, whether in place or not, shall be rejected and shall be removed immediately from the work by the Contractor at his expense unless otherwise permitted by the Engineer. No rejected materials, the defects of which have been subsequently corrected, shall be used until approval has been given. Upon failure on the part of the Contractor to immediately comply with any order of the Engineer relative to the provisions of this section, the Engineer shall have the authority to remove and replace such defective material and to deduct the cost of removal and replacement from any moneys due or which may become due to the Contractor.

SECTION 6 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

6.1 COMPLIANCE WITH LAWS AND REGULATIONS

The Contractor shall at all times observe and comply with all Federal, State, Municipal and other local laws, ordinances, regulations, and requirements which in any manner affect the conduct of the work, and with all Federal, State and local laws and policies of non-discrimination, sexual harassment, prevailing wages and others applicable hereto; and all such orders or decrees as exist at the present and which may be enacted later, of bodies or tribunals having jurisdiction or authority over the work, and no plea of misunderstanding or ignorance thereof will be considered. He shall indemnify and save harmless the City and all its officers, agents, employees, and servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, requirement, order or decree, whether by himself or his employees.

6.2 PERMITS AND LICENSES

The Contractor shall take out and procure at his own expense all permits and licenses required by Federal, State or local public authorities, and he shall, without extra compensation from the City, pay all fees and charges and give notices required incident to the due and lawful prosecution of the work in relation thereto.

6.3 PATENTED DEVICES, MATERIALS, AND PROCESSES

It is mutually understood and agreed that without exception contract prices are to include all royalties and costs arising in the work. It is the intent that whenever the Contractor is required or desires to use any design, device, material, or process covered by letters of patent or copyright, the right of such use shall be provided for by suitable legal agreement with the patent owner. The Contractor and Surety in all cases shall indemnify and save harmless the City from any and all claims for infringement by reason of the use of any such patent design, device, materials, or process, to be performed or used under the contract, and shall indemnify and save harmless the said City for any costs, expenses, attorney's fees, and damages which it may be obligated to pay, by reason of any such infringement at any time during the prosecution or after the completion of the work.

6.4 BARRICADES, LIGHTS, AND SIGNS

The Contractor shall at his own expense and without further or other order provide, erect, and maintain at all times during the progress or suspension of the work, suitable barricades, fences, signs, or other adequate protection, and shall provide, keep, and maintain such lights, danger signals, and watchmen as may be necessary or as may be ordered by the Engineer to insure the safety of the public, as well as those engaged in connection with the work. All barricades and obstructions shall be protected at night by signal lights, which shall be suitably placed and which shall be kept burning from sunset to sunrise. Barricades shall be of substantial construction, and shall be painted in such a way as to increase their visibility at night. The Contractor shall be held responsible for all damage to the work due to failure of barricades, signs, lights, and watchmen to protect it, and whenever evidence of such damage is found prior to acceptance, the Engineer may order such damaged portion immediately removed and replaced by the Contractor without cost to the City if, in his opinion, such action is justified. The Contractor's responsibility for the maintenance of barricades, signs, and lights shall not cease until the project shall have been accepted.

6.5 USE OF EXPLOSIVES

The use of explosives shall be prohibited.

6.6 PROTECTION AND RESTORATION OF PROPERTY

It is understood that in the execution of the work herein provided for there may be interference with and/or damage to trees, shrubbery, crops, fences, railroad tracks, overhead structures such as poles, wires, cables, underground structures such as sewers, gas mains, telephone conduits and cables, water mains, drains, service connections, wires, pipes, conduits, located along, adjacent to, and/or crossing the locations of the work, and that it may be necessary to relocate or reconstruct certain of such structures, improvements, and installations and/or to make repairs to the same by reasons of doing the work herein provided for, and it is therefore particularly and specifically agreed that the Contractor, except as otherwise herein provided, shall do the work necessary for such relocation, reconstruction, and repair and shall bear and pay all of the cost and expense of such relocation, reconstruction, and/or repair of, and all damage done to any and all such pipe line and other structures, improvements, and installations, including service connections, if any, to adjacent property, existing at the date of the execution of the contract and/or existing, during the period of the work to be done under the contract, which may be interfered with, damaged, and/or necessarily relocated, reconstructed, or repaired in the performance of the work herein provided for, including the restoration and resurfacing of unpaved portions of public streets and alleys, rights-of-way, easements, and private property damaged or disturbed by the work, the same to be restored to as good condition as the same existed at the time of the commencement of any such work or relocation.

It is further agreed that the owners of any structures, improvements, installations, referred to in the preceding paragraph shall have the right to do the work or any part thereof necessary for the relocation, reconstruction, replacement, repair, and other work required by reason of any interference with and/or damage to such structures, improvements, installations, due to the prosecution of the work and upon completion of such work by them done, said owners may render bills to the Contractor for the cost and expense thereof, which bills shall be paid by the Contractor, without extra compensation therefore from the City, upon demand by said owners, or upon demand made by the City upon the Contractor for the payment thereof.

6.7 RESPONSIBILITY FOR DAMAGE CLAIMS

The Contractor agrees to indemnify and save harmless the City of Aurora, their agents and employees from and against all loss and expenses (including costs and attorneys' fees) by reason of liability imposed by law or claims made upon the City of Aurora for damages because of bodily injury, including death at any time resulting therefrom sustained by any person or persons or on account of damage to property, including loss of use thereof, arising out of or in consequence of the performance of this work, whether such claims or injuries to persons or damage to property be due to the negligence of the Contractor, his Subcontractors or the City of Aurora.

The Contractor shall assume total risk and shall be responsible for any and all damages or losses caused by or in any way resulting from the work and provide all insurance necessary to protect and save harmless the City of Aurora and its employees. Said insurance shall include contractual liability equal to the limits hereinafter set forth.

The Contractor agrees to purchase a policy of insurance, which shall include the City of Aurora as an additional insured or provide separate coverage for the City with an owner's protective policy. All Insurance provided by Contractor, extending to owner as additional insurance, shall be primary and insurance maintained by owner shall be excess and not contributing with Contractor's insurance. The minimum amounts of insurance shall be as follows, except that no restrictions on occurrence limits will be permitted:

Bodily Injury Liability

Property Damage Liability

Each Occurrence \$3,000,000 Each Occurrence \$500,000

Aggregate \$3,000,000

The coverage and amounts above are minimum requirements and do not establish limits to the Contractor's liability. Other coverage and higher limits may be provided at the Contractor's option and expense.

Owner does not waive its subrogation rights against Contractor and/or any Subcontractor for damages due to losses to owner due to the fault or negligence of the Contractor and/or any Subcontractors during or as a result of the performance of the work.

All such insurance must include an endorsement whereby the insurer agrees to notify the City of Aurora at least thirty (30) days prior to non-renewal, reduction or cancellation. The Contractor shall cease operations on the project if the insurance is canceled or reduced below the required amount of coverage. All costs for insurance as specified herein will not be paid for separately, but shall be considered as incidental to the contract.

6.8 WORKERS COMPENSATION ACT

The Contractor further agrees to insure his employees and their beneficiaries and to provide the employees and the beneficiaries of any Subcontractor employed from time to time by him on said work, the necessary first-aid, medical, surgical, and hospital services and any compensation provided for in the Workers Compensation Act of the State of Illinois that is or may be in force in the State.

Such insurance shall be placed by said Contractor in a company or association (to be approved by the City and to be accepted by the Council thereof) authorized under the laws of the State of Illinois to insure the liability above specified.

Said Contractor hereby further agrees to indemnify, keep and save harmless said City from all action, proceedings, claims, judgments, awards, and costs, losses, damages, expenses, and attorney's fees which may in any way be brought against said City by reason of any accidental injuries or death suffered by any of his employees or the employees of any Subcontractor employed by him in and about the performance of the work provided for in the contract, and any and all liability resulting thereupon; and said Contractor, in case of any suit, action, or proceeding on account of any or all of the foregoing shall defend the same for and on behalf of said City and indemnify the City therefore and pay the amount of any and all awards and final judgments and/orders rendered and entered therein, together with all loss, costs, damages, attorney's fees, and expenses incurred therein. Said Contractor shall be the sole employer of its employees and workers, and in no way so shall the City be considered a joint employer of same under any circumstance.

SECTION 7 PROSECUTION AND PROGRESS OF WORK

7.1 SUBLETTING OR ASSIGNMENT OF WORK

If the Contractor sublets the whole or any part of the work to be done under the contract, with or without the written consent of the City, he shall not, under any circumstances, be relieved of his liabilities and obligations. All transactions of the Engineer shall be with the Contractor; Subcontractors shall be recognized only in the capacity of employees or workmen and shall be subject to the same requirements as to character and competence. In case any party or parties, to whom any work under the contract shall have been sublet, shall disregard the directions of the Engineer or his duly authorized representatives, or shall furnish any unsatisfactory work or shall fail or refuse in any way to conform to any of the provisions or conditions of the contract, then in that case, upon the written order of the Engineer, the Contractor shall require said party or parties in default to discontinue work under the contract. Said work shall be corrected or made good and shall be continued and completed by the said Contractor or by such other party or parties as are approved by the Engineer, in the manner and subject to all of the requirements specified in the contract.

7.2 PROSECUTION OF WORK

The Contractor shall begin the work to be performed under the contract no later than ten (10) days after the execution and acceptance of the contract, unless otherwise provided. The work shall be conducted in such a manner and with sufficient materials, equipment and labor as is considered necessary to insure its completion within the time specified in the contract. The Contractor shall solely be fully responsible for complying with state and local prevailing wage requirements in accordance with its Bidders Certification, and for all wage rate and hour regulations and applications

7.3 GUARANTEE AND MAINTENANCE OF WORK

The Contractor shall guarantee the work to be free from defects of any nature for a period of one year from and after the final acceptance and payment for the work by the City, and the Contractor shall maintain said work and shall make all needed repairs and/or replacements during this one year period which in the judgment of the Council, may be necessary to insure the delivery of the work to the City in first-class condition and in full conformity with the plans and specifications therefore, at the expiration of the guarantee period.

7.4 PAYMENT

Basis of Payment

Payment of the CONTRACTOR for performance of the CONTRACT shall be made by the OWNER and shall be based on the value of the installation resulting from the CONTRACTOR's operations.

The cost of all WORK incidental to the completion of the project in accordance with the Plans and Specifications, excepting authorized extra WORK, shall be included in the unit and lump sum prices stated in the CONTRACTOR's accepted Proposal. The amount obtained by the summation of the products of the quantities of WORK performed or the respective unit or lump sum prices for several items listed in the proposal shall be payment in full, except for payment for authorized extra WORK, for delivering the completed project to the OWNER in accordance with the Plans and Specifications.

Submission of Bid Breakdown

Within 15 days after the execution of this CONTRACT, the CONTRACTOR must submit to the ENGINEER in duplicate an acceptable breakdown of the lump sums and unit prices bid for items of the CONTRACT, showing the various operations to be performed under the CONTRACT, and the value of

each of such operations, the total of such items to equal the total price bid. The CONTRACTOR shall also submit such other information relating to the bid prices as may be required and shall revise the bid breakdown as directed. Thereafter, the breakdown may be used for checking the CONTRACTOR's applications for partial payments hereunder but shall not be binding upon the OWNER or the ENGINEER for any purpose whatsoever.

Partial Payments

When not otherwise provided for under the Specifications for an item of WORK or a complete project, and if the rate of progress is satisfactory to the ENGINEER, partial payments will be made the CONTRACTOR by the OWNER during progress of construction. The amount of each partial payment shall be limited to ninety (90) percent (unless otherwise provided in the Instructions to Bidders) of the value of the WORK shown in the Engineer's periodic estimate to have been done and installed in place by the CONTRACTOR subsequent to the time of commencing WORK or of making the last preceding partial payment on account of WORK done. An amount greater than ninety (90) percent of the value of a largely completed project may be paid the CONTRACTOR at the option of the OWNER.

The CONTRACTOR's request for payment shall be in the form of an invoice, submitted to the OWNER through the ENGINEER, setting forth amounts due for WORK completed on payment items set forth in the CONTRACTOR's Proposal, and shall be accompanied by:

- (1) CONTRACTOR's Sworn Statement setting forth the Subcontractors and material suppliers, the amount requested for each of the Subcontractors or material suppliers, and the amount of the subcontract or material to be completed.
- (2) Subcontractor or material supplier's waivers of lien for amounts requested on previous payment requests.
- (3) CONTRACTOR's waivers of lien.

The CONTRACTOR's request will be reviewed by the ENGINEER and if the ENGINEER is in agreement with the value of WORK completed, as requested by the CONTRACTOR, and if the request is accompanied by the CONTRACTOR's Sworn Statement, Subcontractor and material suppliers waiver of lien as stated above, and by the CONTRACTOR's waiver of lien, the ENGINEER will recommend payment to the OWNER.

Partial payment made to the CONTRACTOR by the OWNER for WORK performed shall in no way constitute an acknowledgement of the acceptance of the WORK nor in any way prejudice or affect the obligation of the CONTRACTOR, at his expense, to repair, correct, renew or replace any defects or imperfections in the construction of the WORK under CONTRACT and its appurtenances, nor any damage due or attributable to such defect, damage and the CONTRACTOR shall be liable to the OWNER for failure to correct the same as provided herein.

Payment in full or in part may be withheld for reasons which include but are not limited to: (1) the existence of defective work which is not remedied; (2) the existence of third party claims filed or reasonable evidence indicating probable filing of such claims; (3) the failure of the CONTRACTOR to make payments properly to Subcontractors or for labor, materials or equipment; (4) the existence of reasonable evidence that the WORK cannot be completed for the unpaid balance of the contract sum; (5) damage to the OWNER; (6) the existence of reasonable evidence that the WORK will not be completed within the CONTRACT time, and that the unpaid balance will not be adequate to cover actual or liquidated damages for the anticipated delay; or, (7) persistent failure to carry out the work in accordance with the contract documents. If within a reasonable time not to exceed 45 days CONTRACTOR has not remedied any condition for which payment in full has been withheld, then OWNER may make such payments as OWNER deems necessary to remedy such situation from said funds withheld and pay the balance to CONTRACTOR, or if, sums are still due to remedy the situation, CONTRACTOR will remit any balances due to OWNER within 10 days of notice of same.

ACCEPTANCE AND FINAL PAYMENT

Whenever the CONTRACT shall have been completely performed on the part of the CONTRACTOR, and all parts of the WORK have been approved by the ENGINEER and accepted by the OWNER, including the resolution of all matters of dispute, a final estimate showing the value of the WORK will be prepared by the ENGINEER as soon as the necessary measurements and computations can be made, all prior estimates upon which payments have been made being approximate only and subject to corrections in the final payments.

The CONTRACTOR shall submit a final payment request showing the total quantities completed for the entire project and all previous payouts. This payment request shall be accompanied by a sworn affidavit listing all Subcontractors and material suppliers and the total payments to each. Final Waivers of Lien from the Subcontractors and material suppliers as well as the CONTRACTOR shall also be furnished at this time.

A final payment including all amounts of money shown by the final estimate to be due the CONTRACTOR shall be made by the OWNER as soon as practicable after the final acceptance of the WORK, provided the CONTRACTOR has furnished the OWNER satisfactory evidence that all sums of money due for labor, materials, apparatus, fixtures or machinery furnished for the purpose of performing the Contract have been paid or that the person or persons to whom the same may respectively be due have consented to such final payment.

PROPOSAL

TO: THE HONORABLE MAYOR AND CITY COUNCIL. CITY OF AURORA 44 EAST DOWNER PLACE AURORA, ILLINOIS 60507

- 1. Proposal of <u>Brandt Excavating Inc.</u> for the improvement known as the 2022 Water & Sewer Division Emergency Repair Program, Bid 21-71.
- 2. The plans and specifications for the proposed improvements are those prepared by the City of Aurora Engineering Department and approved by the City Council of Aurora, Illinois.
- 3. In submitting this proposal, the undersigned declares that the only persons or parties interested in the proposal as principals are those named herein, and that the proposal is made without collusion with any person, firm, or corporation.
- 4. The undersigned further declares that he has carefully examined the proposals, plans, specifications, form of contract and contract bond, and special provisions, if any, and that he has inspected in detail the site of the proposed work and that he has familiarized himself with all of the local conditions affecting the contract and detailed requirements of construction, and understands that in making this proposal he waives all right to plead any misunderstanding regarding the same.
- 5. The undersigned further understands and agrees that if the proposal is accepted, he is to furnish and provide all necessary machinery, tools, apparatus and other means of construction and to do all of the work and to furnish all of the materials and labor required.
- 6. The undersigned declares that he understands that the quantities mentioned are approximate only, and that they are subject to increase or decrease; that he will take in full payment therefore the amount of the summation of the actual quantities, as finally determined, multiplied by the unit prices shown in the schedule of prices contained herein.
- 7. The undersigned agrees that the unit prices submitted herewith are for the purpose of establishing an approved list for the performance of each individual designated item of work for which the City of Aurora reserves the right to select any Contractor for any individual item based not solely upon low bid item price, but also on ability to perform said work in a timely and efficient manner.
- 8. The undersigned agrees that if the City decides to extend or shorten the improvement, or otherwise alter it by extras or deductions, including the elimination of any one or more of the items, as provided in the specifications, he will perform the work as altered, increased or decreased, at the contract unit prices without claim for profits lost as a result of any work or items eliminated by the City of Aurora.
- 9. The undersigned agrees that the Engineer may, at any time during the progress of the work covered by this contract, order other work or materials incidental thereto, and that all such work and materials as do not appear in the proposal or contract as a specific item accompanied by a unit price, and which are not included under the bid price for other items in this contract, shall be performed as extra work, and that he will accept as full compensation therefore the actual cost plus ten percent (10%), the actual cost to be determined as provided for in the specifications.
- 10. The undersigned further agrees to execute a contract prescribed by the City in the penal sum of the full amount of the contract, guaranteeing the faithful performance of the work in accordance with the terms of the contract within fifteen (15) days of after notice of award of the contract.
- 11. The undersigned further agrees to begin work not later than ten (10) calendar days after the execution or by the date stated within the contract documents and approval of the contract and contract bond,

unless otherwise provided, and to prosecute the work in such a manner and with sufficient materials, equipment, and labor as will insure its completion within the time limit specified herein, it being understood and agreed that the completion within the time limit is an essential part of the contract.

- 12. The undersigned agrees to complete the work within the time stipulated in the Special Provisions.
- 13. All work shall be completed to the satisfaction of the Engineer by the above dates unless the Engineer in accordance with the specifications grants additional time. In case of failure to complete the work within the time named herein, or within such extra time as may have been allowed by extensions, the undersigned agrees that the City shall withhold from such sums as may be due him under the terms of the contract the liquidated damages as set forth in the Standard Specifications, which costs shall be considered and treated not as a penalty, but as damages due the Municipality from the undersigned by reason of inconvenience to the public, added cost of engineering and supervision, and other items which have caused an expenditure of public funds resulting from the failure of the undersigned to complete the work within the time specified in the contract.
- 14. The undersigned submits herewith his schedule of prices covering the work to be performed under this contract, he understands that he must show in the schedule the unit prices for which he proposes to perform each item of work, that the extensions must be made by him, and that if not so done, his proposal may be rejected as irregular or non-responsive.
- 15. The undersigned agrees to conform to Section 100 of the Standard Specifications and to Article 107.27 of that section indemnifying and saving harmless the City of Aurora and its officers, agents, and employees. The Contractor shall provide insurance with limits as stated in the Article 6.7 of the City of Aurora General Specifications.
- 16. The City of Aurora reserves the right to reject any or all of the bids and to waive any and all irregularities and technicalities.
- 17. The undersigned of this proposal agrees that he or she has examined all sections of this Proposal, Specifications, and Bidding Documents and hereby understands and accepts the provisions for access, or the lack of access, to the construction site and shall claim no compensation other than the prices as bid for this condition of accessibility.
- 18. The undersigned further agrees that the unit prices submitted herewith are for the complete item constructed, including all labor, equipment, material and other necessary incidental work.
- 19. The undersigned agrees to indemnifying and saving harmless the City of Aurora, its officers, agents, employees, and servants by filing with the City, prior to the execution of the contract, copies of completed Certificates of Insurance satisfactory to the City, with the City of Aurora named as coinsured; automobile liability insurance covering owned, non-owned, and hired vehicles with limits of liability as stated in the City of Aurora General Specifications Article 6.7.
- 20. No bid shall be considered unless the party offering it shall furnish evidence satisfactory to the City of Aurora that he has been previously engaged in the quality construction of improvements of the same character as the one herein specified, and that he has the necessary facilities, equipment, experience, and ability and pecuniary resources to fulfill the conditions of the contract.
- 21. No contract will be awarded to any bidder where that bidder or any principal or supervisory personnel of the bidder has been personally involved with another business that has been delinquent or unfaithful in any former contract with the City or where that bidder or any supervisory personnel of the bidder has been personally involved with another business that is a defaulter as surety or otherwise upon obligation to the City.
- 22. The entire set of specifications shall be submitted with each proposal.

- 23. The City of Aurora has a local preference ordinance that would apply to this contract. O18-070 approved August 28, 2018 and amended with ordinance O20-029 approved April 28, 2020 defines "Local business" to mean a vendor or contractor who has a valid, verifiable physical business address located within the corporate boundaries of the City of Aurora at least twelve months prior to a bid or proposal opening date, from which the vendor, contractor or consultant operates or performs business on a daily basis, including manufacturing production or distribution. The business must disclose the percentage of workforce in the City of Aurora; be registered with the City of Aurora, if applicable; be subject to City of Aurora taxes (inclusive of sales taxes); be current with property tax payments and sales tax payments; not have any outside cited code violations; not have any outstanding debts to the City of Aurora; have adequately qualified and trained staff to service the bid of interest.
- 24. The undersigned submits herewith this **Schedule of Prices** covering the work to be performed under this contract:



Schedule of Prices 2022 Emergency Water Main Repair Schedule of Prices Bid 21-71

Item#	<u>Description</u>	<u>Unit</u>	<u>Unit Price</u>
1	4" Stainless Steel Repair Clamp, 12"	EACH	\$170.00
2	6" Stainless Steel Repair Clamp, 12"	EACH	\$210,00
3	8" Stainless Steel Repair Clamp, 12"	EACH	\$260.00
4	10" Stainless Steel Repair Clamp, 12"	EACH	\$360.00
5	12" Stainless Steel Repair Clamp, 12"	EACH	\$450.00
6	14" Stainless Steel Repair Clamp, 12"	EACH	\$725.00
7	16" Stainless Steel Repair Clamp, 12"	EACH	\$800.00
8	4" Ductile Iron MJ Sleeve	EACH	\$200.00
9	6" Ductile Iron MJ Sleeve	EACH	\$275.00
10	8" Ductile Iron MJ Sleeve	EACH	\$325.00
11	10" Ductile Iron MJ Sleeve	EACH	\$450.00
12	12" Ductile Iron MJ Sleeve	EACH	\$550.00
13	14" Ductile Iron MJ Sleeve	EACH	\$975.00
14	16" Ductile Iron MJ Sleeve	EACH	\$1,500.00
15	4" Ductile Iron Pipe	LF	\$25.00
16	6" Ductile Iron Pipe	LF	\$28.00
17	8" Ductile Iron Pipe	LF	\$32.00
18	10" Ductile Iron Pipe	LF	\$35.00
19	12" Ductile Iron Pipe	LF	\$39.00
20	14" Ductile Iron Pipe	LF	\$45.00
21	16" Ductile Iron Pipe	LF	\$58.00
22	4" MJ Resilient Wedge Gate Valve	EACH	\$800.00
23	6" MJ Resilient Wedge Gate Valve	EACH	\$1,200.00
24	8" MJ Resilient Wedge Gate Valve	EACH	\$1,400.00
25	10" MJ Resilient Wedge Gate Valve	EACH	\$2,000.00
26	12" MJ Resilient Wedge Gate Valve	EACH	\$2,300.00
27	14" MJ Butterfly Valve	EACH	\$4,500.00
28	16" MJ Butterfly Valve	EACH	\$5,300.00
29	6" Insertion Valve	EACH	\$5,100.00



Schedule of Prices 2022 Emergency Water Main Repair Schedule of Prices Bid 21-71

Item#	Description	<u>Unit</u>	<u> Unit Price</u>
30	8" Insertion Valve	EACH	\$5,600.00
31	10" Insertion Valve	EACH	\$6,200.00
32	12" Insertion Valve	EACH	\$7,500.00
33	1" corporation stop	EACH	\$78.00
34	1.5" corporation stop	EACH	\$110.00
35	2" corporation stop	EACH	\$340.00
36	1" curb stop	EACH	\$100.00
37	1.5" curb stop	EACH	\$225.00
38	2" curb stop	EACH	\$400.00
39	1" coupling	EACH	\$55.00
40	1.5" coupling	EACH	\$100.00
41	2" coupling	EACH	\$150.00
42	1" Lead Pack Coupling	EACH	\$85.00
43	1.5" Lead Pack Coupling	EACH	\$110.00
44	2" Lead Pack Coupling	EACH	\$175.00
45	1" copper	EACH	\$8.00
46	1.5" copper	EACH	\$10.00
47	2" copper	EACH	\$12.00
48	4' Diameter Valve Vault w/ Fr & Lid	EACH	\$2,000.00
49	Pavement Sawcutting	LF	\$300.00
50	Pavement Removal & Disposal	СУ	\$40.00
51	Spoil Disposal	CY	\$45.00
52	CA-7	TON	\$30.00
53	CA-6	TON	\$28.00
54	Equipment Operator (Straight Time, 1)	HOUR	\$117.00
55	Equipment Operator (Overtime, 1.5)	HOUR	\$178.00
56	Equipment Operator (Overtime, 2)	HOUR	\$210.00
57	Laborer (Straight Time, 1)	HOUR	\$112.00
58	Laborer (Overtime, 1.5)	HOUR	\$172.00



Schedule of Prices 2022 Emergency Water Main Repair Schedule of Prices Bid 21-71

<u>ltem #</u>	<u>Description</u>	<u>Unit</u>	Unit Price
59	Laborer (Overtime, 2)	HOUR	\$175.00
60	Teamster (Straight Time, 1)	HOUR	\$102.00
61	Teamster (Overtime, 1.5)	HOUR	\$173.00
62	Teamster (Overtime, 2)	HOUR	\$202.00
63	Rubber Tire Excavator	HOUR	\$65.00
64	Track Mounted Excavator	HOUR	\$65.00
65	Rubber Tire Loader	HOUR	\$65.00
66	Skid Steer	HOUR	\$40.00
67	6 Wheel Dump	HOUR	\$40.00
68	Semi	HOUR	\$52.00
69	Lowboy	HOUR	\$52.00
70	Utility Truck w/ Tools	HOUR	\$27.00
71	Plate Compactor	DAY	\$75.00
72	Trench Box	DAY	\$400.00
73	Air Compressor	DAY	\$90.00
. 74	Arrowboard	DAY	\$160.00
75	Barricades, Type 2 w/Steady Burn Lights	DAY	\$20.00
76	Advanced Warning Signs	DAY	\$30.00
77	Flagger	HOUR	\$127.00
78	6" Insertion Valve	EACH	\$5,100.00
79	8" Insertion Valve	EACH	\$5,600.00
80	10" Insertion Valve	EACH	\$6,200.00
81	12" Insertion Valve	EACH	\$7,500.00
82	14" Insertion Valve	EACH	\$8,500.00
83	6" Line Stop	EACH	\$6,200.00
84	8" Line Stop	EACH	\$6,900.00
85	10" Line Stop	EACH	\$7,600.00
86	12" Line Stop	EACH	\$7,700.00
87	14" Line Stop	EACH	\$7,800.00
88	Mobilization	ALLOWANCE	\$ 1,000.00



Schedule of Prices 2022 Emergency Sanitary Sewer Repair Schedule of Prices Bid 21-71

ltem#	Description	Unit	<u>Unit Price</u>
1	6" Non-shear mission coupling	EACH	\$90.00
2	8" Non-shear mission coupling	EACH	\$110.00
3	10" Non-shear mission coupling	EACH	\$140.00
4	12" Non-shear mission coupling	EACH	\$210.00
5	14" Non-shear mission coupling	EACH	\$270.00
6	6" SDR-26 PVC	LF	\$6.00
7	8" SDR-26 PVC	LF	\$9.00
8	10" SDR-26 PVC	LF	\$13.00
9	12" SDR-26 PVC	LF	\$18.00
10	14" SDR-26 PVC	LF	\$28.00
11	Pavement Sawcutting	LF	\$3.25
12	Pavement Removal & Disposal	СҮ	\$40.00
13	Spoil Disposal	СУ	\$40.00
14	CA-7	TON	\$35.00
15	CA-6	TON	\$30.00
16	Equipment Operator (Straight Time, 1)	HOUR	\$118.00
17	Equipment Operator (Overtime, 1.5)	HOUR	\$180.00
18	Equipment Operator (Overtime, 2)	HOUR	\$210.00
19	Laborer (Straight Time, 1)	HOUR	\$112.00
20	Laborer (Overtime, 1.5)	HOUR	\$175.00
21	Laborer (Overtime, 2)	HOUR	\$210.00
22	Teamster (Straight Time, 1)	HOUR	\$ 102.00
23	Teamster (Overtime, 1.5)	HOUR	\$175.00
24	Teamster (Overtime, 2)	HOUR	\$210.00
25	Rubber Tire Excavator	HOUR	\$70.00
26	Track Mounted Excavator	HOUR	\$70.00
27	Rubber Tire Loader	HOUR	\$42.00
28	Skid Steer	HOUR	\$37.00
29	6 Wheel Dump	HOUR	\$37.00

Page 1 of 2



Schedule of Prices 2022 Emergency Sanitary Sewer Repair Schedule of Prices Bid 21-71

<u>ltem #</u>	Description	<u>Unit</u>	<u>Unit Price</u>
30	Semi	HOUR	\$55.00
31	Lowboy	HOUR	\$55.00
32	Utility Truck w/ Tools	HOUR	\$27.00
33	Plate Compactor	DAY	\$80.00
34	Trench Box	DAY	\$400.00
35	Air Compressor	DAY	\$80.00
36	Arrowboard	DAY	\$175.00
37	Barricades, Type 2 w/Steady Burn Lights	DAY	\$20.00
38	Advanced Warning Signs	DAY	\$40.00
39	Flagger	HOUR	\$140.00
40	Mobilization	ALLOWANCE	\$ 1,000.00



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(If an individual)	Signature of Bidder
	Business Address
(If a partnership)	
(Firm Name
	Signed by
	Business Address
	Insert Names and Addresses of All Partners
(If a corporation)	
,	Corporate Name Brandt Excavating Inc. Signed By President
	Business Address 385 E Hoover St, Morris IL 60450
	President Chad Brandt Secretary Meghan E. Fehr Treasurer Meghan E. Fehr
STOTANO AND	Attest: Meghan E. Fehr Attest: Meghan E. Fehr Secretary



BIDDER'S CERTIFICATION

I/We hereby certify that:

- A. A complete set of bid papers, as intended, has been received, and that I/We will abide by the contents and/or information received and/or contained herein.
- B. I/We have not entered into any collusion or other unethical practices with any person, firm, or employee of the City which would in any way be construed as unethical business practice.
- C. I/We have adopted a written sexual harassment policy which is in accordance with the requirements of Federal, State and local laws, regulations and policies and further certify that I/We are also in compliance with all other equal employment requirements contained in Public Act 87-1257 (effective July 1, 1993) 775 ILCS 5/2-105 (A).
- D. I/We are in compliance with the most current "Prevailing Rate" of wages for laborers, mechanics and other workers as required by the State of Illinois Department of Labor.
- E. I/We operate a drug free environment and drugs are not allowed in the workplace or satellite locations as well as City of Aurora sites in accordance with the Drug Free Workplace Act of January, 1992.
- F. The Bidder is not barred from bidding on the Project, or entering into this contract as a result of a violation of either Section 33E-3 or 33E-4 of the Illinois Criminal Code, or any similar offense of "bid rigging" or "bid rotating" of any state or the United States.
- G. I/We will submit with our bid, for all contracts in excess of \$25,000.00, a certificate indicating participation in apprenticeship and training programs approved and registered with the United Sates Department of Labor.

X	Contractor shall check the box indicating that a copy of applicable program	
	certification is attached.	

- H. I/We will abide by all other Federal, State and local codes, rules, regulations, ordinances and statutes.
- G. I/We will abide by the "Illinois Preference Act" which requires contractors to use at least 90% Illinois laborers on all public works projects that receive State funds or funds administered by the State during a period of "excessive unemployment" (Employment of Illinois Workers on Public Works Act, 30 ILCS 570/).

COMPANY NAME Brandt Excavating Inc.	
ADDRESS 385 E Hoover St	
CITY/STATE/ZIP CODE Morris IL 60450	
NAME OF CORPORATE/COMPANY OFFICIAL Chad	Brandt PLEASE TYPE OR PRINT CLEARLY
TITLE President	
AUTHORIZED OFFICIAL SIGNATURE	why
DATE 10/27/2021	Subscribed and Sworn to
TELEPHONE (815) 942-4488	Before me this 27th day
FAX No. (<u>815.) 942-4429</u>	of October, 2021 Mahar Tehr Notaby Public

OFFICIAL SEAL MEGHAN E FEHR Notary Public, State of Illitnois My Commission Expires 9-23-2025

Apprenticeship or Training Program Certification

Return with Bid

	actors are required to complete the following certification:
☐ Fo	r this contract proposal or for all groups in this deliver and install proposal.
☐ Fo	r the following deliver and install groups in this material proposal:
Lab	orers Local 75 & Operators 150
equires t Il other r idders' : pproved nd Train	of Aurora policy, adopted in accordance with the provisions of the Illinois Highway Code, his contract to be awarded to the lowest responsive and responsible bidder. In addition to esponsibility factors, this contract or deliver and install proposal requires all bidders and all subcontractors to disclose participation in apprenticeship or training programs that are by and registered with the United States Department of Labor's Bureau of Apprenticeship ing, and applicable to the work of the above indicated proposals or groups. Therefore, all re required to complete the following certification:
I.	Except as provided in paragraph IV below, the undersigned bidder certifies that it is a participant, either as an individual or as part of a group program, in an approved apprenticeship or training program applicable to each type of work or craft that the bidder will perform with its own employees.
Н.	The undersigned bidder further certifies for work to be performed by subcontract that each of its subcontractors submitted for approval is, at the time of such bid, participating in an approved, applicable apprenticeship or training program applicable to the work of the subcontract.
111.	The undersigned bidder, by inclusion in the list in the space below, certifies the official name of each program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's employees. Types of work or craft that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category for which there is no applicable apprenticeship or training program available.





Executive Director

Thomas Nordeen

21 December 2020

Labor Trustees

James P. Connolly Martin Dwyer Martin Flanagan Joseph V. Healy Charles V. LoVerde III William Martin

Brandt Excavating Inc. 385 E. Hoover Street Morris, IL 60450

Management Trustees

Seth Gudeman Shane Higgins Joseph Koppers Robert G. Krug David Lorig William Vignocchi To Whom It May Concern:

Enclosed you will please find a copy of the Department of Labor certification that you requested recently.

You may also use this letter as verification that Brandt Excavating Inc. is indeed signatory to the Chicagoland Laborers District Council and contribute to the Laborers Apprenticeship Fund,

Should you require anything further, please do not hesitate to contact me.

Carol Stream Location

1200 Old Gary Avenue Carol Stream IL 60188 (630) 653-0006

Yours very truly,

Chicago Location

5700 West Homer Street Chicago IL 60639 (773) 413-3315

Felicita Ruiz

Assistant Office Manager



Feel the Power



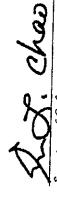
Anited States Bepartment of Anited Office of Apprenticeship Araining, Amplayer and Ashar Services

Qureau of Apprenticeship and Training Chicagoland Laborers' J.A.T.C. Carol Stream, Minois For the Trade - Construction Craft Laborer Certificate of Registration

Registered as part of the Kational Apprenticeship Program in accordance with the basic standards of apprenticeship established by the Secretary of Babor

Dade REVISED August 13, 2004

11 01 7990001



Just Brown

Administrator, Apprenticeship Training, Employer and Babar Services

12/29/2020 1:52 PM FROM: 708-354-0932 TO: +18159424429 P. 3

INTERNATIONAL UNION OF OPERATING ENGINEERS

LOCAL UNION NO. 150, 1508, 150A, 150C, 150RA, 150D, 150G, 150M

JAMES M. SWEENEY PRESIDENT BUSINESS MANAGER



1708) 482-8800 - FAX (708) 482-7186 6200 JOLIET ROAD COUNTRYSIDE, IL 60925-3992

December 29, 2020

Brandt Excavating, Inc. 385 E Hoover St Morris, IL 60450

> Re: Proof of Compliance with 30 ILCS 500/30-22(6) Our File No. MI-00321

Dear Sir or Madam:

At the request of Brandt Excavating, Inc., I am providing you with evidence of the Company's compliance with the apprenticeship requirements in 30 ILCS 500/30-22(6) of the Illinois Procurement Code. I am submitting this letter along with apprenticeship certificates (Nos.IL012020003 and IL008780173).

As a signatory contractor with the International Union of Operating Engineers, Local 150, AFL-CIO, Brothers Brandt Excavating, Inc., is required by Collective Bargaining Agreement to participate in an applicable apprenticeship and training program approved by and registered with the United States Department of Labor's Bureau of Apprenticeship and Training. The attached certificates are evidence of compliance with the U.S. Department of Labor's apprenticeship requirements.

Thank you for your cooperation in this matter. If you have any questions or concerns, please do not hesitate to contact me.

Very truly yours,

IUOE, Local 150, AFL-CIO District 1 dispatch office

Amanda Gunderson

Enclosures: Certificates

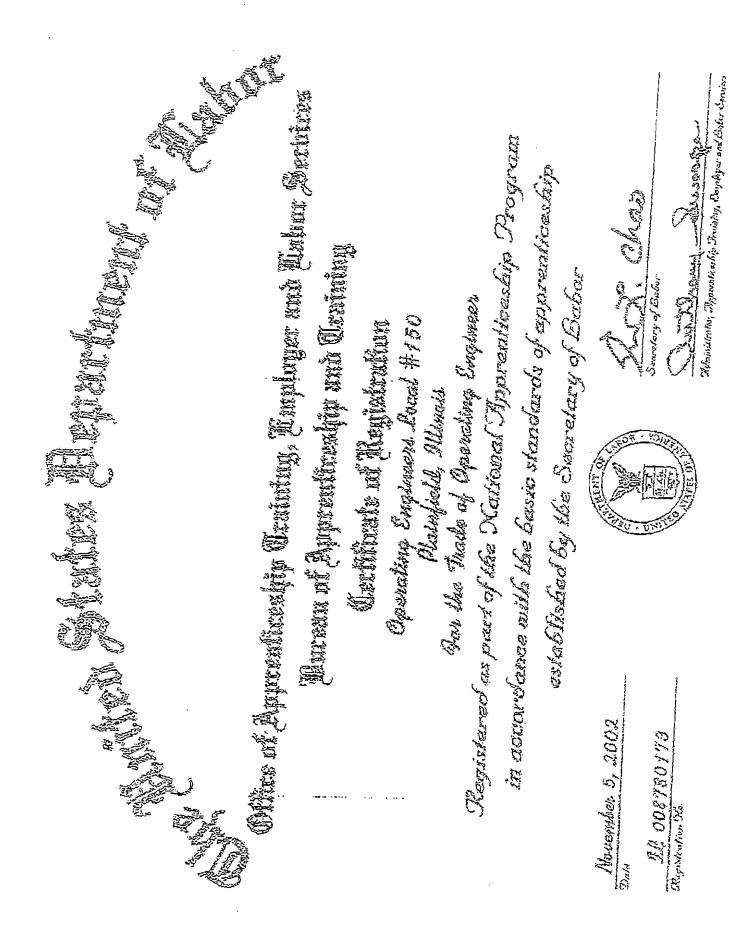
12/29/2020 1:52 PM FROM: 708-354-093

8/3/2020 1.32 PM FROM: 708-354-

TO: +18159424429

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Administrator, Approntionship Institing, Camployer and Basar Services

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After of Apprenticealty Arching, Augulager and Asbar Seculica Heavy Equipment Technician Openating Engineers Local #150 Nainfield, Minois For the Inde of Repairen (Heavy) Registered as part of the Kational Apprenticeship Bagram in accordance with the basic standards of apprenticeship Antran of Apprenticeship and Araining established by the Secretary of Babor Occidence of Registration

VI.	Except for any work identified above, any bid part of the work of the contract or deliver and partners or members and not by employees wages would be required, check the followorkforce and positions of ownership.	install proposal solely by individual owners, to whom the payment of prevailing rates of
contractor bidder is r craft job c requires Department	rements of this certification and disclosure a shall require this certification provision to be esponsible for making a complete report and ategory that will be utilized on the project is ac a copy of each applicable Certificate of F ent of Labor evidencing such participation actors be included with the bid in order to	included in all approved subcontracts. The shall make certain that each type of work or ecounted for and listed. The City of Aurora Registration issued by the United States by the contractor and any or all of its
Bidder:	Brandt Excavating Inc.	By: MM (Signature) Title: President
Address:	385 E Hoover St, Morris IL 60450	(Signature) Title: President

STATE OF ILLINOIS	3)	
)	SS
County of Kane)	

BIDDER'S TAX CERTIFICATION

(BIDDER'S EXECUTING OFFICER), being first duly sworn on oath, deposes and states that all statements made herein are made on behalf of the Bidder, that this despondent is authorized to make them and that the statements contained herein are true and correct.

Bidder deposes, states and certifies that Bidder is not barred from contracting with any unit of local government in the State of Illinois as result of a delinquency in payment of any tax administered by the Illinois Department of Revenue unless Bidder is contesting, in accordance with the procedures established by the appropriate statute, its liability for the tax or the amount of the tax, all as provided for in accordance with 65 ILCS 5/11-42.1-1.

DATED this27th da	y of _	October	, 2021.
	Ву	(Signature of Bidder's Execution	
Chad Brandt	all trade to the state of	(Print name of Bidder's Execut	
President		(Title)	
ATTEST/WITNESS:			
Subscribed and sworn to before me this 27th day of October , 2021. Notary Public			
(SEAL) OFFICIAL SEAL MEGHAN E FEHR Notacy Public State of Illinois	powow		

My Commission Expires 9-23-2025



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(a) (a) (a)

City of Aurora, IL - Local Vendor Preference Application

The business identified below is requesting to be placed on the City of Aurora, filinois Local Vendor Preference list, in accordance with ordinance O18-070, amended with ordinance O20-029 approved April 28, 2020.

D	Date Submitted.
	Name of Business:
	Address of Local Office:
4)	City, State, Zip:
5)	Company's Web Address:
6)	Phone: Fax:
71	County your Local Business is Located In:
	Submitted By (Signature):
	Print Name and Title:
	Email Address:
Sec	. 2-410,-Prequalification; local bidder.
pre Cit _j a. b. Bac Ple	in interested business would like to prequalify as a "local business", such a business shall complete and submit the qualification application along with supporting documentation, as listed below, and the applicable fee as set by the council, to the Finance Department: Evidence that the business has established and maintained a physical presence in the City of Aurora, by virtue of the ownership or lease of all or a portion of a building for a period of not less than twelve (12) consecutive months prior to the submission of the prequalification application; and Evidence demonstrating that the business is legally authorized to conduct business within the State of Illinois and the City of Aurora, and has a business registered to operate in the City if required; and Evidence that the business is not a debtor to the City of Aurora. For purposes of this subparagraph, a debtor is defined as having outstanding fees, water bills, sales tax or restaurant bar tax payments that are thirty (30) days or more past due, or has outstanding weed or nuisance abatements or liens, has failure to comply tickets or parking tickets that are not in dispute as to their validity and are not being challenged in court or other administrative processes. Extra documentation for (a) a. and (a) b. must accompany this submittal or application will be rejected. Extra documentation for (a) c. above the City of Aurora will verify internally that your company does not have any standing fees. Your company should make sure that to the best of its knowledge all bills are current.
Cit Or	urn completed application, with all required backup documentation to: v of Aurora, Attn: Purchasing Division, 44 E. Downer Place, Aurora, IL 60507 email to: <u>PurchasingDL a Aurora-iLorg</u>
	not write below this line: For City of Aurora use ONLY
Dat	e;
Apş Lett	proved: Denied: Initials.