

SECTION 01025

MEASUREMENT AND PAYMENT

- 1. GENERAL BASE BID
- 1.01 MEASUREMENT AND PAYMENT ITEMS
 - A. The following Subsections describe the measurement of and payment for the Work to be done under the Base Bid Unit Price Items listed on the Bid Form. Any and all Work required by the Contract Documents but not included in the Bid Form shall be considered incidental and no additional compensation will be provided.
- 1.02 MOBILIZATION
 - A. Measurement
 - 1. Mobilization will not be measured for payment, but will be paid for as a Lump Sum as detailed in the Contract Documents.
 - B. Payment
 - 1. The Lump Sum Price for this item shall constitute full compensation for mobilization including but not limited to site improvements, moving equipment and materials to the site, temporary facilities and all other site preparation work for the project.
- 1.03 PROVIDE DRILLING WATER AND ASSOCIATED EQUIPMENT
 - A. Measurement
 - 1. Drilling water provided by the contractor and provision of equipment to supply water will not be measured for payment, but will be paid for as a Lump Sum as detailed in the Contract Documents.
 - B. Payment
 - 2. The Lump Sum Price for this item shall constitute full compensation for provision of drilling water including but not limited to water, tanks, hoses and connections, and all other work or equipment necessary to provide drilling water for the project.
- 1.04 SIEVE ANALYSIS OF TEST BORING FORMATION SAMPLES

- A. Measurement
 - 1. The sieve analysis of Test Boring formation samples will not be measured for payment, but will be paid for as a Lump Sum as detailed in the Contract Documents.
- B. Payment
 - 1. The Lump Sum Price for this item shall constitute full compensation for the sieve analysis including but not limited to all labor, equipment, materials and all other items for the completing this work as detailed in the Contract Documents.
- 1.05 SOIL EROSION AND SEDIMENTATION CONTROL
 - A. Measurement
 - 1. The soil erosion and sedimentation control will not be measured for payment, but will be paid for as a Lump Sum as detailed in the Contract Documents.
 - B. Payment
 - 1. The Lump Sum Price for this item shall constitute full compensation for the soil erosion and sedimentation control including but not limited to all labor, equipment, materials and all other items for the completing this work as detailed in the Contract Documents.
- 1.06 DRILL 17-INCH DIAMETER HOLE FOR THE TEST WATER SUPPLY WELL
 - A. Measurement
 - 1. The drilling for the water supply well to be paid for under this Unit Price Item shall be measured by the vertical foot of the drilled hole for the test water supply well.
 - B. Payment
 - 1. The drilling for the water supply well to be paid for under this Unit Price Item shall constitute full compensation for furnishing all labor, materials, equipment for drilling the hole to receive the steel casing and stainless steel screen for the water supply well as detailed in the Contract Documents.
- 1.07 12-INCH DIAMETER STEEL CASING FOR TEST WATER SUPPLY WELL

- A. Measurement
 - 1. The steel casing for the water supply well to be paid for under this Unit Price Item shall be measured by the vertical foot of casing installed for the water supply well.
- B. Payment
 - 1. The steel casing the water supply well to be paid for under this Unit Price Item shall constitute full compensation for furnishing all labor, materials, equipment for providing and installing the steel casing in the hole drilled for the test water supply well as detailed in the Contract Documents.
- 1.08 12-INCH CEMENT SHOE FOR 17-INCH BOREHOLE
 - A. Measurement
 - 1. The cement shoe for the test water supply well to be paid for under this Unit Price Item will not be measured for payment, but will be paid for as a Lump Sum as detailed in the Contract Documents.
 - B. Payment
 - 1. The Unit Price for this Unit Price Item shall include full compensation for all labor, materials, equipment, testing, and installation of the cement shoe for the test water supply well as detailed in the Contract Documents and all other work incidental thereto and not specifically included for payment under other unit Price Items.
- 1.09 NEAT CEMENT GROUT FOR TEST WATER SUPPLY WELL
 - A. Measurement
 - 1. The neat cement grout for the water supply well to be paid for under this Unit Price Item shall be measured by the cubic foot of neat cement grout installed for the water supply well.
 - B. Payment
 - 1. The Unit Price for this Unit Price Item shall include full compensation for all labor, materials, equipment, testing, and installation of the neat cement grout for the water supply well as detailed in the Contract Documents and all other work incidental thereto and not specifically included for payment under other unit Price Items.

1.10 GROUTING EQUIPMENT

- A. Measurement
 - 1. The Grouting Equipment for the test water supply well will not be measured for payment, but will be paid for as a Lump Sum as detailed in the Contract Documents.
- B. Payment
 - 1. The Lump Sum Price for this item shall constitute full compensation for providing the grouting equipment including but not limited to furnishing, installing and removing the grouting equipment and power source. Includes operating equipment as needed to verify functionality, flow rates, integrity, and reliability before starting grouting of the test water supply well.
- 1.11 DRILL 11 7/8-INCH DIAMETER HOLE FOR THE TEST WATER SUPPLY WELL
 - A. Measurement
 - 1. The drilling for the water supply well to be paid for under this Unit Price Item shall be measured by the vertical foot of the drilled hole for the test water supply well.
 - B. Payment
 - 1. The drilling for the water supply well to be paid for under this Unit Price Item shall constitute full compensation for furnishing all labor, materials, equipment for drilling the hole to receive the steel casing and stainless steel screen, formation sampling and sieve analysis for the water supply well as detailed in the Contract Documents.
- 1.12 BENTONITE SEAL FOR TEST WATER SUPPLY WELL
 - A. Measurement
 - 1. The bentonite seal for the water supply well to be paid for under this Unit Price Item shall be shall be measured by the cubic foot of bentonite seal installed for the test water supply well.
 - B. Payment
 - 1. The Unit Price for this Unit Price Item shall include full compensation for all labor, materials, equipment, testing, and installation of the bentonite seal for the

water supply well as detailed in the Contract Documents and all other work incidental thereto and not specifically included for payment under other unit Price Items.

- 1.13 PLUMBNESS AND ALIGNMENT OF TEST WATER SUPPLY WELL
 - A. Measurement
 - 1. The Plumbness and Alignment testing of the test water supply well will not be measured for payment, but will be paid for as a Lump Sum as detailed in the Contract Documents.
 - B. Payment
 - 1. The Lump Sum Price for this item shall constitute full compensation for performing the plumbness and alignment testing of the water supply well including but not limited to furnishing all labor, materials, equipment, and reports as detailed in the Contract Documents and all other work incidental thereto and not specifically included for payment under other unit Price Items.
- 1.14 DEVELOPMENT OF THE TEST WATER SUPPLY WELL
 - A. Measurement
 - 1. The development of the test water supply well will not be measured for payment, but will be paid for as a Lump Sum as detailed in the Contract Documents.
 - B. Payment
 - 1. The Lump Sum Price for this item shall constitute full compensation for the development of the water supply well including but not limited to bailing, surging, air lifting, and other methods intended to maximize well efficiency while minimizing concentration of sediment in water pumped from well. Includes removing fill after completing development.
- 1.15 TEST PUMPING EQUIPMENT
 - A. Measurement
 - 1. The Test Pumping Equipment will not be measured for payment, but will be paid for as a Lump Sum as detailed in the Contract Documents.
 - B. Payment

- 1. The Lump Sum Price for this item shall constitute full compensation for providing the test pumping equipment including but not limited to furnishing, installing and removing test pumping equipment and power source. Includes operating equipment as needed to verify functionality, flow rates, integrity, and reliability before starting pumping test.
- 1.16 WATER LEVEL MONITORING EQUIPMENT FOR USE DURING PUMP TEST
 - A. Measurement
 - 1. The Water Level Monitoring Equipment for use during test pumping will not be measured for payment, but will be paid for as a Lump Sum as detailed in the Contract Documents. The lump sump includes equipment required to monitor the water level at both the existing school well and the new test well location.
 - B. Payment
 - 1. The Lump Sum Price for this item shall constitute full compensation for providing the data loggers and water level measurements including but not limited to furnishing, installing equipment, removing equipment, collecting measurement readings and all other labor, materials and equipment for the complete performance of this Work as required by the Contract Documents.
- 1.17 TEST PUMPING
 - A. Measurement
 - 1. The Test Pumping of the water supply well to be paid for under this Unit Price Item shall be measured by the hour for the test pumping operation.
 - B. Payment
 - 1. The Unit Price per Hour shall constitute full compensation for performing the test pumping of the test well and shall include but not limited to all materials, equipment and labor to operate test pumping equipment and record data.
- 1.18 COLLECTION AND ANALYSIS OF WATER SAMPLE FOR TEST WATER SUPPLY WELL
 - A. Measurement

- 1. The Water Sample Collection and Analysis to be paid for under this Unit Price Item shall be measured by Lump Sum for all water samples collected and analyzed.
- B. Payment
 - 1. The Water Sample Collection and Analysis to be paid for under this Unit Price Item shall constitute full compensation for furnishing all labor, materials, equipment, laboratory services and all other items for the providing the complete water sample collection and analysis for all required water samples from the water supply well as detailed in the Contract Documents.
- 1.19 ADDITIONAL DEVELOPMENT AIR OR GAS IMPULSE GENERATION MOBILIZATION AND DEMOBILIZATION
 - A. Measurement
 - 1. The mobilization and demobilization for additional development of the water supply well through air or gas impulse generation, if authorized, will not be measured for payment, but will be paid for as a Lump Sum as detailed in the Contract Documents.
 - B. Payment

The Lump Sum Price for this item shall constitute full compensation for mobilization of the air or gas impulse development of the water supply well including but not limited to supply and positioning of air gun. Includes removing fill after completing development.

- 1.20 ADDITIONAL DEVELOPMENT AIR OR GAS IMPULSE GENERATION BALING
 - A. Measurement
 - 1. The baling time for additional development of the water supply well through air or gas impulse generation, if authorized, shall be measured by the hour.
 - B. Payment
 - 1. The Unit Price per Hour for this item shall constitute full compensation for the air or gas impulse development of the water supply well including provision of air or gas supply, baling, and bursting and other methods intended to maximize well efficiency while minimizing concentration of sediment in water pumped from well. Includes removing fill after completing development.

1.21 ADDITIONAL DEVELOPMENT - ACIDIZATION MOBILIZATION AND DEMOBILIZATION

- A. Measurement
 - 1. The mobilization and demobilization for additional development of the water supply well through acidization, if authorized, will not be measured for payment, but will be paid for as a Lump Sum as detailed in the Contract Documents.
- B. Payment
 - 1. The Lump Sum Price for this item shall constitute full compensation for the acid development of the water supply well including but not limited to supply and removal of all equipment required for acidization.
- 1.22 ADDITIONAL DEVELOPMENT ACIDIZATION ACID APPLICATION
 - A. Measurement
 - 1. The additional development of the water supply well through acidization, if authorized, will be measured by the gallon.
 - B. Payment
 - 1. The Lump Sum Price for this item shall constitute full compensation for the acid development of the water supply well including but not limited to supply and application of acid to the well, and pumping and recirculating water to remove the acid and return the well to a neutral pH level.
- 1.23 VIDEO LOGGING OF TEST WATER SUPPLY WELL
 - A. Measurement
 - 1. The Video Logging of the water supply well will not be measured for payment, but will be paid for as a Lump Sum as detailed in the Contract Documents.
 - B. Payment
 - 1. The Lump Sum Price for this item shall constitute full compensation for performing the video logging of the water supply well including but not limited to furnishing all labor, materials, equipment, and reports as detailed in the Contract Documents and all other work incidental

thereto and not specifically included for payment under other unit Price Items.

- 1.24 DISINFECTION OF TEST WATER SUPPLY WELL
 - A. Measurement
 - 1. The Disinfection of the water supply well will not be measured for payment, but will be paid for as a Lump Sum as detailed in the Contract Documents.
 - B. Payment
 - 1. The Lump Sum Price for this item shall constitute full compensation for the disinfection of the water supply well including but not limited to all materials, equipment, labor and laboratory services to fully disinfect the water supply well as indicated on the Contract Drawings and including all work incidental thereto and not specifically included for payment under other Unit Price Items.
- 1.25 CLOSURE AND ABANDONMENT OF THE TEST WELL
 - A. Measurement
 - 1. The Closure and Abandonment of the Test Well, if required, to be paid for under this Unit Price Item shall be shall be measured by the vertical foot of the closed test well.
 - B. Payment
 - 1. The Unit Price for this Unit Price Item shall constitute full compensation for the closure and abandonment of the test well, including casing and screen removal, backfilling, grouting, materials, equipment, labor and all other items for the complete closure and abandonment as detailed in the Contract Documents and as per the Lake County Public Health Department requirements.
- 1.26 DEMOBILIZATION
 - A. Measurement
 - 1. Demobilization will not be measured for payment, but will be paid for as a Lump Sum as detailed in the Contract Documents.
 - B. Payment

- 1. The Lump Sum Price for this item shall constitute full compensation for demobilization including but not limited to the removal of all equipment, materials, temporary facilities, soil and erosion control measures and all other work from the site.
- 1.27 SITE RESTORATION AND SEEDING
 - A. Measurement
 - 1. The Site Restoration work will not be measured for payment, but will be paid for as a Lump Sum as detailed in the Contract Documents.
 - B. Payment
 - 1. The Lump Sum Price for this item shall constitute full compensation for furnishing and performing the Site Restoration including all gravel/ pavement restoration, topsoil, mulching, seed, watering, fertilizer, plantings and erosion control blankets and other materials, equipment and labor necessary to fully restore the site as nearly as possible to its original conditions following the complete installation as indicated on the Contract Drawings and as specified including all work incidental thereto and not specifically included for payment under other Unit Price Items.
- 1.28 RECORD DRAWING INFORMATION
 - A. Measurement
 - 1. Record drawing information will not be measured for payment, but will be paid for as a Lump Sum as detailed in the Contract Documents.
 - B. Payment
 - 1. The Lump Sum Price for this item shall constitute full compensation for production and delivery of record drawings as required.
- 2. GENERAL ADDITIVE AMOUNT FOR DEEP WELL EXTENSION
- 2.01 MEASUREMENT AND PAYMENT ITEMS
 - A. The following Subsections describe the measurement of and payment for the Work to be done under the Additive Amount For Deep Well Extensive Unit Price Items listed on the Bid Form. Any and all Work required by the Contract Documents but not included in the Bid Form shall be

considered incidental and no additional compensation will be provided.

- 2.02 DRILL 11 7/8-INCH DIAMETER HOLE FOR THE TEST WATER SUPPLY WELL
 - A. Measurement
 - 1. The drilling for the water supply well to be paid for under this Unit Price Item shall be measured by the vertical foot of the drilled hole for the test water supply well.
 - B. Payment
 - 1. The drilling for the water supply well to be paid for under this Unit Price Item shall constitute full compensation for furnishing all labor, materials, equipment for drilling the hole to receive the steel casing and stainless steel screen, formation sampling and sieve analysis for the water supply well as detailed in the Contract Documents.
- 2.03 NEAT CEMENT GROUT FOR TEST WATER SUPPLY WELL
 - A. Measurement
 - 1. The neat cement grout for the water supply well to be paid for under this Unit Price Item shall be measured by the cubic foot of neat cement grout installed for the water supply well.
 - B. Payment
 - 1. The Unit Price for this Unit Price Item shall include full compensation for all labor, materials, equipment, testing, and installation of the neat cement grout for the water supply well as detailed in the Contract Documents and all other work incidental thereto and not specifically included for payment under other unit Price Items.
- 2.04 BENTONITE SEAL FOR TEST WATER SUPPLY WELL
 - A. Measurement
 - 1. The bentonite seal for the water supply well to be paid for under this Unit Price Item shall be shall be measured by the cubic foot of bentonite seal installed for the test water supply well.
 - B. Payment

- 2. The Unit Price for this Unit Price Item shall include full compensation for all labor, materials, equipment, testing, and installation of the bentonite seal for the water supply well as detailed in the Contract Documents and all other work incidental thereto and not specifically included for payment under other unit Price Items.
- 2.05 8-INCH DIAMETER STEEL CASING FOR TEST WATER SUPPLY WELL
 - A. Measurement
 - 2. The steel casing for the water supply well to be paid for under this Unit Price Item shall be measured by the vertical foot of casing installed for the water supply well.
 - B. Payment
 - 2. The steel casing the water supply well to be paid for under this Unit Price Item shall constitute full compensation for furnishing all labor, materials, equipment for providing and installing the steel casing in the hole drilled for the test water supply well as detailed in the Contract Documents.
- 2.06 8-INCH CEMENT SHOE FOR 12-INCH BOREHOLE
 - A. Measurement
 - 1. The cement shoe for the test water supply well to be paid for under this Unit Price Item will not be measured for payment, but will be paid for as a Lump Sum as detailed in the Contract Documents.
 - B. Payment
 - 2. The Unit Price for this Unit Price Item shall include full compensation for all labor, materials, equipment, testing, and installation of the cement shoe for the test water supply well as detailed in the Contract Documents and all other work incidental thereto and not specifically included for payment under other unit Price Items.
- 2.07 DRILL 7-7/8-INCH DIAMETER HOLE FOR THE TEST WATER SUPPLY WELL
 - A. Measurement
 - 1. The drilling for the water supply well to be paid for under this Unit Price Item shall be shall be measured by

the vertical foot of the drilled hole for the test water supply well.

- B. Payment
 - 1. The drilling for the water supply well to be paid for under this Unit Price Item shall constitute full compensation for furnishing all labor, materials, equipment for drilling the hole to receive the steel casing and stainless steel screen, formation sampling and sieve analysis for the water supply well as detailed in the Contract Documents.
- 2.08 CLOSURE AND ABANDONMENT OF THE TEST WELL (IF TEST WELL FAILS)
 - A. Measurement
 - 1. The Closure and Abandonment of the Test Well, if required, to be paid for under this Unit Price Item shall be shall be measured by the vertical foot of the closed test well.
 - B. Payment
 - 1. The Unit Price for this Unit Price Item shall constitute full compensation for the closure and abandonment of the test well, including casing and screen removal, backfilling, grouting, materials, equipment, labor and all other items for the complete closure and abandonment as detailed in the Contract Documents and as per the Lake County Public Health Department requirements.

END OF SECTION