



Layne Christensen Company
721 W. Illinois Avenue
Aurora, IL 60506

630/897-6941
graniteconstruction.com

July 15, 2022

Mr. Mark Siefert
City of Crest Hill
1610 Plainfield Rd.
Crest Hill, IL 60403

Re: WELL NO. 7 PUMP REPAIRS

Dear Mr. Siefert,

Per your request, I am updating the estimate for the pulling, repairs, and reinstallation of the pumping equipment at Well 7.

We mobilized to your site on April 27, 2022 and our technician found that the electrical downhole megged at 0.000 megohms. We remobilized back to site on June 15, 2022 and pulled the pump assembly.

Since then, the hypot came back on the cable as acceptable to reuse. Please see attached report below.

A new bowl and motor have been ordered and have arrived.

The piping needs quite a bit of work, as is the nature with stainless steel threads. From setting and pulling, the threads can gall. After inspection, all six (6) couplings need to be replaced. There are six (6) male ends that need to be cut and rethread due to thread damage, and one (1) male end that we know of for the same reason. The positive check valve needs to have the internal threads filed and checked for engagement, but we believe this can be salvaged.

There will be approximately 5' to 10' of pipe loss due to the cutting and rethreading at a minimum. The threading estimate assumes we will need to rethread all male joints below the couplings, but this will not be known until the couplings are removed. Unfortunately, we do not have current pumping levels so we would recommend to replace the 10' of SS pipe.

Pump repairs of this nature are normally performed on a time & material basis, per the rates, terms, & conditions as outlined on the attached Work Order Form. We would utilize a Small Pump Service rig, along with a three man crew.

WATER RESOURCES

The additional materials and or services are as follows:

• Hypot check of cable <i>(not included in original proposal)</i>	\$1,300.00
• Grundfos bowl assembly, 475S600-6 <i>(not included in original proposal)</i>	\$5,900.00
• Loading and unloading in yard – Serviceman, 8hrs @ \$174.00/hr	\$1,392.00
• Threading Machine and Operator, 40hrs @ \$219.00/hr	\$8,760.00
• 6" SS coupling, 6pcs @ \$550.00 each	\$3,300.00
• 6" x 10' threaded pipe and coupling	\$3,270.00
TOTAL ESTIMATED ADDITIONAL COST	\$23,922.00

Layne was previously approved for \$46,027.00 and has invoiced \$9,193.50 for pulling and unloading.

Layne assumes the transducer can be reused.

Layne appreciates the opportunity to help the City with its water resource needs. If you have any questions, please do not hesitate to contact us.

Yours Very Truly,

Layne Christensen Company



Jason Gray
Project Manager I

Above work accepted by: _____

Title: _____

Date: _____



CABLE HIGH POTENTIAL TEST

Customer: Crest Hill, IL

Date 7/07/2022

Job No 1152187G

Well No.: 7 Location: Aurora, IL – Layne Yard

Cable Description: 600 Volt #2 (flat) w/grd Length: Installed By:

Type of Test: Proof Max. Test Voltage: 2,000 Duration: 5 min. Motor Voltage: 460

Weather: Indoors Temperature: 75° Humidity:

Test Equipment: 6KV Test Set Test Engineer: J. Geltz Time:

READINGS ON VOLTAGE RISE

Test Voltage	Leakage I in Micro - Amps			
	AØ	BØ	CØ	
	Black	Yellow	Red	
400	1.9	1.8	1.8	
800	2.4	2.4	2.5	
1200	2.3	2.5	2.3	
1600	2.6	2.6	2.4	
2000	2.5	2.3	2.2	

READINGS WITH VOLTAGE CONSTANT

Time in Min.	Leakage I in Micro - Amps			
	AØ	BØ	CØ	
	Black	Yellow	Red	
0	2.5	2.3	2.2	
1	.7	.7	.8	
2	.6	.5	.7	
3	.5	.6	.7	
4	.5	.5	.6	
5	.5	.5	.6	

DISCHARGE TIME

Comments:

Hypot test (flat) @2 power cable only

Leakage values are quite low and cable appears suitable for reuse. However, note that reinstallation means cable as tested on spool above ground will be flexed over cable sheaves, squeezed against pipe by stainless steel banding and will be subject to possible down-hole damage, as well as significant hydrostatic pressure.

Hypot testing may not detect leakage to atmosphere (i.e. external holes in cable insulation).

Witness:

Signature:

John Geltz

WATER RESOURCES

WORK ORDER



Layne Christensen Company

721 W. Illinois Avenue, Aurora, IL 60506; Phone (630) 897-6941
229 W. Indiana Ave., P.O. Box 489, Beecher, IL 60401; Phone (708) 946-2244

Purchaser: _____
Job Location: _____

SERVICE RATES - EFFECTIVE OCTOBER 1, 2021

	Straight Time		Overtime	Doubletime
	Per Hr.	8 Hr. Day	Per Hr.	Per Hr.
Serviceman w/hand tools	196.00	1568.00	294.00	392.00
Serviceman w/service truck and hand tools, or welder	225.00	1800.00	323.00	421.00
Helper	170.00	1360.00	255.00	340.00
Serviceman and 1 Helper	366.00	2928.00	549.00	732.00
<u>Small Rig or Winch Truck</u>				
1 Man Crew	245.00	1960.00	343.00	441.00
2 Man Crew	415.00	3320.00	598.00	781.00
3 Man Crew	585.00	4680.00	853.00	1121.00
<u>Middle Rig, Large Hoist or Flatbed Crane</u>				
1 Man Crew	261.00	2088.00	359.00	457.00
2 Man Crew	431.00	3448.00	614.00	797.00
3 Man Crew	601.00	4808.00	869.00	1137.00
<u>Big Rig, Large Hoist and Poles, or Large Crane</u>				
1 Man Crew	302.00	2416.00	400.00	498.00
2 Man Crew	472.00	3776.00	655.00	838.00
3 Man Crew	642.00	5136.00	910.00	1178.00
4 Man Crew	812.00	6496.00	1165.00	1518.00
Power Tong Usage, per 8 hour shift		470.00		
<u>Machine Shop/Yard Labor and Equipment</u>				
Machinist and Equipment	193.00	1544.00	280.00	367.00
12" Threading Machine and Operator	219.00	1752.00	306.00	393.00
Serviceman w/hand tools	174.00	1392.00	261.00	348.00
Helper	166.00	1328.00	249.00	332.00
Sandblast Equipment and 2 man crew	385.00	3080.00	555.00	725.00

Mileage: Auto: \$0.55 Pickup: \$0.70 1-Ton:\$1.00 2-1/2 Ton Flatbed: \$2.10 Semi-Tractor: \$2.75

Subsistence-Per Man

Over 55 miles radius from home office.....\$65.00 + Hotel

The undersigned Purchaser hereby instructs Layne Christensen Company (Contractor), to proceed with the work described with the understanding that the Terms and Conditions shown on the reverse are hereby incorporated as part of this Quotation and with the specific understanding that Contractor will not be held liable for any damage in any way whatsoever for failure to complete the described work, nor for any injury or damage resulting from Contractor's efforts to perform such work, or for delay on Contractor's part in completing same. All work described herein will be provided as quoted above or on a cost plus basis at the hourly rates provided. All quotes indicated, if any, are estimates based on the best information available prior to beginning work. Purchaser's pumps, motors, parts and/or accessories may be stored by the Contractor for sixty (60) days from the date of invoice or other written notice from Contractor. After said sixty (60) days, disposal of such equipment may be made by the Contractor without incurring any liability. All hours worked before or after Contractor's normal work day hours and all hours worked on Saturdays, will be billed at time and one-half rates. All work on Sundays and/or any federally recognized holiday will be billed at double time rates.

REMARKS:

Work Authorized on Behalf of Purchaser By: _____
Date: _____ Title: _____

TERMS AND CONDITIONS

LIABILITY OF CONTRACTOR: *Contractor shall not be liable for any bodily injury, death, or injury to or destruction of tangible property except as the same may have been caused by the negligence of Contractor. In no event shall Contractor be liable for any delays or special, indirect, incidental or consequential damages. Purchaser agrees that the total limit of Contractor's liability (whether based on negligence, warranty, strict liability or otherwise) hereunder, shall not exceed the aggregate amount due Contractor for services rendered under this contract. All claims, including claims for negligence or any other cause whatsoever, shall be deemed waived unless made in writing and received by Contractor within one (1) year after Contractor's completion of work hereunder.*

INSURANCE: Contractor shall provide workers' compensation insurance, public liability and property damage insurance covering its employees and operation. Purchaser, at its option, may maintain such insurance as will protect it against claims arising out of the work.

REIMBURSABLE COST: In addition to the hourly charge provided on the face of this contract, Purchaser will reimburse Contractor for travel and living expenses necessarily incurred by the Contractor in the performance of the work, minor incidental expenses such as overnight mail, telephone and petty cash expenditures necessarily incurred, cost of removal of all debris if so directed by Purchaser, sales, consumer, use and similar taxes required by law and the cost of permits and all licenses necessary for the execution of the work. The foregoing costs shall be billed at actual cost plus fifteen percent (15%) unless otherwise agreed upon.

PRICE ADJUSTMENT: Any cost estimates or time frames stated herein are subject to equitable adjustment in the event of differing or unforeseeable conditions, changes in applicable laws after the date of this contract, unforeseeable delays or difficulties caused by acts of God, Purchaser or any third parties. Prices of goods acquired by Contractor from others shall be adjusted to reflect Contractor's price in effect at time of shipment. The price of Contractor's goods will be adjusted to the price in effect at time of shipment in accordance with Contractor's current escalation policies or as specifically covered in this contract.

TERMS: Thirty (30) days net from date of invoice. For extended projects, Contractor shall submit invoices on a monthly basis for any and all work completed and materials or equipment provided during the previous month. Past due invoices shall be subject to a delinquency charge of one and one-half percent (1-1/2%) per month (eighteen percent (18%) per annum) unless a lower charge is required under applicable law, in which case the lower rate shall apply. Purchaser agrees to pay all collection fees, attorneys' fees and costs incurred in the collection of any past due amounts arising out of this contract. Contractor shall have the right to immediately terminate this contract without further liability if Purchaser fails to make timely payment or otherwise materially breaches this contract.

MATERIAL SHORTAGES AND COST INCREASES: If any portion of materials or equipment which Contractor is required to furnish becomes unavailable, either temporarily or permanently, through causes beyond the control and without the fault of Contractor, then in the case of temporary unavailability any completion time frames shall be extended for such period of time as Contractor shall be delayed by such above-described unavailability, and in the case of permanent unavailability Contractor shall be excused from the requirement of furnishing such materials or equipment. Purchaser agrees to pay Contractor any increase in cost between the cost of the materials or equipment which have become permanently unavailable and the cost of the closest substitute which is then reasonably available.

DELAYS: If Contractor is delayed at any time in the progress of work by labor disputes, fire, unusual delays in transportation, unavoidable casualties, weather, or any cause beyond Contractor's reasonable control, then any completion time frames shall be extended by a reasonable period of time, at least equal to the period of delay.

CHANGED CONDITIONS: The discovery of any hazardous waste, substances, pollutants, contaminants, underground obstructions or utilities on or in the job site which were not brought to the attention of Contractor prior to the date of this contract will constitute a materially different site condition entitling Contractor, at its sole discretion to immediately terminate this contract without further liability.

ESCALATION: This contract is made with the understanding that Contractor will be able to begin and continuously proceed with its work on or before the proposed start date on the reverse side hereof. In the event Contractor is unable to commence its work on or before said date because the project is not ready for Contractor's work, Contractor will charge Purchaser the amount of increase in Contractor's cost attributable to such delay, plus Contractor's normal overhead percentage.

GUARANTEE AND LIABILITY: Contractor warrants that its labor supplied hereunder shall be free from defect and shall conform to the standard of care in effect in its industry at the time of performance of such labor for a period of twelve (12) months after substantial completion of Contractor's work. Contractor agrees, to the extent it is permitted, to pass on any warranties provided by the manufacturers of materials and/or equipment furnished under this contract. Contractor itself provides no warranty, express, implied or otherwise, on any such materials or equipment. Contractor will not be responsible for: work done, material or equipment furnished or repairs or alterations made by others.

For any breach hereunder, Contractor shall be liable only for the value of the installation work or, if it wrongfully fails to install, then its liability is limited to the difference between the contract price herein, and the value of other similar installation work. If Contractor's breach damages any materials or equipment furnished hereunder, Contractor shall only be liable for the value of such materials or equipment. Under no circumstances will Contractor be liable for consequential, special or indirect damages, including without limitation, any crop loss or damage, damage to other equipment, structures or property, nor for any other similar or dissimilar damages or losses whether due to delay, failure to furnish or install, delay in installation, defective material or equipment, defective workmanship, defective installation, delay in replacing, nor for any cause or breach whatsoever. In any event, Contractor's total liability towards Purchaser for alleged faulty performance or nonperformance under this contract shall be limited to the total contract price. No materials, equipment or services contracted herein carries any guarantee not mentioned in this contract. THE ABOVE WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED.

TITLE AND OWNERSHIP: In case of default on Purchaser's part, Contractor shall have the right to enter the premises upon which any material or equipment furnished herein have been installed and retake such goods not then paid for and pursue any further remedy provided by law, including recovery of attorneys' fees and any deficiency to the maximum extent and in the manner provided by law. Such materials and equipment shall retain their character as personal property of Contractor until payment in full is received by Contractor, regardless of their mode of attachment. Unless prior specific written instructions are received to the contrary, surplus and replaced materials and equipment resulting from repair or installation work shall become the property of Contractor.

DELIVERY: Shipment schedules and dates, expressed or implied, are contingent on normal conditions. Contractor will not be responsible for any delays in shipment or completion caused by factors beyond its control such as, but not limited to, suppliers' failures, accidents, work stoppages or operation of or changes in the law. Shipments will be made as promptly as Contractor's ability to obtain materials and/or equipment and scheduling will permit. No delay in shipments or variances from shipping schedule shall be cause of cancellation or any claim for damage. Any changes in layout or design requested after acceptance of this contract will be made at Purchaser's additional cost. Any such change and/or time taken to supply engineering data or to approve drawings will automatically extend shipping schedules. Equipment will be shipped "knocked down" to the extent Contractor considers necessary, with small parts stripped from equipment and crated. On and after delivery to the carrier for transportation to the Purchaser's site, Purchaser shall be responsible for all loss or damage to materials or equipment due to any cause, including but not limited to loss or damage resulting from casualty.

INDEMNIFICATION: *Purchaser agrees to indemnify and hold Contractor, its directors, officers, stockholders, employees, agents and subcontractors, harmless from and against any and all claims, demands, causes of action (including third party claims, demands or causes of action for contribution or indemnification), liability and costs (including attorneys' fees and other costs of defense) asserted and/or filed by Purchaser or any third party(ies), including without limitation Purchaser's employees, and arising out of or as a result of: (i) the presence of Contractor or its subcontractors at the job site, (ii) the work performed by Contractor or its subcontractors, or (iii) any negligent act or omission of Purchaser, its employees, agents, consultants, other contractors or any person or entity under Purchaser's control; except to the extent that such claims, demands, causes of action, liabilities or costs are caused by the negligence of Contractor or its subcontractors.*