

Mr. Terry Houk Public Works Director 211 S. Hamilton Street High Point, NC 27260

Subject: City of High Point, NC Proposal for Engineering Services Public Works: 2020 Arc Flash Hazard Assessment

Dear Mr. Houk:

Arcadis G&M of North Carolina, Inc. (Arcadis) is pleased to provide this proposal for engineering services for the Public Works: 2020 Arc Flash Hazard Assessments.

SCOPE OF SERVICES

Conducting an Arc Flash Hazard study is crucial to the safe operation and maintenance of electrical power distribution equipment. Arcadis' overall goal will be to update previously assessed potential hazards and re-label the equipment (as necessary) so that personnel will be aware of the incident energy levels at the equipment. With this information available, staff can be fitted with the appropriate personal protective equipment (PPE) to maintain OSHA compliance when servicing the equipment.

The scope of the project generally includes data collection of the existing electrical system at the facilities; analysis and modeling of the data collected using SKM Power Tools for Windows software; and, the delivery and installation of professionally printed arc flash labels. This work is essentially an update of previous modeling and analysis.

The arc flash analysis will be performed for the facilities listed in the attached spreadsheet.

The arc flash analysis will evaluate the existing short circuit current contributors and the existing overcurrent protective device settings within the facilities. The software then calculates the available incident energy hazard at each node of the system. These calculations will be provided in accordance with NFPA 70E and IEEE 1584 standards, latest editions. The results of the available incident energy

Arcadis G&M of North Carolina, Inc. 7029 Albert Pick Road Suite 101 Greensboro North Carolina 27409 Tel 336 292 2271

WATER

Date: March 31, 2020

Contact: Dennis Kachmarsky

Phone: 704 996 9561

Email: dennis.kachmarsky @arcadis.com

ARCADIS G&M of North Carolina, Inc.

NC Engineering License # C-1869 NC Surveying License # C-1869 Mr. Terry Houk City of High Point March 31, 2020

hazard calculations will be provided on a permanent adhesive label that will be installed on the relevant electrical equipment with our guidance. Each label will illustrate the incident energy at that location.

Responsibilities of the City

It is Arcadis' understanding that the City will be responsible for the following:

- 1. Furnish available information pertinent to the project to allow Arcadis to provide the scope of services contained herein. Specifically, City of High Point Electric Utility incoming power characteristics for each site will be provided.
- Provide personnel to identify and open electrical panels. If facility personnel are unavailable and Arcadis staff is permitted to open panels, then Arcadis should be advised of any known interlocks that may cause disruption to power and/or control when the panel is opened.
- Arrange safe access onto public and private property for Arcadis to perform the scope of services. Arcadis staff will follow City of High Point or Arcadis safety requirements, whichever are stricter, when on site at any City-owned facilities.

ENGINEERING FEE

Arcadis will perform the scope of services for a total lump sum fee of \$26,000, distributed as follows.

- Water Treatment \$20,000
- General (Cemetery) \$1,500
- Landfill \$4,500

We look forward to assisting the City of High Point in performing this Arc Flash Hazard Assessment. Please feel free to give me a call if you have any questions regarding this proposal.

Sincerely,

Arcadis G&M of North Carolina, Inc.

Dennis Kachmasky

Dennis J. Kachmarsky, PE Project Manager

Copies: Bobby Sharpe, PE

This proposal and its contents shall not be duplicated, used or disclosed — in whole or in part — for any purpose other than to evaluate the proposal. This proposal is not intended to be binding or form the terms of a contract. The scope and price of this proposal will be superseded by the contract. If this proposal is accepted and a contract is awarded to Arcadis as a result of — or in connection with — the submission of this proposal, Arcadis and/or the client shall have the right to make appropriate revisions of its terms, including scope and price, for purposes of the contract. Further, client shall have the right to duplicate, use or disclose the data contained in this proposal only to the extent provided in the resulting contract.

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ARCADIS G&M of North Carolina, Inc. Public Works: 2020 Arc Flash Hazard Assessment			
PUBLIC SERVICES			\$26,00
Water Treatment (\$20,000)	City Lake Aeration System		
	City Lake Raw Water Pump Station		
	City Lake Raw Water Pump Station Generator		
	City Lake Standby Generation Building & Equipment		
	Lexington Elevated Tank (Howard St)		
	Ground Storage Tank		
	Dam Control MCC - Regency Lake		
	Dam Control MCC - Piedmont Lake		
	Dam Control MCC - Davis Lake		
	Oak Hollow Aeration System		
	Oak Hollow Raw Water Pump Station		
	Sandy Ridge Ground Storage Station-Generator, Tank		
	Ward I-74 1 Million Gallon Water/Booster Tank		
	Ward Maintenance Building and Equipment		
General: Cemetery (\$1,500)	Oakwood Cemetery Office & Storage	512 Steele Street	
Landfill (\$4,500)	Kersey Valley Landfill – Old Scalehouse	3748 E. Kivett Drive	
	Kersey Valley Landfill – New Scalehouse	3748 E. Kivett Drive	
	Kersey Valley Landfill – Chemical Recovery Storage	3748 E. Kivett Drive	
	Kersey Valley Landfill – Chemical Recovery	3748 E. Kivett Drive	
	Grinder Ingleside Storage Area	Ingleside & Bellevue	
		TOTAL	\$26,00