

**AMENDMENT NO. 1 TO L 30298**

Contract Start Date:	12/11/2019	Original Total Amount:	\$97,500.00
Original Completion Date:	7/31/2020	As Previously Amended:	0
Amendment Completion Date:	7/31/2020	Current Amendment:	\$122,045.00
Resolution:	20-0173R	New Total Contract Amount:	\$219,545.00

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This amendment, effective as of the date of attestation by the City Clerk (the "Effective Date"), by and between the City of Duluth, hereinafter referred to as "City", and HGA, Inc. located at 420 North 5th Street, Suite 100, Minneapolis, MN 55401, hereinafter referred to as "Consultant", for the purpose of rendering services to the City.

WHEREAS, on December 11, 2019, City and Consultant entered into an agreement bearing City of Duluth Contract No. L30298 for professional engineering services for the Balance of Plant Connection as part of the Steam to Hot Water Conversion project, which Contract has not been previously amended, hereinafter referred to as the "Contract"; and

WHEREAS, both parties desire to amend the Contract.

NOW THEREFORE, in consideration of the mutual covenants and conditions hereinafter set forth, the parties hereto hereby agree as follows:

In this Amendment changes in the language of the Contract which delete language will be shown as stricken and language added to the contract language will be underlined.

Revision 1. The Total Not to Exceed described in Section V.C. of the Contract is hereby amended as follows:

All payments under this Contract are not to exceed ~~Ninety Seven Thousand Five Hundred Two~~ Hundred Nineteen Thousand Five Hundred Forty-Five and no/100ths Dollars (\$219,545.00).

In all other respects the contract, together with all of its terms, covenants and conditions, is hereby confirmed in its entirety.

*[Remainder of page intentionally left blank. Signature page to follow.]*

IN WITNESS WHEREOF, the parties have hereunto set their hands as of the date of attestation shown below:

**CITY OF DULUTH**

**HGA, INC.**

By:

By:

\_\_\_\_\_  
Mayor

\_\_\_\_\_  
Company Representative

Attest:

Its:

\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Title of Representative

Date Attested: \_\_\_\_\_

Date: \_\_\_\_\_

Countersigned:

\_\_\_\_\_  
City Auditor

Approved as to form:

\_\_\_\_\_  
City Attorney



February 14, 2020

WRITER'S DIRECT DIAL 612-758-4410

Amanda Ashbach  
City Purchasing Agent  
City of Duluth  
411 West First Street, Room 120  
Duluth, MN 55802  
aashbach@duluthmn.gov

Re: Duluth Energy Systems - Electrical System Design and Construction Administration

Dear Ms. Ashbach:

As part of the Energy System Balance of Plant project, HGA performed a Preliminary Electrical Assessment of the Duluth Energy Plant on January 2, 2020 to assess the plant's electrical distribution system. Findings and recommendations from this assessment are found in the attached HGA Electrical Assessment Memorandum dated January 7, 2020. Upon review of the findings with Duluth Energy Systems and Ever-Green Energy, HGA will design and engineer the electrical system following the recommendations in the January 7, 2020 report. HGA proposes a contract amendment to include the following scope of services.

**Electrical Design Services:**

Design and engineering will proceed based on the recommendations from the Preliminary Electrical Assessment. Construction Documents are required for the electrical system improvements, which are not included in HGA's existing contract. Design and engineering would start immediately upon approval of this amendment. HGA requires a minimum of eight weeks to complete Construction Documents, assuming prompt responses in communications and timely decision making.

**Scope of Electrical Services:**

HGA will design and engineer the electrical system and deliver documents for a 50% Construction Documents Owner review and estimate period. These 50% Construction Documents shall include:

- One-line diagrams, site plans, and floor plans for two design options:
  1. New second electrical service to serve distribution pumps
  2. Demolition of existing electrical service and replacement with new service adequate to serve existing and new loads.

Based on the results of the Owner review at 50% Construction Documents, the project team will select one option to proceed to 100% Construction Documents. HGA will provide 100% Construction Documents, which shall include:

- One-line diagrams, site plans, and floor plans for the selected option.
- Typical panel schedules, equipment coordination schedules, and details for the project.

In addition to the Construction Documents this fee includes the following services:

- Coordination with the location electric utility
- Mechanical equipment coordination including developing sequence of operations for generator load management strategies
- Generator load calculations and load scenarios
- Project specifications
- Quality assurance and review
- Addressing 50% CD Owner review comments
- Construction Administrative services (RFIS, submittals, etc.)

- 50% and 100% Construction Document cost estimating

#### Electrical Site visits

- 1 site verification visit during design (for Construction Documents)
- 2 site observations during construction
- 1 final punch list

#### Project Exclusions

- Photometric lighting plans
- Overcurrent protection device coordination studies
- Fire alarm design
- Alternative energy interconnections
- Hazardous classification of rooms and spaces.
- New generator or paralleling switchgear design and engineering

#### **Assumptions and Understanding of Electrical Services**

The existing standby generator is understood to be providing optional standby power to the facility according to Article 702 of the NEC, and not to be considered the primary emergency power source to building egress lighting or fire alarm equipment. Any desire to classify the existing generator as the emergency source of power for egress lighting or fire alarm equipment shall require a selective coordination study to be performed according to Article 700.32 of the NEC, which is not included in this scope. Any new lights added in the project area will be limited to the spaces where mechanical and electrical equipment is being installed. Any lights added will be equipped with integral battery backup.

HGA will design and engineer the Construction Documents assuming the building spaces do not have a Hazardous classification. The client shall provide HGA with a Hazardous classification report from their Fire Protection Engineering consultant. Any change in this assumption will require additional services to redesign and engineer according to the applicable hazardous classification identified by the client's Fire Protection Engineer.

This scope does not include providing a new generator or paralleling switchgear to support the loads provided by the client. This scope does include potential modifications to the existing generator controller and or working with the mechanical engineer to provide sequence of operations for generator load management by a building automation system.

Ms. Amanda Ashbach  
City of Duluth  
February 14, 2020  
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**Proposed Fees:**

HGA proposes the following compensation structure for the services described in the attachment:

1. Electrical Engineering Services: as described on page 1-2
  - a. Compensation: \$112,925
2. Laser scan:
  - a. To create a 200-level detail of first floor where the SCS is planned, the ground floor where the pile cap will be installed, and the external area around the generator, we estimate needing to complete 30 unique scans. We expect to complete these scans in a single day onsite during daylight hours to achieve the best results from our scanning equipment. After completing the scans onsite, we will process the scans and reference existing plans to generate a Revit model that may be used by the project team in design. The City of Duluth, Duluth Energy System, and Ever-Green Energy will be provided with the electronic model upon request.
  - b. Compensation: \$5,530
3. Condensate water and condensate vent pipe routing and design:
  - a. HGA will design a route for the condensate return line from the discharge of the new condensate pumps on the first floor up to the condensate storage tank.
  - b. Compensation: \$3,590

HGA has an existing contract that can be amended to include this scope of work. Additional Services will be performed only when authorized by Owner in advance and in writing.

Sincerely,



Peter Dahl, Ph.D., LEED AP<sup>BD+C & O+M</sup>, CEM  
Associate Vice President

cc: Matt Linder, HGA  
Joe Witchger, HGA

attachment: Electrical Assessment Memorandum dated January 7, 2020