



AGENDA ITEM EXECUTIVE SUMMARY

Agenda Item:	Profession Services Agreement with Stanley Consultants for City of Geneva Arc Flash Study		
Presenter & Title:	Bob VanGyseghem, Superintendent of Water and Wastewater		
Date:	10/4/17		
Please Check Appropriate Box:			
<input checked="" type="checkbox"/>	Committee of the Whole Meeting	<input type="checkbox"/>	Special Committee of the Whole Meeting
<input checked="" type="checkbox"/>	City Council Meeting	<input type="checkbox"/>	Special City Council Meeting
<input type="checkbox"/>	Public Hearing	<input type="checkbox"/>	Other -
Associated Strategic Plan Goal/Objective:			
Estimated Cost: \$30,000	Budgeted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Other Funding? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Executive Summary:			
Changes in NFPA 70E and OSHA will require that facility owners evaluate the arc flash hazard potential and label equipment accordingly prior to allowing a worker to perform a task on energized equipment. In Fiscal Year 2017 Stanly Consultants performed an arc flash study on the City of Geneva Water Plant, Generator Building, and Public Works. Fiscal Year 2018 has funds budgeted for an arc flash study to be performed on all eight (8) well sites and all eight (8) wastewater lift stations. As a continuation of the arc flash study performed in FY 17, staff is recommending that Stanley Consultants be utilized again to perform the arc flash evaluation of the wells and lift stations.			
Attachments: <i>(please list)</i>			
<ul style="list-style-type: none"> • Resolution • Proposal 			
Recommendation / Suggested Action: <i>(how item should be listed on agenda)</i>			
Staff requests that the City Council authorize the City Administrator to enter into a contract with Stanley Consultants in an amount not-to-exceed \$30,000			

RESOLUTION NO. 2017-108
RESOLUTION AUTHORIZING EXECUTION OF
Professional Services Agreement with Stanley Consultants

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GENEVA, KANE COUNTY, ILLINOIS, as follows:

SECTION 1: That the City Administrator is hereby authorized to execute, on behalf of the City of Geneva, a contract with Stanley Consultants, in the form attached hereto as Exhibit "A", relating to the Arc Flash Study for Wells & Lift Stations.

SECTION 2: This Resolution shall become effective from and after its passage as in accordance with law.

PASSED by the City Council of the City of Geneva, Kane County, Illinois, this 16th day of October, 2017

AYES: __ NAYS: __ ABSENT: __ ABSTAINING: __ HOLDING OFFICE: __

Approved by me this 16th day of October, 2017.

Mayor

ATTEST:

City Clerk



PROFESSIONAL SERVICES AGREEMENT

THIS IS AN AGREEMENT made as of 10/16/17, 2017, between City of Geneva, Illinois (CLIENT) and Stanley Consultants, Inc. (CONSULTANT). CLIENT intends to have Wells and Lift Station Arc Flash Study performed (hereinafter called "project").

CLIENT and CONSULTANT agree:

1. **Scope of Services.** CONSULTANT shall perform professional services as stated in Exhibit 1.
2. **Compensation.** CLIENT shall compensate CONSULTANT for CONSULTANT's services as stated in Exhibit 2.
3. **Terms and Conditions.** CONSULTANT shall provide professional services in accordance with the terms and conditions stated in Exhibit 3. If CLIENT issues a purchase order or other document to initiate the commencement of services hereunder, it is agreed that any terms and conditions appearing thereon shall have no application and only the provisions of this Agreement shall automatically apply.
4. CLIENT has provided or shall provide for payment from one or more lawful sources of all sums to be paid to CONSULTANT.
5. Following exhibits are attached to and made part of this Agreement:
 - Exhibit 1 – Scope of Services
 - Exhibit 2 – Compensation
 - Exhibit 3 – Standard Terms and Conditions

IN WITNESS WHEREOF, the parties below have executed this Agreement as of the day and year first above written.

STANLEY CONSULTANTS, INC.

CITY OF GENEVA, ILLINOIS

By: 
Brian J. Schoer, Distribution Group Manager

By: 

Attest: 
Eric D. Kamm, Business Development Manager

Attest: 

Address for giving notices:
225 Iowa Avenue
Muscatine, IA 52761

Address for giving notices:
22 South First Street
Geneva, IL 60134

If CLIENT is a public body, attach evidence of authority to sign and resolution or other document authorizing execution of AGREEMENT.



EXHIBIT 1 (Rev 1) SCOPE OF SERVICES

The following is Stanley Consultants (CONSULTANT) Scope of Work for a project identified by the City of Geneva (CLIENT) as the Arc Flash Study.

PROJECT UNDERSTANDING

CONSULTANT understands the importance of electrical safety at facilities. Care must be taken to achieve reliable electrical system operation while promoting a safe work environment for plant personnel. The intent of this document is to convey CONSULTANT's understanding of project scope of work requirements, explain project approach methodologies, and demonstrate experiences and qualifications to perform electrical system studies.

Project Boundaries and Limits

The physical scope limit for the electrical distribution system assessment and studies is defined below:

1. The proposal will include the project divided in the categories as follows:
 - a. Well Nos. 5, 6, 8, 9, 10, and 11: Includes the 480V service equipment to the 208/120V panelboards and the emergency generator.
 - b. Well Nos. 12 and 13: Includes the 2400V service equipment to the 480V and 208/120V panelboards.
 - c. Total of eight (8) Lift Stations: Includes 480V service equipment to the 208/120V panelboards.
2. The existing ETAP model has been completed for the Generators and the medium voltage distribution system. The ETAP model will be modified as per information obtained during the site visit and information provided by the CLIENT.
3. Updated Electrical Overall One-Line: The one-line diagram will be updated in ETAP per field observations and existing information provided by the CLIENT.
4. Short Circuit Study: The short circuit study has been partially completed by the CLIENT. CONSULTANT will update the short circuit study.
5. Protective Relay Coordination Study: The study will be updated with existing settings collected during the site visit. The protective relay coordination study will not be used to determine if the existing settings are providing adequate protection other than the CONSULTANT will provide recommendations to modify settings if the arc flash energy is high.
6. Arc Flash Hazard Analysis: The arc flash analysis will be completed in ETAP. The arc flash analysis will be completed to determine energy levels for the Wells and Lift Stations.
7. Labels: CONSULTANT will print and install labels on the equipment.



EXHIBIT 1 (Rev 1) SCOPE OF SERVICES

PHASE 1 - PRE-DESIGN ACTIVITIES

General: Phase 1 will commence with the Notice to Proceed. During this phase, all tasks required to be completed before detailed design will be provided such as data collection.

Task 1.1 - General and Administrative

The objective of this task is to establish a clear understanding of the procedures to be adhered to throughout the project. Detailed task descriptions, specific schedules, control and reporting methods, and quality control programs will be developed and reviewed by all concerned parties. This task will commence with the project kick-off meeting and continue throughout the project with specific deliverables being made on a mutually agreeable schedule.

1.1.1. Scheduling

A Project design schedule will be developed and maintained by CONSULTANT. The design schedule identifying Project Milestones, such as completion dates for deliverables, will be maintained.

Deliverables:

- Kick-Off Meeting and Site Visit
- 50% Submittal for Review
- 100% Submittal for Review

1.1.2. Status Reporting

CONSULTANT will maintain contact with CLIENT to provide informal, timely project status and coordination requirements. Significant issues will be conveyed to CLIENT, in writing, as they arise.

Deliverables:

- Weekly Status Reports
- Telephone Conference Review Meetings

1.1.3. Review Meetings

CONSULTANT will maintain contact with CLIENT through teleconference meetings.

Deliverables:

- 50% Review Meeting via teleconference
- 100% Review Meeting via teleconference



EXHIBIT 1 (Rev 1) SCOPE OF SERVICES

Task 1.2 - Project Kick-Off and Site Visit

The objective of this task is to collect data, review the project requirements and the scope of work as presented in this proposal. Existing facilities and specific site conditions not identified by CLIENT that may affect the design will be identified and discussed. This work will commence with the kick-off meeting where access to data will be requested, and drawings related to the site will be provided by CLIENT. The site visit will be scheduled in conjunction with the kick-off meeting to provide the opportunity for CONSULTANT personnel to familiarize themselves with site conditions. CLIENT-provided facility electrician will be available throughout the site visit to assist in gathering data. Any part of the electrical system or equipment not accessible for observation due to facility physical restrictions or operational restrictions will be documented, as such, in the study report. Site visits are assumed to take place on an 8-hour day during normal business hours. It is assumed that the site visit will take the following time:

1. Wells 5, 6, 8, 10, and 11: 1 Day
2. Wells 12 and 13: 1 Day
3. Lift Stations: 1 day

No equipment will be de-energized without prior approval from CLIENT. The CLIENT will provide/verify electrical system configuration and operation information necessary to establish normal and worst-case operating scenarios with respect to short circuit, protective device coordination, and arc flash. The CLIENT will provide up-to-date short circuit data for incoming medium voltage or utility connections, including:

1. Maximum and minimum three-phase and single-phase short circuit kA and X/R.
2. Maximum and minimum system operating voltages.

The CLIENT will provide relay settings logs or breaker settings logs with up-to-date electronic setting files in native format of plant microprocessor relays. During the site visit, the CONSULTANT will document available settings of electromechanical relays and other protective devices that can be visually inspected without direct interface with the device. The CLIENT will provide cable sizes and lengths between equipment that is not available from CLIENT drawings. An arc flash analysis study will be performed by CONSULTANT based on existing protective device settings. Incident energy and flash boundaries will be calculated in accordance with the latest version of IEEE-1584. Electrical analyses will be performed using ETAP software.



EXHIBIT 1 (Rev 1) SCOPE OF SERVICES

PHASE 2 - ELECTRICAL SYSTEM ASSESSMENT AND STUDIES

General: This phase will commence after the data requested at the kick-off meeting has been received. The CLIENT will provide the existing medium voltage ETAP model for CONSULTANT's use. CONSULTANT will perform the following electrical system assessment and studies for the wells and lift stations:

Deliverables:

- Short Circuit Analysis in ETAP
- Arc Flash Hazard Analysis in ETAP

Report content with the following components:

- Executive Summary
- Study Objective
- Premises for the Study
- Methodology
- Study Model Report Outputs

Task 2.1 - Short Circuit Analysis

The Short Circuit Analysis analyzes the effect of faults on electrical distribution systems. The analysis calculates the total short circuit currents, as well as the contributions of individual motors, generators, and utility ties in the system. The Short Circuit Analysis will be performed to determine the available fault currents on the electrical distribution system. The results of the study are used to identify system deficiencies and to help develop recommendations to improve safety and the reliability of the facility electrical distribution system.

Task 2.2 - Protective Relay Coordination Study

The protective relay coordination settings will be provided by the CLIENT and obtained during the site visit. The protective relay coordination study will not be used to determine if the existing settings are providing adequate protection other than the CONSULTANT will provide recommendations to modify settings if the arc flash energy is high. The coordination study is conducted to determine electrical system protective devices setting parameters in order to develop a design of a protection system. A protection system is defined as those components used collectively to detect defective power system elements or conditions of an abnormal or dangerous nature, to initiate an appropriate control circuit action, and to isolate the appropriate components.



EXHIBIT 1 (Rev 1) SCOPE OF SERVICES

Task 2.3 - Arc Flash Hazards Analysis

The National Fire Protection Association Guidelines (NFPA 70E) require facility owners to perform an arc flash hazard analysis prior to allowing a worker to perform a task on energized equipment. Arc Flash Hazard Analysis analyzes potential for incident energy levels resulting from potential arc flash occurrence.

The Arc Flash Hazards Analysis will be performed to determine the flash protection boundary distance. The following are the key steps in the analysis process:

1. Collect electrical system and installation data.
2. Determine electrical system configurations and modes of operation.
3. Determine bolted fault current.
4. Determine protective device characteristics and arc duration.
5. Document system voltages and equipment class.
6. Determine arc fault current.
7. Select the working distance.
8. Calculate the incident energy.
9. Calculate flash protection boundary.
10. IEEE Standard 1584TM IEEE Guide for Performing Arc Flash Hazard Calculations, is the standard to be used for the arc flash hazards analysis. CONSULTANT will use the short circuit information, protection/coordination information, and the data collected to perform arc flash and shock hazard evaluations.

Task 2.4 - Arc Flash Labels

The results of the analysis performed in Task 2.3 will be used by CONSULTANT to create and install proper warning labels on equipment. CLIENT-provided facility electrician will be available during label installation to assist CONSULTANT as required to verify equipment locations. CLIENT will use these labels as the basis for their selection of PPE required for working in various situations.

DELIVERABLE FORMAT AND DISTRIBUTION

Submittal of the electrical system assessment and studies deliverables, as listed above, will be made as outlined. It is assumed CONSULTANT would receive the Notice-to-Proceed by October 05, 2017, and complete the project by January 15, 2018. All submittals shall be concurrently submitted in accordance with the following:

1. Two printed copies (hard copies).
2. One copy in Microsoft Word or Adobe Acrobat format on CD.
3. Software database and library used to model the power system in ETAP.



EXHIBIT 1 (Rev 1)
SCOPE OF SERVICES

Deliverables	Delivery Dates
50 Percent Draft Study Report	30 Days after Phase 2 Commencement
100 Percent Study Report	21 Days after Receiving 50 Percent Comments
Final Study Report – Stamped*	7 Days after Receiving 100 Percent Comments
Project Performance Period	126 Weeks

*Final Study Report will be sealed by a professional engineer registered in the State of Illinois with signature and date.

WORK BY OTHERS

Work not specifically listed in Exhibit 1 is not included in the proposal provided by CONSULTANT. Specific exclusions of this proposal are as follows:

1. ETAP Model of the medium voltage distribution system (provided by CLIENT).
2. Electrician during site visit and label installation (provided by CLIENT).
3. System Fault Data (provided by CLIENT).
4. Cable sizes and lengths (provided by CLIENT).
5. Relay settings logs or breaker settings logs with up-to-date electronic setting files in native format of plant microprocessor relays (provided by CLIENT).

ADDITIONAL SERVICES

CONSULTANT can, at CLIENT's request, provide assistance in:

1. Protective Relay Coordination Study
2. Mileage for the site visit and label installation is included as part of the Arc Flash Study.

Additional services authorized by CLIENT and accepted by CONSULTANT will be compensated as mutually agreed upon.



EXHIBIT 2 COMPENSATION

Based upon Scope of Services described in Exhibit 1, CONSULTANT will provide services on an Hourly Fee and Charges basis for a total not-to-exceed fee of Thirty Thousand Dollars (\$30,000), unless mutually modified by both parties.

Work will be performed in accordance with our current schedule of Hourly Fees and Charges (Form BC_C 17-18, attached).



Stanley Consultants

HOURLY FEES AND CHARGES

Fiscal Year 2017-2018

I. Compensation for office-based personnel in the contiguous United States for time in the performance of the work shall be in accordance with the following Hourly Fees:

Classification	Hourly Fee	Classification	Hourly Fee	Classification	Hourly Fee
BC-1	38.00	BC-11	132.00	BC-21	251.00
BC-2	48.00	BC-12	147.00	BC-22	266.00
BC-3	56.00	BC-13	155.00	BC-23	282.00
BC-4	65.00	BC-14	167.00	BC-24	297.00
BC-5	75.00	BC-15	179.00	BC-25	312.00
BC-6	84.00	BC-16	192.00	BC-26	326.00
BC-7	93.00	BC-17	202.00	BC-27	383.00
BC-8	102.00	BC-18	213.00	BC-28	488.00
BC-9	111.00	BC-19	225.00		
BC-10	119.00	BC-20	238.00		

Travel time in the interest of the work and away from the assigned office, either local or intercity, will be charged in accordance with the foregoing schedule.

II. Compensation for items of expense and other charges incurred in connection with the performance of the work shall be in accordance with the following schedule:

Automobile	\$0.60/mile
Automobile Assigned to Project Site	\$46.00/cal. day
Four-Wheel Drive Vehicles	\$0.80/mile
Four-Wheel Drive Vehicles Assigned to Project Site	\$56.00/cal. day
Ground Transportation (rental car, taxi, etc.)	At Cost Plus 10%
Air Travel (commercial and charter)	At Cost Plus 10%
Living Expenses (away from assigned office)	At Cost Plus 10%
Telephone and Facsimile	At Cost Plus 10%
Equipment Rental	At Cost Plus 10%
Laboratory Work	At Cost Plus 10%
Soils Testing and Analysis	At Cost Plus 10%
Outside Photographic Work	At Cost Plus 10%
Duplicating Work	(schedule supplied upon request)
Technical Testing and Surveying Equipment	(schedule supplied upon request)

III. Compensation for purchases, items of expense, and other charges not scheduled above, incurred in connection with the performance of the work, shall be at cost plus 10%.

IV. Interest at the rate of 1½% per month will be charged on invoices not paid within 30 days.

V. Fees and charges are subject to revision on or after March 31, 2018.



Standard Terms and Conditions Exhibit 3

1. CLIENT'S RESPONSIBILITIES

1.1 Name CLIENT's representative with authority to receive information and transmit instructions for CLIENT.

1.2 Provide CLIENT's requirements for project, including objectives and constraints, design and construction standards, bonding and insurance requirements, and contract forms.

1.3 Provide available information pertinent to project upon which CONSULTANT may rely.

1.4 Arrange for access by CONSULTANT upon public and private property, as required.

1.5 Examine documents presented by CONSULTANT, obtain legal and other advice as CLIENT deems appropriate, and render written decisions within reasonable time.

1.6 Obtain consents, approvals, licenses, and permits necessary for project.

1.7 Advertise for and open bids when scheduled.

1.8 Provide services necessary for project but not within scope of CONSULTANT's services.

1.9 Indemnify CONSULTANT, its employees, agents, and consultants against claims arising out of CONSULTANT's design, if there has been a deviation from the design beyond the CONSULTANT's control or failure to follow CONSULTANT's recommendation and such deviation or failure caused the claims.

1.10 Promptly notify CONSULTANT when CLIENT learns of contractor error or any development that affects scope or timing of CONSULTANT's services.

1.11 Nothing in this agreement shall create a fiduciary duty between the parties.

2. PERIOD OF SERVICE

2.1 CONSULTANT is not responsible for delays due to factors beyond its control.

2.2 If CLIENT requests changes in project, compensation for and time of performance of CONSULTANT's services shall be adjusted appropriately.

3. CONSTRUCTION COST AND COST ESTIMATES

3.1 **Construction Cost.** Construction cost means total cost of entire project to CLIENT, except for CONSULTANT's compensation and expenses, cost of land, rights-of-way, legal and accounting services, insurance, financing charges, and other costs which

are CLIENT's responsibility as provided in this Agreement.

3.2 **Cost Estimates.** Since CONSULTANT has no control over cost of labor, materials, equipment or services furnished by others, over contractors' methods of determining prices, or over competitive bidding or market conditions, its estimates of project construction cost will be made on the basis of its employees' experience and qualifications and will represent their best judgment as experienced and qualified professionals, familiar with the construction industry. CONSULTANT does not guarantee that proposals, bids, or actual construction cost will not vary from its estimates of project cost.

4. GENERAL

4.1 Termination.

4.1.1 Either party may terminate their obligation to provide further services upon twenty (20) days' written notice, after substantial default by other party through no fault of terminating party.

4.1.2 CLIENT may terminate CONSULTANT's obligation to provide further services upon twenty (20) days' written notice if project is abandoned. In such event, progress payments due to CONSULTANT for services rendered plus unpaid reimbursable to expenses, shall constitute total compensation due.

4.2 Reuse of Documents.

4.2.1 All tangible items prepared by CONSULTANT are instruments of service, and CONSULTANT retains all copyrights. CLIENT may retain copies for reference, but reuse on another project without CONSULTANT's written consent is prohibited. CLIENT will indemnify CONSULTANT, its employees, agents, and consultants against claims resulting from such prohibited reuse. Said items are not intended to be suitable for completion of this project by others.

4.2.2 Submittal or distribution of items in connection with project is not publication in derogation of CONSULTANT's rights.

4.2.3 **Confidentiality.** Each party acknowledges that in connection with this Agreement it may receive certain confidential or proprietary technical and business information and materials of the other party ("Confidential Information"). Each party, its agents and employees shall hold and maintain in strict confidence all Confidential Information, shall not disclose Confidential Information to any third party, and shall not use any Confidential Information except as may be necessary to perform its obligations under the agreement except as may be required by a court or governmental authority. CLIENT and CONSULTANT shall keep all information and communications related



Standard Terms and Conditions Exhibit 3

to the project confidential in the same manner each party protects its own confidential information, to the extent that it is marked "proprietary" or "confidential" or with a similar label or which by the nature of the information generally would be regarded as proprietary or confidential. This clause shall not apply to information that is previously known by either party, lawfully becomes public knowledge, or is required to be disclosed by law or a court order.

4.3 Payment.

4.3.1 CONSULTANT shall submit a monthly statement for services rendered and reimbursable expenses incurred. CLIENT shall make prompt monthly payments.

4.3.2 If CLIENT fails to make payment within thirty (30) days after receipt of statement, interest at maximum legal rate or at a rate of 18%, whichever is less, shall accrue; and, in addition, CONSULTANT may, after giving seven (7) days' written notice, suspend services until it has been paid in full all amounts due it.

4.3.3 CLIENT has provided or shall provide for payment from one or more lawful sources of all sums to be paid to CONSULTANT.

4.3.4 CONSULTANT's compensation shall not be reduced on account of any amounts withheld from payments to contractors.

4.3.5 If services performed by CONSULTANT are subject to state or local sales taxes, said taxes will be reflected in the invoices and remitted according to state law. If CLIENT claims a status that would make the transaction exempt, then CLIENT shall provide appropriate proof of exempt status to CONSULTANT.

4.4 **Controlling Law.** Agreement shall be governed by Illinois law, excluding its choice of law rules.

4.5 Successors and Assigns.

4.5.1 The parties bind themselves, their successors, and legal representatives to the other party and to successors and legal representatives of such other party, in respect to all covenants and obligations of this Agreement.

4.5.2 Neither party shall assign, sublet, or transfer any interest in this Agreement without written consent of the other, provided CONSULTANT may employ such independent consultants, associates, and subcontractors as it may deem appropriate.

4.5.3 Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than the parties.

4.6 **CONSULTANT's Accounting Records.** Records of CONSULTANT's personnel time, reimbursable expenses, and accounts between parties shall be kept on a generally-recognized accounting basis.

4.7 **Separate Provisions.** If any provisions of this Agreement shall be held to be invalid or unenforceable, remaining provisions shall be valid and binding.

4.8 **Waiver.** No waiver shall constitute a waiver of any subsequent breach.

4.9 Warranty.

4.9.1 CONSULTANT shall use reasonable care to reflect requirements of all applicable laws, rules, or regulations of which CONSULTANT has knowledge or about which CLIENT specifically advises in writing, which are in effect on date of Agreement. CONSULTANT INTENDS TO RENDER SERVICES IN ACCORDANCE WITH GENERALLY ACCEPTED PROFESSIONAL STANDARDS, BUT NO OTHER WARRANTY IS EXTENDED, EITHER EXPRESS OR IMPLIED, IN CONNECTION WITH SUCH SERVICES. CLIENT's rights and remedies in this Agreement are exclusive.

4.9.2 CONSULTANT shall not be responsible for contractors' construction means, methods, techniques, sequences, or procedures, or for contractors' safety precautions and programs, or for contractors' failure to perform according to contract documents.

4.9.3 The CONSULTANT believes that any computer software provided under this Agreement is suitable for the intended purpose, however, it does not warrant the suitability, merchantability, or fitness for a particular purpose of this software.

4.9.4 Subject to the standard of care set forth in Paragraph 4.9.1, CONSULTANT and its Subconsultants may use or rely upon design elements, work, and information ordinarily or customarily furnished by others, including, but not limited to, CLIENT or his authorized representatives, public record, specialty contractors, manufacturers, suppliers, and publishers of technical standards.

4.10 **Period of Repose.** Any applicable statute of limitations or repose shall commence to run and any alleged cause of action shall be deemed to have accrued not later than completion of services to be performed by CONSULTANT.

4.11 **Indemnification.** To the fullest extent permitted by law, CONSULTANT shall indemnify and hold harmless CLIENT, CLIENT's officers, directors, partners, employees, and agents from and against any and all third party claims for bodily injury and for damage to tangible property to the extent caused by the negligent acts or omissions of CONSULTANT or



Standard Terms and Conditions Exhibit 3

CONSULTANT's officers, directors, partners, employees, agents, and CONSULTANT's consultants in the performance and furnishing of CONSULTANT's services under this Agreement. Any indemnification shall be limited to the terms and amounts of coverage of the CONSULTANT's insurance policies listed in 4.14.

To the fullest extent permitted by law, CLIENT shall indemnify and hold harmless CONSULTANT, CONSULTANT's officers, directors, partners, employees, and agents and CONSULTANT's consultants from and against any and all third party claims for bodily injury and for damage to tangible property to the extent caused by the negligent acts or omissions of CLIENT or CLIENT's officers, directors, partners, employees, agents, and CLIENT's consultants with respect to this Agreement on the Project. In addition to the indemnity provided under this section, and to the fullest extent permitted by law, CLIENT shall indemnify and hold harmless CONSULTANT and its officers, directors, partners, employees, and agents and CONSULTANT's consultants from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) caused by, arising out of, or relating to the presence, discharge, release, or escape of asbestos, PCBs, petroleum, hazardous waste, or radioactive material at, on, under, or from the Project site.

4.12 Limitation of Liability. IN NO EVENT SHALL CONSULTANT BE LIABLE TO CLIENT FOR ANY INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES OF ANY KIND ARISING OUT OF OR RELATED TO THIS AGREEMENT. CONSULTANT SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INDIRECT DAMAGES THAT ARISE OUT OF ITS PERFORMANCE ON THIS PROJECT.

4.13 Extent of Agreement. This Agreement represents the entire agreement between the parties and may be amended only by written instrument signed by both parties.

4.14 INSURANCE. CONSULTANT shall purchase and maintain insurance for the coverages and for not less than the limits of liability set forth below:

(a) **Workers' Compensation:** workers' compensation insurance as required by the laws of the states or countries with jurisdiction of the services to be performed, including employer's liability insurance, with a limit of \$1,000,000 per accident.

(b) **Commercial General Liability:** commercial general liability, including coverage for all premises, operations, operations of independent contractors, products and completed operations, and contractual

liability. Coverage shall have limits of not less than \$1,000,000 for each occurrence and aggregate.

(c) **Commercial Automobile Liability:** commercial automobile liability covering the use of all owned, non-owned, and hired automobiles with minimum combined single limits of \$1,000,000.

(d) **Professional Liability:** professional liability insurance for claims arising out of performance of professional services caused by any negligent error, omission, or act for which the insured is legally liable, with a minimum limit of \$1,000,000, to be kept in force for two (2) years after completion of project.

CONSULTANT shall provide certificates or other evidence from insurance carriers of the required insurance coverages, if requested by CLIENT in writing within 30 days of start of performance. All insurance except workers' compensation and professional liability shall designate CLIENT as additional insured.

4.15 Subrogation Waiver. The parties waive all rights against each other, and against contractors, consultants, agents, and employees of the other for damages covered by any property insurance during construction, and each shall require similar waivers from their contractors, consultants, and agents.

4.16 Force Majeure. Parties will not be liable for delays in delivery or for failure to perform obligations, other than payment, due to causes beyond their reasonable control, including, but not limited to, product allocations, material shortages, labor disputes, transportation delays, unforeseen circumstances, acts of God, acts or omissions of other parties, acts or omissions of civil or military authorities, government priorities, fire, strikes, floods, epidemics, quarantine restrictions, riots, terrorists acts, or war. CONSULTANT's time for delivery or performance will be automatically extended by the period of such delay or CONSULTANT may, at its option, cancel any services, in whole or in part, without liability by giving notice to CLIENT.

4.17 EQUAL EMPLOYMENT OPPORTUNITY CLAUSE. When applicable, the CONSULTANT and SUBCONSULTANT shall abide by the requirements of 41 CFR 60-1.4(a), 60-300.5(a), 60-741.5(a) and Appendix A of Subpart A of 29 CFR 471. These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, or national origin. Moreover, these regulations require that covered prime CONSULTANTS and SUBCONSULTANTS take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, national origin, protected veteran status or disability.