AGREEMENT

36221

THIS AGREEMENT is made and entered, in duplicate, as of September 22, 2021, for reference purposes only, pursuant to a minute order adopted by the City Council of the City of Long Beach at its meeting on September 7, 2021, by and between TETRA TECH, INC., a Delaware corporation ("Consultant"), with a place of business at 3475 E. Foothill Blvd., Pasadena, California 91107, and the CITY OF LONG BEACH, a municipal corporation ("City").

WHEREAS, City requires specialized services requiring unique skills to be performed in connection with consulting, technical, and accounting services for disaster funding administration and cost recovery ("Project"); and

WHEREAS, City has selected Consultant in accordance with City's administrative procedures using a Request for Proposals ("RFP"), attached hereto as Exhibit "A-1", and incorporated by this reference, and City has determined that Consultant and its employees are qualified, licensed, if so required, and experienced in performing these specialized services; and

WHEREAS, City desires to have Consultant perform these specialized services, and Consultant is willing and able to do so on the terms and conditions in this Agreement; and

WHEREAS, this Agreement is funded in part by American Rescue Plan Act ("ARPA") funds from the US Treasury ("Treasury"), and is subject to all applicable award terms and conditions of the State and Local Fiscal Recovery Funds ("SLFRF") financial assistance agreement, as further set forth in this Agreement;

NOW, THEREFORE, in consideration of the mutual terms, covenants, and conditions in this Agreement, the parties agree as follows:

1. SCOPE OF WORK OR SERVICES.

A. Consultant shall furnish specialized services more particularly described in Exhibit "A-2", attached to this Agreement and incorporated by this

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reference, in accordance with the standards of the profession, and City shall pay for these services in the manner described below, in an amount not to exceed Four Hundred Thousand Dollars ($400,000) annually, at the rates or charges shown in Exhibit "B".

B. The City's obligation to pay the sum stated above for any one fiscal year shall be contingent upon the City Council of the City appropriating the necessary funds for such payment by the City in each fiscal year during the term of this Agreement. For the purposes of this Section, a fiscal year commences on October 1 of the year and continues through September 30 of the following year. In the event that the City Council of the City fails to appropriate the necessary funds for any fiscal year, then, and in that event, the Agreement will terminate at no additional cost or obligation to the City.

C. Consultant may select the time and place of performance for these services; provided, however, that access to City documents, records and the like, if needed by Consultant, shall be available only during City's normal business hours and provided that milestones for performance, if any, are met.

D. Consultant has requested to receive regular payments. City shall pay Consultant in due course of payments following receipt from Consultant and approval by City of invoices showing the services or task performed, the time expended (if billing is hourly), and the name of the Project. Consultant shall certify on the invoices that Consultant has performed the services in full conformance with this Agreement and is entitled to receive payment. Each invoice shall be accompanied by a progress report indicating the progress to date of services performed and covered by the invoice, including a brief statement of any Project problems and potential causes of delay in performance, and listing those services that are projected for performance by Consultant during the next invoice cycle. Where billing is done and payment is made on an hourly basis, the parties acknowledge that this arrangement is either customary practice for Consultant's

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profession, industry or business, or is necessary to satisfy audit and legal requirements which may arise due to the fact that City is a municipality.

E. Consultant represents that Consultant has obtained all necessary information on conditions and circumstances that may affect its performance and has conducted site visits, if necessary.

F. CAUTION: Consultant shall not begin work until this Agreement has been signed by both parties and until Consultant's evidence of insurance has been delivered to and approved by City.

2. AMERICAN RESCUE PLAN ACT OF 2021 AWARD TERMS AND CONDITIONS. The award terms and conditions of the SLFRF financial assistance agreement sets forth the compliance obligations for recipients pursuant to the SLFRF statute, the Uniform Guidance, and Treasury's Interim Final Rule, incorporated by reference herein as though fully set force. Consultant must comply with all award terms and conditions. These obligations include the following items in addition to those described above:

A. SAM.gov Requirements. Consultant must have an active registration with the System for Award Management (SAM) (https://www.sam.gov). To ensure timely receipt of funding, any Non-entitlement Units of Government (NEUs) who have not previously registered with SAM.gov may do so after receipt of the award, but before the submission of mandatory reporting.

B. Recordkeeping Requirements. Consultant must maintain records and financial documents for five years after all funds have been expended or returned to Treasury, as outlined in paragraph 4.c. of the award terms and conditions. Treasury may request transfer of records of long-term value at the end of such period. Wherever practicable, such records should be collected, transmitted, and stored in open and machine-readable formats.

Consultant must agree to provide or make available such records to Treasury upon request, and to any authorized oversight body, including but not limited to the

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Government Accountability Office ("GAO"), Treasury's Office of Inspector General ("OIG"), and the Pandemic Relief Accountability Committee ("PRAC").

C. Single Audit Requirements. Consultant and subconsultants that expend more than Seven Hundred Fifty Thousand Dollars ($750,000) in Federal awards during their fiscal year will be subject to an audit under the Single Audit Act and its implementing regulation at 2 CFR Part 200, Subpart F regarding audit requirements. Consultant and subconsultants may also refer to the Office of Management and Budget (OMB) Compliance Supplements for audits of federal funds and related guidance and the Federal Audit Clearinghouse to see examples and single audit submissions.

D. Civil Rights Compliance. Recipients of Federal financial assistance from Treasury, including Consultant, are required to meet legal requirements relating to nondiscrimination and nondiscriminatory use of Federal funds, including ensuring that entities receiving Federal financial assistance from the Treasury do not deny benefits or services, or otherwise discriminate on the basis of race, color, national origin (including limited English proficiency), disability, age, or sex (including sexual orientation and gender identity), in accordance with the following authorities: Title VI of the Civil Rights Act of 1964 (Title VI) Public Law 88-352, 42 U.S.C. 2000d-1 et seq., and the Department's implementing regulations, 31 CFR part 22; Section 504 of the Rehabilitation Act of 1973 (Section 504), Public Law 93-112, as amended by Public Law 93-516, 29 U.S.C. 794; Title IX of the Education Amendments of 1972 (Title IX), 20 U.S.C. 1681 et seq., and the Department's implementing regulations, 31 CFR part 28; Age Discrimination Act of 1975, Public Law 94-135, 42 U.S.C. 6101 et seq., and the Department implementing regulations at 31 CFR part 23.

In order to carry out its enforcement responsibilities under Title VI of the Civil Rights Act, Treasury will collect and review information from recipients to ascertain their compliance with the applicable requirements before and after

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providing financial assistance. Treasury's implementing regulations, 31 CFR part 22, and the Department of Justice (DOJ) regulations, Coordination of Non-discrimination in Federally Assisted Programs, 28 CFR part 42, provide for the collection of data and information from recipients (see 28 CFR 42.406). Treasury may request that recipients submit data for post-award compliance reviews, including information such as a narrative describing their Title VI compliance status.

3. FEDERAL EMERGENCY MANAGEMENT AGENCY - REIMBURSEMENT SPECIAL CONDITIONS. The City of Long Beach may elect to seek federal reimbursement for costs incurred under this contract/purchase order. Pursuant to 2 CFR 200.326, the following clauses, terms, conditions and obligations are incorporated herein by this reference into this Agreement:

A. Compliance with the Contract Work Hours and Safety Standards Act.

i. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

ii. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with

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respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of twenty-seven dollars ($27) for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

iii. Withholding for unpaid wages and liquidated damages. The City shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

iv. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (3) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (3) of this section.

B. Clean Air Act.

i. The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.

ii. The contractor agrees to report each violation to the City

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and understands and agrees that the City will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

iii. The contractor agrees to include these requirements in each subcontract exceeding one hundred fifty thousand dollars ($150,000) financed in whole or in part with Federal assistance provided by FEMA.

C. Federal Water Pollution Control Act.

i. The contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.

ii. The contractor agrees to report each violation to the City and understands and agrees that the City will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

iii. The contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA.

D. Suspension and Debarment.

i. This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the contractor is required to verify that none of the contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

ii. The contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters

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into.

iii. This certification is a material representation of fact relied upon by the City. If it is later determined that the Contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the City, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

iv. Contractor agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. Contractor further agrees to include a provision requiring such compliance in its lower tier covered transactions.

E. Byrd Anti-Lobbying Amendment, 31 U.S.C. § 1352 (as amended).

i. Contractors who apply or bid for an award of $100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non- Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.

ii. If applicable, contractors must sign and submit to the nonfederal entity the following certification. "APPENDIX A, 44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING Certification for Contracts,

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Grants, Loans, and Cooperative Agreements The undersigned certifies, to the best of his or her knowledge and belief, that:

(a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(c) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering

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into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure. The Contractor certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any."

F. Procurement of Recovered Materials.

i. In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired:

(a) Competitively within a timeframe providing for compliance with the contract performance schedule;

(b) Meeting contract performance requirements; or

(c) At a reasonable price.

ii. Information about this requirement, along with the list of EPA designated items, is available at EPA's Comprehensive Procurement Guidelines web site, https://www.epa.gov/smm/ comprehensive procurement-guideline-cpg-program.

iii. The Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.

G. Access to Records.

i. Contractor agrees to provide the City , any state agency involved in funding the Work, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representative's submission of any books, documents, papers, and records of the Contractor

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which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.

ii. Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

iii. Contractor agrees to provide the FEMA Administrator or his authorized representative's access to construction or other work sites pertaining to the work being completed under the contract.

iv. The City and the Contractor acknowledge and agree that no language in this contract is intended to prohibit audits or internal reviews by the FEMA Administrator or the Comptroller General of the United States.

H. DHS Seal, Logo, and Flags. The Contractor shall not use the United States Department of Homeland Security (hereinafter "DHS") seal(s), logos, crests, or reproductions of flags or likeness of DHS agency officials without specific FEMA pre-approval.

I. Compliance with Federal Law, Regulations, and Executive Orders. This is an acknowledgement that FEMA financial assistance will be used to fund all or a portion of the contract. The contractor will comply with all applicable Federal law, regulations, executive orders, FEMA policies, procedures, and directives.

J. No Obligation by Federal Government. The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from the contract.

K. Program Fraud and False or Fraudulent Statements or Related Acts. The Contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the Contractor's actions pertaining to this contract. This contract/purchase order is deemed to include any

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other clause, term, condition and obligation set forth in 2 CFR 200.326 and Appendix II, but only to the extent necessary to qualify this contract/purchase order for reimbursement of costs.

4. TERM. The term of this Agreement shall commence at midnight on October 1, 2021, and shall terminate at 11:59 p.m. on September 30, 2022, unless sooner terminated as provided in this Agreement, or unless the services or the Project is completed sooner. The term may be extended for one(1) additional two-year period, at the discretion of the City Manager.

5. COORDINATION AND ORGANIZATION.

A. Consultant shall coordinate its performance with City's representative, if any, named in Exhibit "C", attached to this Agreement and incorporated by this reference. Consultant shall advise and inform City's representative of the work in progress on the Project in sufficient detail so as to assist City's representative in making presentations and in holding meetings on the Project. City shall furnish to Consultant information or materials, if any, described in Exhibit "D", attached to this Agreement and incorporated by this reference, and shall perform any other tasks described in the Exhibit.

B. The parties acknowledge that a substantial inducement to City for entering this Agreement was and is the reputation and skill of Consultant's key employee, named in Exhibit "E" attached to this Agreement and incorporated by this reference. City shall have the right to approve any person proposed by Consultant to replace that key employee.

6. INDEPENDENT CONTRACTOR. In performing its services, Consultant is and shall act as an independent contractor and not an employee, representative or agent of City. Consultant shall have control of Consultant's work and the manner in which it is performed. Consultant shall be free to contract for similar services to be performed for others during this Agreement; provided, however, that Consultant acts in accordance with Section 9 and Section 11 of this Agreement. Consultant acknowledges

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and agrees that (a) City will not withhold taxes of any kind from Consultant's compensation; (b) City will not secure workers' compensation or pay unemployment insurance to, for or on Consultant's behalf; and (c) City will not provide and Consultant is not entitled to any of the usual and customary rights, benefits or privileges of City employees. Consultant expressly warrants that neither Consultant nor any of Consultant's employees or agents shall represent themselves to be employees or agents of City.

7. INSURANCE.

A. As a condition precedent to the effectiveness of this Agreement, Consultant shall procure and maintain, at Consultant's expense for the duration of this Agreement, from insurance companies that are admitted to write insurance in California and have ratings of or equivalent to A:V by A.M. Best Company or from authorized non-admitted insurance companies subject to Section 1763 of the California Insurance Code and that have ratings of or equivalent to A:VIII by A.M. Best Company, the following insurance:

i. Commercial general liability insurance (equivalent in scope to ISO form CG 00 01 11 85 or CG 00 01 10 93) in an amount not less than One Million Dollars ($1,000,000.00) per each occurrence and Two Million Dollars ($2,000,000.00) general aggregate. This coverage shall include but not be limited to broad form contractual liability, cross liability, independent contractors liability, and products and completed operations liability. City, its boards and commissions, and their officials, employees and agents shall be named as additional insureds by endorsement (on City's endorsement form or on an endorsement equivalent in scope to ISO form CG 20 10 11 85 or CG 20 26 11 85 or both CG 20 10 07 04 and CG 20 37 07 04 or both CG 20 33 07 04 and CG 20 37 07 04), and this insurance shall contain no special limitations on the scope of protection given to City, its boards and commissions, and their officials, employees and agents. This policy shall be endorsed to state that the insurer waives its right of subrogation against City,

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its boards and commissions, and their officials, employees and agents.

ii. Workers' Compensation insurance as required by the California Labor Code and employer's liability insurance in an amount not less than One Million Dollars ($1,000,000.00). This policy shall be endorsed to state that the insurer waives its right of subrogation against City, its boards and commissions, and their officials, employees and agents.

iii. Professional liability or errors and omissions insurance in an amount not less than One Million Dollars ($1,000,000.00) per claim.

iv. Commercial automobile liability insurance (equivalent in scope to ISO form CA 00 01 06 92), covering Auto Symbol 1 (Any Auto) in an amount not less than Five Hundred Thousand Dollars ($500,000.00) combined single limit per accident.

B. Any self-insurance program, self-insured retention, or deductible must be separately approved in writing by City's Risk Manager or designee and shall protect City, its officials, employees and agents in the same manner and to the same extent as they would have been protected had the policy or policies not contained retention or deductible provisions.

C. Each insurance policy shall be endorsed to state that coverage shall not be reduced, non-renewed or canceled except after thirty (30) days prior written notice to City, shall be primary and not contributing to any other insurance or self-insurance maintained by City, and shall be endorsed to state that coverage maintained by City shall be excess to and shall not contribute to insurance or self-insurance maintained by Consultant. Consultant shall notify City in writing within five (5) days after any insurance has been voided by the insurer or cancelled by the insured.

D. If this coverage is written on a "claims made" basis, it must provide for an extended reporting period of not less than one hundred eighty (180) days, commencing on the date this Agreement expires or is terminated, unless

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Consultant guarantees that Consultant will provide to City evidence of uninterrupted, continuing coverage for a period of not less than three (3) years, commencing on the date this Agreement expires or is terminated.

E. Consultant shall require that all subconsultants or contractors that Consultant uses in the performance of these services maintain insurance in compliance with this Section unless otherwise agreed in writing by City's Risk Manager or designee.

F. Prior to the start of performance, Consultant shall deliver to City certificates of insurance and the endorsements for approval as to sufficiency and form. In addition, Consultant shall, within thirty (30) days prior to expiration of the insurance, furnish to City certificates of insurance and endorsements evidencing renewal of the insurance. City reserves the right to require complete certified copies of all policies of Consultant and Consultant's subconsultants and contractors, at any time. Consultant shall make available to City's Risk Manager or designee all books, records and other information relating to this insurance, during normal business hours.

G. Any modification or waiver of these insurance requirements shall only be made with the approval of City's Risk Manager or designee. Not more frequently than once a year, City's Risk Manager or designee may require that Consultant, Consultant's subconsultants and contractors change the amount, scope or types of coverages required in this Section if, in his or her sole opinion, the amount, scope or types of coverages are not adequate.

H. The procuring or existence of insurance shall not be construed or deemed as a limitation on liability relating to Consultant's performance or as full performance of or compliance with the indemnification provisions of this Agreement.

8. <u>ASSIGNMENT AND SUBCONTRACTING</u>. This Agreement contemplates the personal services of Consultant and Consultant's employees, and the parties acknowledge that a substantial inducement to City for entering this Agreement was

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and is the professional reputation and competence of Consultant and Consultant's employees. Consultant shall not assign its rights or delegate its duties under this Agreement, or any interest in this Agreement, or any portion of it, without the prior approval of City, except that Consultant may with the prior approval of the City Manager of City, assign any moneys due or to become due Consultant under this Agreement. Any attempted assignment or delegation shall be void, and any assignee or delegate shall acquire no right or interest by reason of an attempted assignment or delegation. Furthermore, Consultant shall not subcontract any portion of its performance without the prior approval of the City Manager or designee, or substitute an approved subconsultant or contractor without approval prior to the substitution. Nothing stated in this Section shall prevent Consultant from employing as many employees as Consultant deems necessary for performance of this Agreement.

9. CONFLICT OF INTEREST. Consultant, by executing this Agreement, certifies that, at the time Consultant executes this Agreement and for its duration, Consultant does not and will not perform services for any other client which would create a conflict, whether monetary or otherwise, as between the interests of City and the interests of that other client. Consultant further certifies that Consultant does not now have and shall not acquire any interest, direct or indirect, in the area covered by this Agreement or any other source of income, interest in real property or investment which would be affected in any manner or degree by the performance of Consultant's services hereunder. And, Consultant shall obtain similar certifications from Consultant's employees, subconsultants and contractors.

10. MATERIALS. Consultant shall furnish all labor and supervision, supplies, materials, tools, machinery, equipment, appliances, transportation and services necessary to or used in the performance of Consultant's obligations under this Agreement, except as stated in Exhibit “D”.

11. OWNERSHIP OF DATA. All materials, information and data prepared, developed or assembled by Consultant or furnished to Consultant in connection

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with this Agreement, including but not limited to documents, estimates, calculations, studies, maps, graphs, charts, computer disks, computer source documentation, samples, models, reports, summaries, drawings, designs, notes, plans, information, material and memorandum ("Data") shall be the exclusive property of City. Data shall be given to City, in a format identified by City, and City shall have the unrestricted right to use and disclose the Data in any manner and for any purpose without payment of further compensation to Consultant. Copies of Data may be retained by Consultant but Consultant warrants that Data shall not be made available to any person or entity for use without the prior approval of City. This warranty shall survive termination of this Agreement for five (5) years.

12. TERMINATION. Either party shall have the right to terminate this Agreement for any reason or no reason at any time by giving fifteen (15) calendar days prior written notice to the other party. In the event of termination under this Section, City shall pay Consultant for services satisfactorily performed and costs incurred up to the effective date of termination for which Consultant has not been previously paid. The procedures for payment in Section 1.B. with regard to invoices shall apply. On the effective date of termination, Consultant shall deliver to City all Data developed or accumulated in the performance of this Agreement, whether in draft or final form, or in process. And, Consultant acknowledges and agrees that City's obligation to make final payment is conditioned on Consultant's delivery of the Data to City.

13. CONFIDENTIALITY. Consultant shall keep all Data confidential and shall not disclose the Data or use the Data directly or indirectly, other than in the course of performing its services, during the term of this Agreement and for five (5) years following expiration or termination of this Agreement. In addition, Consultant shall keep confidential all information, whether written, oral or visual, obtained by any means whatsoever in the course of performing its services for the same period of time. Consultant shall not disclose any or all of the Data to any third party, or use it for Consultant's own benefit or the benefit of others except for the purpose of this Agreement.

14. BREACH OF CONFIDENTIALITY. Consultant shall not be liable for

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a breach of confidentiality with respect to Data that: (a) Consultant demonstrates Consultant knew prior to the time City disclosed it; or (b) is or becomes publicly available without breach of this Agreement by Consultant; or (c) a third party who has a right to disclose does so to Consultant without restrictions on further disclosure; or (d) must be disclosed pursuant to subpoena or court order.

15. ADDITIONAL COSTS AND REDESIGN.

A. Any costs incurred by City due to Consultant's failure to meet the standards required by the scope of work or Consultant's failure to perform fully the tasks described in the scope of work which, in either case, causes City to request that Consultant perform again all or part of the Scope of Work shall be at the sole cost of Consultant and City shall not pay any additional compensation to Consultant for its re-performance.

B. If the Project involves construction and the scope of work requires Consultant to prepare plans and specifications with an estimate of the cost of construction, then Consultant may be required to modify the plans and specifications, any construction documents relating to the plans and specifications, and Consultant's estimate, at no cost to City, when the lowest bid for construction received by City exceeds by more than ten percent (10%) Consultant's estimate. This modification shall be submitted in a timely fashion to allow City to receive new bids within four (4) months after the date on which the original plans and specifications were submitted by Consultant.

16. AMENDMENT. This Agreement, including all Exhibits, shall not be amended, nor any provision or breach waived, except in writing signed by the parties which expressly refers to this Agreement.

17. LAW. This Agreement shall be construed in accordance with the laws of the State of California, and the venue for any legal actions brought by any party with respect to this Agreement shall be the County of Los Angeles, State of California for state actions and the Central District of California for any federal actions. Consultant shall cause

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all work performed in connection with construction of the Project to be performed in compliance with (1) all applicable laws, ordinances, rules and regulations of federal, state, county or municipal governments or agencies (including, without limitation, all applicable federal and state labor standards, including the prevailing wage provisions of sections 1770 *et seq.* of the California Labor Code); and (2) all directions, rules and regulations of any fire marshal, health officer, building inspector, or other officer of every governmental agency now having or hereafter acquiring jurisdiction.

18. PREVAILING WAGES.

A. Consultant agrees that all public work (as defined in California Labor Code section 1720) performed pursuant to this Agreement (the "Public Work"), if any, shall comply with the requirements of California Labor Code sections 1770 *et seq.* City makes no representation or statement that the Project, or any portion thereof, is or is not a "public work" as defined in California Labor Code section 1720.

B. In all bid specifications, contracts and subcontracts for any such Public Work, Consultant shall obtain the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in this locality for each craft, classification or type of worker needed to perform the Public Work, and shall include such rates in the bid specifications, contract or subcontract. Such bid specifications, contract or subcontract must contain the following provision: "It shall be mandatory for the contractor to pay not less than the said prevailing rate of wages to all workers employed by the contractor in the execution of this contract. The contractor expressly agrees to comply with the penalty provisions of California Labor Code section 1775 and the payroll record keeping requirements of California Labor Code section 1771."

19. ENTIRE AGREEMENT. This Agreement, including all Exhibits, constitutes the entire understanding between the parties and supersedes all other agreements, oral or written, with respect to the subject matter in this Agreement.

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20. <u>INDEMNITY</u>.

A. Consultant shall indemnify, protect and hold harmless City, its Boards, Commissions, and their officials, employees and agents ("Indemnified Parties"), from and against any and all liability, claims, demands, damage, loss, obligations, causes of action, proceedings, awards, fines, judgments, penalties, costs and expenses, arising or alleged to have arisen, in whole or in part, out of or in connection with (1) Consultant's breach or failure to comply with any of its obligations contained in this Agreement, including any obligations arising from the Project's compliance with or failure to comply with applicable laws, including all applicable federal and state labor requirements including, without limitation, the requirements of California Labor Code section 1770 *et seq.* or (2) negligent or willful acts, errors, omissions or misrepresentations committed by Consultant, its officers, employees, agents, subcontractors, or anyone under Consultant's control, in the performance of work or services under this Agreement (collectively "Claims" or individually "Claim").

B. In addition to Consultant's duty to indemnify, Consultant shall have a separate and wholly independent duty to defend Indemnified Parties at Consultant's expense by legal counsel approved by City, from and against all Claims, and shall continue this defense until the Claims are resolved, whether by settlement, judgment or otherwise. No finding or judgment of negligence, fault, breach, or the like on the part of Consultant shall be required for the duty to defend to arise. City shall notify Consultant of any Claim, shall tender the defense of the Claim to Consultant, and shall assist Consultant, as may be reasonably requested, in the defense.

C. If a court of competent jurisdiction determines that a Claim was caused by the sole negligence or willful misconduct of Indemnified Parties, Consultant's costs of defense and indemnity shall be (1) reimbursed in full if the court determines sole negligence by the Indemnified Parties, or (2) reduced by the

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percentage of willful misconduct attributed by the court to the Indemnified Parties.

D. The provisions of this Section shall survive the expiration or termination of this Agreement.

21. AMBIGUITY. In the event of any conflict or ambiguity between this Agreement and any Exhibit, the provisions of this Agreement shall govern.

22. FORCE MAJEURE. If any party fails to perform its obligations because of strikes, lockouts, labor disputes, embargoes, acts of God, inability to obtain labor or materials or reasonable substitutes for labor materials, governmental restrictions, governmental regulations, governmental controls, judicial orders, enemy or hostile governmental action, pandemic, civil commotion, fire or other casualty, or other causes beyond the reasonable control of the party obligated to perform, then that party's performance will be excused for a period equal to the period of such cause for failure to perform.

23. NONDISCRIMINATION.

A. In connection with performance of this Agreement and subject to applicable rules and regulations, Consultant shall not discriminate against any employee or applicant for employment because of race, religion, national origin, color, age, sex, sexual orientation, gender identity, AIDS, HIV status, handicap or disability. Consultant shall ensure that applicants are employed, and that employees are treated during their employment, without regard to these bases. These actions shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

B. It is the policy of City to encourage the participation of Disadvantaged, Minority and Women-Owned Business Enterprises in City's procurement process, and Consultant agrees to use its best efforts to carry out this policy in its use of subconsultants and contractors to the fullest extent consistent

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with the efficient performance of this Agreement. Consultant may rely on written representations by subconsultants and contractors regarding their status. Consultant shall report to City in May and in December or, in the case of short-term agreements, prior to invoicing for final payment, the names of all subconsultants and contractors hired by Consultant for this Project and information on whether or not they are a Disadvantaged, Minority or Women-Owned Business Enterprise, as defined in Section 8 of the Small Business Act (15 U.S.C. Sec. 637).

24. EQUAL BENEFITS ORDINANCE. Unless otherwise exempted in accordance with the provisions of the Ordinance, this Agreement is subject to the applicable provisions of the Equal Benefits Ordinance (EBO), section 2.73 et seq. of the Long Beach Municipal Code, as amended from time to time.

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A. During the performance of this Agreement, the Consultant certifies and represents that the Consultant will comply with the EBO. The Consultant agrees to post the following statement in conspicuous places at its place of business available to employees and applicants for employment:

"During the performance of a contract with the City of Long Beach, the Consultant will provide equal benefits to employees with spouses and its employees with domestic partners. Additional information about the City of Long Beach's Equal Benefits Ordinance may be obtained from the City of Long Beach Business Services Division at 562-570-6200."

B. The failure of the Consultant to comply with the EBO will be deemed to be a material breach of the Agreement by the City.

C. If the Consultant fails to comply with the EBO, the City may cancel, terminate or suspend the Agreement, in whole or in part, and monies due or to become due under the Agreement may be retained by the City. The City may also pursue any and all other remedies at law or in equity for any breach.

D. Failure to comply with the EBO may be used as evidence against the Consultant in actions taken pursuant to the provisions of Long Beach

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Municipal Code 2.93 et seq., Contractor Responsibility.

E. If the City determines that the Consultant has set up or used its contracting entity for the purpose of evading the intent of the EBO, the City may terminate the Agreement on behalf of the City. Violation of this provision may be used as evidence against the Consultant in actions taken pursuant to the provisions of Long Beach Municipal Code Section 2.93 et seq., Contractor Responsibility.

25. NOTICES. Any notice or approval required by this Agreement shall be in writing and personally delivered or deposited in the U.S. Postal Service, first class, postage prepaid, addressed to Consultant at the address first stated above, and to City at 411 West Ocean Boulevard, Long Beach, California 90802, Attn: City Manager, with a copy to the City Engineer at the same address. Notice of change of address shall be given in the same manner as stated for other notices. Notice shall be deemed given on the date deposited in the mail or on the date personal delivery is made, whichever occurs first.

26. COPYRIGHTS AND PATENT RIGHTS.

A. Consultant shall place the following copyright protection on all Data: © City of Long Beach, California ____, inserting the appropriate year.

B. City reserves the exclusive right to seek and obtain a patent or copyright registration on any Data or other result arising from Consultant's performance of this Agreement. By executing this Agreement, Consultant assigns any ownership interest Consultant may have in the Data to City.

C. Consultant warrants that the Data does not violate or infringe any patent, copyright, trade secret or other proprietary right of any other party. Consultant agrees to and shall protect, defend, indemnify and hold City, its officials and employees harmless from any and all claims, demands, damages, loss, liability, causes of action, costs or expenses (including reasonable attorney's fees) whether or not reduced to judgment, arising from any breach or alleged breach of this warranty.

27. COVENANT AGAINST CONTINGENT FEES. Consultant warrants

that Consultant has not employed or retained any entity or person to solicit or obtain this Agreement and that Consultant has not paid or agreed to pay any entity or person any fee, commission or other monies based on or from the award of this Agreement. If Consultant breaches this warranty, City shall have the right to terminate this Agreement immediately notwithstanding the provisions of Section 10 or, in its discretion, to deduct from payments due under this Agreement or otherwise recover the full amount of the fee, commission or other monies.

28. WAIVER. The acceptance of any services or the payment of any money by City shall not operate as a waiver of any provision of this Agreement or of any right to damages or indemnity stated in this Agreement. The waiver of any breach of this Agreement shall not constitute a waiver of any other or subsequent breach of this Agreement.

29. CONTINUATION. Termination or expiration of this Agreement shall not affect rights or liabilities of the parties which accrued pursuant to the Sections titled "Ownership of Data", "Confidentiality", "Breach of Confidentiality", "Law", "Indemnity", and "Audit" prior to termination or expiration of this Agreement.

30. TAX REPORTING. As required by federal and state law, City is obligated to and will report the payment of compensation to Consultant on Form 1099-Misc. Consultant shall be solely responsible for payment of all federal and state taxes resulting from payments under this Agreement. Consultant shall submit Consultant's Employer Identification Number (EIN), or Consultant's Social Security Number if Consultant does not have an EIN, in writing to City's Accounts Payable, Department of Financial Management. Consultant acknowledges and agrees that City has no obligation to pay Consultant until Consultant provides one of these numbers.

31. ADVERTISING. Consultant shall not use the name of City, its officials or employees in any advertising or solicitation for business or as a reference, without the prior approval of the City Manager or designee.

32. AUDIT. City shall have the right at all reasonable times during the

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IN WITNESS WHEREOF, the parties have caused this document to be duly executed with all formalities required by law as of the date first stated above.

TETRA TECH, INC., a Delaware corporation

March 1, 2022 — By [signature]
Name Jonathan Burgiel
Title Business Unit President

March 1, 2022 — By [signature]
Name Preston Hopson
Title Senior Vice President, General Counsel and Secretary

"Consultant"

CITY OF LONG BEACH, a municipal corporation

April 5, 2022 — By Linda F. Tatum
City Manager

EXECUTED PURSUANT TO SECTION 301 OF THE CITY CHARTER.

"City"

This Agreement is approved as to form on March 30, 2022.

CHARLES PARKIN, City Attorney

By Lauren E. Misajon
Deputy

ARW:bg:LEM:kjm A21-01661
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Long Beach, CA 90802-4664

EXHIBIT "A-1"

RFP FM21-067

City of Long Beach
Purchasing Division
411 West Ocean Boulevard, 6th Floor
Long Beach, CA 90802

City of Long Beach

Request For Proposals Number FM21-067

For
Consulting and Technical Accounting Services for Disaster Funding Administration and Cost Recovery

Release Date:	05/25/2021
Questions Due to the City:	05/28/2021
Posting of the Q & A:	06/01/2021
Due Date:	06/08/2021

City Contact: *Tommy Ryan* *Buyer* *562-570-5664*

See Section 4 for instructions on submitting proposals.

Company Name ______________________________ Contact Person ________________________

Address _________________________ City ______________ State ______ Zip ____________

Telephone (____) ________ Fax (____) __________Federal Tax ID No. __________________

E-mail: ____

Prices contained in this proposal are subject to acceptance within __________ calendar days.

I have read, understand, and agree to all terms and conditions herein. Date _________________

Signed ____

Print Name & Title ____

Rev 2016 0919

City of Long Beach
Purchasing Division
411 West Ocean Boulevard, 6th Floor
Long Beach, CA 90802

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1. OVERVIEW OF PROJECT

The City of Long Beach (City) seeks advisory consulting, and professional, technical accounting firms uniquely qualified to provide services related to Federal Emergency Management Agency (FEMA) cost recovery and administration of American Rescue Plan Act of 2021 (ARPA) funds, as well as potential current or future federal, state, or other agency assistance funds. Specifically, the City is seeking an expert, professional consulting and/or accounting firm(s) to provide expert capabilities to:

- Ensure compliance with federal regulations while maximizing the beneficial uses of ARPA and similar assistance dollars in the local community;
- Ensure compliance with state and federal requirements and maximize FEMA cost recovery for COVID-19 expenses, while ensuring that remaining cost recovery work is performed as efficiently as possible; and
- Provide hands-on expert technical and accounting assistance for both COVID-19 cost recovery and ARPA/similar funding administration.

2. ACRONYMS/DEFINITIONS

For purposes of this RFP, the following acronyms/definitions will be used:

Awarded Contractor	The organization/individual that is awarded a contract with the City of Long Beach, California for the services identified in this RFP.
City	The City of Long Beach and any department or agency identified herein.
Contractor	Organization/individual submitting a proposal in response to this RFP.
Department / Division	City of Long Beach, Department of Financial Management
Evaluation Committee	An independent committee comprised solely of representatives of the City established to review proposals submitted in response to the RFP, evaluate the proposals, and select a Contractor.
May	Indicates something that is not mandatory but permissible.
RFP	Request for Proposals.
Shall / Must	Indicates a mandatory requirement. Failure to meet a mandatory requirement may result in the rejection of a proposal as non-responsive.
Should	Indicates something that is recommended but not mandatory. If the Contractor fails to provide recommended information, the City may, at its sole option, ask the Contractor to provide the information or evaluate the proposal without the information.
Subcontractor	Third party not directly employed by the Contractor who will provide services identified in this RFP.

3. SCOPE OF PROJECT

3.1 Background

On March 4, 2020, California Governor Gavin Newsom declared a state of Emergency to prevent the spread of the novel coronavirus disease 2019 (COVID-19). On the same day, the City Manager issued a Proclamation of Local Emergency and the Local Health Officer issued a Declaration of Local Health Emergency, which were both ratified by the City Council on March 10, 2020, and began a series of measures to protect Long Beach residents. Since the onset of the global pandemic, the City has made every effort to keep abreast of the latest state and federal assistance award requirements, including required documentation on the City's processes and expenses. Significant work has already been completed in defining most grant projects, categorizing expenses, and collating resources in preparation for Federal Emergency Management Agency (FEMA) applications. In addition, as part of the American Rescue Plan Act of 2021 (ARPA), the City anticipates receiving over $135 million to address local needs resulting from the COVID-19 pandemic, along with several other allocations of related assistance funding. A significant portion of the ARPA funds are expected to be expended on programmatic uses over the next two to three years.

3.2 Scope of Work

The scope of this Request for Proposals (RFP) details the duties for which the City is seeking to contract. The length of engagement is expected to allow for services to continue throughout completion of FEMA cost recovery efforts and ARPA administration. Proposers who can offer some but not all services (for instance, expert technical and accounting services but not general advisory services) are welcome to respond. Responses should clearly delineate which of the listed duties can be performed by the Proposer.

It is expected this RFP may result in an on-demand contract(s) to meet the need for timely specific services, and that at the same time, certain components will require full-time, hands-on, and potentially on-site work. Consulting and/or accounting firm(s) must also have the ability to perform services remotely with access to all necessary electronic tools and equipment.

With oversight and final review from City staff, the selected expert consulting and/or accounting firm(s) shall assist the City with the following duties, as mutually agreed upon, related to the City's cost recovery operations, ARPA administration, and related programs, in collaboration with the City and other consultants:

3.2.1 COVID-19 Cost Recovery:

- Develop, prepare, and/or complete:
  - Writing and assembly of FEMA project applications to apply for funding, which includes collaborating with the City on project formulation, information gathering, and project development (define both small and large projects' scope, size, and damages, including cost estimating that will be the basis of each Project Worksheet).
  - FEMA forms for reimbursement.
  - Approach and language for appeal(s) and Requests for Information (RFIs).
  - Documentation on cost recovery and funding administration processes and workflows as requested, and recommendations on potential improvements.
  - Templates for required FEMA forms, including tools that would make filling them out more efficient.
  - Grant close-out services to ensure funding is retained.
- Review:
  - All non-labor disaster related costs for FEMA cost eligibility, by project.
  - All labor disaster related costs for eligibility, accuracy of calculations, and compliance with FEMA requirements (spot checking), by project.
- Consult and advise the City on:
  - Planning and coordination of COVID-19 cost recovery efforts.
  - Interpreting and adhering to relevant federal, state, and other agency guidelines.
  - Development/presentation of labor summary and supporting data.
  - Developing new grant management division (and associated policies) tasked with managing any current and future assistance funds.
  - Navigating federal agency web portals and processes.
- Help the City develop and train staff on:
  - A successful approach to FEMA project application development.
  - A process for reviewing and categorize all disaster-related costs (labor and non-labor) as FEMA-eligible or non-eligible; if eligible, assign to appropriate FEMA project/guideline.
- Issue written documentation outlining:
  - Project development in response to an emergency.
  - Funding sources.
  - Procurement.
  - Supporting documentation requirements.
  - Project financial management:
    - Labor
    - Contracted work
    - Materials
    - Equipment

    - Cost recovery review.
    - Drawdown and reimbursement.
    - FEMA audit.
    - Appeals process.
- Provide expert and technical accounting assistance, including:
    - Compile, analyze, and identify necessary corrections to labor reports and supporting data in accordance with FEMA and Single Audit requirements.*
    - Develop worksheets and prepare templates supporting financial transactions.*
    - Review procurement documents for compliance with Single Audit.*

3.2.2 ARPA and Similar Assistance Programs from State, Federal, and Other Agencies

- Assist the City with planning and coordination of funding administration efforts.
- Provide well-informed interpretation of regulations/eligibility requirements from the Department of Treasury.
- Provide guidance regarding third party contractors administering grant programs.
- Perform compliance monitoring.*
- Perform mock single audits of programs on a quarterly or semi-annual basis to identify areas of non-compliance that need to be corrected throughout the program period.*
- Perform on-site assessments for specific City programs for appropriate implementation of the City's program guidelines.*
- Develop processes and documentation requirements around sub-recipient risk assessment, monitoring, and management, including training of sub-recipients on grant requirements.

* These tasks may potentially require a significant degree of on-site work.

4. SUBMITTAL INSTRUCTIONS

4.1 **For questions regarding this RFP, submit all inquiries via email to rfppurchasing@longbeach.gov by 11:00 AM on 05/28/21**. Responses to the questions will be posted on the City's website longbeach.gov/purchasing under the "Bids/RFPs" tab no later than the date and time shown below. All proposers are recommended to visit the abovementioned City website on a regular basis as the responses may be posted earlier than the date above.

4.1.1 The City will not be responsible for or bound by (1) any oral communication or (2) any other information or contact that occurs outside the official communication process specified herein, unless confirmed in writing by the City Contact.

4.2 **RFP Timeline (times indicated are Pacific Time)**

TASK	***DATE/TIME***
Deadline for submitting questions	May 28, 2021 by 11:00 a.m.
Answers to all questions submitted available	June 1, 2021 by 4:30 p.m.
Deadline for submission of proposals	June 8, 2021 by 11:00 a.m.
Evaluation period	June 2021
Selection of Contractor	On or about June 2021

NOTE: These dates represent a tentative schedule of events. The City reserves the right to modify these dates at any time, with appropriate notice to prospective Contractors.

4.3 Method of Submission

Electronic proposals shall be submitted via the City's secure online bidding system. All required sections of the proposal must be submitted via the website. Proposer is solely responsible for "on time" submission of their electronic narrative proposal and cost proposal. The Bid Management System will not accept late proposals and no exceptions shall be made. Proposers will receive an e-bid confirmation number with a time stamp from the Bid Management System indicating that their proposal was submitted successfully. The City will only receive those proposals that were transmitted successfully.

RFP cover page shall be signed in ink, scanned and included with narrative proposal in the electronic proposal submission.

City of Long Beach
Purchasing Division
411 West Ocean Boulevard, 6th Floor
Long Beach, CA 90802

Submit proposal online at:
http://www.planetbids.com/portal/portal.cfm?CompanyID=15810

4.4 **Proposals must be received by 11:00 AM (PT) on 06/08/21.** Proposals that do not arrive by the specified date and time WILL NOT BE ACCEPTED. Contractors may submit their proposal any time prior to the above stated deadline. The City will not be held responsible for proposals mishandled as a result of technical error. Facsimile or telephone proposals will NOT be considered unless otherwise authorized; however, proposals may be modified by fax or written notice provided such notice is received prior to the opening of the proposals.

4.5 Proposals are to be prepared in such a way as to provide a straightforward, concise delineation of capabilities to satisfy the requirements of this RFP, per the evaluation criteria listed in Section 5.1. The proposal should be presented in a format that corresponds to and references Section 3, Scope of Project; Section 7, Project Specifications; Section 8, Warranty/Maintenance and Service; Section 9, Company Background and References; and Section 10, Cost, and should be presented in the same order. Responses to each section and subsection should be labeled so as to indicate which item is being addressed.

4.6 Colored displays, promotional materials, etc., are not necessary or desired. Emphasis should be concentrated on conformance to the RFP instructions, responsiveness to the RFP requirements, and on completeness and clarity of content.

4.7 The proposal must be signed by the individual(s) legally authorized to bind the Contractor. Contractors shall complete the cover page of the RFP document, sign in ink, and submit electronically with their narrative/technical proposal.

4.8 If complete responses cannot be provided without referencing supporting documentation, such documentation must be provided with the proposal and specific references made to the tab, page, section and/or paragraph where the supplemental information can be found.

4.9 Descriptions on how any and all equipment and/or services will be used to meet the requirements of this RFP shall be given, in detail, along with any additional information documents that are appropriately marked.

4.10 Proposals shall be submitted in two (2) distinct parts - the **narrative/technical proposal** and the **cost proposal**. THE NARRATIVE/TECHNICAL PROPOSAL MUST NOT INCLUDE COST AND PRICING INFORMATION. The narrative/technical proposal will be reviewed first and then the cost proposal. Therefore, each part should be **uploaded separately, but submitted together**.

4.11 **A responsive proposal will include the completed and executed in full by the Consultant of the following**:

- **Narrative/technical Proposal**
- **Cost Proposal**
- **Financial Stability** – acceptable submittal types of financial stability are Financial Statement or Annual Report, Business tax return, or Statement of income and related earnings and a balance sheet. See Section 9.1
- **Attachments** - each of the following must be completed and executed in full by the Contractor and provided in this section:
  - RFP Cover Page – Signed and dated.
  - Attachment A – Compliance with the Terms and Conditions of the RFP, signed with any exceptions noted.
  - Attachment C – Statement of Non-Collusion, signed and dated.
  - Attachment D – Debarment, Suspension, Ineligibility and Voluntary Exclusion Certificate, signed and dated.
  - Attachment E – Contractor's W-9 and completed Vendor Application Form
  - Attachment F – Secretary of State Registration. Contractors must be registered with the California Secretary of State prior to contract execution. Submission of Attachment F with the proposal is not mandatory; however, if the Contractor has already filed, it may be uploaded as a general attachment.
  - Attachment G – Completed, signed, and dated Equal Benefits Ordinance Compliance Forms (EBO) – the EBO disclosure form and the certificate of compliance questionnaire forms.
  - Any Addenda (if applicable)

5. PROPOSAL EVALUATION AND AWARD PROCESS

5.1 Proposals shall be consistently evaluated based upon the following criteria:

5.1.1 Organizational Capacity and Experience

Example factors that may be used to evaluate this criteria include:

- General proposer qualifications and experience in performance of comparable engagements
  - Areas, years, and nature of experience in applicable areas of knowledge and expertise, particularly:
    - Programmatic disaster recovery and/or federal accounting
    - Compliance with the federal Office of Management and Budget (OMB)'s Uniform Guidance 2 CFR, Part 200 (including but not limited to federal acquisition requirements)
    - Operations of the FEMA Public Assistance Program
    - ARPA regulations
  - List of references with descriptions for comparable engagements
- Staffing model, including expertise and availability of key personnel
  - Description of staffing model
  - Resumes of individuals expected to be assigned to the City's contract
  - Description of the staffing model's scalability to handle evolving needs
  - Likely turn-over during program period, its anticipated impact, and how it will be handled
  - Demonstrated ability to perform work both remotely and on-site as needed
- Timing and ability start

5.1.2 Method of Approach

Example factors that may be used to evaluate this criteria include:

- Proposed scope of work and approach
  - Clear identification of which requested services are included
  - Specific methods/approaches to providing the included services
- Style of engagement as demonstrated in proposal
  - Ability and commitment to provide hands-on assistance and produce work products
  - Provision of recommendations (as applicable) in written format with clear and specific language
  - Expected nature and level of Proposer initiative to share information, provide guidance, etc. on topics the Proposer independently deems of interest and value to the City
- The methodology, experience, contacts, communications, etc. that position the Proposer to provide accurate and quality interpretations, guidance, recommendations, services, and/or work products covered in their proposal

- What the Proposer expects to need from the City to be successful

5.1.3 Communications and Reporting
Example factors that may be used to evaluate this criteria include:

- Expected working relationship with the City
- Approach to and value added by (as applicable): workplan development and management, coordination/status check-ins, deliverable/milestone monitoring, and reporting

5.1.4 Reasonableness of Cost

5.2 Proposals shall be kept confidential until a contract is awarded.

5.3 The City may also contact the references provided in response to Section 9.3; contact any Contractor to clarify any response; contact any current users of a Contractor's services; solicit information from any available source concerning any aspect of a proposal; and seek and review any other information deemed pertinent to the evaluation process. The City shall not be obligated to accept the lowest priced proposal, but shall make an award in the best interests of the City of Long Beach.

5.4 The City reserves the right to request clarification of any proposal term from prospective Contractors.

5.5 Selected Contractor(s) will be notified in writing. Any award is contingent upon the successful negotiation of final contract terms. Negotiations shall be confidential and not subject to disclosure to competing Contractors unless and until an agreement is reached. If contract negotiations cannot be concluded successfully, the City reserves the right to negotiate a contract with another Contractor or withdraw the RFP.

5.6 Any contract resulting from this RFP shall not be effective unless and until approved by the City Council / City Manager, as applicable.

6. PROTEST PROCEDURES

6.1 Who May Protest

Only a proposer who has actually submitted a proposal is eligible to protest a contract awarded through a Request for Proposals (RFP). A proposer may not rely on the protest submitted by another proposer but must pursue its own protest.

6.2 Time for Protest

The City will post a notice of the intent to award a contract at least ten (10) business days before an award is made. The notice will be available to all proposers who submitted a proposal via the City's electronic bid notification system at http://www.longbeach.gov/purchasing/default.asp. A proposer desiring to submit a protest for a proposal must do so within five (5) business days of the electronic notification of intent to award. The City Purchasing Agent must receive the protest by the close of business on the fifth (5th) business day following posting of notification of intent to award the contract. Proposers are responsible for registering with the City's electronic bid notification system and maintaining an updated Contractor profile. The City is not responsible for proposers' failure to obtain notification for any reason, including but not limited to failure to maintain updated email addresses, failure to open/read electronic messages and failure of their own computer/technology equipment. The City's RFP justification memo will be available for review by protestors once the notification of intent to award has been posted via the City's electronic bid notification system.

6.3 Form of Protest

The protest must be in writing and signed by the individual who signed the proposal or, if the proposer is a corporation, by an officer of the corporation, and addressed to the City Purchasing Agent. Protests may be submitted via US Mail, hand delivery or email, and must include a valid email address, street address and phone number sufficient to ensure that the City's decision concerning the protest will be received. Protests must set forth a complete and detailed statement of the grounds for the protest and include all relevant information to support the grounds stated, and must refer to specific portions of the RFP and attachments upon which the protest is based. Once the protest is received by the City Purchasing Agent, the City will not accept additional information on the protest unless the City requests it.

6.4 City Response to Protest

The City Purchasing Agent or designee will respond with a decision regarding the protest within five (5) business days of receipt of protest by email or US Mail to the address provided in the protest. This decision shall be final.

6.5 Limitation of Remedy

The procedure and time limits set forth herein are mandatory and are the proposer's sole and exclusive remedy in the event of a protest. The proposer's failure to comply with these procedures shall constitute a waiver of any right to further pursue a protest, including filing a Government Code Claim or initiation of legal proceedings.

7. PROJECT SPECIFICATIONS

See Section 3, Scope of Project.

8. WARRANTY/MAINTENANCE AND SERVICE

Not applicable.

9. COMPANY BACKGROUND AND REFERENCES

9.1 Primary Contractor Information

Contractors must provide a company profile. Information provided shall include:

- Company ownership. If incorporated, the state in which the company is incorporated and the date of incorporation. An out-of-state Contractor must register with the State of California Secretary of State before a contract can be executed (http://www.sos.ca.gov/business/).
- Location of the company offices.
- Location of the office servicing any California account(s).
- Number of employees both locally and nationally. Specify the number of full time and part-time employees residing in Long Beach.
- Location(s) from which employees will be assigned.
- Name, address and telephone number of the Contractor's point of contact for a contract resulting from this RFP.
- Company background/history and why Contractor is qualified to provide the services described in this RFP.
- Length of time Contractor has been providing services described in this RFP to the **public and/or private sector**. Please provide a brief description.
- Resumes for key staff to be responsible for performance of any contract resulting from this RFP.
- Financial stability: Proposers must provide financial statements giving the City enough information to determine financial stability. These statements may include, but are not limited to:

  a) Financial Statement or Annual Report;
  b) Business tax return;
  c) Statement of income and related earnings.

  The level and term of documentation required from the proposer to satisfy the City will be commensurate with the size and complexity of the contract and proposers should submit accordingly. If the information submitted by the proposer, or available from other sources, is insufficient to satisfy the City as to the proposer's contractual responsibility, the City may request additional information from the proposer or may deem the proposal non-responsive. The

City's determination of the proposer's responsibility, for the purposes of this RFP, shall be final.

9.2 Subcontractor Information

9.2.1 Does this proposal include the use of subcontractors?

Yes ______ No ______ Initials _______

If "Yes", Contractor must:

9.2.1.1 Identify specific subcontractors and the specific requirements of this RFP for which each proposed subcontractor will perform services.

9.2.1.2 Provide the same information for any subcontractors as is indicated in Section 9.1 for the Contractor as primary contractor.

9.2.1.3 References as specified in Section 9.3 below must also be provided for any proposed subcontractors.

9.2.1.4 The City requires that the awarded Contractor provide proof of payment of any subcontractors used for this project. Proposals shall include a plan by which the City will be notified of such payments.

9.2.1.5 Primary contractor shall not allow any subcontractor to commence work until all insurance required of subcontractor is obtained.

9.3 References

Contractors should provide a minimum of five (5) references from similar projects performed for state and/or large local government clients within the last three years. Information provided shall include:

- Client name;
- Project description;
- Project dates (starting and ending);
- Staff assigned to reference engagement that will be designated for work per this RFP;
- Client project manager name and telephone number.

9.4 Business License

The Long Beach Municipal Code (LBMC) requires all businesses operating in the City of Long Beach to pay a business license tax. In some cases, the City may require a regulatory permit and/or evidence of a State or Federal license. Prior to issuing a business license, certain business types will require the business license application and/or business location to be reviewed by the Development Services, Fire, Health, and/or Police Departments.

For more information, go to www.longbeach.gov/finance/business_license.

10. COST

Consistent with Section 4.10, the cost proposal shall be a separate document and include the following:

- Recommended classifications to match scope.
- Job description for each recommended classification that clearly ties the classification to the specific duties from the scope that would be performed.
- Cost per hour for each classification, including supervision.
- What additional/incidental costs, if any, would be billed (and how/how much).

11. BONDS

Not applicable.

12. ADDITIONAL REQUIREMENTS FROM FUNDING SOURCE

Any Contract arising from this procurement process may be funded in whole or in part by various granting entities. Pursuant to said grants, the Awarded Consultant is required to comply with (and to incorporate into its agreements with any sub-consultants) the following provisions in the performance of the Contract, as applicable.

12.1 Order of Precedence – In the event of conflicts or discrepancies between these Federal grant funding provisions and any other Contract document, the Federal grant provisions shall take precedence.

12.2 Access to Contractor's Records – The Awarded Contractor shall provide the City, the Office of State and Local Government Coordination and Preparedness, the Comptroller General of the United States, or any of their authorized representatives, access to any books, documents, papers, and records of the Awarded Contractor which are directly pertinent to the work performed under the Contract for the purposes of making audit, examination, excerpts or transcriptions.

12.3 Americans with Disabilities Act – The Awarded Contractor hereby certifies that it will comply, as applicable, with the Americans with Disabilities Act of 1990 ("ADA"), 42 USC §§ 12101 et seq., and its implementing regulations, including Subtitle A, Title II of the ADA. The Awarded Contractor will provide, as applicable, reasonable accommodations to allow qualified individuals with disabilities to have access to and to participate in its programs, services and activities in accordance with the provisions of the ADA. The Awarded Contractor will not discriminate against persons with disabilities nor against persons due to their relationship to or association with a person with a disability. Any contract entered into by the Awarded Contractor (or any subcontract thereof), relating to this Agreement, shall be subject to the provisions of this paragraph.

12.4 Compliance with Contract Work Hours and Safety Standard Act – The Awarded Contractor shall comply with the requirements of §§ 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C §§ 327-330) as supplemented by Department of Labor regulations (29 CFR Part 5).

12.5 Compliance with Copeland "Anti-Kickback" Act – The Awarded Contractor shall comply with the requirements of the Copeland "Anti-Kickback" Act (18 U.S.C. § 874) as supplemented in the Department of Labor regulations (29 CFR Part 3).

12.6 Compliance with Davis-Bacon Act – The Awarded Contractor shall comply with the requirements of the Davis-Bacon ACT (40 U.S.C. §§ 276 to 276-a7) as supplemented by Department of Labor regulations (29 CFR Part 5) where applicable and shall provide the City with all applicable payroll records on a weekly basis.

12.7 Copyright – The Awarded Contractor acknowledges the existence of requirements and regulations of the awarding Federal agency relating to copyrights and right in data, including, but not limited to those set forth in 44 CFR Part 13.34 which states: "The Federal awarding agency reserves royalty-free, nonexclusive, and irrevocable license to reproduce, publish or otherwise use, and to authorize others to use, for Federal Government purposes: (a) The copyright in any work developed under a grant, subgrant, or contract under a grant or subgrant; and (b) Any rights of copyright to which a grantee, subgrantee or a contractor purchases ownership with grant support." The Awarded Contractor shall comply with 25 CFR 85.34.

12.8 Drug-Free Workplace – The Awarded Contractor hereby certifies that it shall provide or shall continue to provide a drug-free workplace as required by the Drug-Free Workplace Act of 1988 (41 U.S.C. § 701), and implemented at 44 CFR Part 17.

12.9 Energy Efficiency – The Awarded Contractor shall comply with all mandatory standards and policies relating to energy efficiency that are contained in the State of California's energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L.94-163, 89 Stat. 871).

12.10 Environmental Legislation – The Awarded Contractor shall comply with all applicable standards, orders or requirements issued under § 306 of the Clean Air Act (42 U.S.C. 1857 (h)), § 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR Part 15).

12.11 System for Award Management (SAM) – In accordance with Executive Orders 12549 and 12689 concerning suspension and debarment, contracts must prohibit contractors from awarding any subcontract to persons (individuals or organizations) listed as having an active exclusion of the Federal System for Awards Management Database (www.sam.gov).

12.12 Minority, Women and Other Business Enterprise Outreach – In accordance with CalEMA/Grantor directives, as applicable, firms who represent small business enterprises (SBEs), minority business enterprises (MBEs) and women business enterprises (WBEs) are encouraged to participate in competition for this opportunity. Any such enterprise shall include the appropriate SBE/MBE/WBE certification along with its proposal. The Awarded Contractor agrees that, to the extent contractors or subcontractors are utilized, the Awarded Contractors shall use small, minority, women-owned, or disadvantaged business concerns and contractors or subcontractors to the extent practicable and shall take the affirmative steps as set forth in 49 CFR §13.36(e).

12.13 National Preservation Acts – The Awarded Contractor shall assist City (if necessary) in assuring compliance with § 106 of the National Historic Preservation Act of 1966 (16 U.S.C. § 470), Executive Order 11593 (identification and protection of historic properties), the Archeological and Historical Preservation Act of 1974 (16 U.S.C. § 469 a-1 et seq.), and the National Environmental Policy Act of 1969 (42 U.S.C. § 4321).

12.14 Non-discrimination; Equal Employment Opportunity – The Awarded Contractor hereby assures the City that in performing its obligations pursuant to the Contract, it will comply with all applicable nondiscrimination requirements as set forth in 44 CFR Part 13.36. In addition, the Awarded Contractor shall comply with Executive Order 11246 of September 24, 1965, entitled "Equal Opportunity Employment," as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 CFR chapter 60), and where applicable to the nondiscrimination provisions of the Omnibus Crime Control and Safe Street Acts of 1968 (42 U.S.C. § 3789d), the Victims of Crimes Act (42 U.S.C. § 10604(e)), the Juvenile Justice and Delinquency Prevention Act (42 U.S.C. § 5672(b)), the Civil Rights Act of 1964 (42 U.S.C. § 2000d), the Rehabilitation Act of 1973 (29 U.S.C. § 794), the Americans with Disabilities Act of 1990 (42 U.S.C. §§ 12131-34), the Education Amendments of 1972 (20 U.S.C. §§ 1681, 1683, 1685-86), and the Age Discrimination Act of 1975 (42 U.S.C. §§ 6101-07), see Executive Order 13279 (equal protection of the laws for faith-based and community organizations). This provision must be incorporated by Awarded Contractor into any subcontract exceeding $10,000.

12.15 Patent Rights – The Awarded Contractor acknowledges the existence of requirements and regulations of the awarding Federal agency relating to patent rights with respect to any discovery or invention which arises or is developed in the course or under this Contract, including, but not limited to those regulations and requirements set forth in 44 CFR Part 13.36. Any discovery or invention that arises during the course of this Contract shall be immediately reported to the Department's project management team. The awarding Federal agency shall determine how rights in the invention/discovery shall be allocated consistent with "Government Patent Policy" and 37 CFR Part 401.

12.16 Payments, Reports, Records, Retention and Enforcement – The Awarded Contractor acknowledges the requirements and regulations set forth in 44 CFR Parts 13.36 through 13.42 and 49 CFR Part 18 and agrees to cooperate with the City in order to allow the City to comply with said requirements. The Awarded Contractor shall retain all of its records relating to the project for a period of five (5) years after City makes final payment to the Awarded Contractor and all other pending matters are closed.

12.17 Publications – All publications created and/or published with funding under any contract arising from this RFP shall prominently contain the following statement: "This document was prepared under a grant from FEMA's Grant Programs Directorate, U.S. Department of Homeland Security. Points of view or opinions in this document are those of the author(s) and do not necessarily represent the official position or policies of FEMA's Grant Programs Directorate or the U.S. Department of Homeland Security."

12.18 Rights to Data – The Grantor and the City shall have unlimited rights or copyright license to any data first produced or delivered under this Agreement. "Unlimited rights" means the right to use, disclose, reproduce, prepare derivative works, distribute copies to the public and perform and display publicly, or permit others to do so; as required by 48 CFR 27.401. Where the data are not first produces under this Contract or are published copyrighted data with the notice of 17 U.S.C § 401 or 402, the Grantor acquires the data under copyright license as set forth in 48 CFR 27.404(f)(2) instead of unlimited rights (4 CFR 27.404(a)).

12.19 Rights to Use Inventions – City and all grantors and/or awarding Federal Agency shall have an unencumbered right, and a non-exclusive, irrevocable, royalty –free license, to use, manufacture, improve upon and all others to do so for all governmental purposes, any invention developed under the Contract.

13. TERMS, CONDITIONS AND EXCEPTIONS

13.1 This contract will be for a period of 24 months with three annual renewal options at the discretion of the City. The contract term will not exceed 60 months.

13.2 The City reserves the right to alter, amend, or modify any provisions of this RFP, or to withdraw this RFP, at any time prior to the award of a contract pursuant hereto, if it is in the best interest of the City to do so.

13.3 The City reserves the right to waive informalities and minor irregularities in proposals received.

13.4 The City reserves the right to reject any or all proposals received prior to contract award.

13.5 The City shall not be obligated to accept the lowest priced proposal, but will make an award in the best interests of the City of Long Beach after all factors have been evaluated.

13.6 Any irregularities or lack of clarity in the RFP should be brought to the Purchasing Division designee's attention as soon as possible so that corrective addenda may be furnished to prospective Contractors.

13.7 Proposals must include any and all proposed terms and conditions, including, without limitation, written warranties, maintenance/service agreements, license agreements, lease purchase agreements and the Contractor's standard contract language. The omission of these documents may render a proposal non-responsive.

13.8 Alterations, modifications or variations to a proposal may not be considered unless authorized by the RFP or by addendum or amendment.

13.9 Proposals which appear unrealistic in the terms of technical commitments, lack of technical competence, or are indicative of failure to comprehend the complexity and risk of this contract, may be rejected.

13.10 Proposals may be withdrawn by written or facsimile notice received prior to the proposal opening time.

13.11 The price and amount of this proposal must have been arrived at independently and without consultation, communication, agreement or disclosure with or to any other contractor, Contractor or prospective Contractor.

13.12 No attempt may be made at any time to induce any firm or person to refrain from submitting a proposal or to submit any intentionally high or noncompetitive proposal. All proposals must be made in good faith and without collusion.

13.13 Prices offered by Contractors in their proposals are an irrevocable offer for the term of the contract and any contract extensions. The awarded Contractor agrees to provide the purchased services at the costs, rates and fees as set forth in their proposal in response to this RFP. No other costs, rates or fees shall be payable to the awarded Contractor for implementation of their proposal.

13.14 The City is not liable for any costs incurred by Contractors prior to entering into a formal contract. Costs of developing the proposals or any other such expenses incurred by the Contractor in responding to the RFP, are entirely the responsibility of the Contractor, and shall not be reimbursed in any manner by the City.

13.15 Proposal will become public record after the award of a contract unless the proposal or specific parts of the proposal can be shown to be exempt by law. Each Contractor may clearly label all or part of a proposal as "CONFIDENTIAL" provided that the Contractor thereby agrees to indemnify and defend the City for honoring such a designation. The failure to so label any information that is released by the City shall constitute a complete waiver of any and all claims for damages caused by any release of the information.

13.16 A proposal submitted in response to this RFP must identify any subcontractors, and outline the contractual relationship between the awarded Contractor and each subcontractor. An official of each proposed subcontractor must sign, and include as part of the proposal submitted in response to this RFP, a statement to the effect that the subcontractor has read and will agree to abide by the awarded Contractor's obligations.

13.17 The awarded Contractor will be the sole point of contract responsibility. The City will look solely to the awarded Contractor for the performance of all contractual obligations which may result from an award based on this RFP, and the awarded Contractor shall not be relieved for the non-performance of any or all subcontractors.

13.18 The awarded Contractor must maintain, for the duration of its contract, insurance coverages as required by the City. Work on the contract shall not begin until after the awarded Contractor has submitted acceptable evidence of the required insurance coverages.

13.19 Each Contractor must disclose any existing or potential conflict of interest relative to the performance of the contractual services resulting from this RFP. Any such relationship that might be perceived or represented as a conflict should be disclosed. The City reserves the right to disqualify any Contractor on the grounds of actual or apparent conflict of interest.

13.20 Each Contractor must include in its proposal a complete disclosure of any alleged significant prior or ongoing contract failures, any civil or criminal litigation or investigation pending which involves the Contractor or in which the Contractor has been judged guilty or liable. Failure to comply with the terms of this provision will disqualify any proposal. The City reserves the right to reject any proposal based upon the Contractor's prior history with the City or with any other party, which documents, without limitation, unsatisfactory performance, adversarial or contentious demeanor, significant failure(s) to meet contract milestones or other contractual failures.

13.21 The City will not be liable for Federal, State, or Local excise taxes.

13.22 Execution of **Attachment A** of this RFP shall constitute an agreement to all terms and conditions specified in the RFP, including, without limitation, the **Attachment B** contract form and all terms and conditions therein, except such terms and conditions that the Contractor expressly excludes.

13.23 The City reserves the right to negotiate final contract terms with any Contractor selected. The contract between the parties will consist of the RFP together with any modifications thereto, and the awarded Contractor's proposal, together with any modifications and clarifications thereto that are submitted at the request of the City during the evaluation and negotiation process. In the event of any conflict or contradiction between or among these documents, the documents shall control in the following order of precedence: the final executed contract, the RFP, any modifications and clarifications to the awarded Contractor's proposal, and the awarded Contractor's proposal. Specific exceptions to this general rule may be noted in the final executed contract.

13.24 Contractor understands and acknowledges that the representations above are material and important, and will be relied on by the City in evaluation of the proposal. Any Contractor misrepresentation shall be treated as fraudulent concealment from the City of the true facts relating to the proposal.

13.25 No announcement concerning the award of a contract as a result of this RFP may be made without the prior written approval of the City.

13.26 Proposers are advised that any contract awarded pursuant to this procurement process that exceeds $100,000 shall be subject to the applicable provisions of Long Beach Municipal Code Section 2.73 et seq, the Equal Benefits Ordinance. Proposers shall refer to **Attachment G** for further information regarding the requirements of the ordinance.

All Proposers shall complete and return, with their bid, the Equal Benefits Ordinance Compliance form contained in **Attachment G**. Unless otherwise specified in the procurement package, Proposers do not need to submit with their bid supporting documentation proving compliance. However, supporting documentation verifying that the benefits are provided equally shall be required if the proposer is selected for award of a contract.

13.27 All work performed in connection with construction shall be performed in compliance with all applicable laws, ordinances, rules and regulations of federal, state, county or municipal governments or agencies (including, without limitation, all applicable federal and state labor standards, including the prevailing wage provisions of sections 1770 *et seq.* of the California Labor Code), and (b) all directions, rules and regulations of any fire marshal, health officer, building inspector, or other officer of every governmental agency now having or hereafter acquiring jurisdiction.

Contractor shall indemnify, protect and hold harmless City, its Boards, Commissions, and their officials, employees and agents ("Indemnified Parties"), from and against any and all liability, claims, demands, damage, loss, obligations, causes of action, proceedings, awards, fines, judgments, penalties, costs and expenses, including attorneys' fees, court costs, expert and witness fees, and other costs and fees of litigation, arising or alleged to have arisen, in whole or in part, out of or in connection with (1) Contractor's breach or failure to comply with any of its obligations contained in this Contract, including any obligations arising from the Project's Contractor's compliance with or failure to comply with applicable laws, including all applicable federal and state labor requirements including, without limitation, the requirements of California Labor Code section 1770 et seq. or (2) negligent or willful acts, errors, omissions or misrepresentations committed by Contractor, its officers, employees, agents, subcontractors, or anyone under Contractor's control, in the performance of work or services under this Contract (collectively "Claims" or individually "Claim").

In addition to Contractor's duty to indemnify, Contractor shall have a separate and wholly independent duty to defend Indemnified Parties at Contractor's expense by legal counsel approved by City, from and against all Claims, and shall continue this defense until the Claims are resolved, whether by settlement, judgment or otherwise. No finding or judgment of negligence, fault, breach, or the like on the part of Contractor shall be required for the duty to defend to arise. City shall notify Contractor of any Claim, shall tender the defense of the Claim to Contractor, and shall assist Contractor, as may be reasonably requested, in the defense.

If a court of competent jurisdiction determines that a Claim was caused by the sole negligence or willful misconduct of Indemnified Parties, Contractor's costs of defense and indemnity shall be (1) reimbursed in full if the court determines sole negligence by the Indemnified Parties, or (2) reduced by the percentage of willful misconduct attributed by the court to the Indemnified Parties.

If the Contractor elects to use subcontractors, Contractor agrees to require its subcontractors to indemnify Indemnified Parties and to provide insurance coverage to the same extent as Contractor.

The provisions of this Section shall survive the expiration or termination of this Contract.

Contractor agrees that all public work (as defined in California Labor Code section 1720) performed pursuant to this Agreement (the "Public Work"), if any, shall comply with the requirements of California Labor Code sections 1770 *et seq.* City makes no representation or statement that the project or any portion thereof, is or is not a "public work" as defined in California Labor Code section 1720.

In all bid specifications, contracts and subcontracts for any such Public Work, Contractor shall obtain the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in this locality for each craft, classification or type of worker needed to perform the Public Work, and shall include such rates in the bid specifications, contract or subcontract. Such bid specifications, contract or subcontract must contain the following provision: "It shall be mandatory for the contractor to pay not less than the said prevailing rate of wages to all workers employed by the contractor in the execution of this contract. The contractor expressly agrees to comply with the penalty provisions of California Labor Code section 1775 and the payroll record keeping requirements of California Labor Code section 1771."

City of Long Beach
Purchasing Division
411 West Ocean Boulevard, 6th Floor
Long Beach, CA 90802

Attachment A

CERTIFICATION OF COMPLIANCE WITH TERMS AND CONDITIONS OF RFP

I have read, understand and agree to comply with the terms and conditions specified in this Request for Proposal. Any exceptions MUST be documented.

SIGNATURE ____

EXCEPTIONS: Attach additional sheets if necessary. Please use this format.

EXCEPTION SUMMARY FORM

RFP SECTION NUMBER	RFP PAGE NUMBER	EXCEPTION (PROVIDE A DETAILED EXPLANATION)

City of Long Beach
Purchasing Division
411 West Ocean Boulevard, 6th Floor
Long Beach, CA 90802

Attachment B

PRO-FORMA AGREEMENT

[ATTACHED FOR REFERENCE; TO BE COMPLETED UPON CONTRACT AWARD]

AGREEMENT

THIS AGREEMENT is made and entered, in duplicate, as of ____________, 20__ for reference purposes only, pursuant to a minute order adopted by the City Council of the City of Long Beach at its meeting on _________, 20__, by and between ____, a _______________ corporation ("Consultant"), with a place of business at ____, and the CITY OF LONG BEACH, a municipal corporation ("City").

WHEREAS, the City requires specialized services requiring unique skills to be performed in connection with _________________________________ ("Project"); and

WHEREAS, City has selected Consultant in accordance with City's administrative procedures and City has determined that Consultant and its employees are qualified, licensed, if so required, and experienced in performing these specialized services; and

WHEREAS, City desires to have Consultant perform these specialized services, and Consultant is willing and able to do so on the terms and conditions in this Agreement;

NOW, THEREFORE, in consideration of the mutual terms, covenants, and conditions in this Agreement, the parties agree as follows:

1. SCOPE OF WORK OR SERVICES.

A. Consultant shall furnish specialized services more particularly described in Exhibit "A", attached to this Agreement and incorporated by this reference, in accordance with the standards of the profession, and City shall pay for these services in the manner described below, not to exceed _____________ Dollars ($__________________), at the rates or charges shown in Exhibit "B".

B. The City's obligation to pay the sum stated above for any one

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fiscal year shall be contingent upon the City Council of the City appropriating the necessary funds for such payment by the City in each fiscal year during the term of this Agreement. For the purposes of this Section, a fiscal year commences on October 1 of the year and continues through September 30 of the following year. In the event that the City Council of the City fails to appropriate the necessary funds for any fiscal year, then, and in that event, the Agreement will terminate at no additional cost or obligation to the City.

C. Consultant may select the time and place of performance for these services provided, however, that access to City documents, records, and the like, if needed by Consultant, shall be available only during City's normal business hours and provided that milestones for performance, if any, are met.

D. Consultant has requested to receive regular payments. City shall pay Consultant in due course of payments following receipt from Consultant and approval by City of invoices showing the services or task performed, the time expended (if billing is hourly), and the name of the Project. Consultant shall certify on the invoices that Consultant has performed the services in full conformance with this Agreement and is entitled to receive payment. Each invoice shall be accompanied by a progress report indicating the progress to date of services performed and covered by the invoice, including a brief statement of any Project problems and potential causes of delay in performance, and listing those services that are projected for performance by Consultant during the next invoice cycle. Where billing is done and payment is made on an hourly basis, the parties acknowledge that this arrangement is either customary practice for Consultant's profession, industry, or business, or is necessary to satisfy audit and legal requirements which may arise due to the fact that City is a municipality.

E. Consultant represents that Consultant has obtained all necessary information on conditions and circumstances that may affect its performance and has conducted site visits, if necessary.

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F. CAUTION: Consultant shall not begin work until this Agreement has been signed by both parties and until Consultant's evidence of insurance has been delivered to and approved by the City.

2. TERM. The term of this Agreement shall commence at midnight on _________, 20_, and shall terminate at 11:59 p.m. on _________, 20_19_, unless sooner terminated as provided in this Agreement, or unless the services or the Project is completed sooner.

3. COORDINATION AND ORGANIZATION.

A. Consultant shall coordinate its performance with City's representative, if any, named in Exhibit "C", attached to this Agreement and incorporated by this reference. Consultant shall advise and inform City's representative of the work in progress on the Project in sufficient detail so as to assist City's representative in making presentations and in holding meetings on the Project. City shall furnish to Consultant information or materials, if any, described in Exhibit "D" attached to this Agreement and incorporated by this reference, and shall perform any other tasks described in the Exhibit.

B. The parties acknowledge that a substantial inducement to City for entering this Agreement was and is the reputation and skill of Consultant's key employee, named in Exhibit "E" attached to this Agreement and incorporated by this reference. City shall have the right to approve any person proposed by Consultant to replace that key employee.

4. INDEPENDENT CONTRACTOR. In performing its services, Consultant is and shall act as an independent contractor and not an employee, representative, or agent of City. Consultant shall have control of Consultant's work and the manner in which it is performed. Consultant shall be free to contract for similar services to be performed for others during this Agreement provided, however, that Consultant acts in accordance with Section 9 and Section 11 of this Agreement. Consultant acknowledges and agrees that a) City will not withhold taxes of any kind from Consultant's compensation,

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b) City will not secure workers' compensation or pay unemployment insurance to, for or on Consultant's behalf, and c) City will not provide and Consultant is not entitled to any of the usual and customary rights, benefits or privileges of City employees. Consultant expressly warrants that neither Consultant nor any of Consultant's employees or agents shall represent themselves to be employees or agents of City.

5. INSURANCE.

A. As a condition precedent to the effectiveness of this Agreement, Consultant shall procure and maintain, at Consultant's expense for the duration of this Agreement, from insurance companies that are admitted to write insurance in California and have ratings of or equivalent to A:V by A.M. Best Company or from authorized non-admitted insurance companies subject to Section 1763 of the California Insurance Code and that have ratings of or equivalent to A:VIII by A.M. Best Company the following insurance:

i. Commercial general liability insurance (equivalent in scope to ISO form CG 00 01 11 85 or CG 00 01 10 93) in an amount not less than $1,000,000 per each occurrence and $2,000,000 general aggregate. This coverage shall include but not be limited to broad form contractual liability, cross liability, independent contractors liability, and products and completed operations liability. The City, its boards and commissions, and their officials, employees and agents shall be named as additional insureds by endorsement (on City's endorsement form or on an endorsement equivalent in scope to ISO form CG 20 10 11 85 or CG 20 26 11 85 or both CG 20 10 07 04 and CG 20 37 07 04 or both CG 20 33 07 04 and CG 20 37 07 04), and this insurance shall contain no special limitations on the scope of protection given to the City, its boards and commissions, and their officials, employees and agents. This policy shall be endorsed to state that the insurer waives its right of subrogation against City, its boards and commissions, and their officials, employees and agents.

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ii. Workers' Compensation insurance as required by the California Labor Code and employer's liability insurance in an amount not less than $1,000,000. This policy shall be endorsed to state that the insurer waives its right of subrogation against City, its boards and commissions, and their officials, employees and agents.

iii. Professional liability or errors and omissions insurance in an amount not less than $1,000,000 per claim.

iv. Commercial automobile liability insurance (equivalent in scope to ISO form CA 00 01 06 92), covering Auto Symbol 1 (Any Auto) in an amount not less than $500,000 combined single limit per accident.

B. Any self-insurance program, self-insured retention, or deductible must be separately approved in writing by City's Risk Manager or designee and shall protect City, its officials, employees and agents in the same manner and to the same extent as they would have been protected had the policy or policies not contained retention or deductible provisions.

C. Each insurance policy shall be endorsed to state that coverage shall not be reduced, non-renewed, or canceled except after thirty (30) days prior written notice to City, shall be primary and not contributing to any other insurance or self-insurance maintained by City, and shall be endorsed to state that coverage maintained by City shall be excess to and shall not contribute to insurance or self-insurance maintained by Consultant. Consultant shall notify the City in writing within five (5) days after any insurance has been voided by the insurer or cancelled by the insured.

D. If this coverage is written on a "claims made" basis, it must provide for an extended reporting period of not less than one hundred eighty (180) days, commencing on the date this Agreement expires or is terminated, unless Consultant guarantees that Consultant will provide to the City evidence of uninterrupted, continuing coverage for a period of not less than three (3) years, commencing on the date this Agreement expires or is terminated.

E. Consultant shall require that all subconsultants or contractors which Consultant uses in the performance of these services maintain insurance in compliance with this Section unless otherwise agreed in writing by City's Risk Manager or designee.

F. Prior to the start of performance, Consultant shall deliver to City certificates of insurance and the endorsements for approval as to sufficiency and form. In addition, Consultant, shall, within thirty (30) days prior to expiration of the insurance, furnish to City certificates of insurance and endorsements evidencing renewal of the insurance. City reserves the right to require complete certified copies of all policies of Consultant and Consultant's subconsultants and contractors, at any time. Consultant shall make available to City's Risk Manager or designee all books, records and other information relating to this insurance, during normal business hours.

G. Any modification or waiver of these insurance requirements shall only be made with the approval of City's Risk Manager or designee. Not more frequently than once a year, the City's Risk Manager or designee may require that Consultant, Consultant's subconsultants and contractors change the amount, scope or types of coverages required in this Section if, in his or her sole opinion, the amount, scope, or types of coverages are not adequate.

H. The procuring or existence of insurance shall not be construed or deemed as a limitation on liability relating to Consultant's performance or as full performance of or compliance with the indemnification provisions of this Agreement.

6. <u>ASSIGNMENT AND SUBCONTRACTING</u>. This Agreement contemplates the personal services of Consultant and Consultant's employees, and the parties acknowledge that a substantial inducement to City for entering this Agreement was and is the professional reputation and competence of Consultant and Consultant's employees. Consultant shall not assign its rights or delegate its duties under this

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Agreement, or any interest in this Agreement, or any portion of it, without the prior approval of City, except that Consultant may with the prior approval of the City Manager of City, assign any moneys due or to become due the Consultant under this Agreement. Any attempted assignment or delegation shall be void, and any assignee or delegate shall acquire no right or interest by reason of an attempted assignment or delegation. Furthermore, Consultant shall not subcontract any portion of its performance without the prior approval of the City Manager or designee, or substitute an approved subconsultant or contractor without approval prior to the substitution. Nothing stated in this Section shall prevent Consultant from employing as many employees as Consultant deems necessary for performance of this Agreement.

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7. CONFLICT OF INTEREST. Consultant, by executing this Agreement, certifies that, at the time Consultant executes this Agreement and for its duration, Consultant does not and will not perform services for any other client which would create a conflict, whether monetary or otherwise, as between the interests of City and the interests of that other client. Consultant further certifies that Consultant does not now have and shall not acquire any interest, direct or indirect, in the area covered by this Agreement or any other source of income, interest in real property or investment which would be affected in any manner or degree by the performance of Consultant's services hereunder. And, Consultant shall obtain similar certifications from Consultant's employees, subconsultants and contractors.

8. MATERIALS. Consultant shall furnish all labor and supervision, supplies, materials, tools, machinery, equipment, appliances, transportation, and services necessary to or used in the performance of Consultant's obligations under this Agreement, except as stated in Exhibit "D".

9. OWNERSHIP OF DATA. All materials, information and data prepared, developed, or assembled by Consultant or furnished to Consultant in connection with this Agreement, including but not limited to documents, estimates, calculations, studies, maps, graphs, charts, computer disks, computer source documentation, samples,

models, reports, summaries, drawings, designs, notes, plans, information, material, and memorandum ("Data") shall be the exclusive property of City. Data shall be given to City, and City shall have the unrestricted right to use and disclose the Data in any manner and for any purpose without payment of further compensation to Consultant. Copies of Data may be retained by Consultant but Consultant warrants that Data shall not be made available to any person or entity for use without the prior approval of City. This warranty shall survive termination of this Agreement for five (5) years.

10. TERMINATION. Either party shall have the right to terminate this Agreement for any reason or no reason at any time by giving fifteen (15) calendar days prior written notice to the other party. In the event of termination under this Section, City shall pay Consultant for services satisfactorily performed and costs incurred up to the effective date of termination for which Consultant has not been previously paid. The procedures for payment in Section 1.B. with regard to invoices shall apply. On the effective date of termination, Consultant shall deliver to City all Data developed or accumulated in the performance of this Agreement, whether in draft or final form, or in process. And, Consultant acknowledges and agrees that City's obligation to make final payment is conditioned on Consultant's delivery of the Data to the City.

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11. CONFIDENTIALITY. Consultant shall keep the Data confidential and shall not disclose the Data or use the Data directly or indirectly other than in the course of performing its services, during the term of this Agreement and for five (5) years following expiration or termination of this Agreement. In addition, Consultant shall keep confidential all information, whether written, oral, or visual, obtained by any means whatsoever in the course of performing its services for the same period of time. Consultant shall not disclose any or all of the Data to any third party, or use it for Consultant's own benefit or the benefit of others except for the purpose of this Agreement.

12. BREACH OF CONFIDENTIALITY. Consultant shall not be liable for a breach of confidentiality with respect to Data that: (a) Consultant demonstrates Consultant knew prior to the time City disclosed it; or (b) is or becomes publicly available

without breach of this Agreement by Consultant; or (c) a third party who has a right to disclose does so to Consultant without restrictions on further disclosure; or (d) must be disclosed pursuant to subpoena or court order.

13. ADDITIONAL COSTS AND REDESIGN.

A. Any costs incurred by the City due to Consultant's failure to meet the standards required by the scope of work or Consultant's failure to perform fully the tasks described in the scope of work which, in either case, causes the City to request that Consultant perform again all or part of the Scope of Work shall be at the sole cost of Consultant and City shall not pay any additional compensation to Consultant for its re-performance.

B. If the Project involves construction and the scope of work requires Consultant to prepare plans and specifications with an estimate of the cost of construction, then Consultant may be required to modify the plans and specifications, any construction documents relating to the plans and specifications, and Consultant's estimate, at no cost to City, when the lowest bid for construction received by City exceeds by more than ten percent (10%) Consultant's estimate. This modification shall be submitted in a timely fashion to allow City to receive new bids within four (4) months after the date on which the original plans and specifications were submitted by Consultant.

14. AMENDMENT. This Agreement, including all Exhibits, shall not be amended, nor any provision or breach waived, except in writing signed by the parties which expressly refers to this Agreement.

15. LAW. This Agreement shall be governed by and construed pursuant to the laws of the State of California (except those provisions of California law pertaining to conflicts of laws). Consultant shall comply with all laws, ordinances, rules and regulations of and obtain all permits, licenses, and certificates required by all federal, state and local governmental authorities.

16. ENTIRE AGREEMENT. This Agreement, including all Exhibits,

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constitutes the entire understanding between the parties and supersedes all other agreements, oral or written, with respect to the subject matter in this Agreement.

17. INDEMNITY.

A. Consultant shall indemnify, protect and hold harmless City, its Boards, Commissions, and their officials, employees and agents ("Indemnified Parties"), from and against any and all liability, claims, demands, damage, loss, obligations, causes of action, proceedings, awards, fines, judgments, penalties, costs and expenses, arising or alleged to have arisen, in whole or in part, out of or in connection with (1) Consultant's breach or failure to comply with any of its obligations contained in this Agreement, or (2) negligent or willful acts, errors, omissions or misrepresentations committed by Consultant, its officers, employees, agents, subcontractors, or anyone under Consultant's control, in the performance of work or services under this Agreement (collectively "Claims" or individually "Claim").

B. In addition to Consultant's duty to indemnify, Consultant shall have a separate and wholly independent duty to defend Indemnified Parties at Consultant's expense by legal counsel approved by City, from and against all Claims, and shall continue this defense until the Claims are resolved, whether by settlement, judgment or otherwise. No finding or judgment of negligence, fault, breach, or the like on the part of Consultant shall be required for the duty to defend to arise. City shall notify Consultant of any Claim, shall tender the defense of the Claim to Consultant, and shall assist Consultant, as may be reasonably requested, in the defense.

C. If a court of competent jurisdiction determines that a Claim was caused by the sole negligence or willful misconduct of Indemnified Parties, Consultant's costs of defense and indemnity shall be (1) reimbursed in full if the court determines sole negligence by the Indemnified Parties, or (2) reduced by the percentage of willful misconduct attributed by the court to the Indemnified Parties.

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D. To the extent this Agreement is a professional service agreement for work or services performed by a design professional (architect, landscape architect, professional engineer or professional land surveyor), the provisions of this Section regarding Consultant's duty to defend and indemnify shall be limited as provided in California Civil Code Section 2782.8, and shall apply only to Claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant.

E. The provisions of this Section shall survive the expiration or termination of this Agreement.

18. AMBIGUITY. In the event of any conflict or ambiguity between this Agreement and any Exhibit, the provisions of this Agreement shall govern.

19. NONDISCRIMINATION.

A. In connection with performance of this Agreement and subject to applicable rules and regulations, Consultant shall not discriminate against any employee or applicant for employment because of race, religion, national origin, color, age, sex, sexual orientation, gender identity, AIDS, HIV status, handicap, or disability. Consultant shall ensure that applicants are employed, and that employees are treated during their employment, without regard to these bases. These actions shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

B. It is the policy of City to encourage the participation of Disadvantaged, Minority and Women-owned Business Enterprises in City's procurement process, and Consultant agrees to use its best efforts to carry out this policy in its use of subconsultants and contractors to the fullest extent consistent with the efficient performance of this Agreement. Consultant may rely on written representations by subconsultants and contractors regarding their status. Consultant shall report to City in May and in December or, in the case of short-term

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agreements, prior to invoicing for final payment, the names of all subconsultants and contractors hired by Consultant for this Project and information on whether or not they are a Disadvantaged, Minority or Women-Owned Business Enterprise, as defined in Section 8 of the Small Business Act (15 U.S.C. Sec. 637).

20. EQUAL BENEFITS ORDINANCE. Unless otherwise exempted in accordance with the provisions of the Ordinance, this Agreement is subject to the applicable provisions of the Equal Benefits Ordinance (EBO), section 2.73 et seq. of the Long Beach Municipal Code, as amended from time to time.

A. During the performance of this Agreement, the Consultant certifies and represents that the Consultant will comply with the EBO. The Consultant agrees to post the following statement in conspicuous places at its place of business available to employees and applicants for employment:

"During the performance of a contract with the City of Long Beach, the Consultant will provide equal benefits to employees with spouses and its employees with domestic partners. Additional information about the City of Long Beach's Equal Benefits Ordinance may be obtained from the City of Long Beach Business Services Division at 562-570-6200."

B. The failure of the Consultant to comply with the EBO will be deemed to be a material breach of the Agreement by the City.

C. If the Consultant fails to comply with the EBO, the City may cancel, terminate or suspend the Agreement, in whole or in part, and monies due or to become due under the Agreement may be retained by the City. The City may also pursue any and all other remedies at law or in equity for any breach.

D. Failure to comply with the EBO may be used as evidence against the Consultant in actions taken pursuant to the provisions of Long Beach Municipal Code 2.93 et seq., Contractor Responsibility.

E. If the City determines that the Consultant has set up or used its contracting entity for the purpose of evading the intent of the EBO, the City may

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terminate the Agreement on behalf of the City. Violation of this provision may be used as evidence against the Consultant in actions taken pursuant to the provisions of Long Beach Municipal Code section 2.93 et seq., Contractor Responsibility.

21. NOTICES. Any notice or approval required by this Agreement shall be in writing and personally delivered or deposited in the U.S. Postal Service, first class, postage prepaid, addressed to Consultant at the address first stated above, and to the City at 411 West Ocean Boulevard, Long Beach, California 90802, Attn: City Manager with a copy to the City Engineer at the same address. Notice of change of address shall be given in the same manner as stated for other notices. Notice shall be deemed given on the date deposited in the mail or on the date personal delivery is made, whichever occurs first.

22. COPYRIGHTS AND PATENT RIGHTS.

A. Consultant shall place the following copyright protection on all Data: © City of Long Beach, California 2,104, inserting the appropriate year.

B. City reserves the exclusive right to seek and obtain a patent or copyright registration on any Data or other result arising from Consultant's performance of this Agreement. By executing this Agreement, Consultant assigns any ownership interest Consultant may have in the Data to the City.

C. Consultant warrants that the Data does not violate or infringe any patent, copyright, trade secret or other proprietary right of any other party. Consultant agrees to and shall protect, defend, indemnify and hold City, its officials and employees harmless from any and all claims, demands, damages, loss, liability, causes of action, costs or expenses (including reasonable attorneys' fees) whether or not reduced to judgment, arising from any breach or alleged breach of this warranty.

23. COVENANT AGAINST CONTINGENT FEES. Consultant warrants that Consultant has not employed or retained any entity or person to solicit or obtain this Agreement and that Consultant has not paid or agreed to pay any entity or person any fee, commission, or other monies based on or from the award of this Agreement. If Consultant

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breaches this warranty, City shall have the right to terminate this Agreement immediately notwithstanding the provisions of Section 10 or, in its discretion, to deduct from payments due under this Agreement or otherwise recover the full amount of the fee, commission, or other monies.

24. WAIVER. The acceptance of any services or the payment of any money by City shall not operate as a waiver of any provision of this Agreement or of any right to damages or indemnity stated in this Agreement. The waiver of any breach of this Agreement shall not constitute a waiver of any other or subsequent breach of this Agreement.

25. CONTINUATION. Termination or expiration of this Agreement shall not affect rights or liabilities of the parties which accrued pursuant to Sections 7, 10, 11, 17, 19, 22, and 28 prior to termination or expiration of this Agreement.

26. TAX REPORTING. As required by federal and state law, City is obligated to and will report the payment of compensation to Consultant on Form 1099-Misc. Consultant shall be solely responsible for payment of all federal and state taxes resulting from payments under this Agreement. Consultant shall submit Consultant's Employer Identification Number (EIN), or Consultant's Social Security Number if Consultant does not have an EIN, in writing to City's Accounts Payable, Department of Financial Management. Consultant acknowledges and agrees that City has no obligation to pay Consultant until Consultant provides one of these numbers.

27. ADVERTISING. Consultant shall not use the name of City, its officials or employees in any advertising or solicitation for business or as a reference, without the prior approval of the City Manager or designee.

28. AUDIT. City shall have the right at all reasonable times during the term of this Agreement and for a period of five (5) years after termination or expiration of this Agreement to examine, audit, inspect, review, extract information from, and copy all books, records, accounts, and other documents of Consultant relating to this Agreement.

29. THIRD PARTY BENEFICIARY. This Agreement is not intended or

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designed to or entered for the purpose of creating any benefit or right for any person or entity of any kind that is not a party to this Agreement.

IN WITNESS WHEREOF, the parties have caused this document to be duly executed with all formalities required by law as of the date first stated above.

(NAME OF CONSULTANT)

_________________________, 20__ By______________________________
Name____________________________
Title_____________________________

_________________________, 20_ By______________________________
Name____________________________
Title_____________________________

"Consultant"

CITY OF LONG BEACH, a municipal corporation

_________________________, 20_ By______________________________
City Manager

"City"

This Agreement is approved as to form on ______________________, 20_.

CHARLES PARKIN, City Attorney

By ______________________________
Deputy

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City of Long Beach
Purchasing Division
411 West Ocean Boulevard, 6th Floor
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Attachment C

Statement of Non-collusion

The proposal is submitted as a firm and fixed request valid and open for 90 days from the submission deadline.

This proposal is genuine, and not sham or collusive, nor made in the interest or in behalf of any person not herein named; the proposer has not directly or indirectly induced or solicited any other proposer to put in a sham proposal and the proposer has not in any manner sought by collusion to secure for himself or herself an advantage over any other proposer.

In addition, this organization and its members are not now and will not in the future be engaged in any activity resulting in a conflict of interest, real or apparent, in the selection, award, or administration of a subcontract.

____
Authorized signature and date

____
Print Name & Title

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Attachment D

Debarment, Suspension, Ineligibility and Voluntary Exclusion Certification

Please read Acceptance of Certification and Instructions for Certification before completing

As a current or potential vendor for the City of Long Beach (City) your firm, through its business relationship with the City, may be the recipient of federal grant funds. As such, the City is required to document that neither your business entity or organization, nor any of your principals are debarred, suspended, ineligible, or have voluntarily been excluded from receiving federal grant funds. Consistent with Executive Order No. 12549 Title 2 CFR Part 180 Subpart C, all potential recipients of federal grant funds are required to comply with the requirements specified below. By submission of proposal/bid/agreement, the undersigned, under penalty of perjury, certifies that the participant, nor any of its principals in the capacity of owner, director, partner, officer, manager, or other person with substantial influence in the development or outcome of a covered transaction, whether or not employed by the participant:

- Are not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal department or agency;
- Have not, within a three (3) year period preceding this bid/agreement/proposal, been suspended, debarred, voluntarily excluded or declared ineligible by a federal agency;
- Do not presently have a proposed debarment proceeding pending;
- Have not, within a three (3) year period preceding this bid/agreement/proposal, been indicted or convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct;
- Have not, within a three (3) year period preceding this bid/agreement/proposal, had one or more public transactions (Federal, State, or local) terminated for cause or default.

If reorganization, management turnover, or a shift or change of principals' status occurs, written notice must be submitted within 21 days. Subsequent disclosure of unfavorable information will be subject to thorough review and remedial action. Updated versions of this certification may be requested on a routine basis.

Where the potential prospective recipient of Federal assistance funds is unable to certify to any of the statement in this certification, such prospective participant shall attach an explanation to the applicable bid/agreement/proposal.

____
Business/Contractor/Agency

____
Name of Authorized Representative   Title of Authorized Representative

______________________________ ____________
Signature of Authorized Representative   Date   *r20141001*

City of Long Beach
Purchasing Division
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Acceptance of Certification

1. This bid/agreement/proposal or like document has the potential to be a recipient of Federal funds. In order to be in compliance with Code of Federal Regulations, the City requires this completed form. By signing and submitting this document, the prospective bidder/proposer is providing the certification and acknowledgement as follows:
2. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549.
3. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective recipient of Federal assistance funds knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
4. The potential recipient of Federal assistance funds agrees by submitting this bid/agreement/proposal or like document that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

Instructions for completing the form, *Attachment –Debarment Certification*

1. The City of Long Beach sometimes receives Federal funding on certain purchases/projects. To ensure that the City is in compliance with Federal regulations we require this form to be completed.
2. The City of Long Beach checks the System for Award Management at *www.sam.gov* to make sure that Contractors who are awarded City contracts and/or purchase orders are not debarred or suspended. Prospective contractors should perform a search on this website for your company and or persons associated with your business.
3. If your business is in compliance with the conditions in the form, please have the appropriate person complete and sign this form and return with your bid/proposal/agreement.
4. If at any time, your business or persons associated with your business become debarred or suspended, we require that you inform us of this change in status.
5. If there are any exceptions to the certification, please include an attachment. Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception, indicate to whom it applies, initiating agency and dates of action.
6. Note: Providing false information may result in criminal prosecution or administrative sanctions.

If you have any questions on how to complete this form, please contact the Purchasing Division in the City of Long Beach Business Services Bureau at 562-570-6200.

Rev 12.11.13

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Purchasing Division
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Attachment E

W-9 Request for Taxpayer Identification Number and Certification

[W-9 Form must be signed and dated.]

[Form-Fillable PDF available at http://www.irs.gov/pub/irs-pdf/fw9.pdf]

[Vendor Application Form is for internal City use only.]

City of Long Beach
Purchasing Division
411 West Ocean Boulevard, 6th Floor
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Form **W-9**
(Rev. December 2014)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

Print or type
See Specific Instructions on page 2.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification; check only **one** of the following seven boxes:
☐ Individual/sole proprietor or single-member LLC ☐ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate
☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ► ______
Note. For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner.
☐ Other (see instructions) ►

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):
Exempt payee code (if any) ______
Exemption from FATCA reporting code (if any) ______
(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.)

Requester's name and address (optional)

6 City, state, and ZIP code

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.

Social security number
☐☐☐ – ☐☐ – ☐☐☐☐

or

Employer identification number
☐☐ – ☐☐☐☐☐☐☐

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

Sign Here **Signature of U.S. person ►** **Date ►**

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. Information about developments affecting Form W-9 (such as legislation enacted after we release it) is at *www.irs.gov/fw9*.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See *What is backup withholding?* on page 2.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting?* on page 2 for further information.

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Purchasing Division
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VENDOR APPLICATION FORM

Company Name (same as line 1 on W9):
DBA Name (same as line 2 on W9): leave blank if not applicable
Federal Tax ID Number (or SSN): required (this number is a fed tax ID: ○ SSN: ○
Web Address:

Purchase Order Address:
Attn:
City:
State: Zip Code:
Contact Name:
Email:
Phone Number:
Fax:
Toll Free:

If 'remit to' address is the same as the purchase order address, put SAME in first box only

'Remit to' Address :
Attn:
City:
State: Zip Code:
Contact Name:
Email:
Phone Number:
Fax:
Toll Free:

Type of Ownership:
Individual ○ Partnership ○ Corporation ○ LLC ○ Nonprofit ○ Government ○

Composition of Ownership (at least 51% of ownership of the organization) (check all that apply)
MBE ○ WBE ○ Local ○ DBE ○ Certified SBE ○ Certified Micro ○
State certification number:

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Attachment F

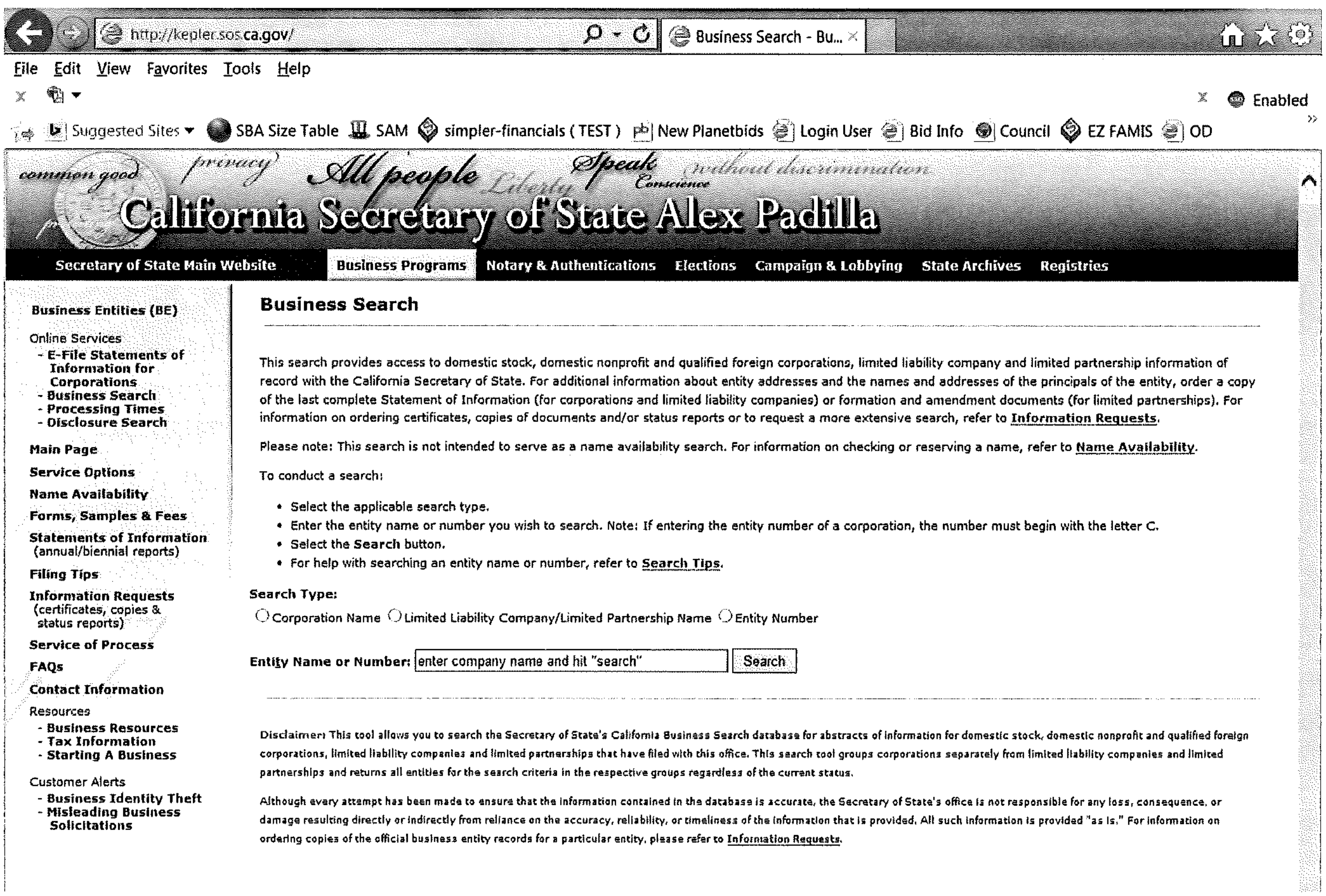
Secretary of State Certification

Please provide print out showing your business is registered with the California Secretary of State.

(Note, individual and sole proprietor companies are not required to register)

Awarded vendors/contractors must be registered with the California Secretary of State prior to contract execution. For more information, please consult:

www.kepler.sos.ca.gov/



ATTACHMENT G

EQUAL BENEFITS ORDINANCE (EBO) FORM

EQUAL BENEFITS ORDINANCE DISCLOSURE FORM

As a condition of being awarded a contract with the City of Long Beach ("City"), the selected Contractor/Vendor ("Contractor") may be required during the performance of the Contract, to comply with the City's nondiscrimination provisions of the Equal Benefits Ordinance ("EBO") set forth in the Long Beach Municipal Code section 2.73 et seq. The EBO requires that during the performance o f the contract, the Contractor shall provide equal benefits to its employees with spouses and employees with domestic partners. Benefits include but are not limited to, health benefits, bereavement leave, family medical leave, member ship and membership discounts, moving expenses, retirement benefits and travel benefits. A cash equivalent payment is permitted if an employer has made all reasonable efforts to provide domestic partners with access to benefits but is unable to do so. A situation in which a cash equivalent payment might be used if where the employer has difficulty finding an insurance provider that is willing to provide domestic partner benefits.

<u>The EBO is applicable to the following employers:</u>

- For-profit employers that have a contract with the City for the purchase of goods, services, public works or improvements and other construction projects in the amount of $100,000 or more

- For-profit entities that generate $350,000 or more in annual gross receipts leasing City property pursuant to a written agreement for a term exceeding 29 days in any calendar year

Contractors who are subject to the EBO must certify to the City before execution of the contract that they are in compliance with the EBO by completing the EBO Certification Form, attached, or that they have been issued a waiver by the City. Contractors must also allow authorized City representatives access to records so the City can verify compliance with the EBO.

The EBO includes provisions that address difficulties associated with implementing procedures to comply with the EBO. Contractors can delay implementation of procedures to comply with the EBO in the following circumstances

1) By the first effective date after the first open enrollment process following the contract start date, not to exceed two years, if the Contractor/vendor submits evidence of taking reasonable measures to comply with the EBO; or

2) At such time that the administrative steps can be taken to incorporate nondiscrimination in benefits in the Contractor/vendor's infrastructure, not to exceed three months; or

3) Upon expiration of the contractor's current collective bargaining agreement(s).

<u>Compliance with the EBO</u>

If a contractor has not received a waiver from complying with the EBO and the timeframe within which it can delay implementation has expired but it has failed to comply with the EBO, the

Contractor may be deemed to be in material breach of the Contract. In the event of a material breach, the City may cancel, terminate or suspend the City agreement, in whole or in part. The City also may deem the Contractor an irresponsible bidder and disqualify the Contractor from contracting with the City for a period of three years. In addition, the City may assess liquidated damages against the Contractor which may be deducted from money otherwise due the Contractor. The City may also pursue any other remedies available at law or in equity.

By my signature below, I acknowledge that the Contractor understands that to the extent it is subject to the provisions of the Long Beach Municipal Code section 2.73, the Contractor shall comply with this provision.

Printed Name:____________________________ Title:_____________________

Signature:_______________________________ Date:___________________

Business Entity Name:____

CERTIFICATION OF COMPLIANCE WITH THE EQUAL BENEFITS ORDINANCE

Section 1. CONTRACTOR/VENDOR INFORMATION

Name: ______________________________ Federal Tax ID No. ____________
Address:____
City:_________________________________State:_______ZIP: ____________
Contact Person: ______________________Telephone:_________________
Email: ______________________________Fax: _______________________

Section 2. COMPLIANCE QUESTIONS

A. The EBO is inapplicable to this Contract because the Contractor/Vendor has no employees. _____Yes _____No

B. Does your company provide (or make available at the employees' expense) any employee benefits? _____Yes _____No
(If "yes," proceed to Question C. If "no," proceed to section 5, as the EBO does not apply to you.)

C. Does your company provide (or make available at the employees' expense) any benefits to the spouse of an employee?
_____Yes _____No

D. Does your company provide (or make available at the employees' expense) any benefits to the domestic partner of an employee?
______Yes _____No (If you answered "no" to both questions C and D, proceed to section 5, as the EBO is not applicable to this contract. If you answered "yes" to both Questions C and D, please continue to Question E. If you answered "yes" to Question C and "no" to Question D, please continue to section 3.)

E. Are the benefits that are available to the spouse of an employee identical to the benefits that are available to the domestic partner of an employee? _____Yes _____No
(If "yes," proceed to section 4, as you are in compliance with the EBO. If "no," continue to section 3.)

Section 3. PROVISIONAL COMPLIANCE

A. Contractor/vendor is not in compliance with the EBO now but will comply by the following date:

_____ By the first effective date after the first open enrollment process following the contract start date, not to exceed two years, if the Contractor/vendor submits evidence of taking reasonable measures to comply with the EBO; or

_____ At such time that the administrative steps can be taken to incorporate nondiscrimination in benefits in the Contractor/vendor's infrastructure, not to exceed three months; or

_____ Upon expiration of the contractor's current collective bargaining agreement(s).

B. If you have taken all reasonable measures to comply with the EBO but are unable to do so, do you agree to provide employees with a cash equivalent? (The cash equivalent is the amount of money your company pays for spousal benefits that are unavailable for domestic partners.)
____Yes ____ No

Section 4. REQUIRED DOCUMENTATION

At time of issuance of purchase order or contract award, you may be required by the City to provide documentation (copy of employee handbook, eligibility statement from your plans, insurance provider statement, etc.) to verify that you do not discriminate in the provision of benefits.

Section 5. CERTIFICATION

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that I am authorized to bind this entity contractually. By signing this certification, I further agree to comply with all additional obligations of the Equal Benefits Ordinance that are set forth in the Long Beach Municipal Code and in the terms of the contract of purchase order with the City.

Executed this ____ day of ____________, 20__, at _______________, _______

Name__________________________ Signature________________________

Title___________________________ Federal Tax ID No.________________

Attachment H

Insurance Requirements

[CONTRACTOR = TECHNICAL AND ACCOUNTING EXPERTISE FOR DISASTER FUNDING ADMINISTRATION AND COST RECOVERY SERVICES' CONSULTANT]

INSURANCE. As a condition precedent to the effectiveness of this Agreement, Contractor shall procure and maintain at Contractor's expense for the duration of this Agreement from an insurance company that is admitted to write insurance in the State of California or that has a rating of or equivalent to an A:VIII by A.M. Best and Company the following insurance:

(a) Commercial general liability insurance equivalent in coverage scope to ISO CG 00 01 10 93 naming the **City of Long Beach and its officials, employees, and agents** as additional insureds on a form equivalent in coverage scope to ISO CG 20 26 11 85 from and against claims, demands, causes of action, expenses, costs, or liability for injury to or death of persons, or damage to or loss of property arising out activities performed by or on behalf of the Contractor in an amount not less than One Million Dollars (US $1,000,000) per occurrence and Two Million Dollars (US $2,000,000) in general aggregate.

(b) Workers' compensation coverage as required by the Labor Code of the State of California and Employer's liability insurance with minimum limits of One Million Dollars (US $1,000,000) per accident or occupational illness. The policy shall be endorsed with a waiver of the insurer's right of subrogation against the **City of Long Beach and its officials, employees, and agents**.

(c) If use of a vehicle is part of the scope of services, commercial automobile liability insurance equivalent in coverage scope to ISO CA 00 01 06 92 in an amount not less than Five Hundred Thousand Dollars (US $500,000) combined single limit (CSL) covering Symbol 1 ("any auto").

(d) Professional liability or errors and omissions liability insurance in an amount not less than One Million Dollars ($1,000,000) per claim and in aggregate covering the services provided pursuant to this Agreement.

Any self-insurance program or self-insurance retention must be approved separately in writing by City and shall protect the **City of Long Beach and its officials, employees, and agents** in the same manner and to the same extent as they would have been protected had the policy or policies not contained retention provisions. Each insurance policy shall be endorsed to state that coverage shall not be suspended, voided, or canceled by either party except after thirty (30) days prior written notice to City, and shall be primary and not contributing to any other insurance or self-insurance maintained by City.

Any subcontractors which Contractor may use in the performance of this Agreement shall be required to indemnify the City to the same extent as the Contractor and to maintain insurance in compliance with the provisions of this section.

Contractor shall deliver to City certificates of insurance and original endorsements for approval as to sufficiency and form prior to the start of performance hereunder. The certificates and endorsements for each insurance policy shall contain the original signature of a person authorized by that insurer to bind coverage on its behalf. "Claims-made" policies are not acceptable unless City Risk Manager determines that "Occurrence" policies are not available in the market for the risk being insured. In a "Claims-made" policy is accepted, it must provide for an extended reporting period of not less than three (3) years. Such insurance as required herein shall not be deemed to limit Contractor's liability relating to performance under this Agreement. City reserves the right to require complete certified copies of all said policies at any time. Any modification or waiver of the insurance requirements herein shall be made only with the approval of City Risk Manager. The procuring of insurance shall not be construed as a limitation on liability or as full performance of the indemnification provisions of this Agreement.

EXHIBIT “A-2”

Consultant’s Response to the RFP

City of Long Beach
Purchasing Division
411 West Ocean Boulevard, 6th Floor
Long Beach, CA 90802

TETRA TECH

Subject: Request for Proposals Number FM21-067 for Consulting and Technical Accounting Services for Disaster Funding Administration and Cost Recovery

Tetra Tech, Inc. (Tetra Tech) is pleased to submit the enclosed proposal in response to the City of Long Beach (City) request for proposals for Consulting and Technical Accounting Services for Disaster Funding Administration and Cost Recovery. To support the City, **Tetra Tech has designed a multidisciplinary toolbox of services to assist in optimizing Federal Emergency Management Agency (FEMA) and American Rescue Plan Act (ARPA) dollars and implementing projects to provide economic stability, as well as a more resilient, socially-conscious, and environmentally-sound future.**

The solutions detailed in this proposal have been developed and refined through Tetra Tech's experience at the forefront of helping communities recover from disasters for more than two decades. The Tetra Tech team has built upon the relationships forged in the immediate aftermath of disasters and is helping clients large and small alike determine and plan for the best, most efficient use of their FEMA and ARPA funds. These funding streams are eligible for use in a wide variety of ways, and ARPA guidance is encouraged to be interpreted to empower communities to tailor their recovery to their needs.

As a turnkey provider of consulting services, we have a deep bench of experts from which to assist our clients, no matter what use of FEMA and/or ARPA funds they decide upon ultimately. We offer the City the following integrated support services:

- **We have managed more than $1.7 billion in COVID-related funding.** We have built standard operating procedures and implementation plans to align with requirements of the U.S. Treasury, FEMA, U.S. Health and Human Services, and the U.S. Department of Housing and Urban Development (HUD), even as these fast-paced programs have evolved. This experience provides the City with a "running start" that will lead to a short implementation phase, compliant program operations, and sustained success.
- **We provide end-to-end solutions for our clients.** Our team brings a unique mix of federal grant program management, technology solutions, technical expertise, and local community partnerships that will help alleviate overburdened City staff. It is our mission to provide holistic support to our clients as a trusted steward of federal funds. *We provide white-glove service so City staff can return their focus to critical daily operations.*
- **Our program is designed to maximize speed, mitigate risk, and ensure compliance.** It is imperative that the City's FEMA and ARPA programs are designed and executed by experts who can apply the difficult lessons learned through experiences designing and administering similar programs throughout the nation. Tetra Tech's time-tested approach quickly identifies and resolves issues that arise over the course of managing grant programs.
- **We can respond immediately to meet the City's needs.** ARPA programs are high-profile endeavors that have no room for error or delays; the Tetra Tech team is prepared, trained, and ready to mobilize immediately to support the City. *We are prepared to launch the program design phase within one week of award to facilitate rapid program mobilization.*

Tetra Tech looks forward to the opportunity to assist the City and its residents in this critical effort. For questions regarding this response, please feel free to contact the representatives listed below.

Technical representative:
Ms. Allison McLeary, Director – Disaster Recovery Programs
(225) 937-2384 | Allison.McLeary@tetratech.com

Contractual representative:
Ms. Betty Kamara, Contracts Manager
(407) 803-2551 | TDR.contracts@tetratech.com

Sincerely,

Tetra Tech, Inc.

Jonathan Burgiel
Business Unit President, Tetra Tech Disaster Recovery

Table of Contents

1. Narrative/Technical Proposal

Tetra Tech understands that the City is an eligible applicant for Federal Emergency Management Agency (FEMA) and American Rescue Plan Act (ARP) programs. Tetra Tech also understands the City is vulnerable to a myriad of hazards that can cause catastrophic damage and result in a future presidential disaster declaration.

Time is critical when responding to and recovering from a major disaster and the following narrative describes how Tetra Tech will support the City upon request for consulting and technical accounting services for disaster funding administration and cost recovery.

Tetra Tech has served over 320 state and local government clients in response to over 77 disaster declarations. This includes assisting state and local governments with federally-funded programs and projects from FEMA Public Assistance (PA) and Hazard Mitigation Grant Program (HMGP) to U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) Disaster Recovery (DR) and U.S. Treasury funded COVID-related relief. Due to our experience responding to most major natural disasters occurring in the United States in the last two decades, Tetra Tech offers broad and deep experience with strategic planning, coordination of recovery efforts, and technical assistance.

Tetra Tech has the necessary expertise to provide timely and innovative program management and general grant administration services to the City.

Overview of the Project Plan

Tetra Tech has built a line of service specifically focused on federal disaster grant programs and appropriations and developed SOPs, staffing, and software tools around those programs to achieve success for our clients. We are familiar with the procurement and documentation requirements and additional, often ever-changing, programmatic requirements that these federal programs demand. Tetra Tech has standard SOPs, trained staff, and custom software applications that have been refined to capture, track, and report on expenditures, in accordance with state, local, and federal guidelines. Our staff understands the required timelines to provide documentation and conversely, the timelines that state and federal agencies are required to respond as well.

Tetra Tech utilizes the RecoveryTrac™ Data Management System as a secure, password-protected, online file-sharing platform to store electronic copies of the monthly progress reports, project work plan, files, and other project-related information. In this way, the City will have access to project-related information in one easy-to-access location. To facilitate a streamlined approach to administering disaster grant programs, Tetra Tech has configured the RecoveryTrac™ system to organize and manage data and documentation associated with each of the programmatic areas.

The expertise and deliverables detailed in this proposal leverage Tetra Tech's proven expertise in staff augmentation, processes and procedures, customer service, and quality assurance to deliver the requested scope of work. As the City's current provider of grant management services, we commit to the following opportunities for the City to benefit from Tetra Tech's capabilities and methodologies:

Seamless Integration & Timely Service	Commitment to Compliance
Planning & Process	Leadership & Expertise

Seamless Integration & Timely Service

We have the right-sized team with the right expertise to build staff capacity and integrate with City departments. **Our staffing and mobilization tools have supported more than $6 billion of post-disaster service contracts.**

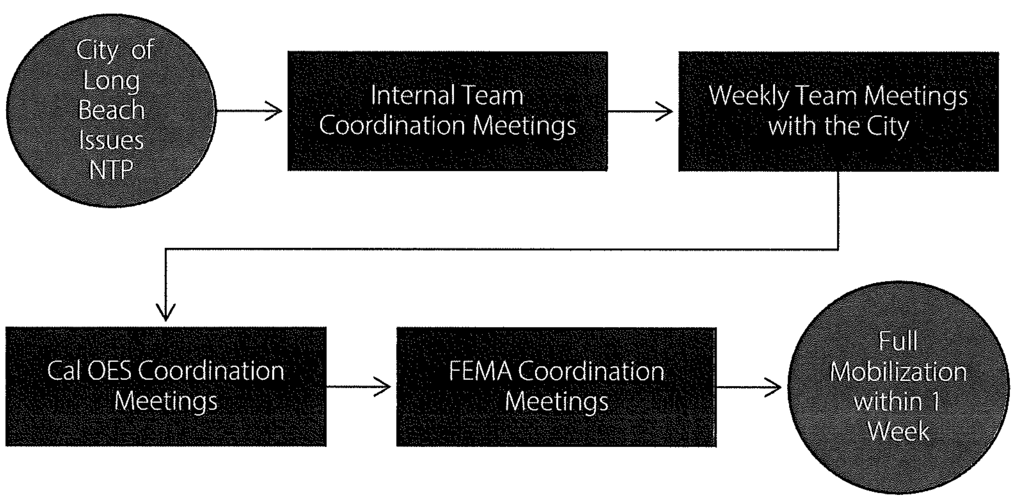
The proposed team of disaster recovery experts offers a unique integration of mitigation, emergency preparedness and planning, and disaster response and recovery management services, providing end-to-end solutions for the City. Our team is comprised of local and national experts holding decades of experience in disaster recovery, who are prepared to meet the City's needs – no matter how big or small.

- ✓ Local office location
- ✓ Qualified staff
- ✓ Mitigation expertise
- ✓ Digital collaboration
- ✓ Structured mobilization

Tetra Tech's proven methodologies for assisting clients after large disasters integrate data-driven staffing ratios to reduce costs and expedite recovery programs. For the City, this includes key leadership staff with federal funding policy experience and an adaptive staffing model based on insight from decades of experience.

This methodology emphasizes constant communication and a robust quality assurance process. Our team promptly and thoroughly supports City staff and stakeholders throughout the grant administration process to ensure **agile responsiveness to evolving needs.**

Timeframe to Commence Services



Our approach to Implementation of FEMA and ARPA programs is simple:

1. Rapidly mobilize trained, experienced resources to immediately meet the needs of the City.
2. Transition to a sustainment plan that is effective and efficient.
3. Use key performance indicators to measure, report on, and improve the performance of the project through its duration.

Tetra Tech staff members are industry leaders in mobilization for response, mitigation, and recovery missions after a disaster. We maintain pre-disaster standby contracts across the nation, and we have never failed to meet our contract obligations. **To effectively respond to these contracts. Tetra Tech has developed a concept of operations (CONOPS) to deliver these services.** We will implement this CONOPS to quickly stand up our management team so that our technical staff can focus on providing support to the City. Elements of our mobilization include:

- Internal coordination with key personnel prior to project kickoff
- Logistics team assignment to focus strictly on reconfiguring existing office space in the Long Beach area, provisioning computers, configuring our timekeeping system, TetraLinx
- Drafting initial Project Management Plans, Work Breakdown Structure and SOPs
- Meetings with key City personnel, contractors, and stakeholder to understand processes and programs
- Issuance of Request for Information (RFI) documents
- Establish milestones and deadlines for deliverables

Planning & Process

Strategic planning, real-time reporting, and tracking of project milestones will set the City up for success. **Our team will develop and administer training programs to educate internal and external stakeholders on the use of program documents, processes, and procedures. Weekly team meetings are a key part of our grant management philosophy, which promotes clear communication with City staff and agile responsiveness to all stakeholders.**

The Tetra Tech team provides the utmost transparency into project operations to deliver a model program that meets the City's needs. We will assist the City with timely expenditure of funds, keeping projects on-time and within budget. Tetra Tech have worked collaboratively with the City to maximize fiscal resources for ongoing disaster recovery through internal controls and audits.

We commit to **low-cost, high-quality service** in program delivery. Tetra Tech has a proven methodology for assisting clients after large disasters that integrates proprietary technology, and standard operating procedures (SOPs) to reduce cost and expedite programs. Our commitment is to deliver high quality, audit-ready files, which allow the City to receive its reimbursement funds faster and protect from claw back of funds. We commit to maintaining cost transparency to reduce costs and deliver quality to the City.

We have worked with some of the nation's largest communities and most complex projects, including ongoing service to the City of Houston; Harris County, Texas; the City of Philadelphia, Pennsylvania; the Commonwealth of Massachusetts; the Commonwealth of Puerto Rico; Richland County, South Carolina; the State of New Jersey; and hundreds more, as detailed in Sections C and F.

Tetra Tech offers the City broad capabilities across the spectrum of disaster response and recovery services to swiftly and effectively customize our approach to any disaster. We understand that the City is not only preparing for natural events like floods or severe storms, but also planning for the potential of political and technological events like civil disturbances and hazardous materials release.

We have pre-identified resources across the firm to support the diverse spectrum of disasters that may impact the City to rapidly mobilize experts to support the City's needs. Tetra Tech is prepared to bring the necessary resources to serve as the single disaster recovery program management services provider for the City's program.

Ability and Capacity to Perform

Clients count on us to respond in their time of need, and we deliver. The firm has never failed to respond to our clients' deployment and mobilization needs, regardless of location or disaster.

We have provided technical consulting expertise on nearly 2,000 emergency response efforts nationwide. We have responded to all types of incidents including industrial plant explosions; chemical fires; train derailments; oil spills and pipeline ruptures impacting environmentally sensitive areas; clandestine drug laboratory operations; mercury spills in residences and schools; releases of unknown hazardous substances; chemical and biological agent incidents; and natural disasters such as floods, tornadoes, and hurricanes.

Tetra Tech follows a deliberate process of RFP evaluation, project capacity assessment, and client compatibility review. Our management team dedicates extensive time to deliberate on whether or not a particular opportunity aligns with Tetra Tech's strategic and operational response plan, which allows our disaster recovery practice to pursue only the contracts we are confident we can serve with utmost dedication to quality, compliance, and consideration. **We are committed to providing a consistent and coordinated team to successfully staff and complete this project and affirm our ability to continue full operations immediately after notification of award.**

Commitment to Compliance

Our program is designed to maximize speed, mitigate risk, and ensure compliance as an honest broker of the City's funds. It is imperative that this program is designed and executed by experts who can apply the difficult lessons learned through proven experience designing and administering similar programs. Tetra Tech's time-tested approach has been designed to quickly identify and resolve issues that have arisen over the course of managing similar programs around the nation.

- ✓ Audit-ready files
- ✓ Cross-cutting regulations expertise (environmental, fair housing, Section 3, URA, Procurement)
- ✓ Policy and procedure development
- ✓ Checklist development
- ✓ Strategies to prevent and address findings

Our methodology emphasizes compliance, meaning that our team will complete pre-monitoring file reviews, conduct physical inspections of project activities, and coordinate with stakeholders to quickly resolve issues and reduce or eliminate monitoring findings and concerns. This project philosophy ensures clear communication for all stakeholders and a smooth closeout process.

Ultimately, we deliver **high quality, audit-ready files.** Our team has participated in numerous audits at the agency and local level, so we understand the effort required to support the City in state and federal audits. Our team will develop and use internal monitoring plan SOPs, schedules, and checklists for the City's projects to prepare for state and federal monitoring.

Our team has progressively improved this approach when performing similar services for Harris County, Texas; Hamilton County, Tennessee; the Commonwealth of Puerto Rico; City of Philadelphia, Pennsylvania; the Port of Corpus Christi, Texas; Volusia County, Florida; Dougherty County, Georgia; and the City of Houston.

Local Presence & Virtual Service

Our project methodology prioritizes local presence to complete project work. Tetra Tech teams are also power users of digital collaboration platforms, including Microsoft Teams, which allows us to accommodate many types of City needs and capabilities.

Leadership & Expertise

Tetra Tech is a California-based company. We have the local staffing resources, key relationships, and direct experience to successfully complete the requested consulting services. This translates into end-to-end support for the City for all aspects of each of complex FEMA and ARPA programs. We commit that we will leverage this working knowledge and relationships in the best interest of the City.

From the Thomas Wildfire to Hurricane Harvey, along with countless other disasters across the U.S. and territories, our team of experts has supported recovery efforts throughout across the country. **This team includes Program Manager Allison McLeary, former Recovery Bureau Chief of the Florida Division of Emergency Management (FDEM), who administered approximately $10 Billion in FEMA PA grant programming for the State of Florida, in addition to developing and implementing a strategy for $1.275 billion in CARES/CRF funding to 55 medium and small counties.**

Our goal is to support the City's programs with the right staff, at the right time, for the right amount of time. We will rapidly mobilize resources in the departments and functional areas that require support, beginning work for the City at pace.

WORKS IN 100+ COUNTRIES

7 CONTINENTS

Publicly traded on NASDAQ as TTEK NASDAQ GLOBAL SELECT

$3 billion ANNUAL REVENUE

WORKS ON 65,000+ PROJECTS ANNUALLY

450 OFFICES WORLDWIDE

16,500 CLIENTS

20,000 ASSOCIATES

ENR **RANKINGS**

#1 Dams & Reservoirs

#1 Environmental Management

#1 Environmental Science

#1 Hydro Plants

#1 Solid Waste

#1 Water

#1 Water Treatment/Desalination

#1 Water Treatment/Supply

#1 Wind Power

Scope of Project: COVID-19 Cost Recovery

Timeline

Tetra Tech's proposed schedule will be refined and validated in close coordination with the City. Tetra Tech's needs assessment schedule is detailed below, beginning with contract execution and/or the receipt of a notice to proceed from the City. Estimated number of meetings and type of meetings that will be required are detailed throughout the work plan; however, these will be modified to the needs of the City as identified at the kickoff meeting.

Draft Operational Plan

Time	Task	Deliverables/Milestones
H-0 CONTRACT EXECUTION / RECEIPT OF A NOTICE TO PROCEED		
Needs Assessment		
Week 1+	**Meet with the City to review activity to date**	Conduct kickoff meeting to review scope of services, establish work plan assumptions, identify reporting requirements, and understand overall client needs and expectations. Establish points of contact to maintain clear project communication. Update critical documents and files, including record of spending to date.
Week 1+	**Submit RFI to the City**	Issue an RFI to the City immediately following the kickoff meeting.
Week 2+	**Data management**	Provide RecoveryTrac™ access. Initiate reconciliation of documentation. Define periodic reporting requirement and schedule.
Week 2+	**Procurement review**	Provide procurement assistance to our clients, including providing procurement experts to provide disaster contracting guidance to review scopes, adherence to grant funding requirements and 2 CFR 200, and satisfactory project completion.
Week 3+	**Data collection and analysis of data**	Gather, compile, and review available data that will assist the team in understanding the future of the PA program.
Week 3+	**Draft work plan**	Based on the data provided by the City, draft a work plan that incorporates the appropriate scope of services elements, staff, and resources to continue the recovery work in a specified amount of time.
Week 4+	**Meet with City to review work plan**	Conduct a meeting with the City to review the proposed work plan, receive concurrence, and start the next phase of the recovery work.
Recovery		
Month 2+	**PWs submitted to FEMA for processing**	Continue PW development. Submit City-approved PWs to FEMA (PWs will be submitted to FEMA in the order they are completed).
Month 2+	**Support FEMA PA RFIs, CRC EEI inquiries, versions, RFRs, and/or appeals**	Respond to FEMA Requests for Information. Support version requests. Support request for reimbursement process. Support appeals (if necessary).
Month 6+	**Support FEMA PA RFIs, versions, RFRs, quarterly reports, and/or appeals**	Respond to FEMA RFIs. Support version requests. Support request for reimbursement process. Support audit requests. Support appeals or arbitrations (if necessary).
Month 12 Project Completion	**Document turnover/closeout**	Manage final reconciliation. Release hard copy files. Provide electronic database. Provide current version of desk manual/operational guide Assist the City with long-term reimbursement. Audit assistance.

Kickoff Meeting

The Tetra Tech team will begin the project by conducting a kickoff meeting to develop the project work plan and review and update existing communications protocols. The kickoff meeting will include the City key staff, other City disaster stakeholders, and the Tetra Tech team. During the kickoff meeting, the Tetra Tech team will review the project's goals, objectives, timeline, and deliverables. The outputs of the initiation kickoff meeting will be a stakeholder register and a Tetra Tech/ City coauthored project scope statement that will provide the global framework for the project work plan.

Continuous and coordinated communication with City staff is essential for the success of this project. Our project management team understands the importance of effective communication and will seek to establish a communication protocol with the City at the kickoff meeting to continue enriching our proactive working relationship and maintaining frequent information exchange.

Areas to be discussed in the kickoff meeting and memorialized in a project work plan will include but not be limited to the following:

- Organizational reporting between Tetra Tech, City staff, and federal agencies
- Timeline of key events (e.g., mobilization of Tetra Tech staff, timing for initial Tetra Tech meetings with the City, completion of applicant PW formulation, etc.)
- Roles and responsibilities and reporting structure of key Tetra Tech, City staff involved in the federal program emergency/disaster assistance efforts
- Contact information for key Tetra Tech, State, and federal staff involved in the recovery effort
- Likely staging of staff operations, including location of day-to-day operations
- Internal communication so parties are kept informed of progress
- Reporting and information requirements of Tetra Tech's work efforts and progress to the City
- Templates of critical forms to provide consistency across the theater of operations
- Identification of key FEMA officers to be interfaced
- Process flow and approvals of documents between Tetra Tech, the State, FEMA, and other federal agencies
- Gathering information on the City's current critical issues
- Identifying protocols to track and resolve issues or problems that may be identified
- Information to be included in Tetra Tech's status reports to the City regarding recent project activity
- Maintenance of the status reports in an easy-to-access location for parties to review from time to time
- Process for establishing task orders as requested by the City
- Other information as specified by the City

Program Management Plan

The Tetra Tech team will utilize the accepted project scope statement to develop a program management plan that details the break down, sequence, and plan of the project method; project milestones; tasks and deliverables; project timeline; and deliverable dates as well as outlines the responsibilities and organizational and reporting relationships of the Tetra Tech team to the City. The program implementation plan will serve as the comprehensive recovery strategy and timeline.

The program management plan will be developed from the results of the kickoff meeting and the scope statement and will take into consideration the requirements of stakeholders. The plan will be submitted to the City for review and approval.

An underlying factor that contributes to the success of Tetra Tech projects is our dedication to project management principles. Tetra Tech strives to train our staff to manage projects based on established successful principles. The Tetra Tech team will execute, monitor, and control the project based on the project work plan. In addition, status reports that track the project based on the project work plan will be distributed and discussed regularly.

Project Formulation

Tetra Tech is prepared to assist the City in all levels of project formulation, including a comprehensive recovery strategy and timeline. This includes, but is not limited to:

- Revisions to Damage Inventory (DI)
- Sites inspections to damaged sites
- Detailed Damage Description (DDD) development
- Completion of Essential Elements of Information (EEI)
- FEMA GrantsPortal upload and tracking
- Review and reconciliation of Emergency Purchase Orders (EPOs)
- Review and reconciliation of supporting cost documentation
- Cal OES Grants Management System (GMS) upload and tracking
- Procurement reviews
- Cost Estimates
- Engineering reviews (if applicable)
- Environmental and Historical Preservation reviews
- Insurance reviews and subrogation
- Codes and Standards Compliance
- 406 Hazard Mitigation Proposals
- Alternate or Improved Project selection
- 428 Program Election
- Resolution of FEMA Damages Under Review (DUR)
- Responding to FEMA RFIs
- Negotiations with FEMA on project scope and costs

Prioritizing Recovery Projects

Tetra Tech has assisted clients throughout the country following catastrophic disasters manage recovery operations from end to end. We understand how important it is to align recovery projects with the mission and vision of the community and to prioritize projects that support the community's goals and objectives. We want to help ensure the City not only recovers from a disaster, but also maximizes opportunities to build back stronger. This requires coordination with key stakeholders to assess and address the following elements of community resilience as identified in the National Disaster Recovery Framework.

It is important to coordinate with the with local and regional agencies on their recovery projects to help align recovery initiatives for the whole community. The disaster recovery team will be responsible for assessing and prioritizing the City's recovery initiatives as well as communicating and coordinating with external agencies within the impacted are on their recovery initiatives.

FEMA Meeting Attendance

Another key responsibility of the Disaster Recovery Team will be to communicate and collaborate with state and federal grant managers. This includes participating in calls, meetings, site visits, and work sessions throughout the recovery operation.

Our team members have worked with our clients to lead or participate in over 100 FEMA Exploratory Calls, Recovery Scoping Meetings (RSM) (e.g., Kickoff Meeting), and Subrecipients Briefings serving local governments. In an effort for subrecipients to be prepared for the initial FEMA meeting, we will conduct **pre-calls** for the following:

Exploratory Call: Tetra Tech will provide example scripts and questions used by FEMA in past Exploratory Calls for subrecipients to review. We will work with the City as a "dress rehearsal" for the Exploratory Call.

Recovery Scoping Meeting (RSM): Tetra Tech team will have the first draft of the Damage Inventory (DI) within 48 hours of the City and FEMA scheduling the RSM. We will request that the City provide comments back within 24 hours, and we will incorporate comments immediately. We will have electronic and printed copies of the DI prior to the official RSM for distribution to FEMA, the State, and the departments.

Throughout the course of our engagement with subrecipients, Tetra Tech may also be called upon to support ad hoc or scheduled meetings with City, Cal OES, and FEMA staff. These meetings may include:

1. 406 Mitigation Proposal Reviews
2. Ad hoc meetings with CRC / Informal RFI meetings
3. Regularly scheduled meetings
4. Additional meetings to maintain project forward momentum/progress

Our approach will include pre-calls and preparation prior to meetings with Cal OES and FEMA. This will include preparation of agendas, PowerPoint, technical memorandums, and technical studies. In each meeting Tetra Tech will also provide notes from all FEMA and Cal OES meetings will be made available to all participants to memorialize the discussion.

Program Guidance and Policy Interpretation

Tetra Tech knows many of the pitfalls related to disaster cost recovery programs like FEMA PA and HMGP programs or more broad-based funding programs funded through the ARPA. Tetra Tech will utilize the expertise necessary to provide recommendations to the City departments on any critical issues that arise. Tetra Tech is prepared for provide Technical Assistance (TA) to the City on commonly identified issues such as:

- Substantial Damage Determinations for Public Facilities
- Rebuild vs. Replace
- 2 CFR 200 compliant procurement
- Inadequate documentation
- Actions or procurements during the exigent and emergency period
- Treasury CRF and ARPA guidance
- FEMA PAPPG and other policy memorandums
- Relocation Assets outside Hazard Areas
- Adoption of FEMA's Consensus-Based Codes
- Updating Building Codes
- Eligibility determinations for emergency and permanent repairs
- Special waivers or pre-approvals from FEMA
- Insurance proceeds and Obtain and Maintain Requirements
- Determination Memos
- Disaster-Specific Guidance
- Determination of Unmet Needs
- Duplication of Benefits prevention among funding streams

Preplanning and Preparedness Activities

Tetra Tech is prepared to provide a suite of training modules based on the requests of the City. In addition, Tetra Tech will conduct one half-day training session for the City staff on the FEMA PA Program at no cost. Based on other similar trainings we have conducted, our focus will be on:

- Changes to the FEMA PA Program, such as new PAPPG edition, supplemental guidance derived from the DRRA and COVID-19 and other disaster-specific guidance;
- Implementation of Section 428 of the Stafford Act;
- Overview of recent DHS-OIG audits; and
- Best Practices for the FEMA PA Program based on recent disasters.

The agenda will be approved by the City Project Manager prior to finalization and will be conducted by the Tetra Tech Project Manager or Training Facilitator. We anticipate that invitations will be coordinated through the City and extended to relevant agencies.

Strategic Planning for Maximizing Reimbursements

Tetra Tech has assisted clients following catastrophic disasters such as Superstorm Sandy in New York and Hurricane Maria in Puerto Rico as well as the response to and recovery from the COVID-19 Pandemic with developing and implementing comprehensive recovery strategies that meet the needs of the community while adhering to federal funding regulations. This strategy includes:

- **Stakeholder Involvement:** Conducting outreach internally within the City and externally may include conducting community outreach on a variety of topics, including impacts from the disaster, the availability of recovery resources, potential funding programs, and application procedures.
- **Adherence to Federal Grant Guidelines:** Providing Subject Matter Experts to provide technical assistance on the myriad rules that accompany federally funded disaster assistance, including FEMA PA, FEMA HMGP, HUD, Treasury CRF and ARPA, Natural Resource Conservation Service (NRCS), Insurance and FHWA.
- **Analyzing Business Processes:** Incorporating recommendations to address issues such as staff turnover, changes in federal guidelines, and upgrades in technology that may improve the City's recovery.
- **Focus on Program Implementation:** Supporting the City through staff augmentation to provide the needed management support that ensures that project data meets requirements for regulatory compliance, quality, format, documentation, and accessibility, and is aligned with anticipated audit criteria.

Identification of Alternative Sources of Funding

Tetra Tech has a long history with working with subrecipients to identify alternative funding sources. We understand how federal funding sources can work "in concert" to reduce local financial impacts to the City, such as FHWA's Emergency Relief (ER) Program, NRCS Emergency Watershed Protection (EWP), HUD's CDBG-DR, CDBG-MIT or CDBG-CV programs, Treasury Coronavirus Relief Program (CRF) or American Rescue Plan Act (ARPA). For those projects that may require a local funding component, we will work with the Finance Department and departmental representative to identify and apply for this assistance, working this into cash flow projections and final cost calculations.

Improved Projects

In some cases, restoration of a facility to its pre-disaster design, capacity, or function may not be desirable and the Subrecipient may wish to make improvements not required by applicable codes and standard. In these cases where the Subrecipient wishes to incorporate improvements or changes to the pre-disaster design, the City can approve this as an Improved Project request. Project funding will be a capped amount that is the lesser of the estimated cost to restore pre-disaster design and function OR actual costs to complete Improved Project. Tetra Tech's team of professionals will help Subrecipient's to maximize the utility of PA funding to ensure improvements are properly funded and accounted for using PA funds. Funding may be increased if an error or omission in the original SOW or cost estimate. If the project estimate includes an HMP that is not completed, FEMA will deobligate the mitigation funds.

Alternate Projects

In other cases, the Subrecipient may determine that the public welfare is not best served by restoring the function of the damaged facility. When this occurs, FEMA can approve an Alternate Project to allow the Subrecipient to apply PA funding toward a different facility (or facilities). Project funding will be a capped amount that is the lesser of the Federal share of the approved estimate to restore the damaged facility to its pre-disaster design and function; or the Federal share of the actual cost of completing the Alternate Project. If this alternative is appropriate for the community's needs, the Tetra Tech's team of expert planners and technical professionals can assist Subrecipient's with project programming to take advantage of this key PA feature. If the project estimate includes an HMP, those funds will not be included in capped amount.

FEMA/State Supplemental Requests

Depending on the size and magnitude of the disaster, Tetra Tech is prepared to support the City with additional requests to state and federal partners to expedite financial recovery, including:

- Expedited PWs (based on estimates)
- State grant(s)
- State Cost Share Program

Grant Management

Tetra Tech is prepared to assist the City in all levels of grant management including, but not limited to:

- Eligibility Review
- Inspections/Monitoring
- Contractor Reconciliations
- Project Scope Finalization
- Procurement Scope and Review
- PW Versioning
- Environmental Review
- FEMA/Cal OES Reporting
- 12/18 Month Extension Requests
- 2 CFR 200 Eligibility Review

Overall Grant Management Approach

Our team will deliver a program that can guide the City through the cost reimbursement cycle. Tetra Tech will employ its time-tested, four-step CASE Management Approach to the federal grant program.

Step 1 - Collect the Data.

The biggest challenge we face is obtaining necessary data quickly and completely. We have found time and time again that our ability to work with our client on collecting the data upfront will lead to success as we monitor the City's program spending and build the FEMA reimbursement documentation. We employ a number of methods to collect, store, and report data, including rapid and detailed program assessments, one-on-one meetings with departments to collect and secure data, a robust SQL server database to store data offsite, and Microsoft PowerBI to report the City on the status of the project.

Result: We have the most robust data management capability in the industry. The City can trust our team to collect and manage the most critical data throughout each phase of the City's FEMA PA program.

Step 2 - Analyze the Projects.

Whether it is analyzing thousands of labor records, assessing the plans to make emergency purchases, identifying mitigation measures to protect damaged assets, or designing a multi-billion-dollar COVID-19 economic recovery program, the Tetra Tech team has unparalleled expertise the City may need to support its recovery efforts.

Tetra Tech will work closely with the City from the beginning of our engagement to understand the project status, scope, and goals to determine the best course of action.

Result: We are committed to delivering national experts with a local perspective to deliver solutions for the City. There is no problem too big for our team to solve.

Step 3 - Submit to FEMA.

We understand the need for the City to expedite the recovery process and keep pace program timelines. We have found that the best way to do this under FEMA's Delivery Model for PA is actively working within the construct of FEMA's GrantsPortal side-by-side with Tetra Tech's proprietary RecoveryTrac™ data management tool. Aligning these systems will result in the City's ability to transmit data more quickly to FEMA and the State, maintain visibility in the status of its programs, and quickly illustrate when funds have been obligated. Our ability to integrate these programs has been a transformative tool that has led to a more streamlined and transparent process.

Since first working in GrantsPortal under FEMA's beta-test in Albany, GA in 2017, we have worked over 100 projects in GrantsPortal and know the system "inside and out".

Result: We are committed to supporting the City to provide a rapid and compliant FEMA PA program that meets FEMA requirements for program administration, spending, and reporting.

Step 4 - Expedite the Requests.

When a project is submitted to FEMA or the State for review, Tetra Tech is with the City each step of the way. Within each of the steps, FEMA or State personnel must review the submission. This may result in one or more RFIs or specialized requests or meetings. These requests must be dealt with timely and with the appropriate amount of information to maintain that the PW does not stall in the process or get moved to a previous step.

Our team has responded to tens of thousands of RFIs for Essential Elements of Information (EEIs) and Hazard Mitigation Proposals as well as DURs for Detailed Damage Descriptions since 2017 alone.

Applicant Briefing, Request for Public Assistance, and Recovery Scoping Meeting

Once a declaration is in place Tetra Tech will support the City complete the required documentation for filing the Request for Public Assistance (RPA) and leading the development of the first draft of the Damage Inventory (DI) prior to the Recovery Scoping Meeting (RSM) and attend the Applicant Briefing, Exploratory Calls (ECs) and RSM. Due to the individualized needs of departments and partner agencies, we will work with the City/State and FEMA to schedule and execute individual RSMs with each department.

Requests for Reimbursement

To facilitate the request for reimbursement (RFR) process and reduce the reconciliation backlog, it is important for supporting documentation to be collected, maintained, and updated throughout the duration of the recovery process. We will constantly monitor grant applications, project progress, requests for reimbursement, and reimbursements received.

The Tetra Tech team has an extensive history of implementing, reconciling, and monitoring the RFR process internally and on behalf of our state and local clients spanning the FEMA PA Program. While many agencies and subrecipients still wait for reimbursement from previous disasters (such as Hurricane Irene in 2012, where it took 5 years for reimbursement for some communities), our goal is to expedite economic recovery through strategies such as:

- Work with departments to collect data necessary for RFR claim
- Issue RFR to the State within 24 hours of notification of award/submission of data from the City
- Respond to RFIs from the State within 48 Hours
- Develop and Issue Weekly RFR Report/Tracker

Tetra Tech will track all supported cost information for labor, materials, and equipment associated with the project and all documentation submitted where the project costs may be estimated by unit price, time and materials, or contracts in which labor, equipment, and materials are provided by an outside source. Tetra Tech will follow-up on any missing or inadequate cost information associated with the project to ensure all expenditures are submitted for reimbursement.

If Tetra Tech determines there are questions, issues, or potential ineligible costs during the submission of documentation, it will be noted and discussed with the City to minimize the delays that can be realized when a PW is disallowed or has multiple RFIs from the State or FEMA staff.

Obtaining and Analyzing Documentation

Tetra Tech maintains orderly files for correspondence and reproductions of original contract documents, including change orders, field orders, work change directives, addenda, additional drawings issued after the execution of the contract, clarifications and interpretations of the contract documents, progress reports, shop drawing and sample submittals received from and delivered to contractor, and other project-related documents.

Tetra Tech will assist in the data collection associated with identified disaster recovery costs and submission of the documentation to FEMA GrantsPortal or other federal systems. Tetra Tech can assist in the collection and review of documentation to each department, including:

- The review and analysis of collected documentation to ensure that costs are reasonable and eligible
- The review and analysis of collected documentation to ensure that the work and costs are adequately documented, are included in the approved scope of work, and are deemed eligible
- The review and analysis of invoices and receipts by checking the dates and amounts to ensure the dates fall within the disaster event range and are reasonable for the purchase
- The review and analysis of contract labor timesheets by checking dates and hours worked per employee to ensure the dates fall within the disaster event range and are recorded as direct labor against the disaster work
- The review and analysis of force account labor timesheets, including special issues like exempt employees, benefits/policies in place, and 40-hour threshold issue; reconciliation of force account labor, equipment, and material data

Our team has directly worked with over 75 state and local clients after 20 disasters in the GrantsPortal system. We understand the importance of ensuring that:

- DIs are completed on-time and updated for latent damages.
- EEIs are completed with the most accurate information available.
- Damages Under Review (DUR) are responded to within 3 business days.
- Supplemental information for the CRC is provided within 3 business days as the PW passes through each of the review queues.

Pre- and Post-Disaster Financial Documentation

Developing and implementing the system for financial management is critical for the successful implementation of the City's FEMA PA program. As such, the Tetra Tech team will work with the City to develop and implement a fiscal management and cash flow systems sufficient to:

1. Provide effective control over and accountability for all funds, property, and other assets.
2. Identify the source and application of funds for Federally sponsored activities, including verification of the reasonableness and eligibility of costs and verification that the funds have not been used in violation of any of the restrictions or prohibitions that apply to this federal assistance.
3. Permit the accurate, complete, and timely disclosure of financial results in accordance with the reporting requirements of the FEMA and Office of Management and Budget (OMB).
4. Minimize the time elapsing between the transfer of funds from the U.S. Treasury and disbursement by the sub-recipient.

In addition, the Tetra Tech team has a thorough understanding of the grant management and administration function for the FEMA PA program. The Tetra Tech team's experience in providing such services has afforded us the opportunity to develop streamlined processes and procedures for accomplishing any of the following grant management and administrative functions:

1. Financial management
2. Chart of accounts
3. Cash receipts journal
4. Cash disbursements journal
5. Payroll journal
6. General ledger
7. Revolving fund policy and approval
8. Approval of use requests
9. Program income/miscellaneous revenue report

Because of our team's experience with FEMA PA work, the Tetra Tech team is knowledgeable of and prepared to administer the conceived grant program through Cal OES's GMS systems. Tetra Tech will use the combination of the two systems to accomplish the following:

- Identify activities funded
- Track amendments to scopes and projects
- Administer project budgets
- Document progress of performance goals for program activities
- Submit quarterly reports summarizing obligation, expenditures, drawdowns, and accomplishments for each program activity

Project Support Documentation

Tetra Tech will tailor the RecoveryTrac™ Project Workflow Case Management System (CMS) to the City's needs. RecoveryTrac™ is a web-based application that provides the City with a real-time portal to the Tetra Tech team's project work. Tetra Tech will customize RecoveryTrac™ reports to meet the City's specific needs for both Force Account Labor and Contractor invoice records.

Regulatory and auditing agencies can efficiently search and review electronic project files as required, and the RecoveryTrac™ system data is exportable and allows for importation into other applications such as the FEMA GrantsPortal and Cal OES GMS software tools.

Our team has worked with FEMA to integrate 20+ improvements into FEMA's GrantsPortal system.

We have delivered over ***2,000 cost estimate reports*** under FEMA's New Delivery Model across Texas, Florida, and Puerto Rico over the last 2 years. In 2020, Our team met with FEMA PA Leadership multiple times on issues related to COVID-19 that has led to policy changes to the betterment of subrecipients across the U.S.

Monitoring and Controlling

Our team is committed to the shepherding the City's projects at each phase throughout the grant life cycle to mitigate the risk of funds being unspent. To achieve these goals, Tetra Tech's approach to managing, controlling, and supervising our team will revolve around (1) providing Tetra Tech's Project Manager with appropriate responsibilities and authority; (2) tracking and reporting progress and costs; (3) implementing a tested and reliable quality assurance methodology; and (4) training project staff on tools and techniques that help improve the operational efficiency of the project team and the drive project toward completion.

1. **Seasoned Management Team:** Our management team is empowered to access and direct the necessary company resources.
2. **Tracking and Reporting Data Utilizing Tetra Tech's RecoveryTrac™ Data Management System:** Tetra Tech will provide the City with standard and customized reports in a web environment using its cloud-based RecoveryTrac™ integrated data management system.
3. **Time-Tested SOPs:** Our team's policies and procedures for this type of work have been tested thousands of times as we have helped grantees and subgrantees execute FEMA PA projects.
4. **Trained Staff:** The staff assigned to this project will be trained on the systems, technology, processes, and guidance documents.

Schedule Management

During the program initiation phase, the master schedule and budget baseline define projects to a common level through the definition of the project work plan. As projects advance through the delivery lifecycle, the master schedule will be updated to reflect the additional scope and schedule details or adjusted when unforeseen obstacles arise.

The Tetra Tech team will control the master schedule with input from all stakeholders and will analyze impacts from individual projects or activities programmatically. We have extensive experience in all aspects of project scheduling for many different project delivery methodologies. Our project controls professionals bring decades of scheduling experience to this contract and are fluent in a full range of software applications.

The master schedule will:

- Provide a logical, structured, and feasible timeline for completing the program within the specified time highlighting compliance requirement.
- Identify the critical path from kickoff through final completion and closeout emphasizing dates for key deliverables submittal.
- Assist the project team in monitoring and measuring the project's progress, focusing on early identification and mitigation of variances.

The program master schedule progress and budget performance will be updated on a regular basis throughout the life of the project. Monthly, the Tetra Tech Project Manager will perform the following reviews:

- **Program Schedule Review:** As part of the monitoring and control processes, the Tetra Tech Project Manager will review all projects included in the master schedule on a monthly basis and provide any updates or adjustments to the City Project Management Team.
- **Budget Performance Review:** The program budget will be monitored and provided to the City Project Manager, including approved Task Order amounts, actual costs, forecasted costs, and average spend by task. Any trending above or below benchmarks will be brought to the attention of the City Program Manager and remedy or redirection will be discussed.
- **Disbursement Tracking:** Tetra Tech will track, review, verify, and approve funds distributed as requested by the City. The Tetra Tech team will be responsible for the steps of verification of costs and reconciliation.
- **Monitor and Report Overall Program Costs:** A key role of the Tetra Tech Project Manager is that of financial management. Accurate and timely reporting on actual costs, forecasting of accrued costs, and comparison to percentage of work completed and schedule are integral to effective program management.
- **Monitor/Report on Subcontractor Costs:** Tetra Tech will monitor and report on subcontractor cost to ensure they are in alignment with the overall approved cost approved by the City Project Manager and that they remain the best value to the project management team.

Deadline Management

The Tetra Tech team will maintain awareness of all deadlines and, in advance of any upcoming deadlines, and assist the City in requesting extensions as necessary. This includes the following deadlines:

- 6 months for Emergency Work (Category A and B)
- Additional 6 months for Emergency Work (Category A and B)
- 12 months for Section 428 opt in
- Additional 18 months for Permanent Work (Category C-G) after 36 months
- Extensions to RFIs
- Extensions to Appeal Responses

In addition, our team will work with the City to submit accurate quarterly reports for each project throughout the life of the grant. In our RecoveryTrac™ system, we will implement push notifications to alert two (2) weeks in advance of quarterly reporting deadlines.

Tetra Tech has worked with countless communities following disasters like Hurricanes Charley, Jeanne, Francis, Ivan, Ike, Gustav, Harvey, Irma, and Maria as well as the COVID-19 Pandemic to meet every extension request whether it be debris, emergency protective measures, or permanent repairs for both State and FEMA deadlines.

Cost Tracking

Tetra Tech has time-tested cost tracking SOPs used to evaluate the City's cost documentation, including document management integration and associated digitization. This approach represents a comprehensive end-to-end solution for the City that will be web-enabled so that reviewers will have real-time access to the most up-to-date cost and supporting data. Taken to its next logical step, this solution can be accessed by federal agencies, such as FEMA, to perform review without incurring the expense of traveling to project sites.

Project Cost Documentation

As one of the world's largest engineering firms with clients around the globe, Tetra Tech's cost estimating experience includes high profile reconstruction projects like Houston's Wortham Theater after Hurricane Harvey, to large complex infrastructure projects such as the Inner Harbor Navigation Canal Lake Borgne Surge Barrier construction near the confluence of and across the Gulf Intracoastal Waterway, and the Mississippi River Gulf Outlet near New Orleans.

Our team has reconciled over $6B in FEMA PA related documentation.

Our team knows the ins and outs of grant management, having worked for Recipients like Louisiana, Connecticut, Vermont, Puerto Rico, Massachusetts, Florida, and New York.

The Tetra Tech team is highly experienced in performing forensic cost reasonable analyses when procurement issues arise when a PW is challenged by FEMA. As an engineering firm with over 20,000 technical professionals and staff, we have all the resources needed to defend a cost challenge by FEMA, from the simplest road repair to a billion-dollar levee repair or wastewater system plant relocation. No matter the PW, Tetra Tech has the internal staff resources to assist the City defend its PWs successfully.

Eligible Purchase Review

Tetra Tech can assist in the collection and review of documentation from City departments, including the review and analysis of:

- Collected documentation so that costs are reasonable and eligible
- Collected documentation so that the work and costs are adequately documented, are included in the approved scope of work, and are deemed eligible
- Invoices and receipts by checking the dates and amounts so the dates fall within the disaster event range and are reasonable for the purchase
- Contract labor timesheets by checking dates and hours worked per employee so the dates fall within the disaster event range and are recorded as direct labor against the disaster work
- Force account labor timesheets, including special issues like exempt employees, benefits/policies in place, and 40-hour threshold issue; reconciliation of force account labor, equipment, and material data

Reasonable Cost Analysis

The Tetra Tech team is highly experienced in performing forensic cost reasonable analyses, which is useful if procurement issues arise when a PW is challenged by FEMA. As an engineering firm with over 20,000 technical professionals and staff, we have all the resources needed to defend a cost challenge by FEMA, from the simplest road repair to a billion-dollar levee repair or wastewater system plant relocation. No matter the PW, Tetra Tech has the internal staff resources to assist the City with defending its PWs successfully.

Tetra Tech will prepare, on behalf of the City, completed packages for submission through Grants Portal and Requests for Reimbursement (RFR), including:

- Audits of claimed costs by comparing documentation and dates with the project scope of work and period of performance for the following:
    - Contract labor
    - Materials/supplies
    - Force account equipment
    - Force account labor
        - Including special issues like exempt employees, benefits/policies in place, and 40-hour threshold issue
- Ensure all work complies with the federal procurement requirements and environmental and historic preservation rules and regulations
- Reconciliation of force account labor, equipment, and material data
    - Avoiding possible duplication of benefit issues in projects which may have insurance coverage or be the responsibility of other federal agencies
    - Cost summary creation

Regulatory and auditing agencies can efficiently search and review electronic project files as required, and the RecoveryTrac™ system data is exportable and allows for importation into other applications such as the FEMA GrantsPortal.

Tetra Tech Cost Price Analysis Worksheet

TETRA TECH

Disaster Name | Subgrantee
Cost/Price Analysis

Project Information	
Disaster Name:	
Disaster Number:	
Project Name:	
Project Number:	
Purchase Order(s):	
Total PO Amount:	

STEP 1: INDEPENDENT COST ESTIMATE

For the pricing used on the Harris County ICE form, please indicate which data points were used to establish the pricing:

Price Estimate Information	
	Historical Pricing – i.e. previous bids, quotes, or procurements
	Market research
	Interviews with industry experts
	Prior personal experience
	Work performed at other entities, for example City of Houston
	Other

Include all associated support, including printouts from online research, emails, or previous contracts used to establish estimated cost.

STEP 2: COST/PRICE ANALYSIS

Price Analysis is used when price is the sole factor in consideration

Price Analysis	
	Compared proposed prices received in response to the solicitation; requires at least two responsible offerors/bidders and assumes no unusual actions that negatively impacted competition.
	Compared historical proposed prices and contract prices with current proposed prices for the same or similar goods or services; can consider changes in quantity, delivery schedules, economy.
	Compared offer with competitively published catalog prices, published market prices, or similar indices.
	Compared proposed prices with independently developed price estimates and/or market research.
	Compared to prices set by law or regulation; includes FEMA's Equipment Rate Schedule and Federal Supply Schedules.
	Other:

A Cost Analysis is used when the procurement is more complicated, for example if multiple price elements are present, if factors other than price are present, or if there is limited competition.

Cost Analysis – Each step must be completed	
	Verified the individual cost elements add up to the total proposed price.
	Verified each cost item is necessary and reasonable for the required scope of work.
	Compared the costs proposed for individual cost elements with previously incurred actual costs and independently developed estimates
	Sought input from experienced personnel to assist in the analysis of hours, materials, and equipment proposed, quantities, tooling, testing, head counts, productivity, and similar factors
	Consulted the resources referenced above for price analysis to the extent available to aid in confirming proposed pricing
	Other

STEP 3: REASONABILITY DETERMINATION

Briefly summarize how the price of the chosen vendor is compatible with the independent estimate performed in step 1. If the prices are significantly increased from those in step 1, please explain any reasoning for this change. For example, "a nationwide shortage of facemasks and a pandemic increased the price for facemasks at the time of the procurement. Of all vendors providing quotes for the requested supply, only Vendor A was able to deliver within two weeks and therefore was chosen to supply the masks."

Review of Contracts and Procurement

The Tetra Tech team utilizes a procurement checklist contained in Tetra Tech's Public Assistance Services Program Standard Operating Procedures (PA SOPs) in the review process of disaster procurements and contracts. The checklists contain requirements from the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments (44 CFR 13.36-FEMA's purchasing regulation) as well as requirements from the Federal Highway Administration such as Form FHWA-1273 and associated requirements identified in the Contract Administration Core Curriculum Participant's Manual and Reference Guide of 2006, and 2 CFR 200.

Contractor Billing Oversight

Tetra Tech assists clients with contractor invoice reconciliation, which involves ensuring accurate payment to contractors and assigning incurred costs to funding sources to minimize local cost share.

Tetra Tech will tailor the RecoveryTrac™ Project Workflow CMS to the City's needs. Tetra Tech will customize RecoveryTrac™ reports to meet the City's specific needs for both force account labor and contractor invoice records. RecoveryTrac™ has been designed to make an auditor's job easier by linking all costs to the proof of payment, invoice, and backup of the documentation to show the cost eligibility.

Internal Controls

The Tetra Tech team helps clients identify, understand, and manage risks. Our team will apply our extensive experience in internal controls, risk management, regulatory compliance, and technology to provide a full range of control and risk advisory services. Our team will assist in evaluating processes and controls, perform testing, and recommend control enhancements to mitigate overall program risk.

Fraud, Waste, and Abuse

Our team's approach is focused on fraud prevention and deterrence, continuous improvement of current anti-fraud controls and fraud detection and monitoring with data analytics. We employ a flexible, case-sensitive approach to each fraud investigation. We will implement procedures including review, approval, and the related controls to detect potential duplicate payment requests during claims processing. We will use various data analytics tools to identify anomalies in claims, including data extraction techniques to prevent and detect duplicate payments.

When we identify an expense or claim that requires further analysis, we will request additional information from the vendor to supplement any claims that we deem deficient. We will design specific templates, including types of costs and the support that will be needed to adequately support the claims. The goal of requesting additional information will be to reimburse the costs, not deny payments. Therefore, we will work with the City to address all avenues before we deny any costs submitted for reimbursement.

Project Worksheet (PW) Development and Review

Tetra Tech will complete the EEIs based on the information provided the City staff. We will prepare a PW Summary Sheet for submission to the City to include a damage description and dimensions (DDD), cost summary, scope of work, and other relevant documents to the Finance Liaison and Finance Project Manager for upload to GrantsPortal submission. Throughout the DUR reconciliation and Request for Information (RFI), our teams will closely coordinate with the City to collect the appropriate documentation and submit to FEMA PDMG staff or FEMA CRC. Through this process, we will work diligently to maximize reimbursement for the City and identify risks for deobligation or non-reimbursement.

Project Reconciliation and Closeout

Tetra Tech will conduct final inspection activities alongside FEMA and the City to document that work was completed according to the PW scope of work and that all regulatory clearances have been satisfied. Tetra Tech will assist with writing closeout versions to large project PWs and any final project accounting. Once approval to proceed with submittal to FEMA is granted by the City, Tetra Tech will generate closeout packets that include the following:

- Listing and copies of PWs
- Closeout PW versions
- All associated invoices and receipts
- Force account labor and equipment records
- Project status report/proof of completion and scope of work
- Project inspection reports
- Complete Emergency Management Mission Integrated Environment (EMMIE) records detailing FEMA review and approval
- All associated project cost and funding documentation

Grant Closeout Process

To close out large projects and receive remaining funds, the City must request a final inspection and submit a closeout form through the State. Tetra Tech will conduct final inspection activities alongside the City and the State. The purpose of the final inspection is to document that work was completed according to the PW scope of work and that all regulatory clearances have been satisfied. In addition to physically conducting the final inspections for projects, Tetra Tech will assist with writing closeout versions to large project PWs and any final project accounting.

As the City prepares to submit documentation to the State, the closeout packets will be created by Tetra Tech. Once all documentation is collected, final inspection is complete, and approval to proceed with submittal to FEMA is granted by the State, Tetra Tech will extract all required documentation to generate closeout packets that fully and concisely present FEMA with all documentation required for grant closeout.

Assistance During the Audit Process

Tetra Tech brings a wealth of experience in audit support for State and Federal audits including those of OMB and DHS-OIG or the inputs required for your Single Audit. To this end, Tetra Tech will provide experienced professionals with extensive experience in large-scale disaster management and related audit services. Specifically, we will help to institute processes that validate that projects are fully supported and "audit ready," based on the cost types claimed. We will confirm that the process includes a checklist/program guide to make grant and applicants aware of all required documentation for the major different cost types incurred.

Critical review points include documentation demonstrating proper procurement and contracting and that supporting documentation is used given contracting type (e.g., lump sum, unit price, force account). Other areas of consideration include review of submitted charges for duplicate billings, compliance to state and federal labor requirements and other areas where overcharges typically occur, such as overhead & profit markups, labor burden claimed on force account, or duplicate billings.

Support During the Appeal Process

Tetra Tech will work through the first and second appeal process on the spectrum of issues the City may face during future disasters. In the event the City elects to pursue FEMA's arbitration process, our team can provide support through this, having recently been successful in arbitrations for Monroe County, FL and the Commonwealth of Virginia on deobligations following Hurricanes Irma (2017) and Dorian (2018).

Appeal and Audit Actions

While Tetra Tech will work with FEMA, the State, and the City to proactively resolve funding challenges through our collaborative approach, applicants have the legal right to appeal decisions and judgments made by the federal government if resolution cannot be reached. Tetra Tech has been retained to assist clients with first and second appeals. In the event that we would be engaged by the City to assist in an appeal, we will collaborate with the City on the legal/FEMA policy-related components of the appeal.

Engagement Management

Perhaps the most critical component of the grant process will be project reporting and providing the City with visibility to the process. To maximize the efficiency and effectiveness of the program, the Tetra Tech team proposes using its RecoveryTrac™ system. The RecoveryTrac™ system was specifically designed for the management and administration of documents, data, and information related to grant administration and case management.

As a means of warehousing files, Tetra Tech utilizes the RecoveryTrac™ Data Management System as a secure, password-protected, online file-sharing platform to store electronic copies of the monthly progress reports, project work plan, files, and other project-related information. In this way, the City will have access to project-related information in one easy-to-access location without having to expend the time and expense of maintaining their own project filing system. To facilitate a streamlined approach to administering disaster grant programs, Tetra Tech has configured the RecoveryTrac™ system to organize and manage data and documentation associated with each of the programmatic areas. Furthermore, RecoveryTrac™ directly interfaces with FEMA Grants Manager/Grants Portal (GM/GP) allowing for seamless transfer of documentation from subgrantee to FEMA.

Tetra Tech has built a major business around understanding federal grant programs and appropriations and then building SOPs, staffing, and software tools around those programs to achieve success for our clients. We are uniquely familiar with the procurement and documentation requirements that these federal programs require. Tetra Tech has standard SOPs, trained staff, and custom software applications that have been refined to capture, track, and report on expenditures in accordance with state and federal guidelines. Our staff understands the timelines that they are required to provide documentation, and conversely, the timelines that state and federal agencies are required to respond as well. We have already assisted several clients, including the City of Philadelphia, in completing interim reports as required by U.S. Treasury.

Documentation and Reporting Services

Service Offering	Description
FEMA Reimbursement Technical Assistance Consulting	Tetra Tech's FEMA reimbursement technical assistance consulting services involve providing guidance and technical assistance for project applications and programs for disaster reimbursement related to response and recovery efforts on behalf of our clients.
FEMA Compliance Monitoring and Audit Oversight	Tetra Tech's grant administrators document eligible work in the field and organize such documentation in an audit-ready format for future review. This includes FEMA guidance requiring that grantees or subgrantees monitor the expenditure of funds and document such expenditures in a manner that will satisfy regulatory audits in the future.
Grant Application Development and Administration	Tetra Tech provides grant application development and administration, which involves providing grant program specialists to assist with the time-consuming process of gathering data and information required to develop grant applications to various agencies and programs.
Financial Advisory	Tetra Tech provides financial advisory services involving the development of program budgets to provide transparency to grant recipients relating to the local cost share, the financial burden, and obligations for program participation.
Data & Documentation Management	Tetra Tech provides data and documentation management by storing grant-related data in a manner that provides efficient recall and review during closeout and auditing.
Contractor Invoice Reconciliation	Tetra Tech assists clients with contractor invoice reconciliation, which involves ensuring accurate payment to contractors and assigning incurred costs to funding sources to minimize local cost-share.
Regulatory Compliance Monitoring	Tetra Tech provides regulatory compliance monitoring by documenting proper regulatory compliance to maximize reimbursement and to avoid fines and site shutdowns, which slow the recovery process.

Service Offering	Description
Project Scoping	Tetra Tech's grant reimbursement team can create scoping documents that involve developing scopes of work for grant funding projects, using key terminology, and highlighting awareness of historical precedence, which maximizes grant funding opportunity.
Direct Administrative Costs (DAC) Monitoring	Tetra Tech's proprietary monitoring software, RecoveryTrac™, will allow the City to monitor the amount and ratio of DAC by individual project.
Grant Closeout	Tetra Tech assists clients years after a disaster by providing closeout services to a grant recipient. This includes developing a closeout package that is organized to satisfy grant closeout and auditing.

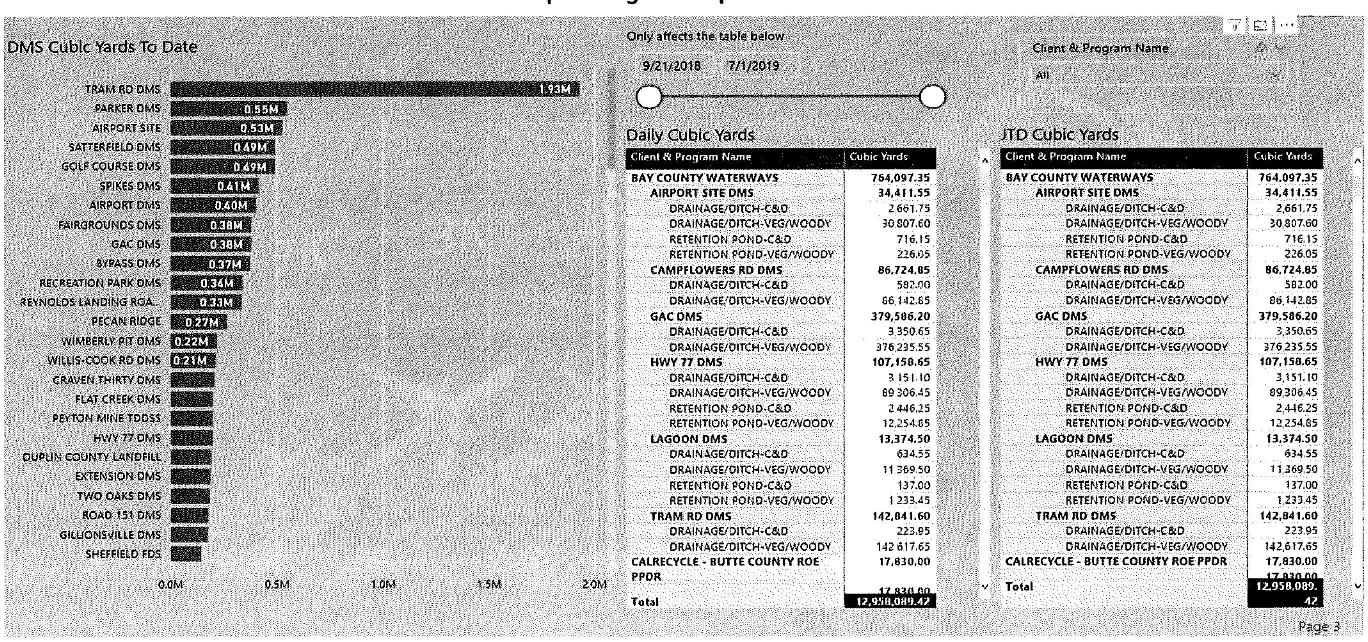
Dashboard Reporting

Tetra Tech will tailor the RecoveryTrac™ Project Workflow Case Management System (CMS) to the City's needs. RecoveryTrac™ is a web-based application that provides the City with a real-time portal to the Tetra Tech team's project work. Tetra Tech will customize RecoveryTrac™ reports to meet the City's specific needs for both force account labor and contractor invoice records.

Regulatory and auditing agencies can efficiently search and review electronic project files as required, and the RecoveryTrac™ system data is exportable and allows for importation into other applications such as the FEMA GrantsPortal.

Because Tetra Tech has managed FEMA PA grant programs for clients across the country, we can anticipate the information the State and FEMA will request to review throughout the entire grant lifecycle. We have built these requirements into our SOPs and our automated system for tracking and controlling costs. We provide transparent, concise, accurate, and routine information to state and federal agencies in aggregate and disaggregate formats as requested and needed. Our proprietary software allows us to run reports in real time that show a summary of costs to present to FEMA. We can generate these reports in various formats depending on what information is being requested. Our professional and knowledgeable staff can facilitate a presentation of summaries and reports that will provide the State and FEMA the information they need to support the City.

Sample Progress Report Dashboard



Program Reports

In order for effective reporting to be achieved, key information needed for decision-making must be extracted and summarized from the large volume of data that is collected through the use of project controls processes and tools. We achieve this through a combination of reporting formats, content, data visualization, and careful analysis of the data to result in sound conclusions and recommendations.

Weekly Reports

The Tetra Tech team will prepare and submit a written report in electronic format to the City. The report will include information related to the KPIs agreed to with the City Project Management Staff during the kickoff meeting including numbers of applications, number of awards, denials, status, and the number of projects monitored and closed out.

Weekly Status Meetings

Tetra Tech's program manager will meet each week with the City to review the weekly status report and discuss any issues, concerns, or problems.

Monthly and Quarterly Progress Reports

Tetra Tech tailors our data management tool so that the review and analysis of the data and preparation of tables and graphs is as automated as possible. This approach will provide consistency and accuracy to our reporting and give the City staff the opportunity to review the data and provide their insights to make the reports more meaningful from a project delivery viewpoint.

In the development of our reports, the Tetra Tech team will apply proven principles, including:

- Focus on the core essentials of the program; avoid trying to discuss all aspects
- Maintain a future orientation; concentrate on where the program is going
- Be concise; limit the total number of pages
- Present information in graphs and tables as opposed to narrative
- Provide well-written and engaging narratives
- Employ standard milestones throughout for consistency in reporting
- Avoid unnecessary details; references can be provided for supporting documentation
- Issue the report in a timely manner
- Fully validate and cross-check all data

Annual Performance Reports

We understand that the purpose of the Annual Performance Report is to provide a concise and insightful summary of progress that is suitable for executive-level review and potentially wider dissemination. The format will be provided to the City for early review and comment.

Final Report

As the final deliverable provided by the Tetra Tech team, the Final Report will capture the lessons learned and serve as a final accounting of the performance in program delivery. The Tetra Tech team will begin the process of Final Report documentation before the end of the contract period to deliver a well-organized and insightful document that could serve as a roadmap for future successful projects. This approach is consistent with our "deliver with the end in mind" approach to program management.

Official Correspondence

Tetra Tech will work with the City and department personnel to prepare technical or policy memorandums, official e-mail or letter correspondence to agencies such as FEMA, Cal OES or external parties – such as critical issues such as audit findings, requests for cost-share adjustments, identification of critical facilities, extension requests, PW eligibility determinations, or progress on a specific scope of work.

Scope of Project: ARPA and Similar Assistance Programs

ARPA is transformative legislation for state and local governments. The economic stimulus bill provides over $1.9 trillion in recovery funding across a variety of programs. **ARPA represents once-in-a-generation funding, intended to deliver immediate and direct relief to families impacted by the COVID-19 pandemic, address a multitude of socio-economic issues, and finance infrastructure and housing improvements across the United States.** This includes response to the public health emergency with respect to COVID-19 or its negative economic impacts, including households, small businesses, and nonprofits, or impacted industries such as tourism, travel, and hospitality.

What is included?

The ARPA established the Coronavirus State and Local Fiscal Recovery Funds, designed to deliver over $350 billion to state, local, territorial, and Tribal governments to bolster their response to the COVID-19 emergency and its economic impacts. This funding is much needed support to:

- Support urgent COVID-19 response efforts to continue to decrease spread of the virus and bring the pandemic under control
- Replace lost public sector revenue to strengthen support for vital public services and help retain jobs
- Support immediate economic stabilization for households and businesses
- Address systemic public health and economic challenges that have contributed to the inequal impact of the pandemic on certain populations

To respond to "**negative economic impacts**" AND to aid **impacted industries**

To provide **premium pay** and grants to essential workers

To address **budget shortfalls** stemming from the pandemic

To make necessary investments in **water, sewer**, or **broadband** infrastructure.

Local Fiscal Recovery Fund (LFRF)

Through the LFRF, the City is slated to ultimately received approximately $153.35 million dollars over the two tranches. Tetra Tech will guide the city in strategically planning for and efficiently utilizing these funds to aid in whole of community recovery from the Pandemic.

Complicating Factors: Use of ARPA Local Fiscal Recovery Funding

Fast Moving

Registration for access to funds OPEN NOW

Short/Long Term Spend

Pressure to spend vs. long term efficient use

Broad Eligibility

Diverse portfolio of eligible projects

New Program

Ever-changing eligibility & reporting requirements

What programs are eligible?

Based on review of current guidance programs funded by these LFRF dollars must prove the following:

- Support public health expenditures, by funding COVID-19 mitigation efforts, medical expenses, behavioral healthcare, and certain public health and safety staff
- Address negative economic impacts caused by the public health emergency, including economic harms to workers, households, small businesses, impacted industries, and the public sector
- Replace lost public sector revenue, using this funding to provide government services to the extent of the reduction in revenue experienced due to the pandemic
- Provide premium pay for essential workers, offering additional support to those who have borne and will bear the greatest health risks because of their service in critical infrastructure sectors
- Invest in water, sewer, and broadband infrastructure, making necessary investments to improve access to clean drinking water, support vital wastewater and stormwater infrastructure, and to expand access to broadband internet.

Potential Programs

Services and programs to contain and mitigate the spread of COVID-19, including:

- Vaccination programs
- Medical expenses
- Testing
- Contact tracing
- Isolation or quarantine
- PPE purchases
- Support for vulnerable populations to access medical or public health services
- Public health surveillance (e.g., monitoring for variants)
- Enforcement of public health orders
- Public communication efforts
- Enhancement of healthcare capacity, including alternative care facilities
- Support for prevention, mitigation, or other services in congregate living facilities and schools
- Enhancement of public health data systems
- Capital investments in public facilities to meet pandemic operational needs
- Ventilation improvements in key settings like healthcare facilities

Replacement of Lost Revenue: Recipients may use these funds to replace lost revenue. Treasury's Interim Final Rule establishes a methodology that can be used to calculate its reduction in revenue. Once a shortfall in revenue is identified, recipients will have broad latitude to use this funding to support government services, up to this amount of lost revenue.

Other Program Areas:

- Addressing health disparities and the social determinants of health, through funding for community health workers, public benefits navigators, remediation of lead hazards, and community violence intervention programs
- Investments in housing and neighborhoods, such as services to address individuals experiencing homelessness, affordable housing development, housing vouchers, and residential counseling and housing navigation assistance to facilitate moves to neighborhoods with high economic opportunity
- Addressing educational disparities through new or expanded early learning services, providing additional resources to high-poverty school districts, and offering educational services like tutoring or afterschool programs as well as services to address social, emotional, and mental health needs
- Promoting healthy childhood environments, including new or expanded high quality childcare, home visiting programs for families with young children, and enhanced services for child welfare-involved families and foster youth
- Assistance to homeowners and renters (so long as not duplicative of other programs)
- Assistance to restaurants and shuttered venue operators
- Provide grants to eligible employers that have eligible workers who perform essential work or by providing premium pay to eligible workers that are performing essential work. "Premium pay" means an additional amount up to $13 per hour that is paid to an eligible worker for work during the COVID-19 pandemic. The bill imposes a cap of $25,000 for any single eligible worker.
- Replacement of lost revenue
- Make necessary investments in water, wastewater, or broadband infrastructure.

Proposed Solutions

Given the complexity of this project and potential expansive nature of ARPA programs, it is critical to have a well-developed program management approach in place from the outset of the project from Initiation to Closeout. Our proposed approach to optimize City APRA programs consists of the following steps:

1. Develop a shared understanding of the strategy and the resulting goals and objectives for the project.
2. Define and formalize specific roles for the team and identifying gaps and overlaps in program design.
3. Establish specific, measurable Key Performance Indicators (KPIs) for the development and maturity of the project that when met will demonstrate successful accomplishment of the strategic goals and objectives. Establish a tracking dashboard to communicate progress.
4. Measure progress and redirect actions to continuously improve benefits and efficiency.
5. Create a feedback loop that will enable the team to flex and adjust to evolving strategy.
6. **Maintaining the project schedule is paramount to success.** Tetra Tech understands the requirements placed on the City as defined by highly complex and changing federal law, regulations, and ARPA guidance. Tetra Tech is experienced in providing the level of staff augmentation needed to administer a compliant program within cost and schedule. Tetra Tech will work closely with the City to identify and mitigate potential schedule risks and provide solutions and amendments to the work plan as necessary by drawing from our experience on similar assignments.
7. **Proactive management is required.** Upon award, support from our Program Manager and project staff will be provided to begin the Kickoff Phase as detailed below for a rapid and efficient project start. We understand that proactive management at each step will be needed to keep the project on schedule. Tetra Tech has worked with or within the key ARPA stakeholder agencies in the past and have the experience that will be required to maintain schedule and quality control.

Our program management system enables us to identify and leverage efficiencies learned from one task to all other similar tasks, thus resulting in continuous improvement through the phases and options. We will focus on completion of tasks and analysis that are on the critical path to sound decision-making regarding the risks and opportunities associated with each project phase to result in the most cost-effective use of any Administrative of Management Cost dollars and ARPA funds that may be applied.

Program Kickoff

Tetra Tech is prepared to begin work immediately upon Notice to Proceed from the City. Tetra Tech has an established project team that is prepared to engage with the City in a combination of settings either on-site or through remote platforms such as Microsoft Teams, Cisco WebEx, Zoom, etc.

As an initial step upon Notice to Proceed, we will host a kickoff meeting between the Tetra Tech team (composed of senior Tetra Tech staff, project personnel from partnering agencies, and City staff. During the project initiation meeting, the Tetra Tech team will review the project's goals, objectives, timeline, and deliverables. Understanding that continuous and coordinated communication with the City staff is essential for the success of this project, our project management team will establish a communication protocol with the City at the project initiation meeting to develop a proactive working relationship and promote frequent information exchange.

Topics to be discussed in the kickoff meeting and memorialized in a project work plan will include the following:

- Program administration requirements and processes
- Review of potential programs and program prioritization
- Organizational reporting among staff from Tetra Tech and the City
- Timeline of key events (e.g., assignment of Tetra Tech staff, timing for initial meetings, reporting schedules, etc.)
- Contact information for key Tetra Tech, City, and other agency staff
- Reporting and information requirements of Tetra Tech's work efforts and progress to the City
- Templates of critical forms to provide consistency across the program
- Process flow and approvals of documents between Tetra Tech and the City
- Identifying protocols to track and resolve issues or problems
- Information to be included in Tetra Tech's status reports to the City regarding recent project activity
- Maintenance of the status reports in an easy-to-access location for the parties to review
- Other information as specified by the City

Needs Assessment and Program Design

Our project team will conduct an assessment to thoroughly understand the City's priorities for ARPA programs. This review includes:

- Identifying losses the City experienced in revenue and any additional projected shortfalls
- Identifying the disproportionate impacts to communities within the City and tailoring programs to address such impacts
- Helping businesses identify the variety of funds available to them through the APRA, and filling any remaining gaps
- Working with the larger private sector to help alleviate negative impacts of Covid-19 on key industries or essential workers
- Working with the City to fund water and sewer initiatives or identify new opportunities
- Research exiting City plans and priorities and help maximize the use of funding available for broadband projects in conjunction with other ARPA funding to FCC and other federal cognizant agencies

Throughout this process, Tetra Tech will work closely with the City to design and deliver a program that meets the program requirements with proven processes and procedures for similar federal grant programs. We will also work with the City to outline the details of administering the program based on the City's needs.

Project Work Plan

After the programs have been identified and agreed, the Tetra Tech team will develop a project work plan detailing the following:

- Project method breakdown, sequence, and plan
- Project tasks and deliverables
- Project timeline and deliverable dates
- Responsibilities and organizational and reporting relationships of the Tetra Tech team to the City

Tetra Tech will submit the project work plan to the City for review and approval.

Implementation Plan for Procedures and Compliance

Following the assessment of the City's needs, Tetra Tech will work with City stakeholders to establish an Implementation Plan along with SOPs for critical program elements, including financial procedures and compliance.

We have combed the ARPA guidance and have developed template SOPs to be rapidly updated and implemented for our clients across a range of program types. We can quickly customize our templates to meet the City's program and meet ARPA documentation requirements. These documents will be published, shared, and made available via online collaboration spaces to keep team members aligned throughout project execution.

Financial Procedures

We anticipate that ARPA will evolve, and program requirements will change as supplemental guidance is released. Our team is prepared for this scenario and is building our systems to quickly adapt to financial and documentation requirements.

SOP Updates

As the program evolves and new program requirements and guidance are released, we will modify programmatic SOPs and other procedures to mitigate risk of noncompliance. We anticipate that subsequent guidance document(s) will be issued to further clarify the program.

Examples of supplemental requirements include GrantSolutions requirements for quarterly reporting, interim reports, and the U.S. Treasury Office of Inspector General (OIG) auditor reviews. Our team will coordinate with the City to adequately track and monitor the financial recording, disbursement, and reporting procedures.

Principles of Compliance

Tetra Tech's compliance program is built around four primary principles. Our strict adherence to these principles results in projects progressing smoothly, on schedule, and on budget.

- **Staffing, Training, and Development.** We staff the project with personnel who are well qualified and trained to perform the work at hand, including a strong mix of senior and junior personnel (depending on the task requested).
- **Standard Operating Procedures.** SOPs are the foundation of Tetra Tech's compliance activities. We have developed our processes to allow consistent grant management activities and allow for new staff to quickly be integrated into a program.
- **Quality Audits.** Quality audits are performed by an objective senior quality control manager who is not directly associated with the project. Elements of the audit include confirming that the proper staff are assigned to the project, key risk items are identified and mitigated, and SOPs have been implemented for consistency and quality.
- **Senior Management Oversight.** As part of this process, our senior personnel will review and report on project activity to the City to confirm that work is progressing according to the agreed standards and timelines.

Program Management

Tetra Tech will work side by side with the City program management team throughout the project management lifecycle to direct the project team and deliver the intended level of service. Tetra Tech will not only make available the firm's resources, but also its project management processes and tools to monitor and control the project.

As Tetra Tech executes the Project Management Plan, Tetra Tech will set up tracking systems, conduct status meetings, and update the project schedules as deliverables are submitted or delays from the process are presented. At each step, Tetra Tech will ensure that the City is informed and provided the information and options available to proceed in the most advantageous and expeditious means available.

Performance and Data-Driven Decision-Making

The power of using KPIs is that they provide a simple means of quantifying goals and objectives in a few simple terms that can then be used to make decisions. However, it is critical that the reporting of the KPIs is consistent and accurate. The KPIs must be reliable and consistently updated in order to make effective decisions.

Once the KPIs are established, then the sources of data must be identified. Ideally and as a goal, the datasets should be integrated such that the collection, validation, cleansing, and analytics can become as automated as possible. In the beginning, the process can be performed manually with layers of QA/QC to ensure that the data analysis can be relied upon for decision-making.

Quality Management

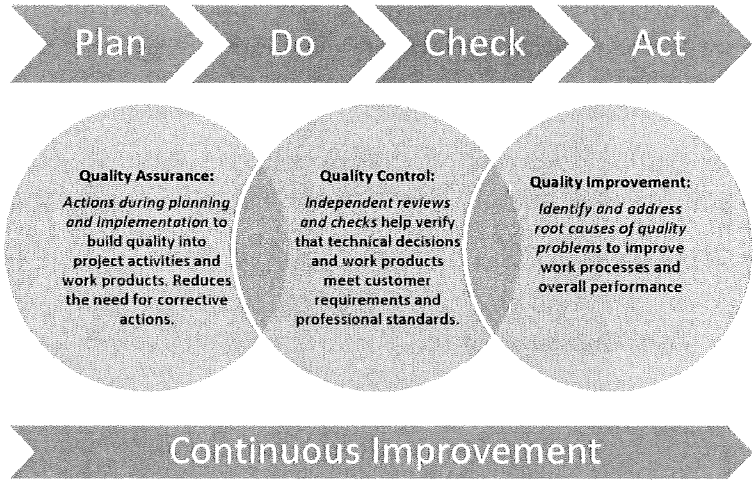
Tetra Tech has an outstanding record of responsive, timely, high-quality deliverables exceeding our clients' expectations. Tetra Tech will customize and implement a robust quality control and quality assurance (QA/QC) program for the City across all of the services areas to identify any issues with compliance in real time and work collaboratively with our City partners to resolve them.

All members of our staff are responsible for quality and are expected to follow available guidance (e.g., regulatory requirements, review guidance) to ensure the quality of their work products.

Deliverable-based QA/QC. Each deliverable produced by Tetra Tech undergoes a rigorous technical review and approval by qualified professional(s) other than the originator(s) to ensure concepts, assumptions, features, methods, analyses, and details are appropriate, complete, fully coordinated, and correct; results and recommendations are reasonable, within policy guidelines, and supported in the deliverable; and deliverables are in compliance with plans, policy, guidance, and standards with deviations appropriately identified and properly approved.

Holistic QA/QC. Tetra Tech's overarching QA/QC process will complement and enhance our deliverables-based procedures. To accomplish this, Tetra Tech's Quality Control Monitor will provide direction and guidance to the Program Manager, coordinators, ARPA technical assistance liaisons, technical reviewers, and the other personnel who are completing the work assignments.

Establishing Expectations. Tetra Tech will work with the City in the program design phase to establish mutually acceptable quality requirements. Tetra Tech will also verify the City's needs, expectations, and quality requirements as work progresses. When appropriate, the Quality Control Monitor may develop program-specific quality plans to help meet the City's requirements for a particular service area. Additional QA/QC activities may include conducting quality audits and assessments of our activities with City staff and identifying quality improvement opportunities.



These strategies are performed throughout the duration of the project and ensure the appropriate quality standards and operational definitions are used to facilitate the continual improvement of quality processes. Our quality system applies the fundamental principles of the Plan-Do-Check-Act model of continuous improvement.

Although projects rarely go exactly as planned, by identifying the important activities and major milestones, we are better prepared so that projects will be successfully executed even when schedule changes occur.

Acceptance of Deliverables

Tetra Tech will work with the City to confirm that criteria for project deliverables established in advance as well as the standard of performance identified in the Kickoff Phase has been met and full acceptance of the project deliverables is possible. Tetra Tech understands that it is imperative that deliverables be accepted and compliant to support ARPA compliance.

Monitoring/Controlling

Tetra Tech dashboards allow for access and transparency in monitoring and controlling the project work, including constant validation of the scope, adherence to the schedule and associated costs, progress and effectiveness of quality control measures, and overall project team performance and activities. We continually monitor our operation to mitigate risks to the project

Progress Report Dashboard. The Tetra Tech team will develop executive-level project status reports according to the requirements collected from the City, providing a dashboard summary of work performed and real-time performance metrics. Use of these executive-level status reports is important to keep all parties informed of ongoing work efforts in the field and to address any issues that may arise so they can be resolved quickly rather than becoming a systemic problem. We are strong believers in regular and frequent communication to achieve superior project results and as a way to keep disaster management projects on track.

Communication is especially important if staff turnover occurs by our federal partners assigned to the City over the course of the disaster recovery effort. The Tetra Tech team will document the work that is completed weekly and provide minutes on all funding agency and City meetings and other work activities. This documentation is vitally important in establishing a clear record of approvals and signoffs as staff changes occur over the duration of the project. The Tetra Tech team will submit the weekly project status reports of these data as well as a snapshot of the executive-level project status report to the City.

Tetra Tech diligently measures project progression and performance to ensure scope tasks are conducted in accordance with the Project Management Plan. The Tetra Tech Project Manager will continue to monitor KPIs as described to determine if the project is on track. Tetra Tech will continually monitor project objectives to confirm that the quality of deliverables, effort, and cost are in alignment and to verify that project performance is tracking appropriately. If there are any issues identified, the Tetra Tech Program Manager will adjust the schedule and resources to ensure the project remains on track, seeking approval from the State where necessary.

Financial and Schedule Management

During the program initiation phase, the master schedule and budget baseline define projects to a common level through the definition of the WBS. As projects advance through the delivery lifecycle, the master schedule will be updated to reflect the additional scope and schedule details or adjusted when unforeseen obstacles arise.

The Tetra Tech team will control the master schedule with input from all stakeholders and will analyze impacts from individual projects or activities programmatically. We have extensive experience in all aspects of project scheduling for many different project delivery methodologies. Our project controls professionals bring decades of scheduling experience to this contract and are fluent in a full range of software applications. The master schedule will:

- Provide a logical, structured, and feasible timeline for completing the program within the specified time highlighting compliance requirement.
- Identify the critical path from kickoff through final completion and closeout emphasizing dates for key deliverables submittal.
- Assist the program team in monitoring and measuring the program's progress, focusing on early identification and mitigation of variances.

The program master schedule progress and budget performance will be updated on a regular basis throughout the life of the project. Monthly, the Tetra Tech Project Manager will perform the following reviews:

- **Program Schedule Review:** As part of the monitoring and control processes, the Tetra Tech Program Manager will review all projects included in the master schedule on a monthly basis and provide any updates or adjustments to the City program management team.
- **Budget Performance Review:** The program budget will be monitored and provided to the City Project Manager, including approved Task Order amounts, actual costs, forecasted costs, and average spend by task. Any trending above or below benchmarks will be brought to the attention of the City Program Manager and remedy or redirection will be discussed.
- **Disbursement Tracking:** Tetra Tech will track, review, verify, and approve funds distributed as requested by the City. The Tetra Tech team will be responsible for the steps of verification of costs and reconciliation.
- **Monitor and Report Overall Program Costs:** A key role of the Tetra Tech Program Manager is financial management. Accurate and timely reporting on actual costs, forecasting of accrued costs, and comparison to percentage of work completed and schedule are integral to effective program management.

Public Information

With the high-profile and high-priority nature of ARPA programs, public information campaigns are a critical element of the City's ARPA approach. Tetra Tech will provide template press releases for the City to share transparent, informative, and helpful details with the community. This information will include program overviews, important dates, and contact information for additional information.

Program Launch Press Coverage

Program launch is a critical time to broadcast progress. In mobilizing similar outreach strategies, Tetra Tech has found press releases, news coverage, and communications by elected officials to be invaluable in educating a broad audience. At this early stage, promoting the program through traditional news media kick-starts awareness about ARPA programs and priorities.

- **Press Releases.** Tetra Tech crafts press releases to be published across news outlets, including general information about the program such as launch date and highlights of deliverables or impacts.
- **News Coverage.** Local news outlets have been critical partners to provide updates to the public at program outset. Whether through televised coverage via digital media, local news outlets share program details with their existing, vast audiences and can help inform City communities about upcoming programs.
- **Elected Officials.** We target press conferences and announcements from the highest levels of State leadership.

Grant Program Compliance

Tetra Tech is an industry expert in federal grant program documentation. This is our specialty, and we have provided this service to our clients on a myriad of federal programs over the last 20 years. We scour program guidance to create a program documentation process that is implemented at the onset of the program. Quality assurance and quality control against program documentation requirements is our standard. We reach out to our network of federal partners to stay ahead of program changes and confirm language of the policy guides. We have conducted a legal review of our eligibility and reporting procedure to comply with ARPA guidance.

Our procedures are designed with the audit in mind.

We know federal agencies routinely and randomly review our clients' programs. We maintain our documentation process so that files are audit-ready.

While the framework for this program is broad, the need for compliance is very structured through the Treasury Office of the Inspector General, Pandemic Response Accountability Committee (PRAC) and their released Guidance documents, FAQs, Recipient Guides and Reporting and Recordkeeping Requirements.

Ongoing Training

Tetra Tech hosts daily briefings with project teams to discuss recent program changes and specific fraud prevention measures. These daily communications provide an opportunity for staff to raise any potential issues and maintain consistency across the program. Tetra Tech proactively mitigates risk by escalating potential issues to QA/QC staff, project leadership, and City stakeholders as appropriate.

Reporting

Given our extensive grant management work, we have embraced technology and routinely design and implement complex data collection and reporting tools. Tetra Tech can design and implement data collection technologies that allow for real-time tracking and dashboard reporting for the City. These typically include:

- **Periodic Reports.** At intervals determined appropriate by the City (generally weekly, monthly, or quarterly), we will submit reports summarizing activities during the reporting period to include production, quality, staffing, or any other metric or criteria deemed necessary.
- **Data Management.** Tetra Tech customizes data management tools so that the review and analysis of the data and preparation of tables and graphs are as automated as possible.
- **Final Reports.** The final report will capture the lessons learned and serve as a final accounting of the performance in program delivery.

Each week, Tetra Tech will provide a project status report to the City, which will include the payment recommendation report, performance metrics of call takers and eligibility reviewers, and any special case reviews. The special case reviews will be for situations such as imminent eviction or cut-offs, fraud detection, or eligible applicants with missing documentation.

Daily Dashboard

Our reporting dashboard provides real-time information about the health of the program. The City can log on and immediately see the information needed for decision-making through the use of meaningful leading KPIs at relevant frequencies. Leading KPIs include quantified and prioritized risks; comparison of planned, projected, and actual costs and percentage complete; and early identification of potential project issues. The system provides easily accessible data that can be share with stakeholders.

Weekly Status Reports

We are a data-driven company. We collect project-related information to serve our staff so that our program managers can make informed decisions about their projects based on real data. We also know how important accurate and concise information is to our clients so they can inform stakeholders on the status of the program. As such, Tetra Tech will provide a weekly report to the City with a variety of project-related information, including:

- Staff performance-related data
- Project performance-related data
- Summary of totals of project metrics
- Key issues, gaps, and critical path items

Final Report and Documentation Transfer

As the final deliverable provided by the Tetra Tech team, the final report will capture the lessons learned and serve as a final accounting of the performance in program delivery. The Tetra Tech team will begin compiling the documentation for the final report before the end of the contract period. This will allow the team to deliver a well-organized and insightful document that could serve as a roadmap for future successful projects. This approach is consistent with our "deliver with the end in mind" approach to program management. Tetra Tech is prepared to assist the City with the transfer of documentation to City servers or cloud-based data storage for simple recall and access during U.S. Treasury OIG audits.

Closeout Documents

In addition to ARPA reporting requirements, we will also archive project records, capture lessons learned, and issue the final report. Throughout this phase, our team will provide ongoing operations and maintenance of the real-time electronic reporting system and attend routine program coordination and briefing meetings. This includes:

1. **Formal Closure.** Deliverables are finalized, and the project is declared complete.
2. **Funding.** The project's final budget is confirmed, and excess funding is reported.
3. **Project Files.** Implementation Plan, SOPs, project work plan, reports, invoices, and other relevant project documentation will be downloaded and provided to the City.
4. **Liabilities.** Warranties, insurance coverage, and bonds are established and agreed to.
5. **Release of Resources.** The project team, equipment, and other resources are demobilized.
6. **Lessons Learned.** Documentation of lessons learned during the project are provided in a final report to the City.

9.1 Primary Contractor Information

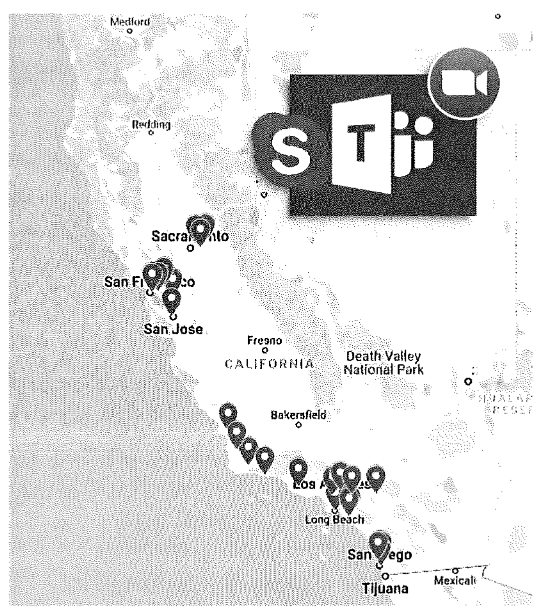
Tetra Tech, Inc. (Tetra Tech) is deeply qualified to provide ARPA support to our clients, with specialized expertise in grant management and proven performance in helping state and local governments respond to and recover from nearly every major emergency response in the United States within the past 25 years. We offer the City unmatched experience and expertise in managing federally-funded programs in response to the COVID-19 pandemic.

Company Ownership

Tetra Tech became a publicly traded company in 1991. Tetra Tech, Inc. has incorporated in the State of Delaware in 1988. Tetra Tech is currently registered with the State of California Secretary of State and has been since 1988.

Location of Offices

Tetra Tech maintains 450 offices worldwide. This includes 216 offices in the United States, and 28 in the state of California. Our disaster recovery headquarters is located in Maitland, Florida. Our clients across the country are supported by local staff whenever possible, and our service is supplemented with remote support from employees based in regional disaster recovery hubs (in Texas, Louisiana, California, and more) and full-time remote staff.



Tetra Tech is prepared to deploy both on-site and remote staff support, as approved by the City. Our teams have been working on over 20+ disasters since COVID-19 impacted the U.S. and have created workflows and processes to ensure that our teams are connected with our clients and efficiently creating best-in-class deliverables.

Our teams are able to utilize the most commonly used applications including MS Teams, Zoom and Skype to stay connected to our clients. While face to face contact with our subrecipients we support cannot be replaced, our ability to serve our clients is our number one goal – across the table or across the screen.

Number and Location of Employees

Nationwide, Tetra Tech employs more than 10,000 associates, including more than 1,500 in the State of California. Tetra Tech has 6 part-time employees and 16 full-time employees residing in Long Beach.

The Tetra Tech disaster recovery team consists of experienced emergency managers, disaster preparedness specialists, engineers, surveyors, and hazardous waste technicians with hands-on management experience in recent disasters and emergencies. The disaster recovery division is supported by more than 250 full-time employees, who are available to support the City as detailed in the section above: Location of Offices.

Contract Point of Contact

Technical Representative
Ms. Allison McLeary
Director – Disaster Recovery Programs
2301 Lucien Way, Suite 120
Maitland, FL 32751
Mobile: (225) 937-2384
allison.mcleary@tetratech.com

Contractual Representative
Ms. Betty Kamara
Contracts Administrator
2301 Lucien Way, Suite 120
Maitland, FL 32751
Mobile: (407) 803-2551
betty.kamara@tetratech.com

Background and History

Tetra Tech is one of the premier firms in the nation within the field of disaster management, with contracts in such diverse areas as disaster recovery; community resilience; grant management; and emergency management, planning, and preparedness.

55	25	$1.7B	$6B	300+
Years in Business	Years in Disaster Recovery	COVID Funds Managed	Reimbursed to Clients	Clients Nationwide

Our core principles form the underpinning of how we work together to serve our clients:

- **Service:** Tetra Tech puts its clients first. We listen better to understand our clients' needs and deliver smart, cost-effective solutions that meet those needs.
- **Value:** Tetra Tech takes on our clients' problems as if they were our own. We develop and implement real-world solutions that are cost-effective, efficient, and practical.
- **Excellence:** Tetra Tech brings superior technical capability, disciplined project management, and excellence in safety and quality to all of our work.
- **Opportunity:** We empower an inclusive and diverse workforce that includes leading experts in disaster recovery. Our entrepreneurial nature and commitment to success provide challenges and opportunities for all of our associates.

The Tetra Tech team's primary mission will be to aid the City with eligibility, administration, and compliance issues surrounding ARPA allocations. Our team has direct experience with the following grant programs:

- U.S. Treasury Emergency Rental Assistance (ERA)
- Coronavirus Relief Fund (CRF)
- Coronavirus Aid, Relief, and Economic Security (CARES) Act
- American Rescue Plan Act (ARPA)
- HUD CDBG-CV
- HUD CDBG-DR
- FEMA PA Program (including Section 406 mitigation and Section 428 alternative procedures program)
- FEMA Hazard Mitigation Grant Program (HMGP) (Section 404 mitigation)
- FEMA Flood Mitigation Assistance Program (FMA)
- Pre-Disaster Mitigation (PDM)
- FHWA-ER Program
- FHWA Transportation Investment Generating Economic Recovery Grant
- Natural Resources Conservation Service (NRCS) Emergency Watershed Protection

Tetra Tech is the Ideal Services Provider for ARPA Programs

State and local governments need a "turnkey provider" that can perform an all-inclusive approach, and with a national reputation for quality, reliability, and capacity to handle a variety of services. Tetra Tech has decades of experience in upholding regulatory compliance, which is imperative for these large, complex programs. In addition to the management consulting and grant management required, **as a full-service engineering firm, Tetra Tech is able to take on the Water, Sewer, and Broadband projects that are funded by ARPA.**

Tetra Tech has formed a COVID-19 Policy Group comprised of subject matter experts within our organization and partners, focused on reviewing and analyzing federal funding passed to state, tribal and local governments through new and existing programs for economic, whole community recovery.

New information is frequently being released by the federal government in the way of additional funding, guidance documents, Frequently Asked Questions (FAQ).

Multidisciplinary Approach

Tetra Tech provides services across multiple disciplines to optimize ARPA funding. Some of these services include:

- Project development, design, and prioritization
- Modeling and analytics to inform funding decisions
- Risk assessments and compliance planning
- Program management and grant management
- Case management
- Infrastructure engineering
- Environmental assessments
- Long-range planning for funding opportunities

History of Similar Services

Tetra Tech has supported clients in recovery from nearly every major disaster in the last 25 years. We are a leading provider of specialized management consulting and technical services. We leverage our industry-leading operating procedures, talented and specialized staff, and community relationships to help our clients administer compliant and effective federally funded programs. **We have supported our clients through the reimbursement of more than $6 billion in federal funds, including FEMA, HUD, FHWA, and other federally-funded grant programs.**

Since the start of the COVID-19 pandemic, we have assisted our clients with managing **more than $1.7 billion in COVID-related funds to support recovery across a variety of federal funding programs including FEMA Public Assistance, U.S. Treasury governed Emergency Rental Assistance, as well as unique Coronavirus Relief Fund recipient-specific programs.**

Resumes of Key Staff

Our team brings together a unique combination of expertise from some of the largest and most complex disasters in U.S. history. Our team has in-depth knowledge of funding sources, including the Coronavirus Relief Fund (CRF), Coronavirus Aid, Relief, and Economic Security (CARES) Act, American Rescue Plan Act (ARPA), HUD Community Development Block Grant-Disaster Recovery (CDBG-DR), FEMA Public Assistance (PA) and Individual Assistance (IA) Programs, Hazard Mitigation Grant Program (HMGP), and many others.

Tetra Tech's project team possesses the technical and functional skills and knowledge to direct all aspects of FEMA and ARPA program design, implementation, and closeout. Our experience in program management includes selecting, developing, integrating, and deploying program management systems, tools, and processes to best support City COVID-19 recovery programs.

Tetra Tech technical advisors have worked with, and in some cases, have served as employees of the federal funding agencies that will be providing federal grant support. The individuals selected for this project have national expertise from having worked on most of the major disasters in the past decade. As a result, our staff has an in-depth understanding of how disaster response and recovery works.

We have provided brief introductions for our team in the following pages. **Resumes for key staff have been provided as an appendix to this document.**

Program Manager Allison McLeary

Ms. McLeary is an experienced emergency response and recovery executive with a demonstrated history of building meaningful relationships across all levels of government over the past 18 years. As former Recovery Bureau Chief of the Florida Division of Emergency Management (FDEM), she administered approximately $10 Billion in FEMA PA grant programming for the State of Florida, in addition to developing and implementing a strategy for $1.275 billion in CARES/CRF funding to 55 medium and small counties. From June 2020 to February 2021, the FDEM administered County government CARES program paid out $1.07 billion of the $1.275 billion allocation. She is a steadfast advisor in planning for, responding to, and recovering from challenges and disasters.

Prior to her time in Florida, she served as legal counsel to the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) and other agencies in the Executive Branch of the State of Louisiana for over a decade. **As FEMA and ARPA subject matter expert and seasoned grant administrator, Ms. McLeary supports the City as a coach to optimize grant funding and programming.**

FEMA Lead Meredith Sanders

Ms. Meridith Sanders is a financial recovery and management professional with a wide range of experience throughout her 9-year career. She evaluates existing contracts for Federal Emergency Management Agency (FEMA) Public Assistance 2 CFR 200 compliance and advises accordingly to reduce risk of deobligation. Ms. Sanders successfully advocates for clients, through the draft and submission of both first and second appeals. She monitors new guidance related to disaster cost recovery and disseminates guidance to clients. She also conducts applicant timesheet review and creation of force account labor, material, and equipment summaries. Most recently, she assisted clients from Miami to Anchorage with completing FEMA Public Assistance (PA) Project Worksheets for category A-G in response to hurricanes, earthquakes, and COVID-19. Ms. Sanders has a background in business management, with experience in process management, finance, and risk management.

Financial Lead Kerri O'Dell

Ms. O'Dell serves as high-level project manager for Tetra Tech and possesses over a decade of disaster preparedness, emergency planning, and disaster response and recovery experience. Ms. O'Dell excels in delivering projects on time and within budget. She has assisted numerous local, state, and private sector businesses with active shooter assessment; emergency operations planning; continuity of operations planning (COOP); exercise design, implementation, and evaluation; and recovery planning. Ms. O'Dell is also experienced in providing disaster debris monitoring services, including mobilizing support teams; assisting with staging operations; and managing the scheduling, dispatching and logistics operations of debris cleanup for some of the nation's worst natural disasters.

In addition, Ms. O'Dell is highly knowledgeable of federal, state, and local emergency agencies and programs, as well as funding sources and reimbursement procedures, having served as project manager on several of the firm's debris monitoring and emergency management planning projects. She has also been responsible for the development of numerous disaster debris management plans (DMPs) that have been approved for the Federal Emergency Management Agency (FEMA) Public Assistance (PA) Pilot Program.

Social Programs Lead Claudia Hill

Ms. Claudia Hill is an experienced project manager with an extensive background in providing excellent case management support, financial support, and maintains the latest knowledge of the Federal Emergency Management Agency (FEMA) mitigation strategies. She has managed private, state, and federally funded grants and contracts, and prepares and processes monthly, quarterly, and annual financial reports for grant and contract sponsors.

She has a unique understanding of duplication of benefits and corresponding processes needed to assist communities in managing widespread recovery projects. Currently she is managing the implementation of multiple FEMA funded mitigation projects for communities around the United States for communities due to ongoing wildfires, tornadoes, and flooding.

Rental Assistance Lead Steve Sims

Mr. Steve Sims is a seasoned program and project manager with extensive experience in developing, operating, and closing disaster recovery grant programs for both FEMA and HUD. He has designed compliance and monitoring workflows for 110,000 subrecipients, managed over 20 client programs administering FEMA PA funding, and closed almost 100 projects for Category A, B, and C damages. Mr. Sims has also managed multiple large HUD CDBG programs by defining grant programs, hiring staff, and creating processes to efficiently disburse more than $10 billion in federal disaster recovery grant funds. Most recently, Mr. Sims has spearheaded Tetra Tech's ERAP programming, providing support to Mobile County, Alabama's $12.3 million ERAP program. Mr. Sims was selected to support this engagement due to his steadfast dedication to quality control, process improvement, and customer service in social programs. This will provide elevated support for rental assistance programs the City may pursue under ARPA funding.

Federal Program Specialist Tricia Rowan

Ms. Rowan is a grant specialist and program manager with five years of grant management experience. She has extensive experience serving Florida agencies, having worked for the Florida Governor's Office of Policy and Budget and the Florida Division of Emergency Management. She has served as contract manager for many multimillion-dollar grant management and staff augmentation contracts. She has led key initiatives, such as the implementation of the Florida Coronavirus Relief Fund (CRF) Program, overseeing more than $5.85 billion funding for state government and small and medium counties.

Ms. Rowan is extremely organized, friendly professional with a proven record of exemplary customer service and strong leadership skills. She is known for being resourceful and detail-oriented, as well as a skilled problem-solver and motivated self-starter. Ms. Rowan is highly dependable and eager to learn, with excellent time management skills and the ability to effectively multitask while remaining calm under pressure. She was selected for this project to provide insight on both FEMA and ARPA programs throughout program design, compliance monitoring, and eventual project closeout.

Senior Management Team

Jonathan Burgiel

As President of Tetra Tech's Disaster Recovery Business Unit, Mr. Burgiel manages the business operations of all disaster recovery efforts, including preparedness planning, project staffing, logistics, grant administration and agency reimbursement support, program accounting/auditing oversight, and contract negotiations. Mr. Burgiel is dedicated to helping communities plan for and recover from disasters and provide the necessary documentation to receive the maximum allowable reimbursement from federal and state emergency management agencies.

Mr. Burgiel has 30+ years of solid waste and disaster recovery experience. His disaster-related work has included serving as principal in charge of over 100 projects, helping clients throughout the country prepare for, respond to, and recover from natural and human-caused disasters. Mr. Burgiel is intimately familiar with HUD, FEMA, and Federal Highway Administration (FHWA) policies and reimbursement procedures as they relate to disaster management and recovery.

John Buri

Mr. John Buri is a director of post-disaster programs for Tetra Tech, Inc., and a member of our senior management team. Mr. Buri has a thorough understanding and practical application of industry best practices and federal guidance governing such efforts including the FEMA PA and HMA programs, 2 CFR 200, HUD CDBG-DR, ARPA, and disaster funding strategies for local and state governments. His work has represented over $3 billion in disaster-related grants across 41 disaster declarations, 17 states, and 8 FEMA regions.

Ralph Natale

Mr. Ralph Natale is the director of post-disaster programs for Tetra Tech, Inc. He leads the practice by developing programs, providing daily project support, and providing oversight and guidance to his team of project managers and projects. Mr. Natale is an expert in FEMA PA Grant Program reimbursement policies and has administered nearly 70 projects in his 13-year career. Mr. Natale has served as a principal in charge, project manager, data manager, and operations manager in response to some of the country's largest debris-generating disasters, including Hurricanes Matthew, Katrina, Ike, and Sandy.

Financial Stability

As requested in Addendum 1, financial stability support attachments have been provided at the end of this document.

9.2 Subcontractor Information

9.2.1 Does this proposal include the use of subcontractors?

_x_ Yes

___ No

Initials

Proposed Subcontractor: Postlethwaite & Netterville (P&N)

Tetra Tech has chosen to partner with Postlethwaite & Netterville (P&N) to provide accounting support for this engagement. P&N will help mitigate the audit risk in FEMA-funded projects by compiling documentation, performing reconciliation audits, and applying quality control procedures for each reimbursement request before submitting to grant administrators. P&N has experience in the design, implementation, and execution of sophisticated processes in the following areas of the claim and disbursement project life cycle: Claims Intake & Data Capture, Claims Eligibility Review/Duplication of Benefit Review, Claims Management Technology, Funds Requisition, Disbursement, and Reporting, and Recapture. P&N also provides monthly account reconciliation and reporting for federal funds pursuant to federal regulations.

Additionally, P&N also has significant experience performing audits of federal funds in accordance with Uniform Guidance (single audits). **P&N currently performs single audits for over 50 governmental and non-profit clients.** This includes funding from a variety of programs, including HUD, CDBG, HMGP, FEMA PA, and others.

Company Ownership

P&N is a corporation registered with the Louisiana Secretary of State. The firm was founded in 1949 and was incorporated in the State of Louisiana in 1991. P&N is also registered with the California Secretary of State. If requested, we would be pleased to provide proof of registration.

Location of Offices

P&N maintains offices in the following locations:

- Louisiana:
  - Baton Rouge
  - New Orleans (Metairie)
  - Lafayette
  - Gonzales
  - Donaldsonville
  - St. Francisville
- Houston, Texas
- Hattiesburg, Mississippi

P&N is also supported by remote team members in California; Oregon; Washington, D.C.; Georgia; and elsewhere throughout the country.

The P&N offices listed above serve clients throughout the country, including California.

Number and Location of Employees

P&N employs 500 associates throughout the Country, including 2 in the Los Angeles area. P&N does not have full or part time employees residing in Long Beach. To support this engagement, staff will be assigned from:

- Louisiana:

- Baton Rouge
  - New Orleans (Metairie)
  - Lafayette
- Houston, Texas:
- Remote work locations in California, Oregon, and elsewhere throughout the U.S.

Contract Point of Contact

Name: Mark Staley
Address: 8550 United Plaza Blvd., Suite 1001, Baton Rouge, LA 70809
Phone: 225-408-4464

Background and History

P&N was founded in 1949 in Baton Rouge, Louisiana. Through the years, as P&N's clients have grown, the firm and the professional services it offers have also expanded into new cities. P&N has worked with State courts, federal courts, government agencies to manage various claims and fund disbursement programs since 1999. Certified Public Accounting Firm with clients throughout the country.

With eight locations and over 500 total staff, P&N offers a deep bench of experienced accountants, financial analysts, project managers, disaster recovery specialists, grant managers, fraud analysts, and other professionals dedicated to disaster recovery programs, housing programs, and complex settlement administration. P&N offers seasoned professionals versed in the federal regulations governing disasters and federal awards, including HUD CDBG, FEMA HMGP, FEMA PA, and Uniform Guidance.

In addition to significant experience with disaster recovery services, P&N has extensive experience working with governmental entities. The firm has over 100 governmental clients and more than 80 professionals with governmental experience and training, making Governmental Services one of the firm's largest practice areas. This experience affords P&N the ability to combine an understanding of governmental operations with an objective, independent viewpoint on the public sector projects we undertake. Because of P&N's diverse governmental client base, P&N professionals understand a wide range of funding sources, nature of operations, requirements for reporting and other matters.

P&N's large program experience also extends beyond its disaster recovery experience to other large programs that require program management, reporting, and fund disbursement, including complex class action or mass tort settlements. P&N's contributions to large program management have ranged from a single, specific role, such as reporting, to the full range of program management responsibilities, including program structure, workflow implementation, rapid stand-up and scaling of facilities and teams, resource alignment, training and communication, process design and implementation, quality assurance and quality control, policy and procedures development, data and systems management, and more.

History of Similar Services

During times of disaster, P&N has helped governmental agencies, municipalities, and non-profit organizations respond and recover. P&N has led and contributed to disaster recovery projects since Hurricane Katrina struck the Gulf Coast in 2005. As such, P&N has a large team of professionals dedicated to disaster recovery projects, including a deep bench of experienced accountants, financial analysts, project managers, grant managers, disaster recovery specialists, consultants, and other team members.

P&N has direct experience providing the following services:

- Case Management
- Applicant Outreach and Support
- Performing Reconciling Audits
- Reimbursement Tracking and Reconciliation
- Closeout
- Quality Control Review Procedures
- Subrecipient Management and Support
- Financial Management and Fund Disbursement
- Eligibility
- Start-up Project Management
- Verification of Benefits/Duplication of Benefits
- Appeals
- Anti-Fraud, Waste & Abuse
- Change Order Process Management
- Training, Change Management, Communications
- Damage Assessment Quality Control
- Program level reporting
- Policy and Procedure Development and Implementation

The following is a representative list of P&N's relevant project experience:

- State of Louisiana, Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), Closeout of Stafford Act and National Flood Insurance Act (NFIA) Programs (subcontractor)
- Louisiana Division of Administration, Office of Community Development, Restore Louisiana Homeowner Assistance Program (subcontractor)
- Rebuild North Carolina Housing Recovery Program (subcontractor)
- Rebuild Florida Housing Repair & Replacement Program (subcontractor)
- Deepwater Horizon Economic Claims Center (DHECC)
- Louisiana Department of Wildlife & Fisheries – Accounting Services Related to Request for Reimbursement, Hurricane Isaac, and Mississippi River Flood
- Louisiana Department of Wildlife & Fisheries – Accounting Services Related to Request for Reimbursement Program, Deepwater Horizon Oil Spill
- ICF Emergency Management Services (ICF) and The Road Home Homeowners Assistance Program – Review of Technology Internal Controls
- City of Houston, Master Program Management (subcontractor)

Resumes of Key Staff

Resumes for P&N key staff have been provided as an appendix to this document.

Accounting Lead Laura Soileau

Laura Soileau, CIA, CISA, CPA, CFE, CRMA, CGMA, is a Director in P&N's Consulting Services Group. Laura has nearly 20 years of internal audit experience. Her practice area includes working with a variety of organizations on internal audit, internal controls, governance, risk, compliance, and fraud-related matters. Laura also has experience leading and delivering system and organization control (SOC) examinations.

Laura has extensive experience in all aspects of internal audit, including working with audit committees; leading internal audit and internal controls assessments; facilitating risk assessments for financial, operational and technology audits; coordinating with external auditors; overseeing the execution of audit plans; and communicating with senior leadership and audit committees.

Financial Stability

As requested in Addendum 1, financial stability support attachments have been provided at the end of this document.

References

Louisiana Department of Treasury - Louisiana Main Street Recovery Program (MSRP) Administration

P&N was engaged with the Louisiana Department of Treasury to serve as the program administrator for the Louisiana Main Street Recovery Program (MSRP), through which approximately $262 million was distributed to Louisiana small businesses for **eligible expenses related to the COVID-19 pandemic**. The program is being administered by the Louisiana Department of Treasury, John M. Schroder, State Treasurer.

Project Dates: June 2020 – June 2021

Client Project Manager: John M. Schroder, Louisiana State Treasurer

(225) 342-0010

P&N established a recovery office for the Program and began public outreach in July 2020. As of January 2021, the Program had processed over 34,000 applications and awarded/paid $262 million to small businesses affected by COVID-19.

P&N's scope of work on the Main Street Recovery Program included software customization that integrated applicant communications and served as a central repository of documentation, eligibility review, applicant outreach and education, duplication of benefit review, eligibility quality control, grant award determination, appeals, anti-fraud, waste, and abuse, change management and communications, and data analytics and reporting.

The MSRP was led by Mark Staley. Randy Cox and Ashley Rome served as functional team leads, leading large numbers of team members throughout the eligibility determination scope.

Fort Bend County, Texas, Emergency Rental Assistance Program

Project Dates: July 2020 – Present

Client Project Manager: Spurgeon Robinson, MPACT Strategic Consulting (Prime Contractor)

(917) 817-8692

Created in response to sudden and projected income losses to both tenants and landlords, the Emergency Rental Assistance Program (ERAP), funded under the CARES Act, makes significant funding available to assist households that are unable to pay rent, mortgage, and utilities due to the COVID-19 pandemic. $48.5 million was allocated to this program in Fort Bend County, Texas.

P&N is engaged as a subcontractor to perform Quality Assurance and Quality Control (QA/QC), review of program compliance, policy development and implementation, and other services. P&N QA/QC reviewed more than 50,000 invoice transmittals.

Laura Soileau led P&N's efforts on this engagement.

North Carolina Emergency Rental Assistance Program

Project Dates: March 2021 – Present

Client Project Manager: Jim Klinger, Finance Chief, North Carolina Office of Recovery & Resiliency

(984) 833-5397

Created in response to sudden and projected income losses to both tenants and landlords, the Emergency Rental Assistance Program (ERAP), funded under the CARES Act and American Rescue Plan Act (ARPA), makes significant funding available to assist households that are unable to pay rent, utilities, and other expenses due to the COVID-19 pandemic.

P&N is engaged as a subcontractor to provide turnkey accounting services to support the NCORR Finance and Accounting division which includes software system setup, payment approval workflow design and implementation, standard operating procedure documentation, payment processing and distribution, payment reporting, and account reconciliations.

Fulton County, Georgia, Rental Assistance Program

Project Dates: April 2021 – Present

Client Project Manager: Pamela Roshell, PhD, MSW, Deputy Chief Operating Officer, Health & Human Services Office of the County Manager

(404) 612-1243

Created in response to sudden and projected income losses to both tenants and landlords, the Emergency Rental Assistance Program (ERAP), funded under the CARES Act and American Rescue Plan Act (ARPA), makes significant funding available to assist households that are unable to pay rent, utilities, and other expenses due to the COVID-19 pandemic.

P&N is engaged to provide end to end support services, including Program Management, Case Review and Adjudication, Applicant Communications and Outreach, Training and Change Management, Process Improvement and Automation, and Business Intelligence, including Production Metrics, Data Analytics and API Integrations.

Deepwater Horizon Economic Claims Center ("Oil Spill")

Project Dates: April 2012 – December 2018

Client Project Manager: Patrick A. Juneau, Special Master, Deepwater Horizon Economic Claims Center

(337) 269-0052

The DHECC Claims Administrator Office (CAO) is responsible for overseeing the review of claims and the distribution of funds for the Deepwater Horizon class action settlement. P&N operated as a claims review vendor for the DHECC CAO for more than eight years.

P&N was approved by the United States District Court for the Eastern District of Louisiana to process business economic loss and seafood harvester claims within the Deepwater Horizon Economic and Property Damages Settlement. This is the largest class action settlement in U.S. history, with over 179,000 business claims. P&N participated in determining over $1 billion in eligible claims within the first six months of the program and approximately $10 billion to date. P&N committed a significant multi-city team of 400+ accounting and finance professionals to the ongoing effort, providing claim eligibility review, economic damages calculations, evaluate indicators of fraud, waste and abuse and resolve when necessary, and claimant communications for over 100,000 businesses and seafood harvesters with representation from 2,000+ law and accounting firms.

P&N's experience includes workflow implementation, process reengineering, District Court participation, facilities operation, systems implementation and management, human resources and change management, policy and quality control, process execution and monitoring, and stakeholder management.

Sample Client List

P&N has led and contributed to disaster recovery and economic damages programs for decades. When Hurricane Katrina struck the Gulf Coast in 2005, our team helped Louisiana and the Gulf Coast recover, and since then, we have worked on numerous large programs, including those related to many of the largest declared disasters in recent history, including:

- ✓ Louisiana Main Street Recovery COVID-19 Small Business Grant Program (2020)
- ✓ COVID-19 Rental Assistance Programs (2020 and 2021)
- ✓ Louisiana Small Business Development Center COVID-19 Funding Services (2021)
- ✓ Hurricanes Florence (2018), Harvey (2017), Irma (2017), Matthew (2016), Isaac (2012), Gustav (2008), Rita (2005), and Katrina (2005)
- ✓ Deepwater Horizon "BP" Oil Spill (2010)
- ✓ Historic Louisiana Floods (2016)
- ✓ 45+ class action settlements and legal notice programs

Emergency Rental Assistance Programs

Created in response to sudden and projected income losses to both tenants and landlords, the Emergency Rental Assistance Program (ERAP), funded under the CARES Act and American Rescue Plan Act (ARPA), makes significant funding available to assist households that are unable to pay rent, utilities, and other expenses due to the COVID-19 pandemic.

P&N is currently leading or contributing to six ERAPs, including those in:

- State of Louisiana
- State of Texas
- State of North Carolina
- Fulton County, Georgia (Atlanta area)
- Ft. Bend County, Texas (Houston area)
- A large city in the Northeast

In total, these six programs are anticipated to fund nearly $1 billion in emergency rentals dollars this year with additional funds on the way. Across these programs, P&N has responsibility for the following key functional areas: Program Design, Case Review and Adjudication, Applicant Communications and Outreach, Quality Control/AFWA, Program Management, Funds Disbursement and Tracking, Training and Change Management, Process Improvement and Automation, Software Vendor Coordination, Business Intelligence including Production Metrics, Data Analytics and API Integrations.

Subcontractor Payment Procedures

Tetra Tech utilizes an automated accounts payable processing system to process and pay vendor invoices in a timely manner. Once an invoice has been submitted, the invoice is entered into the system and routed for approvals. The automated system reduces cycle time, prevents duplicate payment requests, and increases the visibility of payment requests. Once an invoice is fully approved, payments are released according to terms specified in the subcontractor's agreement. Tetra Tech is capable of building a customized module to notify the City when payments have been released.

Tetra Tech is routinely recognized for working effectively with subcontractors, including receiving the City of Houston Goods and Services Prime Contractor of the Year Award (2019) and U.S. Agency for International Development's Office of Small and Disadvantaged Business Utilization Mentor of the Year Award (2016).

Insurance Requirements

Tetra Tech shall not allow any subcontractor to commence work until required insurance is obtained.

9.3 References

Palm Beach County, Florida

COVID-19 Coronavirus Relief Fund Grant Management

Project Dates: June 2020 - Ongoing

Client Project Manager: Sherry Brown, (561) 656-7142

Following Congress passing the $150 billion CARES Act and the establishment of the CRF, Palm Beach County, Florida, was allocated $261.2 million in funding. Tetra Tech was retained by the County to provide policy administration and compliance services in administering CRF and FEMA PA program funding within the County.

Tetra Tech assisted the County in identifying and defining eligible programs as well as providing guidance to the County on best practices for documentation. As of December 30, 2020, Tetra Tech had assisted Palm Beach County in successfully administering nearly $237 million (over 90% of their CRF allocation) through programs such as:

- **$37 million for rental and utility assistance**
- $36 million in food distribution assistance
- $80 million in small business grants
- $6 million for non-congregate sheltering
- $16 million in telecommunications/broadband improvements
- $10 million for testing (including the purchase of two new mobile testing sites)
- $4 million in nonprofit grants in a joint partnership with the Palm Beach County United Way
- $4 million in funding requests from the County's 17 municipalities
- $45 million in general government expenses, including cleaning and disinfection expenses

The Tetra Tech team was selected to provide grant management services to Palm Beach County, in order to ensure proper funding administration in accordance with the FEMA Public Assistance (PA) program, the Florida Division of Emergency Management (FDEM), and the United States Treasury. Our team of grant management experts were tasked with providing technical expertise and knowledge related to current legislation and regulations on COVID-19 funding. **This team includes proposed Program Manager Allison McLeary, who leverages her previous experience working at the state level to inform and improve County programs.** She has supported the County throughout the program implementation phase and provided ongoing guidance to the County in adapting to changing federal requirements for COVID-related funding.

The Tetra Tech team reviews County COVID-19 programs, contracts, and purchases to ensure compliance with CARES Act funding. Our team has assisted Palm Beach County in successfully distributing $236,926,946.41 or over 90% of the CARES allocation by 12/30/2020. Tetra Tech offered project management plan ideas resulting in cost savings, efficiencies, and increasing reimbursement.

Our team consulted Palm Beach County on maximizing potential reimbursement through CRF and FEMA while minimizing audit and/or de-obligation risks. We supported the county with FEMA's project formulation process and reviewed 17 of the county's municipality requests totaling $4,180,436.74 in COVID-19 related expenses. The Tetra Tech team has verified supporting documents for both FEMA and CARES project submissions were in line with federal regulations.

Our team has utilized an identification system for missing documents and issues found in project reviews, which expedited review timeline and alleviated administrative burdens placed on the county and their municipalities while reviewing submissions and requests for additional information. Our team has worked with County Departments to assist with document retention strategies, and review payment packages for sufficient backups ensuring disaster records are complete and ready for audit.

Tetra Tech prepared the quarterly CRF reporting documentation for the U.S. Treasury Grant Solutions Portal. Tetra Tech was also instrumental in verifying that supporting documents for both FEMA PA and CARES Act project submissions were in compliance with federal regulations. We utilized an identification system for missing documents and issues found in project reviews, which expedited review timelines and alleviated administrative burdens in reviewing submissions and requests for additional information.

City of Philadelphia, Pennsylvania

Multiple Funding Stream COVID-19 Recovery

Project Dates: June 2020 – Ongoing

Client Project Manager: Sarah de Wolf, (215) 686-6143

The City of Philadelphia directly received $276,406,952 from the CARES Act, as well as supplemental funding to the FEMA Public Assistance Program of approximately $50M, and additional programs such as HHS Provider Relief Fund and the HUD CDBG-COVID-19 Program.

Tetra Tech is offering support and providing consulting services to the City in response to this emergency regarding current and future available funding and cost recovery sources from state and federal agencies. **Our support team includes proposed Program Manager Allison McLeary, who provided subject matter expertise to the City of Philadelphia to design and implement COVID-19 recovery programs.** Ms. McLeary serves as an expert counsel to the City of Philadelphia, hosting collaborative discussions, providing insight on policy guidance, and supporting the City to maintain programmatic compliance with FEMA and U.S. Treasury requirements.

The Philadelphia team also includes proposed Federal Program Specialist Tricia Rowan, who provides cost and documentation support to facilitate compliance with City SOPs and federal grant guidelines to avoid fraud, waste, and abuse of funds.

Tetra Tech is supporting the City of Philadelphia's Recovery Team by:

- Reconciling of Labor Records and Contract supporting documentation
- Reviewing investment justifications and Scopes of Work for projects requested by City of Philadelphia departments for inclusion in the COVID-19 Spend Plan
- Recommending the likelihood of eligibility for requested expenditure(s) by project under the Coronavirus Relief Fund (CRF);
- Identifying preferable Grant/Fund source to pursue based on overall spend plan funding capacity as well as priorities of the City to include alternative viable known cost recovery options outside of the CRF (ex. FEMA PA, CDC Provider Relief Fund, etc.); and
- Reviewing the criteria matrix to support the City's existing review criteria and priorities of projects in order to finalize the Spend plan.

Tetra Tech has played a key role in the program design and ongoing compliance of the City's CRF rental assistance programs. The City provided a matching amount to Pennsylvania's CRF rental assistance, which only covered $700 of rent per month, by funding up to $1,500 in monthly rent for residents. To assist as many applicants as possible with their housing needs, the City then created a program phase that could directly assist renters whose landlords refused to participate in the program.

Throughout this process, the Tetra Tech team provided technical assistance regarding CRF compliance factors, assisted with writing a program design that included application and eligibility requirements, and verified that reporting requirements were met. As these programs end and in preparation for future Treasury audits, Tetra Tech provides audit-ready files to the City that are easily accessible in a user-friendly program database.

Tetra Tech is also providing procurement support to the City for active and future COVID-19 related procurements by reviewing applicable documentation for compliance with Federal, State, and Local requirements specific to the Grant/ Fund selected for the project. Additionally, Tetra tech is providing ongoing compliance monitoring and documentation collection as well as audit support and data reconciliation. To date, the City has received upwards of $600 million in COVID relief funds in total.

Harris County, Texas

CDBG-DR Housing Program Management

Project Dates: October 2019 – Ongoing

Client Project Manager: Craig Atkins, (832) 927-4741

Following Hurricane Harvey in 2017, Harris County received 2 tranches of funds for long term housing and infrastructure programs within the community for over $1.2 billion. This allocation was 10 times the allocation it received following Hurricane Ike in 2008. The County was responsible for developing an action plan, policies and procedures, and management of its own disaster recovery program to deliver the following programs:

- Homeowner Reimbursement: $25 million
- Homeowner Repair or Reconstruction: $270 million
- Residential Buyout: $217 million
- Commercial Buyout: $12 million
- Affordable Rental Program: $224 million
- Single Family New Construction: $119 million
- Infrastructure: $196 million

Tetra Tech was retained by Harris County, Texas to rapidly assist with program redesign and implementation for the County's $1.2B CDBG-DR allocation as a result of Hurricane Harvey. The program began intake in April 2019 but had limited results. Tetra Tech was contracted in October 2019 to serve as overall program manager to improve program performance.

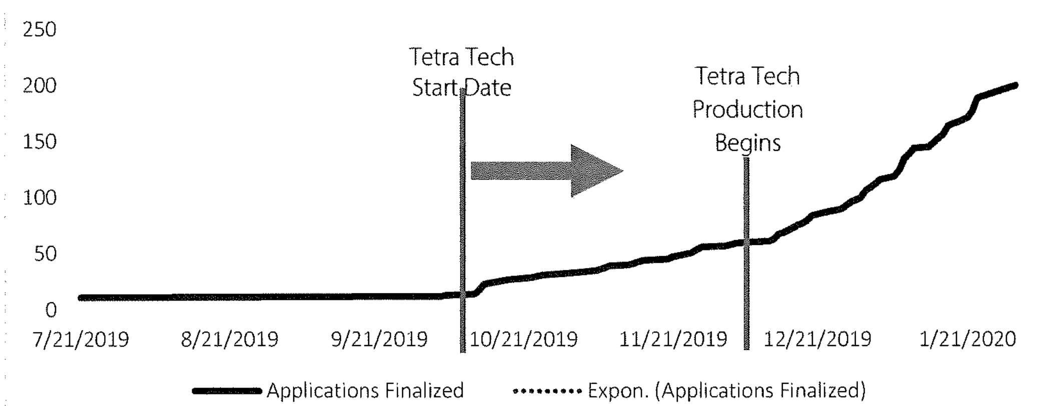
Our contract with Harris County includes the following scope to assist the County with delivering its $1.2 billion program:

1. **Program Conceptualization, Planning and Development** to include program design, assistance with programmatic waivers, assist with public outreach and program marketing efforts, technical assistance associated with programmatic elements
2. **Overall Program Administration, Program Management, Oversight and Regulatory Compliance** to include coordination with County staff and contractors for outreach, intake, case management and damage assessment/cost estimating, inspections and construction activities, staff augmentation for eligibility reviews, designing and implementing internal controls, conducting risk assessments to mitigate programmatic risks, and providing subject matter expertise for program implementation.
3. **Financial Assistance** to include the formulation of processes to confirm federal funds have been accounted for in accordance with grant requirements and assist with the audits and monitoring.

Our team consists of some of the most seasoned CDBG-DR professionals in the industry who are working 6 days per week to ensure that the program goals are met. **This team includes proposed the FEMA Lead for the City, Meredith Sanders.** Ms. Sanders worked closely with the Public Health, Budget Management, Community Services and Engineering Departments to establish multiple sheltering operations and alternate care sites. She wrote and submitted an expedited project worksheet to ensure the County received immediate funding to address the developing and continuing response effort. Ms. Sanders reviews all emergency purchases for compliance with federal requirements and makes recommendations for the most appropriate funding source based on the nature and method of each activity.

Our team's involvement has led to a substantial increase in applications submitted to the GLO.

Immediate Impact of Tetra Tech Support



The Harris County Reimbursement Program is very similar to the Emergency Rental Assistance and Homeowner Assistance programs available through ARPA. Tetra Tech must first determine the eligibility of an applicant by using either the HUD Part 5 method or the 1040 method. Then Tetra Tech must determine the eligibility based on location, occupancy, residency, and many other factors. Once program eligibility is determined, Tetra Tech must determine if the applicant is eligible for funding.

This is completed by determining the value of repairs already made and reviewing for any duplication of benefits. Tetra Tech, by using the latest technology, has streamlined the program in many areas. In fact, when the Reimbursement program began, the County was allocated 20 million for this program.

Due to the project management by Tetra Tech, the State first provided an additional 20 million in funding for the Reimbursement Program, and just recently has published an Action Plan amendment for an additional 10 million, bring the total CDBG-DR Reimbursement to 50 million dollars and anticipated assisting 1200 applicants.

Mobile County, Alabama

Emergency Rental Assistance Program

Project Dates: March 2021 – Ongoing

Client Project Manager: Nayyer Mahdi, 251-574-5086

The Emergency Rental Assistance Program (ERAP) was established to provide financial relief for Americans who have been affected by the economic crisis in the wake of the COVID-19 pandemic. The ERAP program has been expanded under ARPA funding, making it markedly similar to programs the City may encounter through this engagement.

Mobile County, Alabama was allocated approximately $12.3 million in grant funding from the U.S. Treasury to support households who are struggling to pay rent or utilities due to the COVID-19 pandemic. Tetra Tech was selected to provide program design, implementation, case management, and grant administration in support of the County's ERAP.

Our team of specialists provides the County with expertise and resources in federal grant program management, technology solutions, and local community partnerships to deliver a fast-paced and compliant ERAP. **This team includes proposed Rental Assistance Lead, Steve Sims. Mr. Sims supported Mobile County as Project Manager, overseeing a team of 35 specialists to administer more than $12.3 million of ERAP funding.** Upon award, our project management team set up a preliminary kick off call with County officials to establish program goals, communication channels, standard operating procedures, and program requirements. To encourage participation, Tetra Tech provided the County with press releases, announcing funding and program launch.

Within three weeks of award, the program was fully up and running. Tetra Tech worked with the County to provide a customized software solution, which includes a branded portal and unique web address for applicant intake, application status reports, and public information. Tetra Tech provided guidance and recommendations for the web page and created flyers and FAQs to increase usability and understanding of the program. To support the rapid intake of applications and assessment of applicant eligibility, Tetra Tech maintains a consolidated call center and case management center. This team includes more than 3 customer service representatives, 6 lead eligibility specialists, and 26 eligibility specialists.

It was anticipated that the program would result in roughly 2,500 applications, estimating that 1,400 tenants would receive funding. However, almost 5,000 applications were submitted on the first day. To date, over 9,000 applications have been submitted. Tetra Tech staff are reviewing and processing applications, and preparing for funding disbursements, which are scheduled to be disbursed before the end of March.

Ventura County, California

Cost Recovery Invoicing for Thomas and Woolsey-Hill Wildfires

Project Dates: December 2017 - Ongoing

Client Project Manager: Doug Beach, (805) 654-3519

On December 4, 2017, the Thomas Wildfire began burning in Ventura County and grew into the largest wildfire in recorded California history. The Thomas Wildfire left 698 properties damaged or destroyed. Tetra Tech was awarded a contract to assist Ventura County with the cost recovery of available property insurance proceeds to cover the private property structural debris removal efforts.

Our team includes proposed Social Programs Lead Claudia Hill. Ms. Hill led and managed our team in developing and implementing the insurance cost recovery program for the Ventura County on behalf of the State CalRecycle.

Tetra Tech's team conducted outreach to homeowners to explain how duplication of benefits would be applied to the debris that was removed from their property. After this extensive phone, email, and postal mail outreach campaign, the team presented the cost of the debris to the homeowners and assisted them with inquiries from their insurance providers. This work is ongoing. Tetra Tech is collecting and tracking the insurance proceeds on behalf of Ventura County and providing a detailed report on the final status of all properties that participated in the program.

Because of our previous work on the Thomas Fire, Ventura County procured Tetra Tech for insurance cost recovery following the Woolsey-Hill Fire that occurred in 2018. The Woolsey Fire affected many structures statewide, whereas the Hill Fire affected far fewer structures. In Ventura County, over 100 property owners signed up and participated in the State's right-of-entry (ROE) programs, and Tetra Tech continues to eliminate the potential for duplication of benefits for the same loss.

In total, Tetra Tech has worked with over 700 individual homeowners to identify and rectify duplication of benefits. We have recovered over $2.5 million in eligible insurance proceeds.

"Thank you for taking time to explain things to me and help relieve some of my anxiety in such a professional and friendly way." – W. Perez, Homeowner, Ventura California

Additional Spotlight Projects

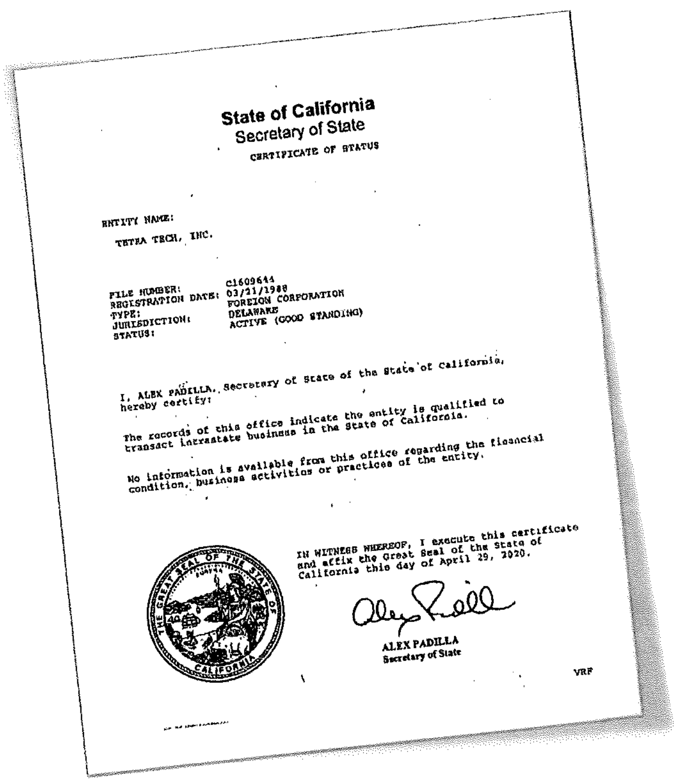
Tetra Tech is currently assisting our clients administer and disburse over $138 million in ERAP funding. This includes:

- Broward County, Florida: $58.9 million in ERAP funding
- Richland County, South Carolina: $12.5 million in ERAP funding
- Pinellas County, Florida: $21 million in ERAP funding
- Leon County, Florida: $8.8 million in ERAP funding

9.4 Business License

Tetra Tech will comply with Long Beach Municipal Code (LBMC) and relevant business license requirements.

Tetra Tech is currently qualified to transact intrastate business in the State of California, as demonstrated in our Certificate of Status issued by the State of California Secretary of State.



State of California
Secretary of State
CERTIFICATE OF STATUS

ENTITY NAME:
TETRA TECH, INC.

FILE NUMBER: C1609644
REGISTRATION DATE: 03/21/1988
TYPE: FOREIGN CORPORATION
JURISDICTION: DELAWARE
STATUS: ACTIVE (GOOD STANDING)

I, ALEX PADILLA, Secretary of State of the State of California, hereby certify:

The records of this office indicate the entity is qualified to transact intrastate business in the State of California.

No information is available from this office regarding the financial condition, business activities or practices of the entity.

IN WITNESS WHEREOF, I execute this certificate and affix the Great Seal of the State of California this day of April 29, 2020.

ALEX PADILLA
Secretary of State

VRF

TETRA TECH

Allison McLeary
Program Manager

EXPERIENCE SUMMARY

Ms. Allison McLeary is an experienced emergency response and recovery executive with a demonstrated history of building meaningful relationships across all levels of government. As **former Recovery Bureau Chief of the Florida Division of Emergency Management,** she offers more than 3 years of direct experience administering grant programming throughout the State of Florida. She is a steadfast advisor in planning for, responding to, and recovering from challenges and disasters.

RELEVANT EXPERIENCE

Director, Disaster Recovery Programs (March 2021 – Present)
Tetra Tech, Inc.

Ms. McLeary serves as Director of Disaster Recovery Programs, providing policy guidance and program support. Ms. McLeary is an expert in FEMA policies, building and maintaining relationships with FEMA representatives. She analyzes policy and provides policy guidance to clients. She supports the Tetra Tech team to build programs that align with federal expectations and comply with client/federal requirements. She maximizes operational efficiencies by analyzing individual projects with a holistic lens, leveraging best practices from Tetra Tech debris management operations throughout the Nation. Additionally, Ms. McLeary coordinates relationships with funding agencies and local partners to streamline project operations.

Recovery Bureau Chief (March 2020 – February 2021)
Compliance and Appeals Officer (December 2018-February 2020)
Florida Division of Emergency Management

- Administered all FEMA Stafford Act programs for the State of Florida ($9.8+ Billion over 26 federally declared events under management)
- Validated and Paid through FDEM an unprecedented $4.1 Billion in Recovery funds in the period January 2019-February 2021, including $2.7 Billion in PA and over $300 Million in USDA Agriculture Recovery Block Grants
- Developed and implemented the State strategy for $1.275 Billion in CARES-Coronavirus Relief Fund payments to 55 medium and small counties. ($1.07 Billion validated and paid June 2020-February 2021)
- Served as Alternate Governor's Authorized Representative and Deputy State Coordinating Officer for all FEMA declared events in Florida
- Created a comprehensive FEMA PA Compliance program, including risk assessments, monitoring, and technical assistance and programmatic guidance tailored to address specific compliance risks

Recovery Legal Counsel (January 2017 – November 2018)
Louisiana Governor's Office of Homeland Security and Emergency Preparedness

- Served as Recovery counsel- advising on all matters of emergency management and whole community Recovery

YEARS OF EXPERIENCE

18 years

AREA OF EXPERTISE

- Disaster Response & Recovery
- Grant Administration
- Stafford Act Compliance
- Alternative Procedures

GRANT EXPERIENCE

- FEMA Public Assistance
- CARES Act
- USDA Agriculture Recovery Block Grants
- HUD CDBG

EDUCATION

Auburn University, Bachelor of Arts, March 2000

Louisiana State University- Paul M. Hebert Law Center, Juris Doctorate, May 2004

Louisiana State University- Paul M. Hebert Law Center, Bachelor of Civil Law, May 2004

  - Programs included FEMA/Stafford Act programs and HUD-Community Development Block Grants (CDBG-DR)
- Audit liaison to US Department of Homeland Security- Office of Inspector General and FEMA
- Developed and delivered a comprehensive outreach and education technical assistance strategy to grant subrecipients in Louisiana

FirstNet Program Manager (February 2015 – January 2017)

Louisiana Division of Administration, Office of Technology Services

- Oversaw a team effort to identify needs, preform gap analyses, and plan for the buildout of the State's portion of the Nationwide Broadband network, known as FirstNet.
- Identified the needs and expectations of the State's 62,000+ first responders and worked with the US Department of Commerce and the FirstNet Authority to include those inputs in the $7 Billion RFP for the buildout and operation of the FirstNet network.

State Police Legal Counsel (August 2003 – May 2013)

Louisiana Department of Public Safety and Corrections, Louisiana State Police, Office of Legal Affairs

- Counsel to State Police on matters of policy, operations, public records law, personnel management, emergency management/crisis response, and investigations
- Advised the State Police through the buildout of the LWIN Statewide radio network, currently with over 99,000 users and statewide coverage, including tower and backhaul buildout
- Served as legislative liaison and helped draft numerous bills and testified in committee on several measures including revisions to the electronic surveillance framework and the regulation of private security.
- Represented the Louisiana Oil Spill Coordinator's Office and was assigned Attorney Supervisor throughout the response to the Deepwater Horizon event
  - Led a multi-agency team of in house, state agency lawyers in the early days of the disaster
  - Coordinated efforts among state agency counsel to ensure that necessary inputs needed for the response, damage assessment and claims under the Oil Pollution Act of 1990, Clean Water Act and other applicable federal and state laws were supported.

REFERENCES

James Waskom, Director

Louisiana Governor's Office of Homeland Security and Emergency Preparedness

James.Waskom@la.gov
(225) 925-7500

Colonel Lamar Davis, Superintendent- Louisiana State Police

Deputy Secretary, Department of Public Safety and Corrections

Lamar.Davis@la.gov
(225) 925-6006

TETRA TECH

Meridith Sanders
Public Assistance Lead

EXPERIENCE SUMMARY

Ms. Meridith Sanders is a financial recovery and management professional with a wide range of experience throughout her 9-year career. She evaluates existing contracts for Federal Emergency Management Agency (FEMA) Public Assistance 2 CFR 200 compliance and advises accordingly to reduce risk of deobligation. Ms. Sanders successfully advocates for clients, through the draft and submission of both first and second appeals. She monitors new guidance related to disaster cost recovery and disseminates guidance to clients. She also conducts applicant timesheet review and creation of force account labor, material, and equipment summaries. Most recently, she assisted clients from Miami to Anchorage with completing FEMA Public Assistance (PA) Project Worksheets for category A-G in response to hurricanes, earthquakes, and COVID-19. Ms. Sanders has a background in business management, with experience in process management, finance, and risk management.

RELEVANT EXPERIENCE

Program Delivery Manager (March 2020-Present)
Harris County, TX

Harris County engaged Tetra Tech in March 2020 to assist in responding to the COVID-19 pandemic. Ms. Sanders worked closely with the Public Health, Budget Management, Community Services and Engineering Departments to establish multiple sheltering operations and alternate care sites. She wrote and submitted an expedited project worksheet to ensure the County received immediate funding to address the developing and continuing response effort. Ms. Sanders reviews all emergency purchases for compliance with federal requirements and makes recommendations for the most appropriate funding source based on the nature and method of each activity

Program Delivery Manager (April 2019-Present)
Port of Corpus Christi, TX

Evaluate existing contracts for FEMA Public Assistance 2 CFR 200 compliance and draft addendums to reduce risk of deobligation. Assisted client in future event planning including operating procedures, best practices, and policy development. Develop roadmap to expedite and streamline recovery by meeting with client and FEMA, assessing damage inventory and Grants Portal status. Compliance review of future contracts and procurements to minimize risk of future deobligation. Applicant timesheet review and creation of force account labor, material, and equipment summaries. Small project certification packet creation. Create project worksheets for management and administrative costs. Project closeout.

YEARS OF EXPERIENCE

9 years

AREA OF EXPERTISE

- FEMA Public Assistance Guidelines and Compliance
- COVID-19 Shelter Operations
- Public Assistance Appeals
- Disaster Cost Recovery
- Policy Development
- Risk Management
- Financial Reporting

EDUCATION

University of North Dakota, Master of Business Administration (May 2011)

University of North Dakota School of Law, Juris Doctor, with distinction (May 2011)

Minnesota State University Moorhead, Bachelor of Arts in Economics (May 2005)

Financial Analyst (December 2015—April 2019)
City of Houston, TX

Managed Hurricane Harvey recovery efforts for multiple City of Houston departments as the liaison to the Finance Department. Coordinated communication between FEMA, external consultants and City of Houston departments. Ensured department activities complied with FEMA disaster cost recovery guidelines established under 2 CFR 200 and other sources. Planned and executed city-wide training for topics such as Disaster Cost Recovery Procurement. Developed training manuals and PowerPoint presentations. Drafted and reviewed policies and procedures for compliance with local and federal requirements. Created, monitored, and analyzed specialized reports. Assisted in the development, implementation and monitoring of policies and procedures as part of City Enterprise Risk Assessment Project.

Consultant (June 2013—December 2015)
Morgan Garris Houston, TX

Reviewed client financial processes and procedures to ensure compliance with statutory regulations and requirements. Performed compliance testing and consulting. Facilitated open and direct discussions about risk and

control environments with clients to identify key risks. Performed risk and control assessments. Other duties included: Client relationship management, Business management consulting including process management and financial management, Review of statutory changes, Composing executive summaries of pertinent legal changes, Development of marketing materials, Business development.

Financial Analyst - ITNA Budget and Portfolio (November 2012—June 2013)
Marathon Oil (Insight Global) Houston, TX

Financial reporting and forecasting. Reconciling budgets for previous years. Assigning costs to appropriate cost centers. Strategic planning and budgeting. Financial project management. Creating PowerPoint and Excel documents for C-Level audience. Software Asset Management, compliance and software procurement. Reviewing invoices to determine spending patterns and reduce costs. Using SAP FI to gather financial data and reporting. Budget coordination for multiple asset teams.

Client Relations Associate (August 2011—March 2012)
Alliantgroup Houston, TX

Managed client relations and led project management for multiple service line teams at specialty tax consulting firm. Directly managed 16 individuals on 4 separate teams. Coached team members on project performance, professionalism, and communication techniques focusing on phone and email communication. Developed project plans for 300 simultaneous projects to comply with client expectations. Ensured compliance with Statute of Limitations resulting in no missed statutory deadlines. Fostered relationships with clients and CPA firms. Provided employee coaching and team mediation to develop professionalism. Resolved client issues regarding deadlines, expectations, and billing concerns. Created new business opportunities through phone calls to existing clients. Traveled to client locations to ensure client expectations were met regarding work product, professionalism, and billing.

Vice President of Finance (February 2010—August 2011)
Dakota Venture Group Grand Forks, ND

Managed finances for university-based angel capital fund. Created and executed operating budget for $400,000 investment fund. Negotiated terms of investments. Led due diligence report team and conducted legal, market, and industry research. Managed existing portfolio investments. Developed exit plan for existing investment. Invested in start-up organizations. Created and revised legal and business documents for a new angel investment fund. Acted as co-coordinator and event planner for fundraising campaign to create a new multi-million-dollar angel fund. Advised local small businesses and start-ups on elevator pitches, operation and obtaining capital for growth.

Law Clerk (April 2010—May 2011)

Schuetzle Law Firm Grand Forks, ND

Provided clerking and administrative assistance for a small business-oriented law firm. Conducted legal research, specifically, for trial and litigation case preparation. Drafted documents necessary for new business start-ups. Interviewed clients. Researched and analyzed law sources to prepare drafts of briefs or arguments for review, approval, and use by attorney. Searched for and studied legal documents to investigate facts and law of cases to determine causes of action. Performed legal analysis.

Performance Management Analyst (April 2007—August 2008)

SEI Fargo, ND

Monitored and analyzed performance of multiple service lines and teams for a service based call center. Reviewed service contracts with SEI clients to gather report requirements. Utilized Six Sigma principles to increase quality based on key performance metrics. Reviewed organizational goals to relate with preferred organizational outcomes in terms of quality, quantity, cost and speed. Analyzed current business processes and recommended areas for improvement. Collaborated with managers on multiple levels to develop and implement metrics to track performance and employee incentive. Created internal and external business intelligence and performance reports using COGNOS and Excel. Created SQL queries to produce appropriate calculations within COGNOS.

Software Asset Management Advisor (June 2005—April 2007)

Microsoft (SEI) Fargo, ND

Researched and contacted Microsoft customers to determine compliance with Microsoft licensing requirements. Coordinated and led small group conference calls. Re-engage lapsed sales opportunities; Made proactive and sales calls for both Microsoft Dynamics and Platform products. Assisted customers with Software Assurance annuity renewals. Consistently exceeded sales goals, including 320% of goal in third quarter of fiscal year 2006. Qualified $4.2 million in second quarter of fiscal year 2007 (190% of plan) as part of SAM team. Received SAM Community Award from Microsoft in 2006. Recognized as SEI Star Performer in 2007.

TETRA TECH

Kerri O'Dell
Financial Lead

EXPERIENCE SUMMARY

Ms. O'Dell serves as high-level project manager for Tetra Tech and possesses over a decade of disaster preparedness, emergency planning, and disaster response and recovery experience. Ms. O'Dell excels in delivering projects on time and within budget. She has assisted numerous local, state and private sector businesses with active shooter assessment; emergency operations planning; continuity of operations planning (COOP); exercise design, implementation and evaluation; and recovery planning. Ms. O'Dell is also experienced in providing disaster debris monitoring services, including mobilizing support teams; assisting with staging operations; and managing the scheduling, dispatching and logistics operations of debris cleanup for some of the nation's worst natural disasters.

In addition, Ms. O'Dell is highly knowledgeable of federal, state, and local emergency agencies and programs, as well as funding sources and reimbursement procedures, having served as project manager on several of the firm's debris monitoring and emergency management planning projects. She has also been responsible for the development of numerous disaster debris management plans (DMPs) that have been approved for the Federal Emergency Management Agency (FEMA) Public Assistance (PA) Pilot Program.

FEATURED PROJECT MANAGEMENT EXPERIENCE

Active Shooter Assessments

Ms. O'Dell manages the Federal Aviation Administration (FAA) active shooter project to develop an enterprise-wide gap assessment of its current efforts related to preparedness, response and recovery efforts in an active shooter incident. The assessment of the FAA's nation preparedness efforts and capabilities related to an active shooter incident includes identification of gaps in program areas of capability, planning, continuity of operations, and training and exercises. Ms. O'Dell worked with the team to provide overarching recommendations that will be used in the implementation plan that ensures a robust national practice model to standardize efforts among the different regions. The recommendations will provide scalable guidance to minimize the likelihood and consequences of these events as well as integrate external stakeholders that have responsibility, authority and/or capabilities that support the prevention of, response to and recover from active shooter incidents.

Security and Emergency Preparedness Program Sustainment

Metropolitan Atlanta Rapid Transit Authority (MARTA)

Ms. O'Dell served as the project manager for the MARTA security and emergency preparedness program sustainment project. Ms. O'Dell directs activities for all tasks under the contract including tabletop, functional and full-

YEARS OF EXPERIENCE

13 Years

AREA OF EXPERTISE

Project Management

Recovery Planning

Exercise Design and Implementation

COOP Planning

Disaster Management Planning

Disaster Response and Recovery Operations

FEMA Compliance Monitoring and Oversight

TRAINING

IS-00700: NIMS and Introduction

IS-00546: Continuity of Operations Awareness Course

HSEEP

TS-13: Intro to the Federal Highway Administration Emergency Relief Program

TS-12: Intro to the USDA-NRCS Watership Protection Program

EDUCATION

University of Central Florida
Bachelor of Science, Finance, 2002

scale exercises; the development of continuity of operations, emergency operations and security and emergency preparedness plan; station action plans: treat and vulnerability assessments; and more. Ms. O'Dell oversees the development of exercises that consisted in more than 200 attendees including MARTA personnel and regional stakeholders that support MARTA. Ms. O'Dell works with the exercise and planning team to ensure quality products in the allotted timeframe.

Emergency Operations Plan Assessment
San Joaquin County, California

Ms. O'Dell served as the project manager for the San Joaquin County Emergency Operations Plan (EOP) Assessment. Ms. O'Dell will oversee the conduct of a comprehensive assessment of the County's current EOP with particular focus on compliance with federal, state, and local laws. This assessment will provide a detailed analysis of the plan's scope, assumptions, policies, procedures, and operational concepts to include identified strengths and areas for potential improvement. Ms. O'Dell will work collaboratively with and garner input from San Joaquin County's Environmental Health, General Services, Human Services Agency, Sheriff's Department, County Administrator, Purchasing, and Health Care Services departments.

Disaster Debris Trainings and Exercises
Chester County, Pennsylvania

Ms. O'Dell served as the project manager for Chester County, PA disaster debris training and exercise project. Ms. O'Dell oversaw the training of key staff on disaster debris management as well as the fundamentals of their debris management plan. Ms. O'Dell oversaw the design and implementation of a customized exercise series which consisted of the County and municipalities within the County. In addition, she oversaw the development of a RFP that the County can utilize when procuring disaster debris contractors.

Emergency Management Planning, Exercises and Senior Leadership Seminars
Metro Atlanta UASI, Georgia

Ms. O'Dell was the project manager on the development of the Tactical Operations Annex to the Regional Evacuation Coordination Plan. The annex focused on developing evacuation procedures for the Metro Atlanta Region. The annex includes emergency evacuation operations, communications interoperability, traffic management, and special needs components for the Metro Atlanta UASI. Ms. O'Dell ensured that all timelines were met and this project also included training and outreach seminars for each jurisdiction before the functional exercise. Ms. O'Dell served as a senior controller for the evacuation functional exercise to validate strengths and identify areas for improvement. Ms. O'Dell also co-facilitated a senior leadership seminar for the region's senior elected officials and their staffs.

Preparedness Planning, Training and Exercises
Metropolitan Atlanta Rapid Transit Authority (MARTA)

Ms. O'Dell served as the project manager for the MARTA business continuity plan and exercise program. Ms. O'Dell conducted on-site consultations, working group sessions, and a plan walkthrough. Ms. O'Dell delivered a series of workshops to train key staff members on how to use the newly developed plan. Ms. O'Dell oversaw the design and implementation of a custom training program for all 14 MARTA line departments and their senior leadership team and the MARTA COOP tabletop exercise for over 150 participants. She also oversaw the MARTA COOP functional exercise designed to test MARTA's updated plans and continuity capability.

Emergency Preparedness Plans
Administrative Office of the Illinois Courts

Ms. O'Dell served as the project manager for the Administrative Office of the Illinois Courts (AOIC) to plan for and develop emergency preparedness plans consistent with the Supreme Court's directives for the 23 Circuit Courts and their approximately 100 courts in Illinois. Ms. O'Dell worked closely with the AOIC and guide and provide technical assistance to the AOIC and the Chief Circuit Judges throughout the planning and development of the circuit plans.

Recovery Planning Services

Brunswick County, North Carolina

Ms. O'Dell served as the project manager for the Brunswick County recovery plan project, where she was responsible for the day-to-day activates of the project. She recently co-facilitated 16 recovery function working group sessions. During the sessions, baseline information was gathered and will be used in developing the plan. Ms. O'Dell was responsible for the ability to complete the project in six months and submit all deliverable on time.

Tabletop Exercise

Montgomery County, Texas

Ms. O'Dell served as the project manager for the development of a capabilities-based tabletop exercise that would trigger a COOP event. Ms. O'Dell designed, implemented and evaluated Montgomery County's ability to respond to a COOP event. At the completion of the workshop, the team revised the existing COOP plan to reflect changes that were identified during the workshop. Ms. O'Dell is responsible for the overall success of the project and for assigning tasks and meeting deadlines set by the County.

Hazard Mitigation Planning

Gwinnett County, Georgia

Ms. O'Dell served as the client manager for the development of Gwinnett County's multi-jurisdictional hazard mitigation plan. Ms. O'Dell assisted with the data collection, analysis and plan development activities necessary to fulfill the local planning requirements. Included in the planning process is the hazard identification and risk assessment. Ms. O'Dell will assist in the assessment that will address hazards, whether natural or man-made, often not included in the hazard mitigation planning process (e.g., disease or terrorism) to develop an enhanced plan in accordance with FEMA standards.

Disaster Response and Recovery Projects

Senior Recruiter

States of Georgia and South Carolina | Winter Storm Pax Disaster Debris Program Management

The jurisdictions of the City of Augusta, GA; Colleton County, SC; City of Sumter, SC; Sumter County, SC; Dorchester County, SC; and Barnwell County, SC were greatly affected by Winter Storm Pax that occurred in February 2014. Ms. O'Dell oversaw the staffing for all these projects, which included the hiring of more than 500 staff within a 4-week period. Utilizing the processed that Ms. O'Dell put together, this effort allowed all projects to start on time, as required by the jurisdiction.

Senior Recruiter

State of Connecticut | Hurricane Sandy Disaster Debris Program Management

Similar to the Nor'easter that impacted Connecticut, Ms. O'Dell was responsible for making sure that all projects were staffed appropriately with the expertise needed. Ms. O'Dell utilized her expertise to track all personnel in the field and make sure they were being utilized to their full potential.

Senior Recruiter

State of Connecticut | Winter Storm Alfred Disaster Debris Program Management

When Winter Storm Alfred impacted Connecticut, Ms. O'Dell supported the incident commander in the activation, which included accessing our current staffing levels, making sure that management was provided for each jurisdiction, and supporting the activation of almost twenty projects.

Senior Recruiter

States of North Carolina, Connecticut and Virginia | Hurricane Irene Disaster Debris Program Management

When Hurricane Irene approached the east coast, Ms. O'Dell supported the incident commander in the activation. This included making sure all management positions were staffed appropriately, as well as, tracking where each person was working. With twenty two projects starting within days of each other, it was important Leidos had the management team to support such a large effort. Ms. O'Dell was provided the necessary expertise to each jurisdiction.

Project Manager

Montgomery County, Texas | Hurricane Ike Program Management Debris Monitoring

When Hurricane Ike approached the Houston/Galveston area, Ms. O'Dell headed to Texas and was ready to assist Montgomery County. While Montgomery County is located 40 miles northwest of Houston, the damage was significant. The County accumulated over 850,000 cubic yards of debris that was brought to six debris management sites throughout the County. Ms. O'Dell served as the project manager and provided leadership to over 150 individuals. Ms. O'Dell was responsible for the overall management of the project and ensured that the County followed the necessary local, state and federal guidelines for debris management.

Operations Manager

City of Gulfport, Mississippi | Public and Private Property Debris Removal Program Management

Following the devastating hit of Hurricane Katrina, the City of Gulfport suffered tremendous damage. Due to the storm surge created by the Hurricane, the City was eligible for the right-of-entry (ROE) program. The ROE program is when the City has the authority to go on to private property to remove all vegetative and construction and demolition (C&D) debris. During this project, Ms. O'Dell assisted with the start-up of the ROE program. This included training monitors, developing ROE forms and conducting citizen information meetings. A ROE program is very detailed and required a lot of oversight on all documentation.

Collection Supervisor

Miami-Dade County, Florida | Storm Debris Clean-Up Management

Ms. O'Dell assisted the project manager of the Miami-Dade County project by serving as a collection supervisor. Ms. O'Dell was responsible for the oversight in paper work provided to the project manager. Ms. O'Dell was also responsible for the logistics of the monitors including the haulers that they were assigned to, determining a meeting location, communicating information throughout the day and ensuring that all documents were turned in at the end of the day.

Project Manager

City of Fort Lauderdale, Florida | Hurricanes Katrina and Wilma Disaster Recovery and Debris Clean-up Management

Following Hurricanes Katrina and Wilma, Ms. O'Dell immediately responded to the City of Fort Lauderdale and served as the project manager for the debris management effort. Ms. O'Dell was responsible for the coordination and training of over 200 collection and disposal monitors, ten supervisors and all administrative staff. Ms. O'Dell was also responsible for the oversight of 12 contractors, combining to make a total of over 500 trucks.

Field Supervisor

Monroe County, Florida | Disaster Recovery Services

Ms. O'Dell helped set up the project and developed zone maps, trained collection monitors, and temporary debris storage and reduction site (TDSRS) monitors. Additionally, Ms. O'Dell supervised monitors during the project.

Operations Manager

City of Orlando, Florida | Hurricane Charley Disaster Recovery Services

Ms. O'Dell assisted the City of Orlando following the three devastating hurricanes that affected Florida in the fall of 2004. She was part of the initial team that was on-site immediately following Hurricane Charley to provide assistance to the City with recovery efforts. Ms. O'Dell provided TDSRS support, ROE management, staffing assistance and assisted with the development of data management tools to accurately record and monitor all project data.

Field Supervisor

City of Marathon, Florida | Disaster Recovery Services

Ms. O'Dell helped set up the project and developed zone maps, trained collection monitors, and TDSRS monitors. Additionally, Ms. O'Dell supervised monitors during the project.

Operations Manager

Volusia County, Florida | Tornado Disaster Debris Monitoring

Without notice, Volusia County was struck by a set of tornados which later became known as the "Groundhog Day Tornadoes". Ms. O'Dell was the first to respond to the County, assisting them with the logistics of starting a debris removal project. Ms. O'Dell provided oversight of the project and provided guidance to the County on the rules and regulations. In addition, with the help of Ms. O'Dell and the rest of the project team, the project was completed in less than two months and the County received maximum reimbursement.

Project Manager

City of Boca Raton, Florida | Debris Clean-up Management

Ms. O'Dell, as the assigned project manager, mobilized a full support team for deployment to the City's emergency operations center to provide a wide range of disaster recovery and storm debris management services. Ms. O'Dell assisted with the comprehensive collection and disposal monitoring related activities including hazardous stump removal, tree removal and some waterway cleanup for approximately 200,000 cubic yards of vegetative debris. In addition, she oversaw all data management activities associated with the debris collection effort.

Debris Management Planning

The goal of a debris management plan is to better prepare the jurisdiction for a debris generating event and to make the jurisdiction eligible for the FEMA PA Pilot Program funding. Ms. O'Dell managed the development/revision of disaster debris management plans for many communities including:

- Town of Longboat Key, Florida (plan approved)
- City of Daytona Beach, Florida (plan approved)
- Volusia County, Florida
- City of Winter Springs, Florida
- City of Hialeah, Florida
- City of Cape Coral, Florida
- Osceola County, Florida

TETRA TECH

Claudia Hill, CFM
Social Programs Lead

EXPERIENCE SUMMARY

Ms. Claudia Hill is an experienced project manager with an extensive background in providing excellent case management support, financial support, and maintains the latest knowledge of the Federal Emergency Management Agency (FEMA) mitigation strategies. She has managed private, state, and federally funded grants and contracts, and prepares and processes monthly, quarterly, and annual financial reports for grant and contract sponsors.

She has a unique understanding of duplication of benefits and corresponding processes needed to assist communities in managing widespread recovery projects. Currently she is managing the implementation of multiple FEMA funded mitigation projects for communities around the United States for communities due to ongoing wildfires, tornadoes, and flooding. Under her recovery efforts she has managed to recover over $17 million dollars in duplication of benefits, manage the building process of a community multi-use safe room, and elevate and acquire over 150 residential properties.

Ms. Hill is also involved with managing intake and outreach processes with property owners, developing cost effective residential mitigation projects, benefit cost analysis, and submitting numerous HMGP and FMA residential mitigation applications. Recently FEMA identified 6 of 6 of her FMA applications for FY 2018 and FY 2019 for intent to award totaling $39 million in funding for the City of Houston residential elevation and acquisition projects. Ms. Hill maintains her Certified Floodplain Managers (CFM) certification.

RELEVANT EXPERIENCE

Project Manager (June 2019 – Ongoing)
Los Angeles County, CA | Project Management and Insurance Cost Recovery Woolsey Fire

Ms. Hill is providing support in the recovery efforts post Woolsey wildfire for duplication of benefits for debris removal services provided by the State on behalf of the County. She has assisted in setting up internal controls, and program design. Currently she is managing a team that has recovered almost $1M in duplication of benefits.

Project Manager (October 2018 – Ongoing)
Ventura County, CA | Project Management and Insurance Cost Recovery Thomas, Woolsey, Hill Fires

Ms. Hill led and managed a team in developing and implementing an insurance cost recovery program for the Ventura County on behalf of the State Cal Recycle. Currently our team has recovered $10.6M in duplication of benefits for structural debris removal services.

Project Manager (May 2018 – Ongoing)
City of Houston, TX | Application Development, Flooding

YEARS OF EXPERIENCE

7 Years

AREA OF EXPERTISE

- Financial Analysis
- Financial Recovery Services
- Mitigation
- Grant Program Management
- Federal Reimbursement
- Data Management
- Project Analysis and Scoping
- Grant Application Development
- Project Management
- Insurance Cost Recovery

GRANT EXPERIENCE

- FEMA Public Assistance
- HMGP Application Development and Implementation
- FMA Application Development and Implementation
- URA Implementation

EDUCATION

University of Texas at Tyler
Bachelor of Science, Business Administration – Finance, 2011

Ms. Hill works directly with the City of Houston to develop their residential Hazard Mitigation Program and Flood Mitigation Assistance program applications for funding. She manages a team to conduct outreach, host public meetings, webinars and has made eligibility determinations-based FEMA and State rules and regulations. She is responsible for completing the benefit costs analysis using FEMA's BCA software. Over the years this resulted in the submission of six HMGP applications and six FMA applications for elevation and acquisition and demolition totaling $54M and $39M, respectively by program.

Project Manager (July 2020 – Ongoing)

Barnwell County School District, SC I Project Management, Tornadoes

Ms. Hill is leading a team to construct a multi-use saferoom for the community in Barnwell County which includes the completion of schematic design, site survey, geotechnical investigation, design development, and construction documents. She will be responsible for leading the School District and applying for additional funds to complete the construction of the building in the coming year.

Project Manager (December 2019 – Ongoing)

Lake County, CA | Project Management and Insurance Cost Recovery, Mendocino Complex Fires

Due to COVID this client has elected to postpone project startup. However, Ms. Hill maintains the relationship and has scheduled project start up set for January 2021. She will be responsible for managing a team to recover duplication of benefits post the Mendocino Complex Fires.

Project Manager (June 2020 – Ongoing)

Richland County, SC I HMGP Acquisitions and URA

Ms. Hill managed a team to complete over 30 acquisitions in Richland County. This involves managing staff and demo contractors while being the liaison with the client. She manages deliverables, outreach information and drives the project forward to completion. Regarding, URA Ms. Hill has developed programmatic guidelines to assist tenants post disaster to retrieve funds for relocation.

Project Manager (August 2017 – June 2019)

CT Division of Emergency Management and Homeland Security | HMGP Close – Out and Grant Eligibility

Ms. Hill was responsible for conducting reviews of individual Hazard Mitigation projects financial documentation for accuracy and eligibility, for close-out and reimbursement funding by the State of Connecticut.

Insurance Subrogation Lead (August 2017 – June 2018)

Calaveras County, CA | Project Management and Insurance Cost Recovery, Butte Wildfire Disaster

Ms. Hill led and managed a team in developing and implementing an insurance cost recovery program for the County of Calaveras on behalf of CAL Recycle. The team was able to recover over $7M in insurance funds for the County. Ms. Hill produced weekly status reports to the client and communicated directly with Cal OES Recovery Operations Officer and state agencies. Using RecoveryTrac, she developed and maintained all intake/outreach correspondence of disaster victims involved. Ms. Hill oversaw the coordination between the disaster victim and the County. She reviewed documents to determine if there was duplication, conducted outreach to those with duplication; and managed process of receiving duplication of benefits throughout the project. To mitigate project-specific challenges, Ms. Hill implemented a four-step process in case management.

PA Consultant Lead (August 2017 – October 2017)

City of Houston, TX | FAL&E Reconciliation

Ms. Hill did project start up for tracking force account labor and equipment following the disaster declaration for Hurricane Harvey for City of Houston Solid Waste Management. She was responsible for putting together and managing a team to collect data from six operating service centers currently totaling $21M in expenses where seventy five percent are reimbursable by FEMA.

Hazard Mitigation Specialist (April 2016–August 2017)
City of Houston, TX | FAL&E Reconciliation

Ms. Hill served as the data manager for all service centers running in the City of Houston and was responsible for capturing force account labor. She was responsible for compiling the documentation in order to reimburse the Solid Waste Management Centers costs for debris removal by FEMA.

Hazard Mitigation Specialist (February 2017–April 2017)
City of Albany & Dougherty County, GA | FAL&E Reconciliation

Ms. Hill served as the data manager for all force account labor and equipment provided by the City of Albany and Dougherty County. She was responsible for compiling and reviewing data for FEMA reimbursement for eligible expenses.

Hazard Mitigation Specialist (May 2016–December 2016)
Fort Bend County, TX | Substantial Damage Determinations and Application Development

Ms. Hill served as the data and field manager for all home inspections and field inspectors. She was responsible for community outreach and headed the Flood Recovery Center to field questions and concerns from flood victims regarding FEMA and County regulations.

Hazard Mitigation Specialist (April 2016–January 2017)
Texas & South Carolina | Application Development

Ms. Hill served as a team member to provide support for submission of buyout mitigation grant applications to Montgomery County, Texas, Fort Bend County, Texas and Lexington County and the City of Charleston, South Carolina. She was responsible for community outreach, compiling application documents as well as writing the FEMA application.

Hazard Mitigation Specialist (January 2014–December 2017)
Galveston County, TX | FEMA Severe Repetitive Loss (SRL) Elevation (220 properties) Grant Application Development and Support

Ms. Hill implemented mitigation measures to reduce residential property long-term flood risk and assisted in lowering homeowners flood insurance rates. She provided support in grant management while maintaining the support of three levels of government. She was responsible for analyzing and reporting project quarterly financials and remained current with governmental regulation changes, grant program task order to develop more effective, efficient tracking systems for business processes. Additionally, she compiled elevation project documentation for requests of reimbursable funds to the County from FEMA as well as for filing ICC claims on behalf of the eligible participating homeowners.

Hazard Mitigation Specialist (September 2015–October 2015)
City of Houston, TX | Wood and Yard Waste Removal Services for Solid Waste Management Department Support

Ms. Hill provided assistance in reconciling and auditing force account labor according to project cost estimation and documentation.

Hazard Mitigation Specialist (June 2015–August 2015)
Galveston County, TX I Flood Mitigation Assistance (FMA) Application Support
Walton County, Florida I Flood Mitigation Assistance (FMA) Application Support

Ms. Hill assisted in writing Galveston County's and Walton County's FMA 2015 application for FEMA funding. In addition, she was responsible for community outreach and documentation intake.

Hazard Mitigation Specialist (January 2014–December 2015)

Galveston County, TX | FEMA Hazard Mitigation Grant Program (HMGP) Closeout Support

Ms. Hill assisted Galveston County with closeout support associated with Hurricane Ike HMGP acquisitions. As part of this work, Ms. Hill served as the County's representative in reviewing final costs and closeout documentation.

Hazard Mitigation Specialist (January 2014–December 2015)

Galveston County, TX | SRL Elevations Closeout Support

Ms. Hill assisted Galveston County with closeout support associated with Hurricane Ike SRL elevations. As part of this work, Ms. Hill served as the County's representative in reviewing final costs and closeout documentation.

EMPLOYMENT HISTORY

- Tetra Tech, Inc., Financial Analyst, (January 2014 – Present)
- UTMB Health, Financial Analyst (August 2013–January 2014)
- Easy Gardner Products, Inc., Financial Analyst (July 2012–May 2013)
- CMC America, Financial Data Analyst (November 2011–June 2012)
- New York Life Long-Term Care, Policy Production Analyst (June 2011–August 2011)
- Christus Health Hospitals, Decision Support and Reimbursement Analyst (June 2009–August 2011)
- New York Life Long-Term Care, Medical Information Unit Specialist (June 2010–August 2010)

TETRA TECH

Steve Sims, PMP
Rental Assistance Lead

EXPERIENCE SUMMARY

Mr. Steve Sims is a seasoned program and project manager with extensive experience in developing, operating, and closing disaster recovery grant programs for both FEMA and HUD. He has designed compliance and monitoring workflows for 110,000 subrecipients, managed over 20 client programs administering FEMA PA funding, and closed almost 100 projects for Category A, B, and C damages. Mr. Sims has also managed multiple large HUD CDBG programs by defining grant programs, hiring staff, and creating processes to efficiently disburse more than $10 billion in federal disaster recovery grant funds. Most recently, Mr. Sims has spearheaded Tetra Tech's ERAP programming, providing support to Mobile County, Alabama's $12.3 million ERAP program. Mr. Sims was selected to support this engagement due to his steadfast dedication to quality control, process improvement, and customer service in social programs. This will provide elevated support for rental assistance programs the City may pursue under ARPA funding.

RELEVANT EXPERIENCE

Planning Program Manager (February 2021 – Present)
Mobile, AL Rental Assistance Program | Tetra Tech, Inc.

Within one week of going live, Mobile County's ERAP program received more applications within the first week than we expected for six months. As planning program manager, has provided oversight for application processing, with the first payments completed within about 30 days. To date, our team has submitted payments for 975 cases totaling just under $4.5M.

We anticipate disbursing Mobile County's entire ERAP 1 funds by the end of July or the first week of August 2021, and anticipate winning the contract to help Mobile County disburse their ERAP 2 funds.

- Developed ERAP program for Mobile County, AL
- Managed Client relationship during challenging contract amendment
- Currently approved 975 ERAP cases for a total of almost $4.5M, with 100% case acceptance by the Client.
- Lessons learned on Mobile program implemented across all TT ERAP programs
- Helped many newer Program Managers implement their ERAP programs
- Direct Manager for 30+ staff of Case Managers and QC Reviewers.

FEMA Senior Consultant
Integrated Solutions Consulting

- Senior Consultant for FEMA Public Assistance (PA) Program, managing over 20 clients in a Ohio disaster.
- Tasked with assisting counties, cities, and townships recover from damages to a large number of roads and embankments.
- Closed almost 100 projects (Cat A, B & C).

YEARS OF EXPERIENCE

36 years

AREA OF EXPERTISE

- Program Management
- Disaster Recovery
- Grant Management

GRANT EXPERIENCE

- Emergency Rental Assistance Program
- FEMA Public Assistance
- HUD CDBG-DR

TRAINING/CERTIFICATIONS

- Certified Adjuster (Texas)
- PMI Project Management Professional (PMP)
- E0869 (Public Assistance Program Delivery Management)
- IS-634 (FEMA Public Assistance Program)
- IS-632A (Debris Operations)
- IS-100C (Incident Command System - ICS)
- IS-556 (Damage Assessment for Public Works)
- IS-633 (Debris Management Plan Development)
- IS-2002 (FEMA Operational Planning)
- IS-1004 (FEMA Site Inspection Process)

EDUCATION

Honors Bachelor of Science, University of Louisiana-Lafayette, Major Computer Science, Minors Business, English, Math

Director, Operations & QA/QC (2008 – 2018)
Hammerman & Gainer (HGI)

- Operations Principal for a large CDBG-DR recovery effort ($10B), implementing/managing seven different HUD CDBG Disaster Recovery grant programs, and eight unmet needs programs. Coauthored the RFP Response to win the business. (Hurricanes Katrina & Rita)
- Interviewed, hired and trained 120+ Case Managers, Call Center Analysts, QA Analysts, & Inspectors.
- Directed the day-to-day activities for over 100 staff in the Operations and QA Organizations.
- Developed a streamlined approach for implementing disaster recovery housing grant program implementations. Designed, documented, and implemented the operational procedures/SOP's.
- Designed much of the workflow process using PMBOK concepts. Wrote checklists, tracking software, training docs, and production reports to maintain auditability and confirm compliance with HUD CDBG regulations. Created project schedules as needed in MS-Project.
- Opened and staffed satellite offices as needed to support the local grant recipients.
- Created and managed the QA team to verify case management quality and adherence to published procedures. Developed detailed process and product controls for all operations. Collected and statistically analyzed process, defect, and operational data to measure and maintain product quality.
- Won two contract renewals and several contract scope extensions, successfully implementing new grant, unmet needs, and mitigation disaster recovery housing programs.
- Assisted in implementing construction estimating and oversight for several unmet needs programs using Xactimate. Performed QA reviews on field-generated cost estimates.
- Worked on other RFP responses and new business developments/procurements as needed.

Manager, Audits & QA/QC (2007 – 2008)
ICF – Louisiana Road Home Program

- Managed 30+ state, federal, and external audits for a $10B federal (HUD) grant program.
- Developed and trained a QA/QC team of 40+ analysts.
- Directed day-to-day operations to research data issues found in audits, and apply standard statistical analysis to extrapolate error rates.

Director, Core Services (2001 – 2007)
KnowledgeBase Marketing

- Reorganized Core Services Groups. Created new QA, Test, and Operations groups, implemented a new source control system, documented legacy systems, automated product builds and systems monitoring.
- Technical Account Manager for a large telecom client.
- Recognized in CIO Top 100 Innovations (2006) for creating a distributed computational model for address standardization software (Team Award).

Senior Consultant, Owner (1994 – 2001)
Superior Software Solutions

- XO Communications - Managed a team of 20+ for a large telecom implementation project.
- Raytheon/E-Systems/ElectroSpace - Technical lead and software program manager for a real time monitor and control system for a very low frequency communications project (NATO).
- Texas Instruments - Ported a leading case tool (IEF) to multiple Unix platforms, and tested using Oracle, Sybase, and Informix databases.

Project Manager Advanced SE (1985 – 1994)
Electronic Data Systems

- Converted mainframe software systems (Title XIX Medicaid) to client/server data warehouses
- Created common mainframe software to install on each EDS mainframe. Matrix-managed 40 systems programmers comprising several development and test teams.

TETRA TECH

Tricia Rowan
Federal Program Specialist

EXPERIENCE SUMMARY

Ms. Rowan is a grant specialist and program manager with five years of grant management experience. She has extensive experience serving Florida agencies, having worked for the Florida Governor's Office of Policy and Budget and the Florida Division of Emergency Management. She has served as contract manager for many multimillion-dollar grant management and staff augmentation contracts. She has led key initiatives, such as the implementation of the Florida Coronavirus Relief Fund (CRF) Program, overseeing more than $5.85 billion funding for state government and small and medium counties.

Ms. Rowan is extremely organized, friendly professional with a proven record of exemplary customer service and strong leadership skills. She is known for being resourceful and detail-oriented, as well as a skilled problem-solver and motivated self-starter. Ms. Rowan is highly dependable and eager to learn, with excellent time management skills and the ability to effectively multitask while remaining calm under pressure.

RELEVANT EXPERIENCE

Public Assistance Consultant (April 2021 – Present)
City of Philadelphia, Pennsylvania

- Provides consulting services to the City in response to the COVID-19 emergency regarding current and future available funding and cost recovery sources from state and federal agencies.
- Provides procurement support to the City for active and future COVID-19 related procurements by reviewing applicable documentation for compliance with Federal, State, and Local requirements specific to the Grant/Fund selected for the project.
- Liaises with City leadership to collect and review COVID-19 costs and relevant documentation submitted by departments and review/reconcile relevant project documentation for compliance with selected Grant/Fund source.
- Oversees auditing of cost data (time sheets, project specific costs, outgoing payments to funding recipients (residents, businesses) to ensure all activities have been performed to follow City project SOPs and guidelines to avoid fraud, waste and abuse of funds.

Government Analyst III (August 2020 – March 2021)
Florida Governor's Office of Policy and Budget, Federal Relief Acts Project Unit

- Assisted in program management of the CRF. Researched and maintained guidance from the U.S. Department of Treasury.
- Wrote program guidelines documenting policies and approaches of the Florida CRF Program.
- Provided training and technical assistance to State Agencies on U.S.

YEARS OF EXPERIENCE

5 years

AREA OF EXPERTISE

- Accounting
- Grant Management
- Compliance & Reporting
- Auditing

GRANT EXPERIENCE

- FEMA Public Assistance
- Coronavirus Relief Fund

TRAINING/CERTIFICATIONS

- Microsoft Certified in Excel 2019
- Florida Certified Contract Manager, January 2019

EDUCATION

Bachelor of Arts, Accounting
Flagler College, 2017

Treasury guidance and State policies. Reviewed State Agency costs for eligibility in the CRF program.

- Assisted in determining the most cost-effective federal source for pandemic-related costs.
- Submitted quarterly reports to the U.S. Treasury Office of Inspector General detailing the State of Florida's CRF costs.
- Prepared presentations and talking points to facilitate briefings with legislative, executive, and external partners in understanding Florida's use of the CRF and other federal relief acts.

Compliance Program Manager (July 2019 – August 2020)
Compliance Program Team Lead (July 2019 - April 2020)
Florida Division of Emergency Management (FDEM), Bureau of Recovery

- Supervisor over the Compliance Unit.
- Assisted Bureau management in creating a new section, the Compliance Unit, to oversee subrecipient risk assessments and monitoring for Federal Emergency Management Agency's (FEMA) Public Assistance Program in accordance with 2 CFR 200.
- Created FDEM-formalized Subrecipient Compliance Program Standard Operating Procedures, including criteria for formalized risk assessments, the review process for subrecipient Federal Single Audit Reports, and yearly monitoring plans for each Public Assistance Program subrecipient.
- Conducted reviews of subrecipient Federal Single Audit Reports and issued Management Decision letters on behalf of FDEM.
- Facilitate various audits of the Recovery Bureau including the Auditor General's annual Federal Awards audit of the Public Assistance Program and the 2017 Wildfires and Hurricanes Indemnity Program. Created the State Entity Response and Corrective Action Plan for the Auditor General's audit findings.
- Provided technical assistance for the Public Assistance Program to subrecipients, auditors, and FDEM personnel.
- COVID-19 Activation (March 2020-August 2020): Served as Field Operations Director for all state supported, drive-through Community Based Testing Sites.

Contract Manager (December 2018 – July 2019)
Florida Division of Emergency Management (FDEM), Bureau of Recovery

- Contract manager for 15 multimillion-dollar grant management and staff augmentation contracts.
- Developed new processes to review invoices and activity-timesheets for accuracy.
- Audited contractor's time worked on activity-timesheets in Microsoft Excel against the Bureau's grant management system.
- Created multiple tracking spreadsheets used in reimbursement request submissions to the Federal Emergency Management Agency.

Professional Account Specialist (December 2017 – December 2018)
Florida Department of Financial Services, Bureau of Vendor Relations

- Maintained the State of Florida's Statewide Vendor File within Florida Accounting Information Resource (FLAIR). Added and updated vendor records.
- Generated and audited numerous quality control reports in Microsoft Excel to safeguard the validity of the Statewide Vendor File, including a monthly audit of records added by state agencies against the Statewide Vendor File Reference Guide.
- Assisted vendors in completing online Substitute Form W-9's.
- Reviewed disbursements initiated by agency personnel to ensure internal control guidelines were being followed.
- Assisted with various State Agency-wide projects.

Senior Professional Accountant (June 2016 – December 2017)
Florida Department of Financial Services, Bureau of Auditing

- Audited Agency payment voucher schedules and journal transfers according to Florida Statutes in Florida Accounting Information Resource (FLAIR) and MyFloridaMarketPlace; posted acceptable voucher schedules. Prepared and sent return forms of improper payments to the State Agency finance departments.
- Answered questions regarding payments, contracts, and Florida Statutes from State Agencies.

Accounts Receivable Clerk (February 2015 – June 2016)
Altrua Global Solutions

- Printed, verified, and maintained accounts receivable invoice records and aging reports.
- Updated and reviewed aged receivables for unpaid balances; determined whether there was an internal accounting issue before contacting customers for collections. Corrected internal issues as needed.
- Prepared and keyed remittance advices for posting checks received.
- Cross-trained to complete Accounts Payable Clerk duties.

LAURA SOILEAU, CPA, CIA, CGMA, CRMA, CFE, CISA - POSTLETHWAITE & NETTERVILLE
Director

Laura Soileau, CIA, CISA, CPA, CFE, CRMA, CGMA, is a Director in P&N's Consulting Services Group. Laura has 20 years of internal audit experience. Her practice area includes working with a variety of organizations on internal audit, internal controls, governance, risk, compliance and fraud-related matters. Laura also has experience leading and delivering system and organization control (SOC) examinations.

Laura has extensive experience in all aspects of internal audit, including working with audit committees; leading internal audit and internal controls assessments; facilitating risk assessments for financial, operational and technology audits; coordinating with external auditors; overseeing the execution of audit plans; and communicating with senior leadership and audit committees. Her clients come from a diverse array of industries, including governmental, public companies, higher education, and professional services.

Laura also has a depth of experience helping small to mid-size organizations in assessing their current state environment and making recommendations to improve performance, including identification of internal controls tailored to the organization as well as opportunities to improve the effectiveness and efficiency of the organization. Additionally, Laura is experienced in fraud prevention and detection, including the development of a client-specific risk-based approach to fraud monitoring and investigation through the use of data analytics. Laura has also attended the AICPA's SOC School.

Laura was named one of twenty "emerging Leaders" by The IIA in 2014. Laura has also co-authored multiple articles for IA magazine and presents regularly on internal audit and fraud-related topics. Laura currently serves as Chairman of The IIA North American Board of Directors in addition to serving on The IIA's Global Board of Directors

PROJECT EXPERIENCE

Fort Bend County, Texas Rental, Mortgage and Utility Assistance Program (RMU Program)

Project Description: P&N is engaged to perform QA/QC reviews of payments to vendors from CARES Act funding through the Fort Bend County RMU program. Fort Bend County approved $19.5 million in funding from the CARES Act to support residents in paying their rent or mortgage from June 2020 through December 2020. An additional $2 million was allocated by the county for utility assistance for residents. Further, approximately, $27 million was allocated to Fort Bend County for rental and utility assistance through the Emergency Rental Assistance Program, which is expected to continue through December 31, 2021.

As the Engagement Director, Laura is responsible for overseeing all aspects of the engagement. Her responsibilities also include developing the project work plan and staffing, ensuring overall quality and timeliness, communicating with project team and stakeholders, issue and conflict resolution, and contractual matters.

Louisiana Department of Education – Child Care Assistance Program (CCAP), Child Care Development Fund
P&N was engaged to perform an internal control analysis, fraud risk assessment, and investigation related to the Child Care Development Fund (CCDF) administered by the Louisiana Department of Education (LDE) Child Care Assistance Program (CCAP). Day care centers across the state receive funding from CCDF to provide services to low income families.

As Engagement Director, Laura oversaw all aspects of the engagement. Her responsibilities also included developing project work plan, ensuring overall quality and timeliness, communicating with project team and stakeholders, issue and conflict resolution, and contractual matters.

Disaster Recovery Financial Services, Louisiana Department of Wildlife and Fisheries:
Hurricane Isaac and Mississippi River Flood - *Reimbursement activities resulting from Hurricane Isaac and Mississippi River Flood for expenses incurred by the State and eligible for reimbursement from FEMA through GOHSEP. (2011 – 2013)*

Deep Water Horizon Oil Spill - *Reimbursement activities through the Department of Public Safety (DPS) for expenses incurred by the LDWF's participation in PRFA and NRDA processes. (2011 – 2016)*

Project Manager, responsible for leading the project team through all phases of the engagement:
- Oversight of key risk management activities including contract compliance;
- Development and oversight of project implementation plans, including: scope definition, project deliverables and outcomes, resource plans, time and cost components, project schedules, and key performance indicators;
- Organizing, training, and deploying team members to the various aspects of project scope, from inception to the successful closeout of program activities;
- Establishing and monitoring deliverables aligned to stakeholder expectations.

EDUCATION, CERTIFICATIONS AND PROFESSIONAL AFFILIATIONS
- Master of Science, Accounting, Louisiana State University
- Bachelor of Science, Accounting/Marketing, University of Arkansas
- Chartered Global Management Accountant
- Certified in Risk Management Assurance
- Certified Fraud Examiner
- Certified Public Accountant
- Certified Information Systems Auditor
- Certified Internal Auditor
- Director, The Institute of Internal Auditors (IIA) Global Board, July 2017 - present
- North American Director, Vice Chair - Professional Development, The Institute of Internal Auditors (IIA) North American Board, April 2017 - present
- Member, Institute of Internal Auditors
- Member, American Institute of Certified Public Accountants
- Member, Society of Louisiana Certified Public Accountants
- Member, Association of Certified Fraud Examiners (ACFE)
- Member, ISACA
- Member, Editorial Advisory Board, Internal Auditor magazine, 2010 - 2019
- Member, Publications Advisory Committee of The Institute of Internal Auditors, North American Board, 2010 – 2017

LAURA SOILEAU, CPA, CIA, CGMA, CRMA, CFE, CISA – POSTLETHWAITE & NETTERVILLE
Director

Laura Soileau, CIA, CISA, CPA, CFE, CRMA, CGMA, is a Director in P&N's Consulting Services Group. Laura has 20 years of internal audit experience. Her practice area includes working with a variety of organizations on internal audit, internal controls, governance, risk, compliance and fraud-related matters. Laura also has experience leading and delivering system and organization control (SOC) examinations.

Laura has extensive experience in all aspects of internal audit, including working with audit committees; leading internal audit and internal controls assessments; facilitating risk assessments for financial, operational and technology audits; coordinating with external auditors; overseeing the execution of audit plans; and communicating with senior leadership and audit committees. Her clients come from a diverse array of industries, including governmental, public companies, higher education, and professional services.

Laura also has a depth of experience helping small to mid-size organizations in assessing their current state environment and making recommendations to improve performance, including identification of internal controls tailored to the organization as well as opportunities to improve the effectiveness and efficiency of the organization. Additionally, Laura is experienced in fraud prevention and detection, including the development of a client-specific risk-based approach to fraud monitoring and investigation through the use of data analytics. Laura has also attended the AICPA's SOC School.

Laura was named one of twenty "emerging Leaders" by The IIA in 2014. Laura has also co-authored multiple articles for IA magazine and presents regularly on internal audit and fraud-related topics. Laura currently serves as Chairman of The IIA North American Board of Directors in addition to serving on The IIA's Global Board of Directors

PROJECT EXPERIENCE

Fort Bend County, Texas Rental, Mortgage and Utility Assistance Program (RMU Program)

Project Description: P&N is engaged to perform QA/QC reviews of payments to vendors from CARES Act funding through the Fort Bend County RMU program. Fort Bend County approved $19.5 million in funding from the CARES Act to support residents in paying their rent or mortgage from June 2020 through December 2020. An additional $2 million was allocated by the county for utility assistance for residents. Further, approximately, $27 million was allocated to Fort Bend County for rental and utility assistance through the Emergency Rental Assistance Program, which is expected to continue through December 31, 2021.

As the Engagement Director, Laura is responsible for overseeing all aspects of the engagement. Her responsibilities also include developing the project work plan and staffing, ensuring overall quality and timeliness, communicating with project team and stakeholders, issue and conflict resolution, and contractual matters.

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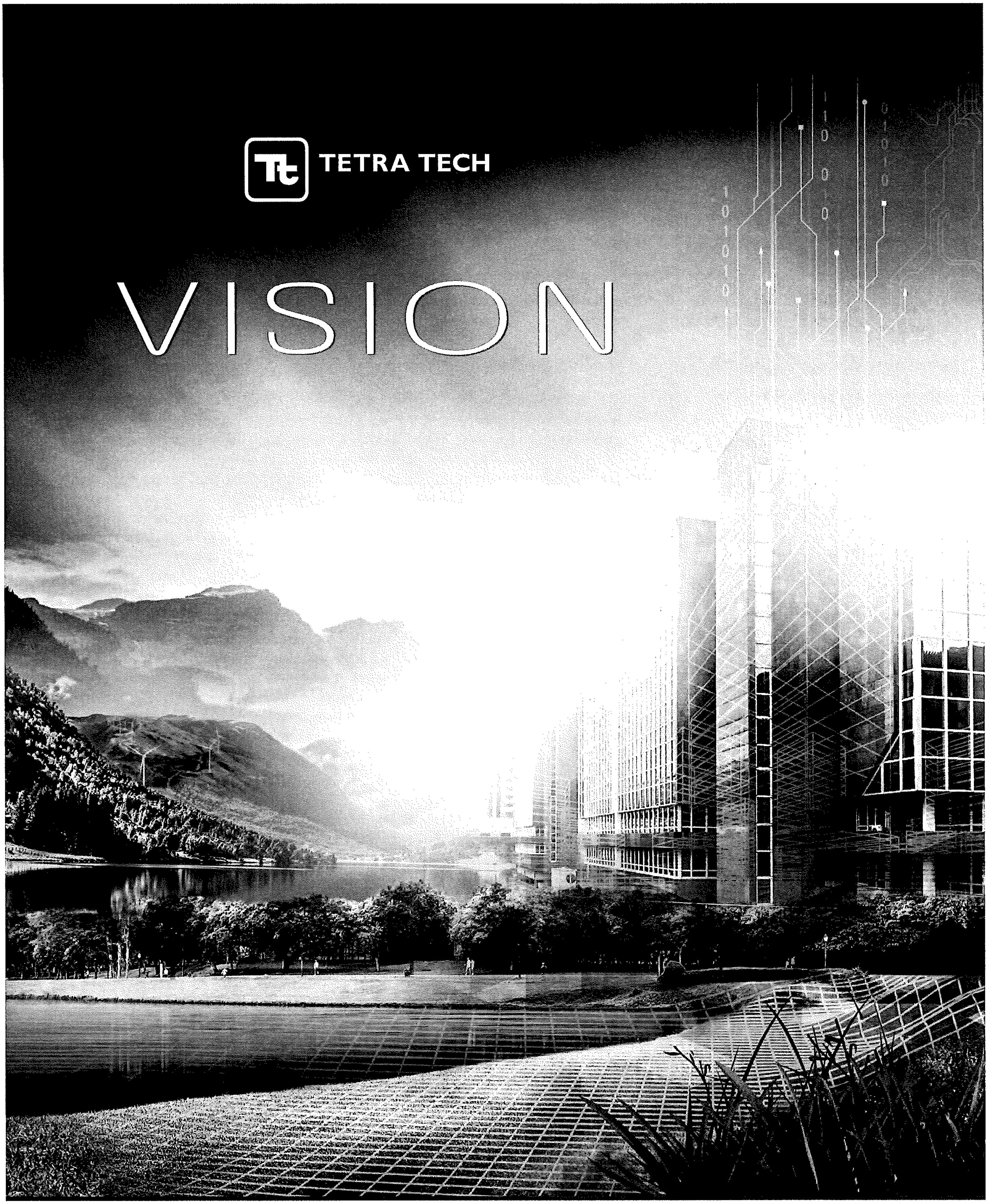
2. Financial Stability

Tetra Tech is a financially sound and successful firm with fiscal year 2020 annual revenues of more than $3 billion and approximately 20,000 employees. Tetra Tech has a Dun & Bradstreet rating of 5A2. To demonstrate the firm's solid financial performance, our most recent Annual Report has been included at the end of this section.

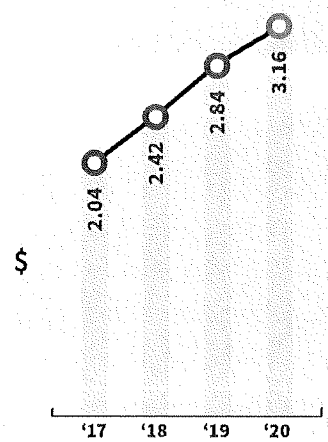
A confidential summary of P&N's financial position is also attached.

TETRA TECH

VISION



2020 Annual Report



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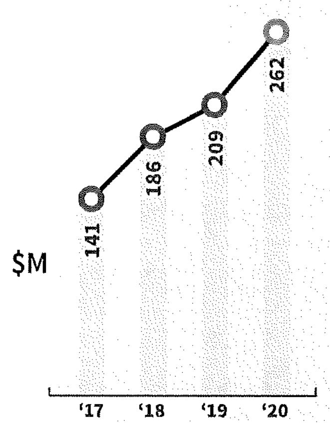
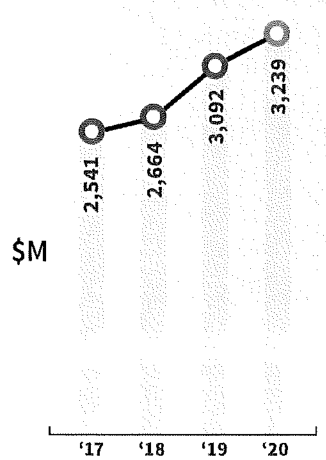


Cash from Operations



Backlog

Dear Shareholders,

As we enter 2021, Tetra Tech is in the best position ever in the history of the company. We are leaders in our markets with #1 rankings in Water for 17 consecutive years, Environment for 12 consecutive years, and 8 additional categories as published by *Engineering News-Record*. Our *Leading with Science®* approach is valued by our clients and augmented by a suite of proprietary technologies and analytical tools we call the Tetra Tech Delta. Through our projects, Tetra Tech is working to build a better future that is improving the lives of millions of people around the world.

In 2020, a year marked by the world's response to the global pandemic, Tetra Tech demonstrated that our unwavering focus is on our clients and our work providing essential services in water, environment, sustainable infrastructure, renewable energy, and international development. In fiscal year 2020, our 20,000 associates worked on more than 65,000 projects, in more than 100 countries on 7 continents, generating $3 billion in revenue. As a result of our differentiated high-end services, Tetra Tech achieved record results in 2020, including all-time highs for earnings per share, cash flow, and backlog. Earnings per share in 2020 was up 11 percent from the prior year, and the company generated $262 million of cash flow from operations, which was up 26 percent from last year. The demand for our high-end consulting services and resilience of our business model resulted in new program wins that drove backlog to another all-time high of more than $3.2 billion at year-end.

In 2020 we expanded our contract capacity to more than $20 billion, providing us with access to some of the largest markets in the world. With new U.S. government contracts, we are prepared to support a resurgence in research and programs to support essential climate change, water, environment, and renewable energy programs. We also advanced our strategic focus on cutting-edge technology solutions with the acquisitions of Segue Technologies and BlueWater Federal Solutions, who augment Tetra Tech's consulting and data analytics resources with more than 550 high-end technical experts in advanced analytics, cybersecurity, artificial intelligence, and enterprise-wide software applications.

In 2020 we reiterated our commitment to diversity, equity, and inclusion, embracing the breadth of experience of our 20,000 associates worldwide and our culture of technical excellence, innovation, and entrepreneurship. We launched our global Employee Resource Group Program, which broadens and enhances companywide interaction opportunities through collaborative, employee-led teams where all voices are heard, all employees feel safe, and each employee has the opportunity to thrive. As a signatory of the United Nations Global Compact on human rights, labor, environment, and anti-corruption, Tetra Tech embraces the Compact's Ten Principles as part of our strategy, culture, and daily operations.

Technical excellence, entrepreneurial spirit, and fiscal discipline are the characteristics that make Tetra Tech an exceptional company—and have remained unchanged since our founding in 1966.

Through both times of economic growth and disruption, Tetra Tech has maintained a consistent focus on the alignment of our industry-leading expertise with the long-term priorities of our clients. Over the past decade Tetra Tech has expanded from North America to include significant operations in Australia and the United Kingdom, and we now perform projects in more than 100 countries around the world. While remaining focused on our core water and environment services, we have strategically added complementary practices in disaster recovery and response, data analytics and information technology, and sustainable high-performance building design. Through our projects, we have worked on the leading edge of transformative programs such as offshore wind, the management of emerging contaminants such as PFAS and micro-plastics, and the design of resilient infrastructure for extreme conditions. We have leveraged more than 50 years of research and industry-leading applications that serve as the foundation for the solutions that represent the Tetra Tech Delta. Our Tetra Tech Delta solutions include first-of-a-kind rapid inspection services for infrastructure and rail (Rail AI™), water management optimization (CSoft®), and practical applications of artificial intelligence for asset management (Tetra Tech AI Vision™).

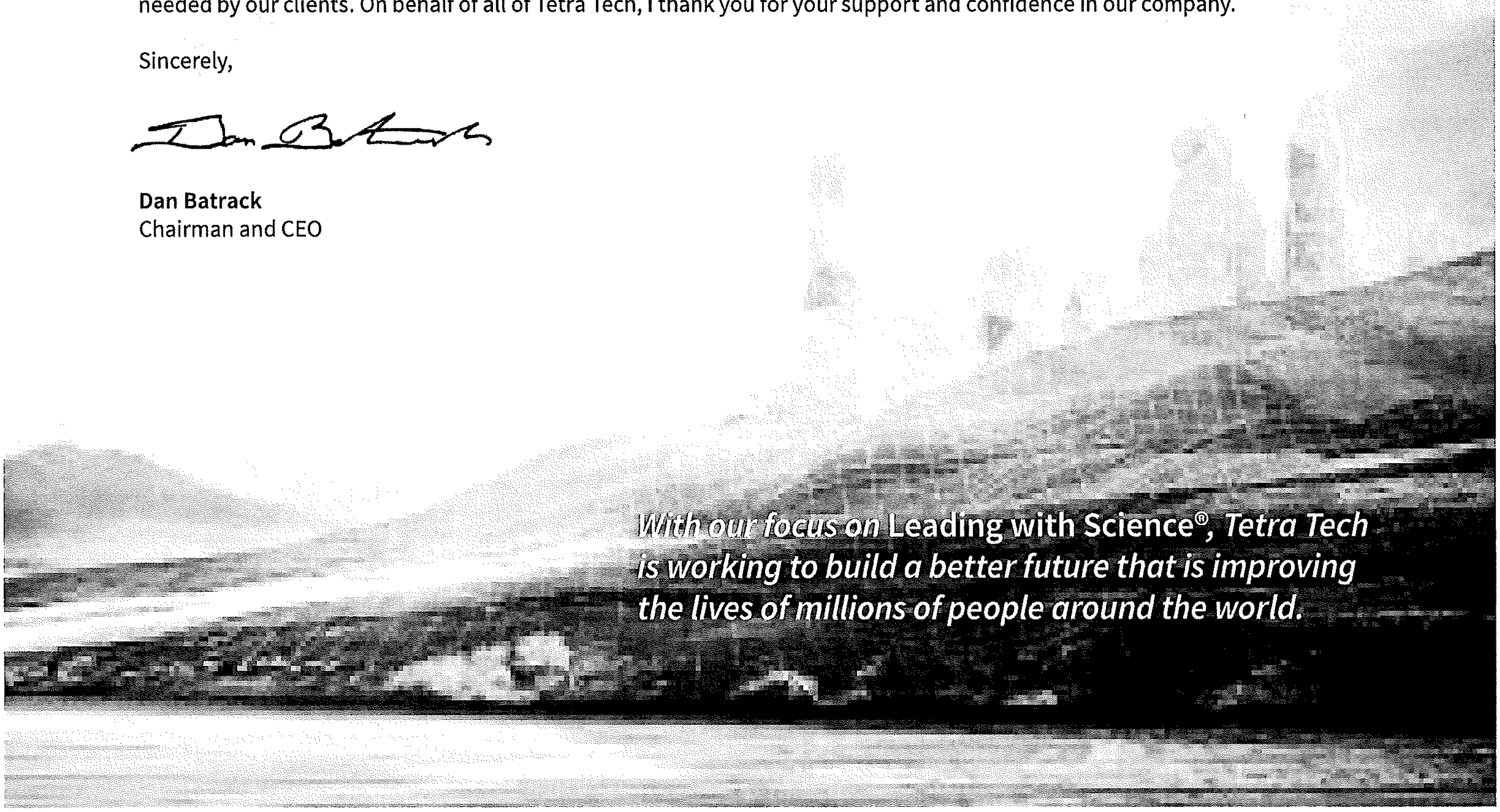
As we have shaped the company to prepare for the future, we have also provided value for our shareholders. Over the past five years, total shareholder return has been an extraordinary 283 percent. We have returned over $157 million to shareholders through 26 consecutive quarterly dividends since 2014. Tetra Tech's capital allocation has resulted in 140 percent return on stock buybacks, funded by our operations, effectively reducing our share count even as the company has grown. Tetra Tech's market cap has quadrupled in 10 years, from $1.3 billion to over $5 billion at the end of the 2020 fiscal year. Our early investments in IT and financial infrastructure throughout the last decade have enabled us to increase efficiency while reducing costs. Today we are 100 percent in the cloud with a global Enterprise Resource Planning System and optimized network that facilitates remote working and interoffice collaboration. Our office space resources have been designed to be flexible through the disciplined negotiation of shorter-term lease agreements, resulting in our ability to reduce office space over the next several years by more than 20 percent with expected annual cost savings of $20 million, as we adapt to hybrid in-office and remote working arrangements.

The consistency of our focus on water and environment, the inherent ingenuity of our world-class technical experts, and our more than $20 billion in contract capacity—these are the elements that set the stage for us to address the challenges of the future. The markets we serve are now at the center of emerging challenges such as adapting to climate change in coastal areas, providing reliable water supplies in drought-stricken regions, identifying innovative sources of renewable energy, and reducing carbon emissions.

We look forward to the opportunities of the next decade and to applying our global resources to provide the clear solutions needed by our clients. On behalf of all of Tetra Tech, I thank you for your support and confidence in our company.

Sincerely,

Dan Batrack
Chairman and CEO



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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Fiscal Year Ended September 27, 2020

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Transition Period from to

Commission File Number 0-19655

TETRA TECH, INC.
(Exact name of registrant as specified in its charter)

Delaware	**95-4148514**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

3475 East Foothill Boulevard, Pasadena, California 91107
(Address of principal executive offices) (Zip Code)

(626) 351-4664
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.01 par value	TTEK	The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐ Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of the registrant's common stock held by non-affiliates on March 29, 2020, was $3.6 billion (based upon the closing price of a share of registrant's common stock as reported by the Nasdaq National Market on that date).

On November 12, 2020, 53,777,381 shares of the registrant's common stock were outstanding.

DOCUMENT INCORPORATED BY REFERENCE

Portions of registrant's Proxy Statement for its 2021 Annual Meeting of Stockholders are incorporated by reference in Part III of this report where indicated.

TABLE OF CONTENTS

This Annual Report on Form 10-K ("Report"), including the "Management's Discussion and Analysis of Financial Condition and Results of Operations," contains forward-looking statements regarding future events and our future results that are subject to the safe harbors created under the Securities Act of 1933 (the "Securities Act") and the Securities Exchange Act of 1934 (the "Exchange Act"). All statements other than statements of historical facts are statements that could be deemed forward-looking statements. These statements are based on current expectations, estimates, forecasts and projections about the industries in which we operate and the beliefs and assumptions of our management. Words such as "expects," "anticipates," "targets," "goals," "projects," "intends," "plans," "believes," "estimates," "seeks," "continues," "may," variations of such words, and similar expressions are intended to identify such forward-looking statements. In addition, statements that refer to projections of our future financial performance, our anticipated growth and trends in our businesses, and other characterizations of future events or circumstances are forward-looking statements. Readers are cautioned that these forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions that are difficult to predict, including those identified below under "Risk Factors," and elsewhere herein. Therefore, actual results may differ materially and adversely from those expressed in any forward-looking statements. We undertake no obligation to revise or update publicly any forward-looking statements for any reason.

PART I

Item 1. Business

General

Tetra Tech, Inc. ("Tetra Tech") is a leading global provider of consulting and engineering services that focuses on water, environment, sustainable infrastructure, resource management, energy, and international development. We are a global company that is *Leading with Science®* to provide innovative solutions for our public and private clients. We typically begin at the earliest stage of a project by identifying technical solutions and developing execution plans tailored to our clients' needs and resources.

Tetra Tech is *Leading with Science®* to provide sustainable and resilient solutions to our clients' most complex needs. *Engineering News-Record* ("ENR"), the engineering industry's leading magazine, has ranked Tetra Tech #1 in Water for 17 years in a row. In 2020, we were also ranked #1 in dams and reservoirs, environmental management, environmental science, hydro plants, solid waste, water treatment/desalination, water treatment/supply, and wind power. ENR also ranked Tetra Tech in the top 10 in several categories, including chemical and soil remediation, green building design, hazardous waste, solar power, and site assessment and compliance.

Our reputation for high-end consulting and engineering services and our ability to develop solutions for water and environmental management has supported our growth for more than 50 years. Today, we are proud to be making a difference in people's lives worldwide through broad consulting, engineering, and technology service offerings. In fiscal 2020, we worked on over 65,000 projects, in more than 100 countries on seven continents, with a talent force of 20,000 associates. We are *Leading with Science®* throughout our operations, with domain experts across multiple disciplines supported by our advanced analytics, artificial intelligence ("AI"), machine learning, and digital technology solutions. Our ability to provide innovation and first-of-kind solutions is enhanced by partnerships with our forward-thinking clients. We are diverse and inclusive, embracing the breadth of experience across our talented workforce worldwide with a culture of innovation and entrepreneurship. We are disciplined in our business delivering value to customers and high performance to our shareholders. In supporting our clients, we seek to add value and provide long-term sustainable consulting, engineering, and technology solutions.

By combining ingenuity and practical experience, we have helped to advance sustainable solutions for managing water, protecting the environment, providing energy, and engineering the infrastructure for our cities and communities. Our mission is to be the world's leading consulting and engineering firm solving global challenges in water and the environment that make a positive difference in people's lives worldwide.

The following core principles form the underpinning of how we work together to serve our clients:

- *Service.* We put our clients first. We listen closely to better understand our clients' needs and deliver smart, cost-effective solutions that meet their needs.
- *Value.* We solve our clients' problems as if they were our own. We develop and implement sustainable solutions that are innovative, efficient and practical.
- *Excellence.* We bring superior technical capability, disciplined project management, and excellence in safety and quality to all of our services.
- *Opportunity.* Our people are our number one asset. Opportunity means new technical challenges that provide advancement within our company, encourage an inclusive and diverse workforce, and ensure a safe workplace.

We have a strong project management culture that enables us to deliver on more than 65,000 projects in a year. We maintain a strong emphasis on project management at all levels of the organization. Our client-focused project management is supported by strong fiscal management and financial tools. We use a disciplined approach to monitoring, managing, and improving our return on investment in each of our business areas through our efforts to negotiate appropriate contract terms, manage our contract performance to minimize schedule delays and cost overruns, and promptly bill and collect accounts receivable.

We have a broad client and contract base built by proactively understanding our clients' priorities and demonstrating a long track record of successful performance that results in repeat business and limits competition. We believe that proximity to our clients is also instrumental to integrating global experience and resources with an understanding of our local clients' needs. Over the past year, we worked in more than 100 countries, helping our clients address complex water, environment, energy and related infrastructure needs.

Throughout our history, we have supported both public and private clients, many for multiple decades of continuous contracts and repeat business. Long-term relationships provide us with institutional knowledge of our clients' programs, past projects and internal resources. Institutional knowledge is often a significant factor in winning competitive proposals and providing cost-effective solutions tailored to our clients' needs.

We are often at the leading edge of new challenges where we are delivering one-of-a-kind solutions. These might be a new water treatment technology, a unique solution to addressing new regulatory requirements, a new system for automated assessment of infrastructure assets or a digital twin for real time management of water treatment systems.

We combine interdisciplinary capabilities, technical resources, and institutional knowledge to implement complex projects that are at the leading edge of policy and technology development.

Leading with Science®

At Tetra Tech, we provide value-generating solutions by combining operational expertise, science, and technology. By *Leading with Science®* and leveraging our collective technology including advanced data analytics and digital technologies, we create transformational solutions for our clients.

Tetra Tech's proprietary technologies and solutions, referred to collectively as the Tetra Tech Delta, differentiate us in the market and provide us with a competitive advantage. We create customized solutions; from smart data collection and advanced analytics that support decision making to AI enabled solutions for asset management. Our Tetra Tech Delta technologies are drawn from our decades of operational experience and a reservoir of technical applications that are shared throughout our company. Our high-end teams connect interdisciplinary experts from across our company's 20,000 staff worldwide. Tetra Tech mobilizes teams that include analysts, statisticians, digital engineers, and industry experts who effectively implement value-generating and pragmatic solutions for our clients.

These advanced analytical solutions enable us to provide clients with real-time reporting, automated and remote data collection, and dashboards for tracking and communicating results. Tetra Tech Delta is continually expanding and includes cutting-edge tools on interpretive analysis, modeling of physical systems, forecasting and scenario analysis, optimization and operations research.

In implementing our *Leading with Science®* approach, we work with our clients to explore, incubate, and test solutions in our Tetra Tech Innovation Hubs ("Tt I-Hub"). Tt I-Hub provides a collaborative platform for exploration, testing, and formulation of new solutions in partnership with clients, academia and donor agencies.

Leading with Science® also means fully leveraging the collective expertise provided by our global talent force of 20,000 associates. We actively share information, ideas, and resources across our global operations through our network structure, guided subject matter teams, and project team building. We also proactively share emerging technology and new ideas through our knowledge transfer system, Tetra Tech Technology Transfer ("T4"). T4 facilitates our innovation culture through webcasts, blogs, multi-media, and social media across our global operations.

Reportable Segments

In fiscal 2020, we managed our operations under two reportable segments. Our Government Services Group ("GSG") reportable segment primarily includes activities with U.S. government clients (federal, state and local) and all activities with development agencies worldwide. Our Commercial/International Services Group ("CIG") reportable segment primarily includes activities with U.S. commercial clients and international clients other than development agencies. These reportable segments allow us to capitalize on our growing market opportunities and enhance the development of high-end consulting and technical solutions to meet our growing client demand. We continued to report the results of the wind-down of our non-core construction activities in the Remediation and Construction Management ("RCM") reportable segment. The following table presents the percentage of our revenue by reportable segment:

Reportable Segment	Fiscal Year 2020	2019	2018
GSG	59.4%	58.6%	57.2%
CIG	42.3	43.1	44.6
RCM	—	—	0.5
Inter-segment elimination	(1.7)	(1.7)	(2.3)
	100.0%	100.0%	100.0%

For additional information regarding our reportable segments, see Note 18, "Reportable Segments" of the "Notes to Consolidated Financial Statements" included in Item 8. For more information on risks related to our business, reportable segments and geographic regions, including risks related to foreign operations, see Item 1A, "Risk Factors" of this report.

Government Services Group

GSG provides consulting and engineering services primarily to U.S. government clients (federal, state and local) and development agencies worldwide. GSG supports U.S. government civilian and defense agencies with services in water, environment, sustainable infrastructure, information technology, and disaster management. GSG also provides engineering design services for U.S. municipal and commercial clients, especially in water infrastructure, solid waste, and high-end sustainable infrastructure designs. GSG also leads our support for development agencies worldwide, especially in the United States, United Kingdom, and Australia.

GSG provides consulting and engineering services for a broad range of water, environment, and infrastructure-related needs primarily for U.S. government clients. The primary GSG markets include water resources analysis and water management, environmental monitoring, data analytics, government consulting, waste management, and a broad range of civil infrastructure master planning and engineering design for facilities, transportation, and local development projects. GSG's services span from early data collection and monitoring, to data analysis and information management, to science and engineering applied research, to engineering design, to construction management, and operations and maintenance.

GSG provides our clients with sustainable solutions that optimize their water management and environmental programs to address regulatory requirements, improve operational efficiencies, and manage assets. Our services advance sustainability and resiliency through the "greening" of infrastructure, design of energy efficiency and resource conservation programs, innovation in the capture and sequestration of carbon, development of disaster preparedness and response plans, and improvement in water and land resource management practices. We provide climate change and energy management consulting, and greenhouse gas ("GHG") inventory assessment, certification, reduction, and management services.

Many government organizations face complex problems due to increased demand and competition for water and natural resources, newly understood threats to human health and the environment, aging infrastructure, and demand for new and more resilient infrastructure. Our integrated water management services support government agencies responsible for managing water supplies, wastewater treatment, storm water management, and flood protection. We help our clients develop more resilient water supplies and more sustainable management of water resources, while addressing a wide range of local and national government requirements and policies. Fluctuations in weather patterns and extreme events, such as prolonged droughts and more frequent flooding, are increasing concerns over the reliability of water supplies, the need to protect coastal areas, and flood mitigation and adaptation in metropolitan areas. We provide smart water infrastructure solutions that integrate water modeling, instrumentation and controls, and real-time controls to create flexible water systems that respond to changing conditions, optimize use of existing infrastructure, and provide clients with the ability to more efficiently monitor and manage their water infrastructure. We provide operational technology for secure management of water treatment and wastewater systems, including cybersecurity assessment and digital twin solutions.

We also support government agencies in the full range of disaster response and community resilience services including monitoring and environmental response, damage assessment and program management services, and resilient engineering design and mitigation planning. We have a full suite of proprietary software tools and procedures that support our disaster response, planning, and management support services. These tools and procedures address disaster management and community resilience data management needs, including information technology systems, portals, dashboards, data management, data analytics, and statistical analysis.

GSG provides planning, architectural, and sustainable engineering services for U.S. federal, state and local government facilities and non-residential commercial buildings. We support the government agencies with related infrastructure needs including military housing, and educational, institutional, and research facilities. Our high-performance buildings practice provides sustainable energy, water, and GHG efficient solutions including civil, electrical, mechanical, structural, plumbing and fire protection engineering and design services for buildings and surrounding developments. We provide high-end services in addressing indoor health and associated assessment, consulting, and retrofits of buildings to address indoor air quality and safety. We also provide engineering services for a wide range of clients with specialized needs, such as security systems, training and audiovisual facilities, clean rooms, laboratories, medical facilities and disaster preparedness facilities.

GSG provides a wide range of consulting and engineering services for solid waste management, including landfill design and management and recycling facility design, throughout the United States; providing design, construction management, and maintenance services to manage solid and hazardous waste, for environmental, wastewater, energy, containment, mining, utilities, aquaculture, and other industrial clients; designing and installing geosynthetic liners for large lining and capping projects, as well as innovative renewable energy projects such as solar energy-generating landfill caps; and providing full-service solutions for gas-to-energy facilities to efficiently use landfill methane gas.

We provide high-end advanced analytics and information technology ("IT") consulting and support to various federal clients including AI applications, machine learning, modernization of IT systems, and cloud migration. We design solutions to manage and analyze data for major federal agency programs including data related to health, security, environment, and water programs. We use our e-lab to demonstrate and test technology solutions to facilitate rapid deployment by our clients. We provide technical support for the Federal Aviation Administration ("FAA") to optimize the U.S. airspace system and support related aviation systems integration for the U.S. and other countries' metropolitan airports. We provide specialized modeling and data analytics for airspace acoustic analysis. Our aviation airspace services include data management, data processing, communications and outreach, and systems development; and providing systems analysis and information management.

We support governments in implementing international development programs for developing nations to help them address numerous challenges, including access to potable water and adapting to the threats of climate change. Our international development services include supporting donor agencies to develop safe and reliable water supplies and sanitation services, support the eradication of poverty, improve livelihoods, promote democracy and increase economic growth; planning, designing, implementing, researching, and monitoring projects in the areas of climate change, agriculture and rural development, governance and institutional development, natural resources and the environment, infrastructure, economic growth, energy, rule of law and justice systems, land tenure and property rights, and training and consulting for public-private partnerships; and building capacity and strengthening institutions in areas such as global health, energy sector reform, utility management, education, food security, and local governance.

Commercial/International Services Group

CIG primarily provides consulting and engineering services to U.S. commercial clients, and international clients that include both commercial and government sectors. CIG supports commercial clients across the Fortune 500, energy utilities, industrial, manufacturing, aerospace, and resource management markets. CIG also provides infrastructure and related environmental, engineering and project management services to commercial and local government clients across Canada, in Asia Pacific (primarily Australia and New Zealand), the United Kingdom, as well as Brazil and Chile.

CIG provides consulting and engineering services worldwide for a broad range of water, environment, and sustainable infrastructure-related needs in both developed and emerging economies. The primary markets for CIG's services include natural resources, energy, and utilities, as well as civil infrastructure master planning and engineering design for facilities, transportation, and local development projects. CIG's services span from early data collection and monitoring to data analysis and information management, to feasibility studies and assessments, to science and engineering applied research, to engineering design, to construction management, and operations and maintenance.

CIG's environmental services include cleanup and beneficial reuse of sites contaminated with hazardous materials, toxic chemicals, and oil and petroleum products, which cover all phases of the remedial planning process, starting with disaster response and initial site assessment through removal actions, remedial design and implementation oversight; and supporting both commercial and government clients in planning and implementing remedial activities at numerous sites around the world, and providing a broad range of environmental analysis and planning services.

CIG also supports U.S. commercial clients by providing design services to renovate, upgrade, and modernize industrial water supplies, and address industrial water treatment and water reuse needs; and provides plant engineering, project execution, and program management services for industrial water treatment projects throughout the world.

CIG's international services, especially in Canada and Asia-Pacific, include high-end analytical, engineering, architecture, geotechnical, and construction management services for infrastructure projects, including rail and roadway monitoring and asset management services, collection of condition data, optimization of upgrades and long-term planning for expansion; multi-modal design services for commuter railway stations, airport expansions, bridges and major highways, and ports and harbors; and designing resilient solutions to repair, replace, and upgrade older transportation infrastructure.

CIG provides infrastructure design services in extreme and remote areas by using specialized techniques that are adapted to local resources, while minimizing environmental impacts, and considering potential climate change impacts. These include providing consulting, geotechnical, and design services to owners of transportation, natural resources, energy and community infrastructure in areas of permafrost or extreme climate regions.

CIG's energy services include support for electric power utilities and independent power producers worldwide, ranging from macro-level planning and management advisory services to project-specific environmental, engineering, construction management, and operational services, and advising on the design and implementation of smart grids, both domestically and internationally, including increasing utility automation, information and operational technologies, and critical infrastructure security. For utilities and governmental regulatory agencies, our services include policy and regulatory development, utility management, performance improvement, asset management and evaluation, and transaction support services. For developers and owners of renewable energy resources such as solar grid and off-grid, on-shore and off-shore wind, biogas and biomass, tidal, and hydropower, and conventional power generation facilities, micro-grid and battery or alternative storage facilities, as well as transmission and distribution assets, our services include environmental, engineering, procurement, operations and maintenance, and regulatory support for all project phases.

CIG supports industrial and energy clients, primarily in North America, in the upstream, midstream and downstream market sectors. Our services include environmental permitting support, siting studies, strategic planning and analyses; design of well pads and surface impoundments for drilling sites; water management for exploration activities; design of midstream pipelines and associated pumping stations and storage facilities; construction monitoring, design and construction management for downstream sustaining capital projects; biological and cultural assessments, and site investigations; and hazardous waste site remediation.

CIG also provides environmental remediation and reconstruction services to evaluate and restore lands to beneficial use, including the identification, evaluation and destruction of unexploded ordnance, both domestically and internationally; investigating, remediating, and restoring contaminated facilities at military locations in the U.S. and around the world; managing large, complex sediment remediation programs that help restore rivers and coastal waters to beneficial use; constructing state-of-the-art water treatment plants for U.S. commercial clients; and supporting utilities in the U.S. in implementing infrastructure needs.

Remediation and Construction Management

We continued to report the results of the wind-down of our non-core construction activities in the RCM reportable segment in fiscal 2020. As of September 27, 2020, there was no remaining backlog for RCM as the projects were complete.

Project Examples

Project examples are provided on our company website located at tetratech.com, including expert interviews, in-depth articles, and project profiles that demonstrate our services across water, environment, sustainable infrastructure, energy, resource management, and international development.

Clients

We provide services to a diverse base of U.S. state and local government, U.S. federal government, U.S. commercial, and international clients. The following table presents the percentage of our revenue by client sector:

	Fiscal Year		
Client Sector	**2020**	**2019**	**2018**
U.S. state and local government	14.7%	18.9%	15.8%
U.S. federal government (1)	33.2	30.3	32.9
U.S. commercial	22.5	23.1	26.6
International (2)	29.6	27.7	24.7
	100.0%	100.0%	100.0%

(1) Includes revenue generated under U.S. federal government contracts performed outside the United States.
(2) Includes revenue generated from foreign operations, primarily in Canada, Australia, the United Kingdom, and revenue generated from non-U.S. clients.

U.S. federal government agencies are significant clients. The U.S. Agency for International Development ("USAID") accounted for 12.2%, 12.4% and 14.0% of our revenue in fiscal 2020, 2019 and 2018, respectively. The Department of Defense ("DoD") accounted for 9.2%, 7.9% and 10.0% of our revenue in fiscal 2020, 2019 and 2018, respectively. We typically support multiple programs within a single U.S. federal government agency, both domestically and internationally. We also assist U.S. state and local government clients in various jurisdictions across the United States. In Canada, we work for several provinces and various local jurisdictions. Our U.S. commercial clients include companies in the chemical, energy, mining, pharmaceutical, retail, aerospace, automotive, petroleum, and communications industries. No single client, except for U.S. federal government clients, accounted for more than 10% of our revenue in fiscal 2020.

Contracts

Our services are performed under three principal types of contracts with our clients: fixed-price, time-and-materials, and cost-plus. The following table presents the percentage of our revenue by contract type:

	Fiscal Year		
Contract Type	**2020**	**2019**	**2018**
Fixed-price	36.0%	33.7%	33.3%
Time-and-materials	46.5	48.6	47.1
Cost-plus	17.5	17.7	19.6
	100.0%	100.0%	100.0%

Under a fixed-price contract, clients agree to pay a specified price for our performance of the entire contract or a specified portion of the contract. Some fixed-price contracts can include date-certain and/or performance obligations. Fixed-price contracts carry certain inherent risks, including risks of losses from underestimating costs, delays in project completion, problems with new technologies, price increases for materials, and economic and other changes that may occur over the contract period. Consequently, the profitability of fixed-price contracts may vary substantially. Under time-and-materials contracts, we are paid for labor at negotiated hourly billing rates and paid for other expenses. Profitability on these contracts is driven by billable headcount and cost control. Many of our time-and-materials contracts are subject to maximum contract values and, accordingly, revenue related to these contracts is recognized as if these contracts were fixed-price contracts. Under our cost-plus contracts, some of which are subject to a contract ceiling amount, we are reimbursed for allowable costs and fees, which may be fixed or performance-based. If our costs exceed the contract ceiling or are not allowable, we may not be able to obtain full reimbursement. Further, the amount of the fee received for a cost-plus award fee contract partially depends upon the client's discretionary periodic assessment of our performance on that contract.

Some contracts with the U.S. federal government are subject to annual funding approval. U.S. federal government agencies may impose spending restrictions that limit the continued funding of our existing contracts and may limit our ability to obtain additional contracts. These limitations, if significant, could have a material adverse effect on us. All contracts with the U.S. federal government may be terminated by the government at any time, with or without cause.

U.S. federal government agencies have formal policies against continuing or awarding contracts that would create actual or potential conflicts of interest with other activities of a contractor. These policies may prevent us from bidding for or performing government contracts resulting from or related to certain work we have performed. In addition, services performed for a commercial or government sector client may create conflicts of interest that preclude or limit our ability to obtain work for a private organization. We attempt to identify actual or potential conflicts of interest and to minimize the possibility that such conflicts could affect our work under current contracts or our ability to compete for future contracts. We have, on occasion, declined to bid on a project because of an existing or potential conflict of interest.

Some of our operating units have contracts with the U.S. federal government that are subject to audit by the government, primarily the Defense Contract Audit Agency ("DCAA"). The DCAA generally seeks to (i) identify and evaluate all activities that contribute to, or have an impact on, proposed or incurred costs of government contracts; (ii) evaluate a contractor's policies, procedures, controls, and performance; and (iii) prevent or avoid wasteful, careless, and inefficient production or service. To accomplish this, the DCAA examines our internal control systems, management policies, and financial capability; evaluates the accuracy, reliability, and reasonableness of our cost representations and records; and assesses our compliance with Cost Accounting Standards ("CAS") and defective-pricing clauses found within the Federal Acquisition Regulation ("FAR"). The DCAA also performs an annual review of our overhead rates and assists in the establishment of our final rates. This review focuses on the allowability of cost items and the applicability of CAS. The DCAA also audits cost-based contracts, including the close-out of those contracts.

The DCAA reviews all types of U.S. federal government proposals, including those of award, administration, modification, and re-pricing. The DCAA considers our cost accounting system, estimating methods and procedures, and specific proposal requirements. Operational audits are also performed by the DCAA. A review of our operations at every major organizational level is conducted during the proposal review period. During the course of its audit, the U.S. federal government may disallow certain costs if it determines that we accounted for such costs in a manner inconsistent with CAS. Under a government contract, only those costs that are reasonable, allocable, and allowable are recoverable. A disallowance of costs by the U.S. federal government could have a material adverse effect on our financial results.

In accordance with our corporate policies, we maintain controls to minimize any occurrence of fraud or other unlawful activities that could result in severe legal remedies, including the payment of damages and/or penalties, criminal and civil sanctions, and debarment. In addition, we maintain preventative audit programs and mitigation measures to ensure that appropriate control systems are in place.

We provide services under contracts, purchase orders, or retainer letters. Our policy requires that all contracts must be in writing. We bill our clients in accordance with the contract terms and periodically based on costs incurred, on either an hourly-fee basis or on a percentage-of-completion basis, as the project progresses. Most of our agreements permit our clients to terminate the agreements without cause upon payment of fees and expenses through the date of the termination. Generally, our contracts do not require that we provide performance bonds. If required, a performance bond, issued by a surety company, guarantees a contractor's performance under the contract. If the contractor defaults under the contract, the surety will, at its discretion, complete the job or pay the client the amount of the bond. If the contractor does not have a performance bond and defaults in the performance of a contract, the contractor is responsible for all damages resulting from the breach of contract. These damages include the cost of completion, together with possible consequential damages such as lost profits.

Growth Strategy

Our management team establishes Tetra Tech's overall business strategy. Our strategic plan defines and guides our investment in marketing and business development to leverage our differentiators and target priority programs and growth markets. We maintain centralized business development resources to develop our corporate branding and marketing materials, support proposal preparation and planning, conduct market research, and manage promotional and professional activities, including appearances at trade shows, direct mailings, advertising, and public relations.

We have established company-wide growth initiatives that reinforce internal coordination, track the development of new programs, identify and coordinate collective resources for major bids, and help us build interdisciplinary teams and provide innovative solutions for major pursuits. Our growth initiatives provide a forum for cross-sector collaboration, access to technical solutions, and the development of interdisciplinary solutions. We continuously identify new markets that are consistent with our strategic plan and service offerings, and we leverage our full-service capabilities and internal coordination structure to develop and implement strategies to research, anticipate, and position us for future procurements and emerging programs. Our Tetra Tech Delta program facilitates access and exchange of technology solutions across our company, through the use of internal training, inventories, and facilitated virtual networking events.

Business development activities are implemented by our technical and professional management staff throughout Tetra Tech with the support of company-wide resources and expertise. Our project managers and technical staff have the best understanding of our clients' needs and the effect of local or client-specific issues, laws and regulations, and procurement procedures. Our professional staff members hold frequent meetings with existing and potential clients; give presentations to civic and professional organizations; and present seminars on research and technical applications. Essential to the effective development of business is each staff member's access to all of our service offerings through our internal Tetra Tech Delta and geographic networks. Our strong internal networking programs help our professional staff members to pursue new opportunities for both existing and new clients. These networks also facilitate our ability to provide services throughout the project life cycle from the early studies to operations and maintenance. Networking is further supported by our enterprise-wide knowledge management systems which include skills search tools, business development tracking, and collaboration tools.

To support our growth plans, we actively attract, recruit and retain key hires. Our combination of high-end science and consulting coupled with practical applications provides challenging and rewarding opportunities for our associates, thereby enhancing our ability to recruit and retain top quality talent. Our internal networking programs, leadership training, entrepreneurial environment, focus on *Leading with Science®*, and global project portfolio help to attract and retain highly qualified individuals.

Our strategic growth plans are augmented by our selective investment in acquisitions aligned with our business. Acquisitions enhance plans to add new technologies, broaden our service offerings, add contract capacity and extend our geographic presence. Our long-established experience in identifying and integrating acquisitions strengthens our ability to integrate and rapidly leverage the resources of the acquired companies post-acquisition.

Sustainability Program

Tetra Tech supports clients in more than 100 countries around the world, helping them to solve complex problems and achieve solutions that are technically, socially, and economically resilient. Our high-end consulting and engineering services focus on using innovative technologies and creative solutions to minimize environmental impacts and enhance social systems. Our greatest contribution toward sustainability is through the projects we perform every day for our clients, including recycling freshwater supplies, recycling waste products, and reducing greenhouse gas emissions. In developing countries, we also support gender equality programs, strengthen land tenure, and increase climate resiliency and adaptation. As a signatory of the United Nations Global Compact ("UNGC") on human rights, labor, environment, and anti-corruption, Tetra Tech embraces the UNGC Ten Principles as part of the strategy, culture, and daily operations of our company.

Our Sustainability Program enhances our commitment by focusing on the environmental, social, and governance impact of our business via four primary pillars: Projects – the solutions we provide for our clients; Procurement – our procurement and subcontracting approaches; Processes – the internal policies and processes that promote sustainable practices, reduce costs, and minimize environmental impacts; and People – the 20,000 staff at Tetra Tech and our partners, clients, and communities worldwide. In addition, our program is based on the Global Reporting Initiative ("GRI") Sustainability Report Framework, the internationally accepted sustainability reporting protocol for corporate sustainability plans, which includes three fundamental areas: environmental, economic, and governance.

Our Sustainability Program is led by our Chief Sustainability Officer, who has been appointed by executive management and is supported by other key corporate and operations representatives via our Sustainability Council. We have established a clear set of metrics to evaluate our progress toward our corporate sustainability goals. Each metric corresponds with one or more performance indicators from GRI and include the following categories: environmental (greenhouse gas emissions), economic, health and safety, information technology, human resources, and real estate. We continuously implement sustainability-related policies and practices and assess the results of our efforts in order to improve upon them in the future. Our executive management team reviews and approves the Sustainability Program and evaluates our progress in achieving the goals and objectives outlined in our plan. As part of the UNGC, we fulfill the annual Communication on Progress via Tetra Tech's Sustainability Report Card that is published on Earth Day. Tetra Tech also participates in the Dow Jones Sustainability Index Corporate Sustainability Assessment.

Acquisitions and Divestitures

Acquisitions. We continuously evaluate the marketplace for acquisition opportunities to further our strategic growth plans. Due to our reputation, size, financial resources, geographic presence and range of services, we have numerous opportunities to acquire privately and publicly held companies or selected portions of such companies. We evaluate an acquisition opportunity based on its ability to strengthen our leadership in the markets we serve, the technologies and solutions they provide, and the additional new geographies and clients they bring. Also, during our evaluation, we examine an acquisition's ability to drive organic growth, its accretive effect on long-term earnings, and its ability to generate return on investment. Generally, we proceed with an acquisition if we believe that it will strategically expand our service offerings, improve our long-term financial performance, and increase shareholder returns.

We view acquisitions as a key component in the execution of our growth strategy, and we intend to use cash, debt or equity, as we deem appropriate, to fund acquisitions. We may acquire other businesses that we believe are synergistic and will ultimately increase our revenue and net income, strengthen our ability to achieve our strategic goals, provide critical mass with existing clients, and further expand our lines of service. We typically pay a purchase price that results in the recognition of goodwill, generally representing the intangible value of a successful business with an assembled workforce specialized in our areas of interest. Acquisitions are inherently risky, and no assurance can be given that our previous or future acquisitions will be successful or will not have a material adverse effect on our financial position, results of operations, or cash flows. All acquisitions require the approval of our Board of Directors.

Divestitures. We regularly review and evaluate our existing operations to determine whether our business model should change through the divestiture of certain businesses. Accordingly, from time to time, we may divest or wind-down certain non-core businesses and reallocate our resources to businesses that better align with our long-term strategic direction.

For detailed information regarding acquisitions, see Note 5, "Acquisitions and Divestitures" of the "Notes to Consolidated Financial Statements" included in Item 8.

Competition

The market for our services is generally competitive. We often compete with many other firms ranging from small regional firms to large international firms.

We perform a broad spectrum of consulting, engineering, and technical services across the water, environment, sustainable infrastructure, resource management, energy, and international development markets. Our client base includes U.S. federal government agencies such as the DoD, USAID, the U.S. Department of Energy ("DOE"), the U.S. Environmental Protection Agency ("EPA"), and the FAA; U.S. state and local government agencies; government and commercial clients in Canada, Australia, and the United Kingdom; the U.S. commercial sector, which consists primarily of large industrial companies and utilities; and our international commercial clients. Our competition varies and is a function of the business areas in which, and the client sectors for which, we perform our services. The number of competitors for any procurement can vary widely, depending upon technical qualifications, the relative value of the project, geographic location, the financial terms and risks associated with the work, and any restrictions placed upon competition by the client. Historically, clients have chosen among competing firms by weighing the quality, innovation and timeliness of the firm's service versus its cost to determine which firm offers the best value. When less work becomes available in certain markets, price could become an increasingly important factor.

Our competitors vary depending on end markets and clients, and often we may only compete with a portion of a firm. We believe that our principal competitors include the following firms, in alphabetical order: AECOM; Arcadis NV; Black & Veatch Corporation; Booz Allen Hamilton; Brown & Caldwell; CDM Smith Inc.; Chemonics International, Inc.;

Exponent, Inc.; GHD; ICF International, Inc.; Jacobs Engineering Group Inc.; Leidos, Inc.; SAIC; SNC-Lavalin Group Inc.; Stantec Inc.; TRC Companies, Inc.; Weston Solutions, Inc.; and WSP Global Inc.

Backlog

We include in our backlog only those contracts for which funding has been provided and work authorization has been received. We estimate that approximately 58% of our backlog at the end of fiscal 2020 will be recognized as revenue in fiscal 2021, as work is being performed. However, we cannot guarantee that the revenue projected in our backlog will be realized or, if realized, will result in profits. In addition, project cancellations or scope adjustments may occur with respect to contracts reflected in our backlog. For example, certain of our contracts with the U.S. federal government and other clients are terminable at the discretion of the client, with or without cause. These types of backlog reductions could adversely affect our revenue and margins. Accordingly, our backlog as of any particular date is an uncertain indicator of our future earnings.

At fiscal 2020 year-end, our backlog was $3.2 billion, an increase of $147.4 million, or 4.8%, compared to fiscal 2019 year-end. Approximately $2.2 billion and $1.0 billion of our backlog at fiscal 2020 year-end related to GSG and CIG, respectively.

Regulations

We engage in various service activities that are subject to government oversight, including environmental laws and regulations, general government procurement laws and regulations, and other regulations and requirements imposed by the specific government agencies with which we conduct business.

Environmental. A significant portion of our business involves the planning, design, program management and construction management of pollution control facilities, as well as the assessment and management of remediation activities at hazardous waste sites, U.S. Superfund sites, and military bases. In addition, we contract with U.S. federal government entities to destroy hazardous materials. These activities require us to manage, handle, remove, treat, transport, and dispose of toxic or hazardous substances.

Some environmental laws, such as the U.S. Superfund law and similar state, provincial and local statutes, can impose liability for the entire cost of clean-up for contaminated facilities or sites upon present and former owners and operators, as well as generators, transporters, and persons arranging for the treatment or disposal of such substances. In addition, while we strive to handle hazardous and toxic substances with care and in accordance with safe methods, the possibility of accidents, leaks, spills, and events of force majeure always exist. Humans exposed to these materials, including workers or subcontractors engaged in the transportation and disposal of hazardous materials and persons in affected areas, may be injured or become ill. This could result in lawsuits that expose us to liability and substantial damage awards. Liabilities for contamination or human exposure to hazardous or toxic materials, or a failure to comply with applicable regulations, could result in substantial costs, including clean-up costs, fines, civil or criminal sanctions, third party claims for property damage or personal injury, or the cessation of remediation activities.

Certain of our business operations are covered by U.S. Public Law 85-804, which provides for government indemnification against claims and damages arising out of unusually hazardous activities performed at the request of the government. Due to changes in public policies and law, however, government indemnification may not be available in the case of any future claims or liabilities relating to other hazardous activities that we perform.

Government Procurement. The services we provide to the U.S. federal government are subject to the FAR and other rules and regulations applicable to government contracts. These rules and regulations:

- require certification and disclosure of all cost and pricing data in connection with the contract negotiations under certain contract types;
- impose accounting rules that define allowable and unallowable costs and otherwise govern our right to reimbursement under certain cost-based government contracts; and
- restrict the use and dissemination of information classified for national security purposes and the exportation of certain products and technical data.

In addition, services provided to the DoD are monitored by the Defense Contract Management Agency and audited by the DCAA. Our government clients can also terminate any of their contracts, and many of our government contracts are subject to renewal or extension annually. Further, the services we provide to state and local government clients are subject to various government rules and regulations.

Seasonality

We experience seasonal trends in our business. Our revenue and operating income are typically lower in the first half of our fiscal year, primarily due to the Thanksgiving (in the U.S.), Christmas and New Year's holidays. Many of our clients' employees, as well as our own employees, take vacations during these holiday periods. Further, seasonal inclement weather conditions occasionally cause some of our offices to close temporarily or may hamper our project field work in the northern hemisphere's temperate and arctic regions. These occurrences result in fewer billable hours worked on projects and, correspondingly, less revenue recognized.

Potential Liability and Insurance

Our business activities could expose us to potential liability under various laws and under workplace health and safety regulations. In addition, we occasionally assume liability by contract under indemnification agreements. We cannot predict the magnitude of such potential liabilities.

We maintain a comprehensive general liability insurance policy with an umbrella policy that covers losses beyond the general liability limits. We also maintain professional errors and omissions liability and contractor's pollution liability insurance policies. We believe that both policies provide adequate coverage for our business. When we perform higher-risk work, we obtain, if available, the necessary types of insurance coverage for such activities, as is typically required by our clients.

We obtain insurance coverage through a broker that is experienced in our industry. The broker and our risk manager regularly review the adequacy of our insurance coverage. Because there are various exclusions and retentions under our policies, or an insurance carrier may become insolvent, there can be no assurance that all potential liabilities will be covered by our insurance policies or paid by our carrier.

We evaluate the risk associated with insurance claims. If we determine that a loss is probable and reasonably estimable, we establish an appropriate reserve. A reserve is not established if we determine that a claim has no merit or is not probable or reasonably estimable. Our historic levels of insurance coverage and reserves have been adequate. However, partially or completely uninsured claims, if successful and of significant magnitude, could have a material adverse effect on our business.

Human Capital Management

Employees. At fiscal 2020 year-end, we had approximately 20,000 staff worldwide. A large percentage of our employees have technical and professional backgrounds and undergraduate and/or advanced degrees, including the employees of recently acquired companies. Our professional staff includes archaeologists, architects, biologists, chemical engineers, chemists, civil engineers, data scientists, computer scientists, economists, electrical engineers, environmental engineers, environmental scientists, geologists, hydrogeologists, mechanical engineers, oceanographers, project managers and toxicologists. We consider the current relationships with our employees to be favorable. We are not aware of any employment circumstances that are likely to disrupt work at any of our facilities. See Part I, Item 1A, "Risk Factors" for a discussion of the risks related to the loss of key personnel or our inability to attract and retain qualified personnel.

Diversity and Inclusion. Tetra Tech brings together engineers and technical specialists from all backgrounds to solve our clients' most challenging problems. Our Diversity and Inclusion Policy guides the Board of Directors, management, associates, subcontractors, and partners in developing an inclusive culture. Our Diversity and Inclusion Council monitors Tetra Tech's diversity and inclusion practices and makes recommendations to the Board of Directors and Chief Executive Officer for any changes or improvements to our program.

Tetra Tech values diversity and inclusion and undertakes various efforts throughout its operations to promote these initiatives. Our current efforts are focused on three primary areas:

- *Safe work environment.* We provide training to all associates to improve their understanding of behaviors that can be perceived as discriminatory, exclusionary, and/or harassing, and provide safe avenues for associates to report such behaviors.
- *Equal employment opportunity.* Tetra Tech ensures that our practices and processes attract a diverse range of candidate, and that candidates are recruited, hired, assigned, developed, and promoted based on merit and their alignment to our values.
- *Learning and development opportunities.* To support our associates in reaching their full potential, Tetra Tech offers a wide range of internal and external learning and development opportunities. Education assistance is offered to financially support associates who seek to expand their knowledge and skill base.

As part of Tetra Tech's commitment to a culture of inclusion, in fiscal 2020 we launched our Global Resource Group ("ERG") Program, which broadens and enhances company-wide interaction opportunities for our employees. Our ERG's are open to all and involve activities for both employees whose background is the focus of the ERG and those who are supportive of the group (also known as allies). These global networks build on and coordinate with the many local networks that are already active throughout our operations and include groups focused on the experiences of Black, Latino, Women, Veterans, and LGBTQ employees.

Professional Development. Tetra Tech invests in the professional development of our associates. They are provided with training in leadership development, project management skills, and interpersonal skills development. Our focused programs are designed, taught, and facilitated by Tetra Tech leadership, consistent with our commitment to talent development. These programs include the following:

- *Tetra Tech Leadership Academy.* Tetra Tech Leadership Academy develops our high-potential associates from around the world into outstanding business leaders. Instructors for this intensive, year-long program are executive management and operational leaders. Participants are immersed in all aspects of the operations of Tetra Tech and complete challenging, real-world assignments designed to hone their leadership and management skills.
- *Project Excellence Program.* Tetra Tech develops Project Managers who are world class in their abilities and performance. The program is led by our Chief Engineer and involves extensive training on how to effectively manage all components of a project.
- *Fearless Entrepreneur Program.* Tetra Tech develops into client-oriented, business-minded professionals who are driven to understand and meet the needs of our clients. Developing professionals are challenged and mentored through a process of building client relationships. Participants take part in group discussions in a classroom setting and then are required to implement learned strategies with actual and potential clients.
- *Tetra Tech Technology Transfer (T4) and ToolTalk Webcast Series.* Tetra Tech holds webcasts to help associates around the world share technical resources and enhance their use of available internal tools and to provide better service to clients. Through the T4 and ToolTalk Webcast Series, Tetra Tech experts present and lead discussions about new technologies and programs, best practices, and opportunities for growth across our company.

By offering our associates meaningful work and career development, Tetra Tech is well positioned to continue its growth through recruitment, development, and retention of the best talent in the industry.

Executive Officers of the Registrant

The following table shows the name, age and position of each of our executive officers at November 20, 2020:

Name	Age	Position
Dan L. Batrack	62	Chairman and Chief Executive Officer Mr. Batrack joined our predecessor in 1980 and was named Chairman in January 2008. He has served as our Chief Executive Officer and a director since November 2005, and as our President from October 2008 to September 2019. Mr. Batrack has served in numerous capacities over the last 40 years, including arctic research scientist, deep water oceanographic hydrographer, coastal hydrodynamic modeler, environmental data analyst, project and program manager, President of the Engineering Division, and in 2004 he was appointed Chief Operating Officer. He has managed complex programs for many small and Fortune 500 clients, both in the United States and internationally. Mr. Batrack holds a B.A. degree in Business Administration from the University of Washington.
Leslie L. Shoemaker	63	President Dr. Shoemaker was appointed President in September 2019, having previously served as President of WEI Business Group from April 2015 to November 2017, and CIG from November 2017 to September 2019. Dr. Shoemaker joined us in 1991, and has served in various management capacities, including project and program manager, water resources manager and infrastructure group president. From 2005 to 2015, she led our strategic planning, business development and company-wide collaboration programs. Her technical expertise is in the management of large-scale watershed and master planning studies, development of modeling tools and application of optimization tools for decision making. Additionally, she is our Chief Sustainability Officer who leads our Sustainability Council to implement sustainability-related policies and practices company-wide. Dr. Shoemaker holds a B.A. degree in Mathematics from Hamilton College, a Master of Engineering from Cornell University and a Ph.D. in Agricultural Engineering from the University of Maryland.
Steven M. Burdick	56	Executive Vice President, Chief Financial Officer Mr. Burdick has served as our Executive Vice President, Chief Financial Officer since April 2011. He served as our Senior Vice President and Corporate Controller from January 2004 to March 2011. Mr. Burdick joined us in April 2003 as Vice President, Management Audit. Previously, Mr. Burdick served in senior financial and executive positions with Aura Systems, Inc., TRW Ventures, and Ernst & Young LLP. Mr. Burdick holds a B.S. degree in Business Administration from Santa Clara University and is a Certified Public Accountant.

Name	Age	Position
Derek G. Amidon	53	Senior Vice President, President of CIG and the Client Account Management Division of CIG Mr. Amidon was appointed President of CIG in September 2019, in addition to his role as President of CIG's Client Account Management Division. Mr. Amidon has served as a project manager, key account manager, operations manager, and regional manager since joining us in 2012. He has managed a variety of complex, high profile programs for key clients, including Fortune 100 companies. His focus has been on leading high value consulting services that deliver scientific, engineering and regulatory solutions for challenging environmental, engineering, permitting and public relations problems for energy, industrial, institutional and custodial trust clients. He has managed projects in the U.S., Africa, Australia, Europe, and the Caribbean. In addition to experience in both public and private consulting and engineering firms over his 24-year career, Mr. Amidon also served in a variety of business leadership and project development roles at Hess Corporation, a leading independent oil and gas company. Mr. Amidon is a registered Professional Engineer. He holds B.S. and M.S. degrees in Civil Engineering from Brigham Young University and a M.S. in Management from Rensselaer Polytechnic Institute.
Roger R. Argus	59	Senior Vice President, President of GSG and the U.S. Government Division of GSG Mr. Argus is a chemical engineer with 35 years of experience, including 27 years with us in operational leadership, program and project management, and quality assurance for projects encompassing a broad spectrum of environmental, engineering, information technology, and disaster management services. Mr. Argus has also been responsible for managing multidisciplinary contracts and projects in support of the U.S. federal government (i.e., Navy, the U.S. Army Corps of Engineers ("USACE"), and the EPA), state and municipal agencies, and private clients nationwide. The scope of his technical experience includes planning and directing environmental programs, developing data acquisition, management and analytics solutions, fund research and development support for innovative environmental technologies and waste treatment systems, municipal resiliency, and sustainability programs. Mr. Argus holds a B.S. in Chemical Engineering from California State University, Long Beach.
William R. Brownlie	67	Senior Vice President, Chief Engineer and Corporate Risk Management Officer Dr. Brownlie was named Senior Vice President and Chief Engineer in September 2009, and Corporate Risk Management Officer in November 2013. From December 2005 to September 2009, he served as a Group President. Dr. Brownlie joined our predecessor in 1981 and was named a Senior Vice President in December 1993. Dr. Brownlie has managed various operating units and programs focusing on water resources and environmental services, including work with USACE, the U.S. Air Force, the U.S. Bureau of Reclamation and DOE. He is a registered professional engineer and has a strong technical background in water resources. Dr. Brownlie holds B.S. and M.S. degrees in Civil Engineering from the State University of New York at Buffalo and a Ph.D. in Civil Engineering from the California Institute of Technology.

Name	Age	Position
Brian N. Carter	53	Senior Vice President, Corporate Controller and Chief Accounting Officer Mr. Carter joined us as Vice President, Corporate Controller and Chief Accounting Officer in June 2011 and was appointed Senior Vice President in October 2012. Previously, Mr. Carter served in finance and auditing positions in private industry and with Ernst & Young LLP. Mr. Carter holds a B.S. in Business Administration from Miami University and is a Certified Public Accountant.
Craig L. Christensen	67	Senior Vice President, Chief Information Officer Mr. Christensen joined us in 1998 through the acquisition of our Tetra Tech NUS, Inc. ("NUS") subsidiary. He is responsible for our information services and technologies, including the implementation of our enterprise resource planning system. Previously, Mr. Christensen held positions at NUS, Brown and Root Services, and Landmark Graphics subsidiaries of Halliburton Company where his responsibilities included contracts administration, finance, and system development. Prior to his service at Halliburton, Mr. Christensen held positions at Burroughs Corporation and Apple Computer. Mr. Christensen holds B.A. and M.B.A. degrees from Brigham Young University.
Preston Hopson	44	Senior Vice President, General Counsel and Secretary Mr. Hopson was appointed Senior Vice President, General Counsel and Secretary to the Board of Directors in January 2018. He also serves as the Chief Compliance Officer. For the prior 10 years, Mr. Hopson served as Vice President, Assistant General Counsel and Assistant Corporate Secretary at the engineering and infrastructure firm AECOM. Prior to this, he was a Senior Associate at the law firm O'Melveny & Myers LLP. Mr. Hopson began his career as a judicial clerk on the U.S. Court of Appeals for the Ninth Circuit. Mr. Hopson holds B.A. and J.D. degrees from Yale University.
Richard A. Lemmon	61	Senior Vice President, Corporate Administration Mr. Lemmon joined our predecessor in 1981 in a technical capacity and became a member of its corporate staff in a management position in 1985. In 1988, at the time of our predecessor's divestiture from Honeywell, Inc., Mr. Lemmon structured and managed many of our corporate functions. He is currently responsible for insurance, health and safety and facilities.
Brendan M. O'Rourke	47	Senior Vice President, Enterprise Risk Management Mr. O'Rourke joined us in January 2018 as Vice President, Enterprise Risk Management and was appointed Senior Vice President, Enterprise Risk Management in November 2018. For the prior 10 years, Mr. O'Rourke served as Assistant Vice President of Professional Liability Claims at AIG. Prior to this, he was a Senior Associate at the law firm of Seyfarth Shaw in Boston, Massachusetts. Mr. O'Rourke has more than twenty years of experience in risk management, contract negotiation, claim resolution and litigation within the construction industry. Mr. O'Rourke holds a J.D. from Suffolk Law School and a B.A. from Worcester State University.

Name	Age	Position
Mark A. Rynning	59	Senior Vice President, President of the Resilient and Sustainable Infrastructure Division of GSG Mr. Rynning has more than 30 years of engineering consulting experience with us. He is a registered professional engineer and has served us in numerous capacities including project manager, operations manager, and operating unit leader. He has managed large water infrastructure programs for state and local agencies throughout the United States. Mr. Rynning has broad experience in planning and design of water and wastewater infrastructure, utility master planning, and design of water and wastewater transmission and collection systems. In addition, Mr. Rynning has planned and designed reverse osmosis water treatment plants and advanced wastewater treatment systems. He has provided expert advisory services to numerous municipal clients for utility system acquisitions. He holds a B.S. in Civil Engineering and a Master of Business Administration, both from the University of Florida.
Bernard Teufele	55	Senior Vice President, President of the Canada and South America Division of CIG Mr. Teufele joined us through an acquisition in 2010. He has over 22 years of consulting engineering experience as a leader of a highly diversified, high-end infrastructure practice and as a technical expert in the field of infrastructure monitoring and asset management. Prior to his current role, Mr. Teufele has managed operating units of increasing size and complexity with a primary focus on infrastructure, environmental sciences, civil transportation, and mining-related services doing work for municipal, provincial, and federal government clients in Canada. He has managed key provincial infrastructure programs in Canada with a particular focus on the monitoring and assessment of roadway infrastructure and the development of asset management programs. Mr. Teufele has a B.Sc. in Applied Science from the University of British Columbia.

Available Information

Our website address is www.tetratech.com. We made available, free electronic copies of our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports through the "Investor Relations" portion of our website, under the heading "SEC Filings" filed under "Financial Information." These reports are available on our website as soon as reasonably practicable after we electronically file them with the Securities and Exchange Commission ("SEC"). These reports, and any amendments to them, are also available at the Internet website of the SEC, http:// www.sec.gov. Also available on our website are our Corporate Governance Policies, Board Committees, Corporate Code of Conduct and Finance Code of Professional Conduct.

Item 1A. Risk Factors

We operate in a changing environment that involves numerous known and unknown risks and uncertainties that could materially adversely affect our operations. Set forth below and elsewhere in this report and in other documents we file with the SEC are descriptions of the risks and uncertainties that could cause our actual results to differ materially from the results contemplated by the forward-looking statements contained in this report. Additional risks we do not yet know of or that we currently think are immaterial may also affect our business operations. If any of the events or circumstances described in the following risks actually occurs, our business, financial condition or results of operations could be materially adversely affected.

Business and Operations Risk Factors

Our results of operations could be adversely affected by the coronavirus disease 2019 ("COVID-19") pandemic.

The global spread of the COVID-19 pandemic has created significant volatility, uncertainty and economic disruption. The extent to which the COVID-19 pandemic continues to impact our business, operations and financial results will depend on numerous evolving factors that we may not be able to accurately predict, including: the duration and scope of the pandemic; governmental, business and individuals' actions that have been and continue to be taken in response to the pandemic; the impact of the pandemic on economic activity and actions taken in response; the effect on our clients' demand for our services; our ability to provide our services, including as a result of more severe or prolonged travel restrictions and people working from home; the ability of our clients to pay for our services or their need to seek reductions of our fees; any closures of our and our clients' offices and facilities; and the need for enhanced health and hygiene requirements or social distancing or other measures in attempts to counteract future outbreaks in our offices and facilities. Clients may also slow down decision-making, delay planned work or seek to terminate existing agreements. In addition, while governments around the world have enacted emergency relief programs designed to combat the economic impact of the pandemic, the long-term effect of such spending is uncertain and could result in future budgetary restrictions for our government clients. Any of these events could adversely affect our business, financial condition and results of operations.

Continuing worldwide political, social and economic uncertainties may adversely affect our revenue and profitability.

The last several years have been periodically marked by political, social and economic concerns, including decreased consumer confidence, the lingering effects of international conflicts, energy costs and inflation. Although certain indices and economic data have shown signs of stabilization in the United States and certain global markets, there can be no assurance that these improvements will be broad-based or sustainable. This instability can make it extremely difficult for our clients, our vendors and us to accurately forecast and plan future business activities, and could cause constrained spending on our services, delays and a lengthening of our business development efforts, the demand for more favorable pricing or other terms, and/or difficulty in collection of our accounts receivable. Our government clients may face budget deficits that prohibit them from funding proposed and existing projects. Further, ongoing economic instability in the global markets could limit our ability to access the capital markets at a time when we would like, or need, to raise capital, which could have an impact on our ability to react to changing business conditions or new opportunities. If economic conditions remain uncertain or weaken, or government spending is reduced, our revenue and profitability could be adversely affected.

Changes in tax laws could increase our tax rate and materially affect our results of operations.

We are subject to tax laws in the United States and numerous foreign jurisdictions. The incoming U.S. presidential administration has called for changes to fiscal and tax policies, which may include comprehensive tax reform. In addition, many international legislative and regulatory bodies have proposed and/or enacted legislation that could significantly impact how U.S. multinational corporations are taxed on foreign earnings. Many of these proposed and enacted changes to the taxation of our activities could increase our effective tax rate and harm our results of operations.

Demand for our services is cyclical and vulnerable to economic downturns. If economic growth slows, government fiscal conditions worsen, or client spending declines further, then our revenue, profits and financial condition may deteriorate.

Demand for our services is cyclical, and vulnerable to economic downturns and reductions in government and private industry spending. Such downturns or reductions may result in clients delaying, curtailing or canceling proposed and existing projects. Our business traditionally lags the overall recovery in the economy; therefore, our business may not recover immediately when the economy improves. If economic growth slows, government fiscal conditions worsen, or client spending declines, then our revenue, profits and overall financial condition may deteriorate. Our government clients may face budget deficits that prohibit them from funding new or existing projects. In addition, our existing and potential clients may either postpone entering into new contracts or request price concessions. Difficult financing and economic conditions may cause some of our clients to demand better pricing terms or delay payments for services we perform, thereby increasing the average number of days our receivables are outstanding, and the potential of increased credit losses of uncollectible invoices. Further, these conditions may result in the inability of some of our clients to pay us for services that we have already performed. If we are not able to reduce our costs quickly enough to respond to the revenue decline from these clients, our operating results may be adversely affected. Accordingly, these factors affect our ability to forecast our future revenue and earnings from business areas that may be adversely impacted by market conditions.

Our international operations expose us to legal, political, and economic risks in different countries as well as currency exchange rate fluctuations that could harm our business and financial results.

In fiscal 2020, we generated 29.6% of our revenue from our international operations, primarily in Canada, Australia, the United Kingdom and from international clients for work that is performed by our domestic operations. International business is subject to a variety of risks, including:

- imposition of governmental controls and changes in laws, regulations, or policies;
- lack of developed legal systems to enforce contractual rights;
- greater risk of uncollectible accounts and longer collection cycles;
- currency exchange rate fluctuations, devaluations, and other conversion restrictions;
- uncertain and changing tax rules, regulations, and rates;
- the potential for civil unrest, acts of terrorism, force majeure, war or other armed conflict, and greater physical security risks, which may cause us to have to leave a country quickly;
- logistical and communication challenges;
- changes in regulatory practices, including tariffs and taxes;
- changes in labor conditions;
- general economic, political, and financial conditions in foreign markets; and
- exposure to civil or criminal liability under the U.S. Foreign Corrupt Practices Act ("FCPA"), the U.K. Bribery Act, the Canadian Corruption of Foreign Public Officials Act, the Brazilian Clean Companies Act, the anti-boycott rules, trade and export control regulations, as well as other international regulations.

For example, the Province of Quebec has adopted legislation that requires businesses and individuals seeking contracts with governmental bodies be certified by a Quebec regulatory authority for contracts over a specified size. Our failure to maintain certification could adversely affect our business.

International risks and violations of international regulations may significantly reduce our revenue and profits, and subject us to criminal or civil enforcement actions, including fines, suspensions, or disqualification from future U.S. federal procurement contracting. Although we have policies and procedures to monitor legal and regulatory compliance, our employees, subcontractors, and agents could take actions that violate these requirements. As a result, our international risk exposure may be more or less than the percentage of revenue attributed to our international operations.

The United Kingdom's withdrawal from the European Union could have an adverse effect on our business and financial results.

In March 2017, the United Kingdom government initiated a process to withdraw from the European Union ("Brexit") and began negotiating the terms of the separation. Brexit has created substantial economic and political uncertainty and volatility in currency exchange rates, and the terms of the United Kingdom's withdrawal from the European Union remain uncertain. The uncertainty created by Brexit may cause our customers to closely monitor their costs and reduce demand for our services and may ultimately result in new legal regulatory and cost challenges for our United Kingdom and global operations. Any of these events could adversely affect our United Kingdom, European and overall business and financial results.

We derive a substantial amount of our revenue from U.S. federal, state and local government agencies, and any disruption in government funding or in our relationship with those agencies could adversely affect our business.

In fiscal 2020, we generated 47.9% of our revenue from contracts with U.S. federal, and state and local government agencies. A significant amount of this revenue is derived under multi-year contracts, many of which are appropriated on an annual basis. As a result, at the beginning of a project, the related contract may be only partially funded, and additional funding is normally committed only as appropriations are made in each subsequent year. These appropriations, and the timing of payment of appropriated amounts, may be influenced by numerous factors as noted below. Our backlog includes only the projects that have funding appropriated.

The demand for our U.S. government-related services is generally driven by the level of government program funding. Accordingly, the success and further development of our business depends, in large part, upon the continued funding of these U.S. government programs, and upon our ability to obtain contracts and perform well under these programs. Under the Budget Control Act of 2011, an automatic sequestration process, or across-the-board budget cuts (a large portion of which was defense-related), was triggered. The sequestration began on March 1, 2013. Although the Bipartisan Budget Act of 2013 provided some sequester relief through the end of fiscal year 2015, the sequestration requires reduced U.S. federal government spending through fiscal year 2021. A significant reduction in federal government spending, the absence of a bipartisan agreement on the federal government budget, a partial or full federal government shutdown, or a change in budgetary priorities could reduce demand for our services, cancel or delay federal projects, result in the closure of federal facilities and significant personnel reductions, and have a material and adverse impact on our business, financial condition, results of operations and cash flows.

There are several additional factors that could materially affect our U.S. government contracting business, which could cause U.S. government agencies to delay or cancel programs, to reduce their orders under existing contracts, to exercise their rights to terminate contracts or not to exercise contract options for renewals or extensions. Such factors, which include the following, could have a material adverse effect on our revenue or the timing of contract payments from U.S. government agencies:

- the failure of the U.S. government to complete its budget and appropriations process before its fiscal year-end;
- changes in and delays or cancellations of government programs, procurements, requirements or appropriations;
- budget constraints or policy changes resulting in delay or curtailment of expenditures related to the services we provide;
- re-competes of government contracts;
- the timing and amount of tax revenue received by federal, state and local governments, and the overall level of government expenditures;
- curtailment in the use of government contracting firms;
- delays associated with insufficient numbers of government staff to oversee contracts;
- the increasing preference by government agencies for contracting with small and disadvantaged businesses;
- competing political priorities and changes in the political climate regarding the funding or operation of the services we provide;
- the adoption of new laws or regulations affecting our contracting relationships with the federal, state or local governments;
- unsatisfactory performance on government contracts by us or one of our subcontractors, negative government audits or other events that may impair our relationship with federal, state or local governments;
- a dispute with or improper activity by any of our subcontractors; and
- general economic or political conditions.

Our inability to win or renew U.S. government contracts during regulated procurement processes could harm our operations and significantly reduce or eliminate our profits.

U.S. government contracts are awarded through a regulated procurement process. The U.S. federal government has increasingly relied upon multi-year contracts with pre-established terms and conditions, such as indefinite delivery/indefinite quantity ("IDIQ") contracts, which generally require those contractors who have previously been awarded the IDIQ to engage in an additional competitive bidding process before a task order is issued. As a result, new work awards tend to be smaller and of shorter duration, since the orders represent individual tasks rather than large, programmatic assignments. In addition, we believe that there has been an increase in the award of federal contracts based on a low-price, technically acceptable criteria emphasizing price over qualitative factors, such as past performance. As a result, pricing pressure may reduce our profit margins on future federal contracts. The increased competition and pricing pressure, in turn, may require us to make sustained efforts to reduce costs in order to realize revenue, and profits under government contracts. If we are not successful in reducing the amount of costs we incur, our profitability on government contracts will be negatively impacted. Moreover, even if we are qualified to work on a government contract, we may not be awarded the contract because of existing government policies designed to protect small businesses and under-represented minority contractors. Our inability to win or renew government contracts during regulated procurement processes could harm our operations and significantly reduce or eliminate our profits.

Each year, client funding for some of our U.S. government contracts may rely on government appropriations or public-supported financing. If adequate public funding is delayed or is not available, then our profits and revenue could decline.

Each year, client funding for some of our U.S. government contracts may directly or indirectly rely on government appropriations or public-supported financing. Legislatures may appropriate funds for a given project on a year-by-year basis, even though the project may take more than one year to perform. In addition, public-supported financing such as U.S. state and local municipal bonds may be only partially raised to support existing projects. Similarly, an economic downturn may make it more difficult for U.S. state and local governments to fund projects. In addition to the state of the economy and competing political priorities, public funds and the timing of payment of these funds may be influenced by, among other things, curtailments in the use of government contracting firms, increases in raw material costs, delays associated with insufficient numbers of government staff to oversee contracts, budget constraints, the timing and amount of tax receipts, and the overall level of government expenditures. If adequate public funding is not available or is delayed, then our profits and revenue could decline.

Our U.S. federal government contracts may give government agencies the right to modify, delay, curtail, renegotiate, or terminate existing contracts at their convenience at any time prior to their completion, which may result in a decline in our profits and revenue.

U.S. federal government projects in which we participate as a contractor or subcontractor may extend for several years. Generally, government contracts include the right to modify, delay, curtail, renegotiate, or terminate contracts and subcontracts at the government's convenience any time prior to their completion. Any decision by a U.S. federal government client to modify, delay, curtail, renegotiate, or terminate our contracts at their convenience may result in a decline in our profits and revenue.

As a U.S. government contractor, we must comply with various procurement laws and regulations and are subject to regular government audits; a violation of any of these laws and regulations or the failure to pass a government audit could result in sanctions, contract termination, forfeiture of profit, harm to our reputation or loss of our status as an eligible government contractor and could reduce our profits and revenue.

We must comply with and are affected by U.S. federal, state, local, and foreign laws and regulations relating to the formation, administration and performance of government contracts. For example, we must comply with FAR, the Truth in Negotiations Act, CAS, the American Recovery and Reinvestment Act of 2009, the Services Contract Act, and the DoD security regulations, as well as many other rules and regulations. In addition, we must comply with other government regulations related to employment practices, environmental protection, health and safety, tax, accounting, and anti-fraud measures, as well as many other regulations in order to maintain our government contractor status. These laws and regulations affect how we do business with our clients and, in some instances, impose additional costs on our business operations. Although we take precautions to prevent and deter fraud, misconduct, and non-compliance, we face the risk that our employees or outside partners may engage in misconduct, fraud, or other improper activities. U.S. government agencies, such as the DCAA, routinely audit and investigate government contractors. These government agencies review and audit a government contractor's performance under its contracts and cost structure, and evaluate compliance with applicable laws, regulations, and standards. In addition, during the course of its audits, the DCAA may question our incurred project costs. If the DCAA believes we have accounted for such costs in a manner inconsistent with the requirements for FAR or CAS, the DCAA auditor may recommend to our U.S. government corporate administrative contracting officer that such costs be disallowed. Historically, we have not experienced significant disallowed costs as a result of government audits. However, we can provide no assurance that the DCAA or other government audits will not result in material disallowances for incurred costs in the future. In addition, U.S. government contracts are subject to various other requirements relating to the formation, administration, performance, and accounting for these contracts. We may also be subject to *qui tam* litigation brought by private individuals on behalf of the U.S. government under the Federal Civil False Claims Act, which could include claims for treble damages. For example, as discussed elsewhere in this report, on January 14, 2019, the Civil Division of the United States Attorney's Office filed complaints in intervention in three qui tam actions filed against our subsidiary, Tetra Tech EC, Inc., in the U.S. District Court for the Northern District of California. U.S. government contract violations could result in the imposition of civil and criminal penalties or sanctions, contract termination, forfeiture of profit, and/or suspension of payment, any of which could make us lose our status as an eligible government contractor. We could also suffer serious harm to our reputation. Any interruption or termination of our U.S. government contractor status could reduce our profits and revenue significantly.

If we extend a significant portion of our credit to clients in a specific geographic area or industry, we may experience disproportionately high levels of collection risk and nonpayment if those clients are adversely affected by factors particular to their geographic area or industry.

Our clients include public and private entities that have been, and may continue to be, negatively impacted by the changing landscape in the global economy. While outside of the U.S. federal government no one client accounted for over 10%

of our revenue for fiscal 2020, we face collection risk as a normal part of our business where we perform services and subsequently bill our clients for such services. In the event that we have concentrated credit risk from clients in a specific geographic area or industry, continuing negative trends or a worsening in the financial condition of that specific geographic area or industry could make us susceptible to disproportionately high levels of default by those clients. Such defaults could materially adversely impact our revenues and our results of operations.

We have made and expect to continue to make acquisitions. Acquisitions could disrupt our operations and adversely impact our business and operating results. Our failure to conduct due diligence effectively, or our inability to successfully integrate acquisitions, could impede us from realizing all of the benefits of the acquisitions, which could weaken our results of operations.

A key part of our growth strategy is to acquire other companies that complement our lines of business or that broaden our technical capabilities and geographic presence. However, our ability to make acquisitions is restricted under our credit agreement. Acquisitions involve certain known and unknown risks that could cause our actual growth or operating results to differ from our expectations or the expectations of securities analysts. For example:

- we may not be able to identify suitable acquisition candidates or to acquire additional companies on acceptable terms;
- we are pursuing international acquisitions, which inherently pose more risk than domestic acquisitions;
- we compete with others to acquire companies, which may result in decreased availability of, or increased price for, suitable acquisition candidates;
- we may not be able to obtain the necessary financing, on favorable terms or at all, to finance any of our potential acquisitions;
- we may ultimately fail to consummate an acquisition even if we announce that we plan to acquire a company; and
- acquired companies may not perform as we expect, and we may fail to realize anticipated revenue and profits.

If we fail to conduct due diligence on our potential targets effectively, we may, for example, not identify problems at target companies, or fail to recognize incompatibilities or other obstacles to successful integration. The integration process may disrupt our business and, if implemented ineffectively, may preclude realization of the full benefits expected by us and could harm our results of operations. In addition, the overall integration of the combining companies may result in unanticipated problems, expenses, liabilities, and competitive responses, and may cause our stock price to decline. The difficulties of integrating an acquisition include, among others:

- issues in integrating information, communications, and other systems;
- incompatibility of logistics, marketing, and administration methods;
- maintaining employee morale and retaining key employees;
- integrating the business cultures of both companies;
- preserving important strategic client relationships;
- consolidating corporate and administrative infrastructures, and eliminating duplicative operations; and
- coordinating and integrating geographically separate organizations.

In addition, even if the operations of an acquisition are integrated successfully, we may not realize the full benefits of the acquisition, including the synergies, cost savings or growth opportunities that we expect. These benefits may not be achieved within the anticipated time frame, or at all.

Further, acquisitions may cause us to:

- issue common stock that would dilute our current stockholders' ownership percentage;
- use a substantial portion of our cash resources;
- increase our interest expense, leverage, and debt service requirements (if we incur additional debt to fund an acquisition);
- assume liabilities, including undisclosed, contingent or environmental liabilities, for which we do not have indemnification from the former owners. Further, indemnification obligations may be subject to dispute or concerns regarding the creditworthiness of the former owners;
- record goodwill and non-amortizable intangible assets that are subject to impairment testing and potential impairment charges;
- experience volatility in earnings due to changes in contingent consideration related to acquisition earn-out liability estimates;

- incur amortization expenses related to certain intangible assets;
- lose existing or potential contracts as a result of conflict of interest issues;
- incur large and immediate write-offs; or
- become subject to litigation.

Finally, acquired companies that derive a significant portion of their revenue from the U.S. federal government and do not follow the same cost accounting policies and billing practices that we follow may be subject to larger cost disallowances for greater periods than we typically encounter. If we fail to determine the existence of unallowable costs and do not establish appropriate reserves at acquisition, we may be exposed to material unanticipated liabilities, which could have a material adverse effect on our business.

If our goodwill or intangible assets become impaired, then our profits may be significantly reduced.

Because we have historically acquired a significant number of companies, goodwill and intangible assets represent a substantial portion of our assets. As of September 27, 2020, our goodwill was $993.5 million and other intangible assets were $13.9 million. We are required to perform a goodwill impairment test for potential impairment at least on an annual basis. We also assess the recoverability of the unamortized balance of our intangible assets when indications of impairment are present based on expected future profitability and undiscounted expected cash flows and their contribution to our overall operations. The goodwill impairment test requires us to determine the fair value of our reporting units, which are the components one level below our reportable segments. In determining fair value, we make significant judgments and estimates, including assumptions about our strategic plans with regard to our operations. We also analyze current economic indicators and market valuations to help determine fair value. To the extent economic conditions that would impact the future operations of our reporting units change, our goodwill may be deemed to be impaired, and we would be required to record a non-cash charge that could result in a material adverse effect on our financial position or results of operations. For example, we had goodwill impairment of $15.8 million and $7.8 million in fiscal 2020 and 2019, respectively. We had no goodwill impairment in fiscal 2018.

We could be adversely affected by violations of the FCPA and similar worldwide anti-bribery laws.

The FCPA and similar anti-bribery laws generally prohibit companies and their intermediaries from making improper payments to foreign government officials for the purpose of obtaining or retaining business. The U.K. Bribery Act of 2010 prohibits both domestic and international bribery, as well as bribery across both private and public sectors. In addition, an organization that "fails to prevent bribery" by anyone associated with the organization can be charged under the U.K. Bribery Act unless the organization can establish the defense of having implemented "adequate procedures" to prevent bribery. Improper payments are also prohibited under the Canadian Corruption of Foreign Public Officials Act and the Brazilian Clean Companies Act. Local business practices in many countries outside the United States create a greater risk of government corruption than that found in the United States and other more developed countries. Our policies mandate compliance with anti-bribery laws, and we have established policies and procedures designed to monitor compliance with anti-bribery law requirements; however, we cannot ensure that our policies and procedures will protect us from potential reckless or criminal acts committed by individual employees or agents. If we are found to be liable for anti-bribery law violations, we could suffer from criminal or civil penalties or other sanctions that could have a material adverse effect on our business.

We could be adversely impacted if we fail to comply with domestic and international export laws.

To the extent we export technical services, data and products outside of the United States, we are subject to U.S. and international laws and regulations governing international trade and exports, including but not limited to the International Traffic in Arms Regulations, the Export Administration Regulations, and trade sanctions against embargoed countries. A failure to comply with these laws and regulations could result in civil or criminal sanctions, including the imposition of fines, the denial of export privileges, and suspension or debarment from participation in U.S. government contracts, which could have a material adverse effect on our business.

If we fail to complete a project in a timely manner, miss a required performance standard, or otherwise fail to adequately perform on a project, then we may incur a loss on that project, which may reduce or eliminate our overall profitability.

Our engagements often involve large-scale, complex projects. The quality of our performance on such projects depends in large part upon our ability to manage the relationship with our clients and our ability to effectively manage the project and deploy appropriate resources, including third-party contractors and our own personnel, in a timely manner. We may commit to a client that we will complete a project by a scheduled date. We may also commit that a project, when completed, will achieve specified performance standards. If the project is not completed by the scheduled date or fails to meet required performance standards, we may either incur significant additional costs or be held responsible for the costs incurred by the client to rectify damages due to late completion or failure to achieve the required performance standards. The uncertainty of the timing of a project can present difficulties in planning the amount of personnel needed for the project. If the project is delayed or canceled, we may bear the cost of an underutilized workforce that was dedicated to fulfilling the project. In addition, performance of projects can be affected by a number of factors beyond our control, including unavoidable delays from government inaction, public opposition, inability to obtain financing, weather conditions, unavailability of vendor materials, changes in the project scope of services requested by our clients, industrial accidents, environmental hazards, and labor disruptions. To the extent these events occur, the total costs of the project could exceed our estimates, and we could experience reduced profits or, in some cases, incur a loss on a project, which may reduce or eliminate our overall profitability. Further, any defects or errors, or failures to meet our clients' expectations, could result in claims for damages against us. Failure to meet performance standards or complete performance on a timely basis could also adversely affect our reputation.

The loss of key personnel or our inability to attract and retain qualified personnel could impair our ability to provide services to our clients and otherwise conduct our business effectively.

As primarily a professional and technical services company, we are labor-intensive and, therefore, our ability to attract, retain, and expand our senior management and our professional and technical staff is an important factor in determining our future success. The market for qualified scientists and engineers is competitive and, from time to time, it may be difficult to attract and retain qualified individuals with the required expertise within the timeframe demanded by our clients. For example, some of our U.S. government contracts may require us to employ only individuals who have particular government security clearance levels. In addition, if we are unable to retain executives and other key personnel, the roles and responsibilities of those employees will need to be filled, which may require that we devote time and resources to identify, hire, and integrate new employees. The loss of the services of any of these key personnel could adversely affect our business. Our failure to attract and retain key individuals could impair our ability to provide services to our clients and conduct our business effectively.

Our revenue and growth prospects may be harmed if we or our employees are unable to obtain government granted eligibility or other qualifications we and they need to perform services for our customers.

A number of government programs require contractors to have certain kinds of government granted eligibility, such as security clearance credentials. Depending on the project, eligibility can be difficult and time-consuming to obtain. If we or our employees are unable to obtain or retain the necessary eligibility, we may not be able to win new business, and our existing customers could terminate their contracts with us or decide not to renew them. To the extent we cannot obtain or maintain the required security clearances for our employees working on a particular contract, we may not derive the revenue or profit anticipated from such contract.

Our actual business and financial results could differ from the estimates and assumptions that we use to prepare our consolidated financial statements, which may significantly reduce or eliminate our profits.

To prepare consolidated financial statements in conformity with generally accepted accounting principles in the U.S. ("U.S. GAAP"), management is required to make estimates and assumptions as of the date of the consolidated financial statements. These estimates and assumptions affect the reported values of assets, liabilities, revenue and expenses, as well as disclosures of contingent assets and liabilities. For example, we typically recognize revenue over the life of a contract based on the proportion of costs incurred to date compared to the total costs estimated to be incurred for the entire project. Areas requiring significant estimates by our management include:

- the application of the percentage-of-completion method of accounting and revenue recognition on contracts, change orders, and contract claims, including related unbilled accounts receivable;
- unbilled accounts receivable, including amounts related to requests for equitable adjustment to contracts that provide for price redetermination, primarily with the U.S. federal government. These amounts are recorded only when they can be reliably estimated, and realization is probable;
- provisions for uncollectible receivables, client claims, and recoveries of costs from subcontractors, vendors, and others;
- provisions for income taxes, research and development tax credits, valuation allowances, and unrecognized tax benefits;
- value of goodwill and recoverability of intangible assets;
- valuations of assets acquired and liabilities assumed in connection with business combinations;
- valuation of contingent earn-out liabilities recorded in connection with business combinations;
- valuation of employee benefit plans;
- valuation of stock-based compensation expense; and
- accruals for estimated liabilities, including litigation and insurance reserves.

Our actual business and financial results could differ from those estimates, which may significantly reduce or eliminate our profits.

Our profitability could suffer if we are not able to maintain adequate utilization of our workforce.

The cost of providing our services, including the extent to which we utilize our workforce, affects our profitability. The rate at which we utilize our workforce is affected by a number of factors, including:

- our ability to transition employees from completed projects to new assignments and to hire and assimilate new employees;
- our ability to forecast demand for our services and thereby maintain an appropriate headcount in each of our geographies and operating units;
- our ability to engage employees in assignments during natural disasters or pandemics;
- our ability to manage attrition;
- our need to devote time and resources to training, business development, professional development, and other non-chargeable activities; and
- our ability to match the skill sets of our employees to the needs of the marketplace.

If we over-utilize our workforce, our employees may become disengaged, which could impact employee attrition. If we under-utilize our workforce, our profit margin and profitability could suffer.

Our use of the percentage-of-completion method of revenue recognition could result in a reduction or reversal of previously recorded revenue and profits.

We account for most of our contracts on the percentage-of-completion method of revenue recognition. Generally, our use of this method results in recognition of revenue and profit ratably over the life of the contract, based on the proportion of costs incurred to date to total costs expected to be incurred for the entire project. The effects of revisions to estimated revenue and costs, including the achievement of award fees and the impact of change orders and claims, are recorded when the amounts are known and can be reasonably estimated. Such revisions could occur in any period and their effects could be material. Although we have historically made reasonably reliable estimates of the progress towards completion of long-term contracts, the uncertainties inherent in the estimating process make it possible for actual costs to vary materially from estimates, including reductions or reversals of previously recorded revenue and profit.

If we are unable to accurately estimate and control our contract costs, then we may incur losses on our contracts, which could decrease our operating margins and reduce our profits. Specifically, our fixed-price contracts could increase the unpredictability of our earnings.

It is important for us to accurately estimate and control our contract costs so that we can maintain positive operating margins and profitability. We generally enter into three principal types of contracts with our clients: fixed-price, time-and-materials and cost-plus.

The U.S. federal government and certain other clients have increased the use of fixed-priced contracts. Under fixed-price contracts, we receive a fixed price irrespective of the actual costs we incur and, consequently, we are exposed to a number of risks. We realize a profit on fixed-price contracts only if we can control our costs and prevent cost over-runs on our contracts. Fixed-price contracts require cost and scheduling estimates that are based on a number of assumptions, including those about future economic conditions, costs, and availability of labor, equipment and materials, and other exigencies. We could experience cost over-runs if these estimates are originally inaccurate as a result of errors or ambiguities in the contract specifications, or become inaccurate as a result of a change in circumstances following the submission of the estimate due to, among other things, unanticipated technical problems, difficulties in obtaining permits or approvals, changes in local laws or labor conditions, weather delays, changes in the costs of raw materials, or the inability of our vendors or subcontractors to perform. If cost overruns occur, we could experience reduced profits or, in some cases, a loss for that project. If a project is significant, or if there are one or more common issues that impact multiple projects, costs overruns could increase the unpredictability of our earnings, as well as have a material adverse impact on our business and earnings.

Under our time-and-materials contracts, we are paid for labor at negotiated hourly billing rates and paid for other expenses. Profitability on these contracts is driven by billable headcount and cost control. Many of our time-and-materials contracts are subject to maximum contract values and, accordingly, revenue relating to these contracts is recognized as if these contracts were fixed-price contracts. Under our cost-plus contracts, some of which are subject to contract ceiling amounts, we are reimbursed for allowable costs and fees, which may be fixed or performance-based. If our costs exceed the contract ceiling or are not allowable under the provisions of the contract or any applicable regulations, we may not be able to obtain reimbursement for all of the costs we incur.

Profitability on our contracts is driven by billable headcount and our ability to manage our subcontractors, vendors, and material suppliers. If we are unable to accurately estimate and manage our costs, we may incur losses on our contracts, which could decrease our operating margins and significantly reduce or eliminate our profits. Certain of our contracts require us to satisfy specific design, engineering, procurement, or construction milestones in order to receive payment for the work completed or equipment or supplies procured prior to achievement of the applicable milestone. As a result, under these types of arrangements, we may incur significant costs or perform significant amounts of services prior to receipt of payment. If a client determines not to proceed with the completion of the project or if the client defaults on its payment obligations, we may face difficulties in collecting payment of amounts due to us for the costs previously incurred or for the amounts previously expended to purchase equipment or supplies.

Accounting for a contract requires judgments relative to assessing the contract's estimated risks, revenue, costs, and other technical issues. Due to the size and nature of many of our contracts, the estimation of overall risk, revenue, and cost at completion is complicated and subject to many variables. Changes in underlying assumptions, circumstances, or estimates may also adversely affect future period financial performance. If we are unable to accurately estimate the overall revenue or costs on a contract, then we may experience a lower profit or incur a loss on the contract.

Our failure to adequately recover on claims brought by us against clients for additional contract costs could have a negative impact on our liquidity and profitability.

We have brought claims against clients for additional costs exceeding the contract price or for amounts not included in the original contract price. These types of claims occur due to matters such as client-caused delays or changes from the initial project scope, both of which may result in additional cost. Often, these claims can be the subject of lengthy arbitration or litigation proceedings, and it is difficult to accurately predict when these claims will be fully resolved. When these types of events occur and unresolved claims are pending, we have used working capital in projects to cover cost overruns pending the resolution of the relevant claims. A failure to promptly recover on these types of claims could have a negative impact on our liquidity and profitability. Total accounts receivable at September 27, 2020 included approximately $14 million related to such claims.

Our failure to win new contracts and renew existing contracts with private and public sector clients could adversely affect our profitability.

Our business depends on our ability to win new contracts and renew existing contracts with private and public sector clients. Contract proposals and negotiations are complex and frequently involve a lengthy bidding and selection process, which is affected by a number of factors. These factors include market conditions, financing arrangements, and required governmental approvals. If negative market conditions arise, or if we fail to secure adequate financial arrangements or the required government approval, we may not be able to pursue certain projects, which could adversely affect our profitability.

If we are not able to successfully manage our growth strategy, our business and results of operations may be adversely affected.

Our expected future growth presents numerous managerial, administrative, operational, and other challenges. Our ability to manage the growth of our operations will require us to continue to improve our management information systems and our other internal systems and controls. In addition, our growth will increase our need to attract, develop, motivate, and retain both our management and professional employees. The inability to effectively manage our growth or the inability of our employees to achieve anticipated performance could have a material adverse effect on our business.

Our backlog is subject to cancellation, unexpected adjustments and changing economic conditions, and is an uncertain indicator of future operating results.

Our backlog at September 27, 2020 was $3.2 billion, an increase of $147.4 million, or 4.8%, compared to the end of fiscal 2019. We include in backlog only those contracts for which funding has been provided and work authorizations have been received. We cannot guarantee that the revenue projected in our backlog will be realized or, if realized, will result in profits. In addition, project cancellations or scope adjustments may occur, from time to time, with respect to contracts reflected in our backlog. For example, certain of our contracts with the U.S. federal government and other clients are terminable at the discretion of the client, with or without cause. These types of backlog reductions could adversely affect our revenue and margins. As a result of these factors, our backlog as of any particular date is an uncertain indicator of our future earnings.

Cyber security breaches of our systems and information technology could adversely impact our ability to operate.

We develop, install and maintain information technology systems for ourselves, as well as for customers. Client contracts for the performance of information technology services, as well as various privacy and securities laws, require us to manage and protect sensitive and confidential information, including federal and other government information, from disclosure. We also need to protect our own internal trade secrets and other business confidential information, as well as personal data of our employees and contractors, from disclosure. For example, the European Union's General Data Protection Regulation ("GDPR") extends the scope of the European Union data protection laws to all companies processing data of European Union residents, regardless of the company's location. In addition, the California Consumer Privacy Act ("CCPA"), which became effective in January 2020, increases the penalties for data privacy incidents. The GDPR and CCPA are just examples of privacy regulations that are emerging in locations where we work.

We face the threat to our computer systems of unauthorized access, computer hackers, computer viruses, malicious code, organized cyber-attacks and other security problems and system disruptions, including possible unauthorized access to our and our clients' proprietary or classified information. We rely on industry-accepted security measures and technology to securely maintain all confidential and proprietary information on our information systems. In addition, we rely on the security of third-party service providers, vendors, and cloud services providers to protect confidential data. In the ordinary course of business, we have been targeted by malicious cyber-attacks. A user who circumvents security measures could misappropriate confidential or proprietary information, including information regarding us, our personnel and/or our clients, or cause interruptions or malfunctions in operations. As a result, we may be required to expend significant resources to protect against the threat of these system disruptions and security breaches or to alleviate problems caused by these disruptions and breaches.

We also rely in part on third-party software and information technology vendors to run our critical accounting, project management and financial information systems. We depend on our software and information technology vendors to provide long-term software and hardware support for our information systems. Our software and information technology vendors may decide to discontinue further development, integration or long-term software and hardware support for our information systems, in which case we may need to abandon one or more of our current information systems and migrate some or all of our accounting, project management and financial information to other systems, thus increasing our operational expense, as well as disrupting the management of our business operations. Any of these events could damage our reputation and have a material adverse effect on our business, financial condition, results of operations and cash flows.

If our business partners fail to perform their contractual obligations on a project, we could be exposed to legal liability, loss of reputation and profit reduction or loss on the project.

We routinely enter into subcontracts and, occasionally, joint ventures, teaming arrangements, and other contractual arrangements so that we can jointly bid and perform on a particular project. Success under these arrangements depends in large part on whether our business partners fulfill their contractual obligations satisfactorily. In addition, when we operate through a joint venture in which we are a minority holder, we have limited control over many project decisions, including decisions related to the joint venture's internal controls, which may not be subject to the same internal control procedures that we employ. If these unaffiliated third parties do not fulfill their contract obligations, the partnerships or joint ventures may be unable to adequately perform and deliver their contracted services. Under these circumstances, we may be obligated to pay financial penalties, provide additional services to ensure the adequate performance and delivery of the contracted services, and may be jointly and severally liable for the other's actions or contract performance. These additional obligations could result in reduced profits and revenues or, in some cases, significant losses for us with respect to the joint venture, which could also affect our reputation in the industries we serve.

If our contractors and subcontractors fail to satisfy their obligations to us or other parties, or if we are unable to maintain these relationships, our revenue, profitability, and growth prospects could be adversely affected.

We depend on contractors and subcontractors in conducting our business. There is a risk that we may have disputes with our subcontractors arising from, among other things, the quality and timeliness of work performed by the subcontractor, client concerns about the subcontractor, or our failure to extend existing task orders or issue new task orders under a subcontract. In addition, if a subcontractor fails to deliver on a timely basis the agreed-upon supplies, fails to perform the agreed-upon services, or goes out of business, then we may be required to purchase the services or supplies from another source at a higher price, and our ability to fulfill our obligations as a prime contractor may be jeopardized. This may reduce the profit to be realized or result in a loss on a project for which the services or supplies are needed.

We also rely on relationships with other contractors when we act as their subcontractor or joint venture partner. The absence of qualified subcontractors with which we have a satisfactory relationship could adversely affect the quality of our service and our ability to perform under some of our contracts. Our future revenue and growth prospects could be adversely affected if other contractors eliminate or reduce their subcontracts or teaming arrangement relationships with us, or if a government agency terminates or reduces these other contractors' programs, does not award them new contracts, or refuses to pay under a contract.

Our failure to meet contractual schedule or performance requirements that we have guaranteed could adversely affect our operating results.

In certain circumstances, we can incur liquidated or other damages if we do not achieve project completion by a scheduled date. If we or an entity for which we have provided a guarantee subsequently fails to complete the project as scheduled and the matter cannot be satisfactorily resolved with the client, we may be responsible for cost impacts to the client resulting from any delay or the cost to complete the project. Our costs generally increase from schedule delays and/or could exceed our projections for a particular project. In addition, project performance can be affected by a number of factors beyond our control, including unavoidable delays from governmental inaction, public opposition, inability to obtain financing, weather conditions, unavailability of vendor materials, changes in the project scope of services requested by our clients, industrial accidents, environmental hazards, labor disruptions and other factors. As a result, material performance problems for existing and future contracts could cause actual results of operations to differ from those anticipated by us and could cause us to suffer damage to our reputation within our industry and client base.

New legal requirements could adversely affect our operating results.

Our business and results of operations could be adversely affected by the passage of climate change, defense, environmental, infrastructure and other legislation, policies and regulations. Growing concerns about climate change may result in the imposition of additional environmental regulations. For example, legislation, international protocols, regulation or other restrictions on emissions could increase the costs of projects for our clients or, in some cases, prevent a project from going forward, thereby potentially reducing the need for our services. In addition, relaxation or repeal of laws and regulations, or changes in governmental policies regarding environmental, defense, infrastructure or other industries we serve could result in a decline in demand for our services, which could in turn negatively impact our revenues. We cannot predict when or whether any of these various proposals may be enacted or what their effect will be on us or on our customers.

Changes in resource management, environmental, or infrastructure industry laws, regulations, and programs could directly or indirectly reduce the demand for our services, which could in turn negatively impact our revenue.

Some of our services are directly or indirectly impacted by changes in U.S. federal, state, local or foreign laws and regulations pertaining to the resource management, environmental, and infrastructure industries. Accordingly, a relaxation or repeal of these laws and regulations, or changes in governmental policies regarding the funding, implementation or enforcement of these programs, could result in a decline in demand for our services, which could in turn negatively impact our revenue.

Changes in capital markets could adversely affect our access to capital and negatively impact our business.

Our results could be adversely affected by an inability to access the revolving credit facility under our credit agreement. Unfavorable financial or economic conditions could impact certain lenders' willingness or ability to fund our revolving credit facility. In addition, increases in interest rates or credit spreads, volatility in financial markets or the interest rate environment, significant political or economic events, defaults of significant issuers, and other market and economic factors, may negatively impact the general level of debt issuance, the debt issuance plans of certain categories of borrowers, the types of credit-sensitive products being offered, and/or a sustained period of market decline or weakness could have a material adverse effect on us.

Restrictive covenants in our credit agreement may restrict our ability to pursue certain business strategies.

Our credit agreement limits or restricts our ability to, among other things:

- incur additional indebtedness;
- create liens securing debt or other encumbrances on our assets;
- make loans or advances;
- pay dividends or make distributions to our stockholders;
- purchase or redeem our stock;
- repay indebtedness that is junior to indebtedness under our credit agreement;
- acquire the assets of, or merge or consolidate with, other companies; and
- sell, lease, or otherwise dispose of assets.

Our credit agreement also requires that we maintain certain financial ratios, which we may not be able to achieve. The covenants may impair our ability to finance future operations or capital needs or to engage in other favorable business activities.

Our industry is highly competitive, and we may be unable to compete effectively, which could result in reduced revenue, profitability and market share.

We are engaged in a highly competitive business. The markets we serve are highly fragmented and we compete with many regional, national and international companies. Certain of these competitors have greater financial and other resources than we do. Others are smaller and more specialized and concentrate their resources in particular areas of expertise. The extent of our competition varies according to certain markets and geographic area. In addition, the technical and professional aspects of some of our services generally do not require large upfront capital expenditures and provide limited barriers against new competitors. Our clients make competitive determinations based upon qualifications, experience, performance, reputation, technology, customer relationships and ability to provide the relevant services in a timely, safe and cost-efficient manner. This competitive environment could force us to make price concessions or otherwise reduce prices for our services. If we are unable to maintain our competitiveness and win bids for future projects, our market share, revenue, and profits will decline.

Legal proceedings, investigations, and disputes could result in substantial monetary penalties and damages, especially if such penalties and damages exceed or are excluded from existing insurance coverage.

We engage in consulting, engineering, program management, construction management, construction, and technical services that can result in substantial injury or damages that may expose us to legal proceedings, investigations, and disputes. For example, in the ordinary course of our business, we may be involved in legal disputes regarding personal injury claims, employee or labor disputes, professional liability claims, and general commercial disputes involving project cost overruns and liquidated damages, as well as other claims. In addition, in the ordinary course of our business, we frequently make professional judgments and recommendations about environmental and engineering conditions of project sites for our clients, and we may be deemed to be responsible for these judgments and recommendations if they are later determined to be inaccurate. Any unfavorable legal ruling against us could result in substantial monetary damages or even criminal violations. We maintain insurance coverage as part of our overall legal and risk management strategy to minimize our potential liabilities; however, insurance coverage contains exclusions and other limitations that may not cover our potential liabilities. Generally, our insurance program covers workers' compensation and employer's liability, general liability, automobile liability, professional errors and omissions liability, property, and contractor's pollution liability (in addition to other policies for specific projects). Our insurance program includes deductibles or self-insured retentions for each covered claim that may increase over time. In addition, our insurance policies contain exclusions that insurance providers may use to deny or restrict coverage. Excess liability and professional liability insurance policies provide for coverage on a "claims-made" basis, covering only claims actually made and reported during the policy period currently in effect. If we sustain liabilities that exceed or that are excluded from our insurance coverage, or for which we are not insured, it could have a material adverse impact on our financial condition, results of operations and cash flows.

Unavailability or cancellation of third-party insurance coverage would increase our overall risk exposure as well as disrupt the management of our business operations.

We maintain insurance coverage from third-party insurers as part of our overall risk management strategy and because some of our contracts require us to maintain specific insurance coverage limits. If any of our third-party insurers fail, suddenly cancel our coverage, or otherwise are unable to provide us with adequate insurance coverage, then our overall risk exposure and our operational expenses would increase, and the management of our business operations would be disrupted. In addition, there can be no assurance that any of our existing insurance coverage will be renewable upon the expiration of the coverage period or that future coverage will be affordable at the required limits.

Our inability to obtain adequate bonding could have a material adverse effect on our future revenue and business prospects.

Certain clients require bid bonds, and performance and payment bonds. These bonds indemnify the client should we fail to perform our obligations under a contract. If a bond is required for a certain project and we are unable to obtain an appropriate bond, we cannot pursue that project. In some instances, we are required to co-venture with a small or disadvantaged business to pursue certain government contracts. In connection with these ventures, we are sometimes required to utilize our bonding capacity to cover all of the obligations under the contract with the client. We have a bonding facility but, as is typically the case, the issuance of bonds under that facility is at the surety's sole discretion. Moreover, bonding may be more difficult to obtain or may only be available at significant additional cost. There can be no assurance that bonds will continue to be available to us on reasonable terms. Our inability to obtain adequate bonding and, as a result, to bid on new work could have a material adverse effect on our future revenue and business prospects.

Employee, agent, or partner misconduct, or our failure to comply with anti-bribery and other laws or regulations, could harm our reputation, reduce our revenue and profits, and subject us to criminal and civil enforcement actions.

Misconduct, fraud, non-compliance with applicable laws and regulations, or other improper activities by one of our employees, agents, or partners could have a significant negative impact on our business and reputation. Such misconduct could include the failure to comply with government procurement regulations, regulations regarding the protection of classified information, regulations prohibiting bribery and other foreign corrupt practices, regulations regarding the pricing of labor and other costs in government contracts, regulations on lobbying or similar activities, regulations pertaining to the internal controls over financial reporting, environmental laws, and any other applicable laws or regulations. For example, as previously noted, the FCPA and similar anti-bribery laws in other jurisdictions generally prohibit companies and their intermediaries from making improper payments to non-U.S. officials for the purpose of obtaining or retaining business. Our policies mandate compliance with these regulations and laws, and we take precautions to prevent and detect misconduct. However, since our internal controls are subject to inherent limitations, including human error, it is possible that these controls could be intentionally circumvented or become inadequate because of changed conditions. As a result, we cannot assure that our controls will protect us from reckless or criminal acts committed by our employees or agents. Our failure to comply with applicable laws or regulations, or acts of misconduct could subject us to fines and penalties, loss of security clearances, and suspension or debarment from contracting, any or all of which could harm our reputation, reduce our revenue and profits, and subject us to criminal and civil enforcement actions.

Our business activities may require our employees to travel to and work in countries where there are high security risks, which may result in employee death or injury, repatriation costs or other unforeseen costs.

Certain of our contracts may require our employees travel to and work in high-risk countries that are undergoing political, social, and economic upheavals resulting from war, civil unrest, criminal activity, acts of terrorism, or public health crises. For example, we currently have employees working in high security risk countries such as Afghanistan and Iraq. As a result, we risk loss of or injury to our employees and may be subject to costs related to employee death or injury, repatriation, or other unforeseen circumstances. We may choose or be forced to leave a country with little or no warning due to physical security risks.

Our failure to implement and comply with our safety program could adversely affect our operating results or financial condition.

Our project sites often put our employees and others in close proximity with mechanized equipment, moving vehicles, chemical and manufacturing processes, and highly regulated materials. On some project sites, we may be responsible for safety, and, accordingly, we have an obligation to implement effective safety procedures. Our safety program is a fundamental element of our overall approach to risk management, and the implementation of the safety program is a significant issue in our dealings with our clients. We maintain an enterprise-wide group of health and safety professionals to help ensure that the services we provide are delivered safely and in accordance with standard work processes. Unsafe job sites and office environments have the potential to increase employee turnover, increase the cost of a project to our clients, expose us to types and levels of risk that are fundamentally unacceptable, and raise our operating costs. The implementation of our safety processes and procedures are monitored by various agencies, including the U.S. Mine Safety and Health Administration ("MSHA"), and rating bureaus, and may be evaluated by certain clients in cases in which safety requirements have been established in our contracts. Our failure to meet these requirements or our failure to properly implement and comply with our safety program could result in reduced profitability, the loss of projects or clients, or potential litigation, and could have a material adverse effect on our business, operating results, or financial condition.

We may be precluded from providing certain services due to conflict of interest issues.

Many of our clients are concerned about potential or actual conflicts of interest in retaining management consultants. U.S. federal government agencies have formal policies against continuing or awarding contracts that would create actual or potential conflicts of interest with other activities of a contractor. These policies may prevent us from bidding for or performing government contracts resulting from or relating to certain work we have performed. In addition, services performed for a commercial or government client may create a conflict of interest that precludes or limits our ability to obtain work from other public or private organizations. We have, on occasion, declined to bid on projects due to conflict of interest issues.

If our reports and opinions are not in compliance with professional standards and other regulations, we could be subject to monetary damages and penalties.

We issue reports and opinions to clients based on our professional engineering expertise, as well as our other professional credentials. Our reports and opinions may need to comply with professional standards, licensing requirements, securities regulations, and other laws and rules governing the performance of professional services in the jurisdiction in which the services are performed. In addition, we could be liable to third parties who use or rely upon our reports or opinions even if we are not contractually bound to those third parties. For example, if we deliver an inaccurate report or one that is not in compliance with the relevant standards, and that report is made available to a third party, we could be subject to third-party liability, resulting in monetary damages and penalties.

We may be subject to liabilities under environmental laws and regulations.

Our services are subject to numerous U.S. and international environmental protection laws and regulations that are complex and stringent. For example, we must comply with a number of U.S. federal government laws that strictly regulate the handling, removal, treatment, transportation, and disposal of toxic and hazardous substances. Under the Comprehensive Environmental Response Compensation and Liability Act of 1980, as amended ("CERCLA"), and comparable state laws, we may be required to investigate and remediate regulated hazardous materials. CERCLA and comparable state laws typically impose strict, joint and several liabilities without regard to whether a company knew of or caused the release of hazardous substances. The liability for the entire cost of clean-up could be imposed upon any responsible party. Other principal U.S. federal environmental, health, and safety laws affecting us include, but are not limited to, the Resource Conversation and Recovery Act, National Environmental Policy Act, the Clean Air Act, the Occupational Safety and Health Act, the Federal Mine Safety and Health Act of 1977 (the "Mine Act"), the Toxic Substances Control Act, and the Superfund Amendments and Reauthorization Act. Our business operations may also be subject to similar state and international laws relating to environmental protection. Further, past business practices at companies that we have acquired may also expose us to future unknown environmental liabilities. Liabilities related to environmental contamination or human exposure to hazardous substances, or a failure to comply with applicable regulations, could result in substantial costs to us, including clean-up costs, fines, civil or criminal sanctions, and third-party claims for property damage or personal injury or cessation of remediation activities. Our continuing work in the areas governed by these laws and regulations exposes us to the risk of substantial liability.

Force majeure events, including natural disasters, pandemics and terrorist actions, could negatively impact the economies in which we operate or disrupt our operations, which may affect our financial condition, results of operations, or cash flows.

Force majeure or extraordinary events beyond the control of the contracting parties, such as natural and man-made disasters, as well as pandemics and terrorist actions, could negatively impact the economies in which we operate by causing the closure of offices, interrupting projects, and forcing the relocation of employees. We typically remain obligated to perform our services after a terrorist action or natural disaster unless the contract contains a force majeure clause that relieves us of our contractual obligations in such an extraordinary event. If we are not able to react quickly to force majeure, our operations may be affected significantly, which would have a negative impact on our financial condition, results of operations, or cash flows.

We have only a limited ability to protect our intellectual property rights, and our failure to protect our intellectual property rights could adversely affect our competitive position.

We rely upon a combination of nondisclosure agreements and other contractual arrangements, as well as copyright, trademark, patent and trade secret laws to protect our proprietary information. We also enter into proprietary information and intellectual property agreements with employees, which require them to disclose any inventions created during employment, to convey such rights to inventions to us, and to restrict any disclosure of proprietary information. Trade secrets are generally difficult to protect. Although our employees are subject to confidentiality obligations, this protection may be inadequate to deter or prevent misappropriation of our confidential information and/or the infringement of our patents and copyrights. Further, we may be unable to detect unauthorized use of our intellectual property or otherwise take appropriate steps to enforce our rights. Failure to adequately protect, maintain, or enforce our intellectual property rights may adversely limit our competitive position.

Assertions by third parties of infringement, misappropriation or other violations by us of their intellectual property rights could result in significant costs and substantially harm our business, financial condition and operating results.

In recent years, there has been significant litigation involving intellectual property rights in technology industries. We may face from time to time, allegations that we or a supplier or customer have violated the rights of third parties, including patent, trademark, and other intellectual property rights. If, with respect to any claim against us for violation of third-party intellectual property rights, we are unable to prevail in the litigation or retain or obtain sufficient rights or develop non-infringing intellectual property or otherwise alter our business practices on a timely or cost-efficient basis, our business, financial condition or results of operations may be adversely affected.

Any infringement, misappropriation or related claims, whether or not meritorious, are time consuming, divert technical and management personnel, and are costly to resolve. As a result of any such dispute, we may have to develop non-infringing technology, pay damages, enter into royalty or licensing agreements, cease utilizing products or services, or take other actions to resolve the claims. These actions, if required, may be costly or unavailable on terms acceptable to us.

General Risk Factors

Our stock price could become more volatile and stockholders' investments could lose value.

In addition to the macroeconomic factors that have affected the prices of many securities generally, all of the factors discussed in this section could affect our stock price. Our common stock has previously experienced substantial price volatility. In addition, the stock market has experienced extreme price and volume fluctuations that have affected the market price of many companies, and that have often been unrelated to the operating performance of these companies. The trading price of our common stock may be significantly affected by various factors, including quarter-to-quarter variations in our financial results, such as revenue, profits, days sales outstanding, backlog, and other measures of financial performance or financial condition (which factors may, themselves, be affected by the factors described below):

- loss of key employees;
- the number and significance of client contracts commenced and completed during a quarter;
- creditworthiness and solvency of clients;
- the ability of our clients to terminate contracts without penalties;
- general economic or political conditions;
- unanticipated changes in contract performance that may affect profitability, particularly with contracts that are fixed-price or have funding limits;

- contract negotiations on change orders, requests for equitable adjustment, and collections of related billed and unbilled accounts receivable;
- seasonality of the spending cycle of our public sector clients, notably the U.S. federal government, the spending patterns of our commercial sector clients, and weather conditions;
- budget constraints experienced by our U.S. federal, and state and local government clients;
- integration of acquired companies;
- changes in contingent consideration related to acquisition earn-outs;
- divestiture or discontinuance of operating units;
- employee hiring, utilization and turnover rates;
- delays incurred in connection with a contract;
- the size, scope and payment terms of contracts;
- the timing of expenses incurred for corporate initiatives;
- reductions in the prices of services offered by our competitors;
- threatened or pending litigation;
- legislative and regulatory enforcement policy changes that may affect demand for our services;
- the impairment of goodwill or identifiable intangible assets;
- the fluctuation of a foreign currency exchange rate;
- stock-based compensation expense;
- actual events, circumstances, outcomes, and amounts differing from judgments, assumptions, and estimates used in determining the value of certain assets (including the amounts of related valuation allowances), liabilities, and other items reflected in our consolidated financial statements;
- success in executing our strategy and operating plans;
- changes in tax laws or regulations or accounting rules;
- results of income tax examinations;
- the timing of announcements in the public markets regarding new services or potential problems with the performance of services by us or our competitors, or any other material announcements;
- speculation in the media and analyst community, changes in recommendations or earnings estimates by financial analysts, changes in investors' or analysts' valuation measures for our stock, and market trends unrelated to our stock;
- our announcements concerning the payment of dividends or the repurchase of our shares;
- resolution of threatened or pending litigation;
- changes in investors' and analysts' perceptions of our business or any of our competitors' businesses;
- changes in environmental legislation;
- broader market fluctuations; and
- general economic or political conditions.

A significant drop in the price of our stock could expose us to the risk of securities class action lawsuits, which could result in substantial costs and divert management's attention and resources, which could adversely affect our business. Additionally, volatility or a lack of positive performance in our stock price may adversely affect our ability to retain key employees, many of whom are awarded equity securities, the value of which is dependent on the performance of our stock price.

Delaware law and our charter documents may impede or discourage a merger, takeover, or other business combination even if the business combination would have been in the short-term best interests of our stockholders.

We are a Delaware corporation and the anti-takeover provisions of Delaware law impose various impediments to the ability of a third party to acquire control of us, even if a change in control would be beneficial to our stockholders. In addition, our Board of Directors has the power, without stockholder approval, to designate the terms of one or more series of preferred stock and issue shares of preferred stock, which could be used defensively if a takeover is threatened. These features, as well as provisions in our certificate of incorporation and bylaws, such as those relating to advance notice of certain stockholder proposals and nominations, could impede a merger, takeover, or other business combination involving us, or discourage a potential acquirer from making a tender offer for our common stock, even if the business combination would have been in the best interests of our current stockholders.

Item 1B Unresolved Staff Comments

None.

Item 2. Properties

At fiscal 2020 year-end, we leased approximately 450 operating facilities in domestic and foreign locations. Our significant lease agreements expire at various dates through 2032. We believe that our current facilities are adequate for the operation of our business, and that suitable additional space in various local markets is available to accommodate any needs that may arise.

The following table summarizes our ten most significant leased properties by location based on annual rental expenses (listed alphabetically, except for our corporate headquarters):

Location	Description	Reportable Segment
Pasadena, CA	Corporate Headquarters	Corporate
Adelaide, South Australia, Australia	Office Building	GSG / CIG
Arlington, VA	Office Building	GSG / CIG
Irvine, CA	Office Building	GSG / CIG
London, United Kingdom	Office Building	GSG / CIG
Montreal, QC, Canada	Office Building	CIG
New York, NY	Office Building	GSG / CIG
Perth, Western Australia, Australia	Office Building	CIG
Pittsburgh, PA	Office Building	GSG / CIG
San Francisco, CA	Office Building	GSG

Item 3. Legal Proceedings

For a description of our material pending legal and regulatory proceedings and settlements, see Note 17, "Commitments and Contingencies" of the "Notes to Consolidated Financial Statements" included in Item 8.

Item 4. Mine Safety Disclosures

Section 1503 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") requires domestic mine operators to disclose violations and orders issued under the Mine Act by MSHA. We do not act as the owner of any mines, but we may act as a mining operator as defined under the Mine Act where we may be an independent contractor performing services or construction at such mine. Information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Act and Item 104 of Regulation S-K is included in Exhibit 95.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Information

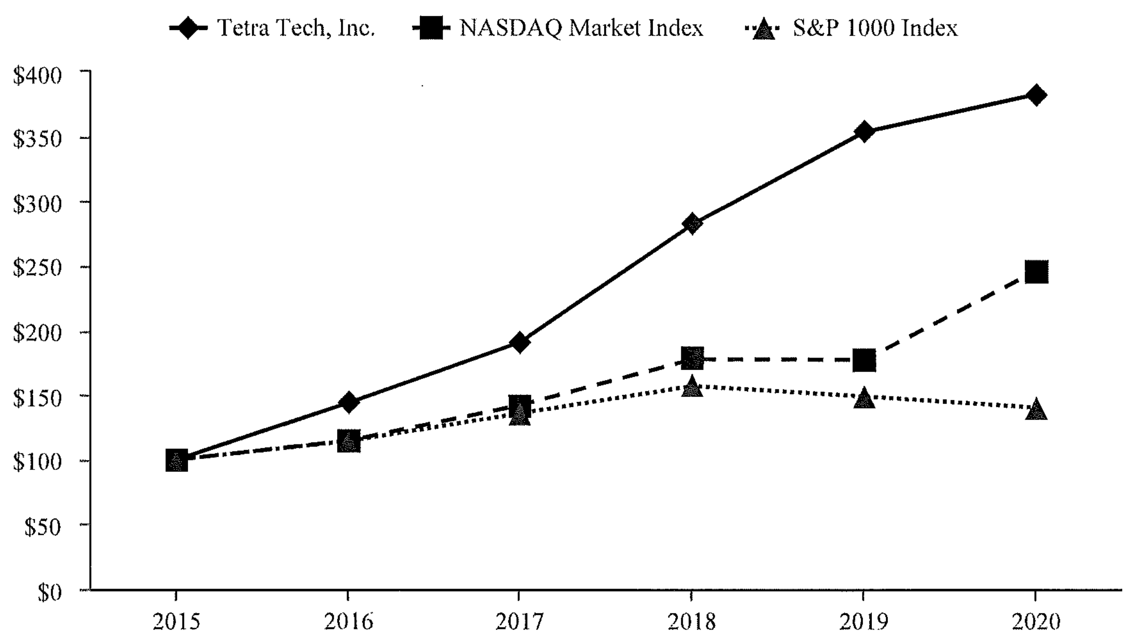
Our common stock is traded on the NASDAQ Global Select Market under the symbol TTEK. There were approximately 1,200 stockholders of record at September 27, 2020.

Stock-Based Compensation

For information regarding our stock-based compensation, see Note 11, "Stockholders' Equity and Stock Compensation Plans" of the "Notes to Consolidated Financial Statements" included in Item 8.

Performance Graph

The following graph shows a comparison of our cumulative total returns with those of the NASDAQ Market Index and the Standard & Poor's ("S&P") 1000 Index. At this time, we do not have a comparable peer group due to the combination of our differentiated high-end consulting services and our end-markets. Thus, we have selected the S&P 1000 Index. The graph assumes that the value of an investment in our common stock and in each such index was $100 on September 27, 2015, and that all dividends have been reinvested. During fiscal 2020, we declared and paid dividends in the first and second quarters totaling $0.30 per share ($0.15 each quarter) on our common stock and paid dividends in the third and fourth quarters totaling $0.34 per share ($0.17 each quarter) on our common stock. We declared and paid dividends totaling $0.54, $0.44, $0.38 and $0.34 per share in fiscal 2019, 2018, 2017 and 2016, respectively. The comparison in the graph below is based on historical data and is not intended to forecast the possible future performance of our common stock.



ASSUMES $100 INVESTED ON SEPTEMBER 27, 2015
ASSUMES DIVIDEND REINVESTED
FISCAL YEAR ENDED SEPTEMBER 27, 2020

	2015	2016	2017	2018	2019	2020
Tetra Tech, Inc.	$ 100.00	$ 144.01	$ 190.68	$ 282.06	$ 353.67	$ 382.89
NASDAQ Market Index	100.00	114.80	141.98	177.72	177.31	246.08
S&P 1000 Index	100.00	114.43	135.72	157.02	148.93	140.29

The performance graph above and related text are being furnished solely to accompany this annual report on Form 10-K pursuant to Item 201(e) of Regulation S-K, and are not being filed for purposes of Section 18 of the Exchange Act, and are not to be incorporated by reference into any of our filings with the SEC, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

Stock Repurchase Program

On November 5, 2018, the Board of Directors authorized a stock repurchase program ("2019 Program") under which we could repurchase up to $200 million of our common stock. This was in addition to the $25 million remaining as of fiscal 2018 year-end under the previous stock repurchase program ("2018 Program"). On January 27, 2020, the Board of Directors authorized a new $200 million stock repurchase program ("2020 Program"). As of September 27, 2020, we had a remaining balance of $207.8 million available under the 2019 and 2020 programs. The following table summarizes stock repurchases in the open market and settled in fiscal 2019 and fiscal 2020:

Fiscal Year	Stock Repurchase Program	Shares Repurchased	Average Price Paid per Share	Total Cost (in thousands)
2019	2018 Program	430,559	$ 58.06	$ 25,000
2019	2019 Program	1,131,962	66.26	75,000
2019 Total		**1,562,521**	**$ 64.00**	**$ 100,000**
2020	2019 Program	1,508,747	$ 77.67	$ 117,188

Below is a summary of the stock repurchases that were traded and settled during the 12 months ended September 27, 2020 under the 2019 Program:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Dollar Value that May Yet be Purchased Under the Plans or Programs (in thousands)
September 30, 2019 - October 27, 2019	87,614	$ 85.25	87,614	$ 117,532
October 28, 2019 - November 24, 2019	88,030	87.80	88,030	109,803
November 25, 2019 - December 29, 2019	68,794	86.91	68,794	103,824
December 30, 2019 - January 26, 2020	53,485	87.48	53,485	99,145
January 27, 2020 - February 23, 2020	53,677	92.00	53,677	94,206
February 24, 2020 - March 29, 2020	709,250	71.72	709,250	43,341
March 30, 2020 - April 26, 2020	130,436	72.23	130,436	33,920
April 27, 2020 - May 24, 2020	71,320	72.99	71,320	28,714
May 25, 2020 - June 28, 2020	75,239	78.44	75,239	22,813
June 29, 2020 - July 26, 2020	55,466	79.68	55,466	18,394
July 27, 2020 - August 23, 2020	42,881	90.47	42,881	14,514
August 24, 2020 - September 27, 2020	72,555	92.36	72,555	7,813

Item 6. Selected Financial Data

The following selected financial data was derived from our audited consolidated financial statements. The selected financial data presented below should be read in conjunction with the information contained in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," and our consolidated financial statements and the notes thereto contained in Item 8, "Financial Statements and Supplementary Data," of this report.

	Fiscal Year Ended				
	September 27, 2020	September 29, 2019	September 30, 2018	October 1, 2017	October 2, 2016
	(in thousands, except per share data)				
Statements of Operations Data					
Revenue	$ 2,994,891	$ 3,107,348	$ 2,964,148	$ 2,753,360	$ 2,583,469
Income from operations	241,091	188,762	190,086	183,342	135,855
Net income attributable to Tetra Tech	173,859	158,668	136,883	117,874	83,783
Earnings per share	3.16	2.84	2.42	2.04	1.42
Cash dividends paid per share	0.64	0.54	0.44	0.38	0.34
Balance Sheets Data					
Total assets	$ 2,378,558	$ 2,147,408	$ 1,959,421	$ 1,902,745	$ 1,800,779
Long-term debt, net of current portion	242,395	263,934	264,627	341,072	331,437
Tetra Tech stockholders' equity	1,037,319	989,286	966,971	928,453	869,259

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following analysis of our financial condition and results of operations should be read in conjunction with Part I of this report, as well as our consolidated financial statements and accompanying notes in Item 8. The following analysis contains forward-looking statements about our future results of operations and expectations. Our actual results and the timing of events could differ materially from those described herein. See Part 1, Item 1A, "Risk Factors" for a discussion of the risks, assumptions, and uncertainties affecting these statements.

OVERVIEW OF RESULTS AND BUSINESS TRENDS

General. As the COVID-19 spread globally, we responded quickly to ensure the health and safety of our employees, clients and the communities we support. Our high-end consulting focus and the technologies we deployed have allowed our staff to support clients and projects remotely without interruption. We remain focused on providing clients with the highest level of service and our 450 global offices are operational, supporting our programs and projects. By *Leading with Science®*, we are responding to the challenges of COVID-19, with the commitment of our 20,000 staff supported by technological innovation.

We entered fiscal 2020 in the best position in our history, with record backlog from our government and commercial clients supporting their critical water and environmental programs. For the first five months of fiscal 2020, we were on pace for another record year; however, the unprecedented disruption of the global economy due to the COVID-19 pandemic has impacted all businesses. Our government business, which represents approximately 60% of our revenue, has been stable, while our commercial business experienced relatively more impact. Much of our commercial business has continued due to regulatory drivers, but we have seen project delays in the industrial sectors. Our diversified end-markets have allowed us to redeploy staff to areas of uninterrupted or increased demand, and we have made decisions to align our cost structures with our clients' projects. The actions we have taken to navigate through this worldwide pandemic, the strength of our balance sheet, and our technical leadership position us well to address the global challenges of providing clean water, environmental restoration, and the impacts of climate change.

In fiscal 2020, our revenue decreased 3.6% compared to fiscal 2019. Our year-over-year revenue comparisons were impacted by the disposal of our Canadian turn-key pipeline activities in the fourth quarter of fiscal 2019 and a decrease in revenue from disaster response activities related to California wildfires. Excluding the disposal and the decreased California wildfire activity, our revenue increased 3.5% in fiscal 2020 compared to last year. This increase includes $210.5 million of revenue from acquisitions, which did not have comparable revenue in fiscal 2019. Excluding the net impact of acquisitions/ disposals and the California wildfire disaster response activities, our revenue in fiscal 2020 decreased 3.9% compared to fiscal 2019 primarily due to the adverse impact of the COVID-19 pandemic on our U.S. commercial and international revenue.

U.S. Federal Government. Our U.S. federal government revenue increased 5.6% in fiscal 2020 compared to fiscal 2019. Excluding contributions from acquisitions, our revenue declined 1.5% in fiscal 2020 compared to last year. The decrease was primarily due to reduced international development activities, partially offset by increased federal information technology consulting activity. During periods of economic volatility, our U.S. federal government business has historically been the most stable and predictable. We expect our U.S. federal government revenue to grow modestly in fiscal 2021 due to continued increased federal information technology consulting activity. However, U.S. federal spending amounts and priorities could change significantly from our current expectations, which could have a significant positive or negative impact on our fiscal 2021 revenue.

U.S. State and Local Government. Our U.S. state and local government revenue decreased 25.3% in fiscal 2020 compared to last year as we experienced a decrease in revenue from the aforementioned California wildfire disaster response activities. This decline was partially offset by continued broad-based growth in our U.S. state and local government project-related infrastructure business, particularly with increased revenue from municipal water infrastructure work in the metropolitan areas of California, Texas, and Florida. Most of our work for U.S. state and local governments relates to critical water and environmental programs, which we expect to increase further next year. However, further budgetary constraints to our clients could negatively impact our business. Conversely, increased disaster response activity could cause our fiscal 2021 revenue to exceed our current expectations.

U.S. Commercial. Our U.S. commercial revenue decreased 6.2% in fiscal 2020 compared to fiscal 2019. This decline was primarily due to reduced industrial activity as a result of the COVID-19 pandemic. We currently expect the adverse impact of the COVID-19 pandemic to our U.S. commercial revenue to continue to be more significant than to our U.S. government programs and projects throughout most of next year.

International. Our international revenue increased 3.2% in fiscal 2020 compared to fiscal 2019. Excluding the impact of the aforementioned prior-year disposal of our Canadian turn-key pipeline activities, our international revenue increased 11.4% in fiscal 2020 compared to last year. This increase includes $132.5 million of revenue from acquisitions, which did not have comparable revenue in fiscal 2019. Excluding the net impact of acquisitions/disposals, our international revenue in fiscal

2020 decreased 5.5% compared to last year. The revenue decline primarily reflects the adverse impact of the COVID-19 pandemic, partially offset by increased renewable energy activity in Canada. In light of the COVID-19 pandemic, we currently expect our overall international government work to be stable in fiscal 2021; however, our international commercial activities could have a significant adverse impact if the current economic conditions due to COVID-19 are prolonged.

RESULTS OF OPERATIONS

Fiscal 2020 Compared to Fiscal 2019

Consolidated Results of Operations

	Fiscal Year Ended			
	September 27, 2020	September 29, 2019	Change $	Change %
	($ in thousands)			
Revenue	$ 2,994,891	$ 3,107,348	$ (112,457)	(3.6)%
Subcontractor costs	(646,319)	(717,711)	71,392	9.9
Revenue, net of subcontractor costs [1]	2,348,572	2,389,637	(41,065)	(1.7)
Other costs of revenue	(1,902,037)	(1,981,454)	79,417	4.0
Gross profit	446,535	408,183	38,352	9.4
Selling, general and administrative expenses	(204,615)	(200,230)	(4,385)	(2.2)
Acquisition and integration expenses	—	(10,351)	10,351	NM
Contingent consideration – fair value adjustments	14,971	(1,085)	16,056	NM
Impairment of goodwill	(15,800)	(7,755)	(8,045)	(103.7)
Income from operations	241,091	188,762	52,329	27.7
Interest expense – net	(13,100)	(13,626)	526	3.9
Income before income tax expense	227,991	175,136	52,855	30.2
Income tax expense	(54,101)	(16,375)	(37,726)	(230.4)
Net income	173,890	158,761	15,129	9.5
Net income attributable to noncontrolling interests	(31)	(93)	62	66.7
Net income attributable to Tetra Tech	$ 173,859	$ 158,668	$ 15,191	9.6
Diluted earnings per share	$ 3.16	$ 2.84	$ 0.32	11.3

(1) We believe that the presentation of "Revenue, net of subcontractor costs", which is a non-U.S. GAAP financial measure, enhances investors' ability to analyze our business trends and performance because it substantially measures the work performed by our employees. In the course of providing services, we routinely subcontract various services and, under certain USAID programs, issue grants. Generally, these subcontractor costs and grants are passed through to our clients and, in accordance with U.S. GAAP and industry practice, are included in our revenue when it is our contractual responsibility to procure or manage these activities. Because subcontractor services can vary significantly from project to project and period to period, changes in revenue may not necessarily be indicative of our business trends. Accordingly, we segregate subcontractor costs from revenue to promote a better understanding of our business by evaluating revenue exclusive of costs associated with external service providers.
NM = not meaningful

In fiscal 2020, revenue and revenue, net of subcontractor costs, decreased $112.5 million, or 3.6%, and $41.1 million, or 1.7%, compared to fiscal 2019. These comparisons were impacted by the disposal of our Canadian turn-key pipeline activities in the fourth quarter of fiscal 2019 and a decrease in revenue from disaster response activities related to California wildfires. In addition, our fiscal 2019 results included a reduction of revenue of $13.7 million from a claim that was resolved last year. Excluding the disposal, the decreased California wildfire activity, and the 2019 claim resolution, our revenue increased 3.0% in fiscal 2020 compared to last year. This increase includes $210.5 million of revenue from acquisitions, which did not have comparable revenue in fiscal 2019. Also excluding the contribution from acquisitions, our revenue in fiscal 2020 decreased 4.4% compared to fiscal 2019 primarily due to the adverse impact of the COVID-19 pandemic on our U.S. commercial and international revenue.

The following table reconciles our reported results to non-U.S. GAAP adjusted results, which exclude the RCM results and certain non-operating accounting-related adjustments, such as acquisition and integration costs, gains/losses from adjustments to contingent considerations, goodwill impairment charges, non-recurring costs to address COVID-19, and non-recurring tax benefits. Adjusted results also exclude charges resulting from the decision to dispose of our Canadian turn-key pipeline activities that commenced in the fourth quarter of fiscal 2019 and subsequent related gains from non-core equipment disposals in fiscal 2020. Our fiscal 2019 adjusted results exclude a charge to operating income of $13.7 million from a claim that was resolved in the fourth quarter of fiscal 2019 for a remediation project, where the work was substantially performed in prior years. The effective tax rates applied to these adjustments to earnings per share ("EPS") to arrive at adjusted EPS averaged 155% and 16% in fiscal 2020 and 2019, respectively. The goodwill impairment charges in both fiscal years and certain of the transaction charges in fiscal 2019 did not have related tax benefits. Excluding these items, the effective tax rates applied to the adjustments in fiscal 2020 and 2019 were 24% and 26%, respectively. We applied the relevant marginal statutory tax rate based on the nature of the adjustments and tax jurisdiction in which they occur. Both EPS and adjusted EPS were calculated using diluted weighted-average common shares outstanding for the respective periods as reflected in our consolidated statements of income.

During the second quarter of fiscal 2020, we took actions in response to the COVID-19 pandemic to ensure the health and safety of our employees, clients, and communities. These actions included activating our Business Continuity Plan globally, which enabled 95% of our workforce to work remotely and all 450 of our global offices to remain operational supporting our clients' programs and projects. This required incremental costs for employee relocation, expansion of our virtual private network capabilities, enhanced security, and sanitizing our offices. In addition, we incurred severance costs to right-size select operations where projects were cancelled specifically due to COVID-19 concerns and the resulting macroeconomic conditions. These incremental costs totaled $8.2 million in the second quarter of fiscal 2020. Substantially all of these costs were paid in cash in the second half of fiscal 2020.

	Fiscal Year Ended			
	September 27, 2020	September 29, 2019	Change $	Change %
Income from operations	$ 241,091	$ 188,762	$ 52,329	27.7
COVID-19	8,233	—	8,233	NM
Non-core dispositions	(8,525)	10,946	(19,471)	NM
RCM	—	5,933	(5,933)	NM
Claims	—	13,700	(13,700)	NM
Acquisition/Integration	—	10,351	(10,351)	NM
Earn-out adjustments	(13,371)	3,085	(16,456)	NM
Impairment of goodwill	15,800	7,755	8,045	NM
Adjusted income from operations (1)	$ 243,228	$ 240,532	$ 2,696	1.1
EPS	$ 3.16	$ 2.84	$ 0.32	11.3
COVID-19	0.11	—	0.11	NM
Non-core dispositions	(0.12)	0.14	(0.26)	NM
RCM	—	0.08	(0.08)	NM
Claims	—	0.18	(0.18)	NM
Acquisition/Integration	—	0.19	(0.19)	NM
Earn-out adjustments	(0.18)	0.04	(0.22)	NM
Impairment of goodwill	0.29	0.14	0.15	NM
Non-recurring tax benefits	—	(0.44)	0.44	NM
Adjusted EPS (1)	$ 3.26	$ 3.17	$ 0.09	2.8

NM = not meaningful
(1) Non-U.S. GAAP financial measure

Our operating income increased $52.3 million in fiscal 2020 compared to fiscal 2019. Our operating income in fiscal 2020 was reduced by the previously described non-recurring charges of $8.2 million to address COVID-19. In addition, our fiscal 2020 results include gains from the sales of non-core equipment of $8.5 million related to the disposal of our Canadian turn-key pipeline activities. Our operating income in fiscal 2019 included charges of $10.9 million related to this disposal. Our operating income in fiscal 2019 also included a $5.9 million loss from exited construction activities in our RCM segment. Our RCM results are described below under "Remediation and Construction Management." Additionally, our operating income in fiscal 2019 included the aforementioned $13.7 million charge for a resolved claim and expenses of $10.4 million related to the acquisition and integration of WYG plc ("WYG"). For further detailed information regarding the WYG-related costs, see "Fiscal 2019 Acquisition and Integration Expenses" below. Our fiscal 2020 operating income includes gains of $15.0 million related to changes in the estimated fair value of contingent earn-out liabilities partially offset by related compensation charges of $1.6 million. Our fiscal 2019 operating income reflects losses of $1.1 million related to changes in the estimated fair value of contingent earn-out liabilities and an additional $2.0 million of related compensation charges. These earn-out related amounts are described below under "Fiscal 2020 and 2019 Earn-Out Adjustments." Further, our operating income reflects non-cash goodwill impairment charges of $15.8 million and $7.8 million in fiscal 2020 and 2019, respectively. These charges are described below under "Fiscal 2020 and 2019 Impairment of Goodwill."

Excluding these items, our adjusted operating income increased $2.7 million, or 1.1%, in fiscal 2020 compared to fiscal 2019. The increase reflects improved results in our CIG segment partially offset by lower operating income in our GSG segment. GSG and CIG results are described below under "Government Services Group" and "Commercial/International Services Group", respectively.

Our net interest expense was $13.1 million in fiscal 2020 compared to $13.6 million last year. The decrease primarily reflects lower interest rates (primarily LIBOR), and to a lesser extent, lower average borrowings.

The effective tax rates for fiscal 2020 and 2019 were 23.7% and 9.3%, respectively. The goodwill impairment charges in fiscal 2020 and fiscal 2019 and certain of the transaction charges in fiscal 2019 did not have related tax benefits, which increased our effective tax rates by 1.5% and 1.1% in fiscal 2020 and 2019, respectively. Conversely, income tax expense was reduced by $8.3 million and $6.4 million of excess tax benefits on share-based payments in fiscal 2020 and 2019, respectively. Additionally, we finalized the analysis of our deferred tax liabilities for the Tax Cuts and Jobs Act's ("TCJA's") lower tax rates in the first quarter of fiscal 2019 and recorded a deferred tax benefit of $2.6 million. Also, valuation allowances of $22.3 million in Australia were released due to sufficient positive evidence obtained during the second quarter of fiscal 2019. The valuation allowances were primarily related to net operating loss and research and development credit carryforwards and other temporary differences. We evaluated the positive evidence against any negative evidence and determined that it was more likely than not that the deferred tax assets would be realized. The factors used to assess the likelihood of realization were the past performance of the related entities, our forecast of future taxable income, and available tax planning strategies that could be implemented to realize the deferred tax assets.

Excluding the impact of the non-deductible goodwill impairment charges and transaction costs, the excess tax benefits on share-based payments, the net deferred tax benefits from the TCJA, and the valuation allowance release, our effective tax rates in fiscal 2020 and 2019 were 25.6% and 24.6%, respectively.

Our EPS was $3.16 in fiscal 2020, compared to $2.84 in fiscal 2019. On the same basis as our adjusted operating income and excluding non-recurring tax benefits in fiscal 2019, EPS was $3.26 in fiscal 2020, compared to $3.17 last year.

Segment Results of Operations

Government Services Group ("GSG")

	Fiscal Year Ended			
	September 27, 2020	September 29, 2019	Change $	Change %
	($ in thousands)			
Revenue	$ 1,778,922	$ 1,820,671	$ (41,749)	(2.3)%
Subcontractor costs	(478,839)	(491,290)	12,451	2.5
Revenue, net of subcontractor costs	$ 1,300,083	$ 1,329,381	$ (29,298)	(2.2)
Income from operations	$ 168,669	$ 185,263	$ (16,594)	(9.0)

Revenue and revenue, net of subcontractor costs, decreased $41.7 million, or 2.3%, and $29.3 million, or 2.2%, respectively, in fiscal 2020 compared to fiscal 2019. These declines primarily reflect the previously described decrease in revenue from disaster response activities related to California wildfires offset by revenue from acquisitions, which did not have comparable revenue in fiscal 2019. Excluding the contributions from acquisitions and the California wildfire disaster response activities, our revenue in fiscal 2020 was substantially the same as fiscal 2019 as increases in federal information technology activity were offset by lower international development revenue.

Operating income decreased $16.6 million in fiscal 2020 compared to fiscal 2019 primarily reflecting the lower disaster response revenue. Also, we incurred $1.6 million of incremental costs for actions to respond to the COVID-19 pandemic in the second quarter of fiscal 2020. Our operating margin, based on revenue, net of subcontractor costs, was 13.0% in fiscal 2020 compared to 13.9% last year. Excluding the COVID-19 charges, our operating margin was 13.1% in fiscal 2020.

Commercial/International Services Group ("CIG")

	Fiscal Year Ended			
	September 27, 2020	September 29, 2019	Change $	Change %
	($ in thousands)			
Revenue	$ 1,266,059	$ 1,342,509	$ (76,450)	(5.7)%
Subcontractor costs	(217,547)	(279,468)	61,921	22.2
Revenue, net of subcontractor costs	$ 1,048,512	$ 1,063,041	$ (14,529)	(1.4)
Income from operations	$ 114,022	$ 79,633	$ 34,389	43.2

Revenue and revenue, net of subcontractor costs, decreased $76.5 million, or 5.7%, and $14.5 million, or 1.4%, respectively, in fiscal 2020 compared to fiscal 2019. Our year-over-year revenue comparisons were impacted by the disposal of our Canadian turn-key pipeline activities in the fourth quarter of fiscal 2019, and a reduction in revenue and a corresponding charge to operating income of $13.7 million in fiscal 2019 for a remediation project where the work was substantially performed in prior years. Excluding the disposal and the fiscal 2019 claim resolution, our revenue decreased 2.2% due to lower subcontractor activity and the adverse impact of the COVID-19 pandemic on our U.S. and international commercial revenue.

Operating income increased $34.4 million in fiscal 2020 compared to last year. This comparison was also impacted by the disposal of our Canadian turn-key pipeline activities. Our fiscal 2020 operating income includes gains of $8.5 million from the disposition of non-core equipment and our fiscal 2019 operating income includes charges of $10.9 million related to these activities. In addition, we incurred $6.6 million of incremental costs for actions to respond to the COVID-19 pandemic in the second quarter of fiscal 2020. Excluding the Canadian turn-key pipeline activities, the COVID-19 charges, and the aforementioned $13.7 million claim in fiscal 2019, our operating income increased $7.9 million, or 7.5%, in fiscal 2020 compared to fiscal 2019. On the same basis, our operating margin, based on revenue, net of subcontractor costs, improved to 10.7% in fiscal 2020 from 9.7% last year.

Remediation and Construction Management ("RCM")

	Fiscal Year Ended			
	September 27, 2020	September 29, 2019	Change $	Change %
	($ in thousands)			
Revenue	$ 198	$ (1,542)	$ 1,740	NM
Subcontractor costs	(221)	(1,243)	1,022	NM
Revenue, net of subcontractor costs	$ (23)	$ (2,785)	$ 2,762	NM
Loss from operations	$ —	$ (5,933)	$ 5,933	NM

RCM's projects were substantially complete at the end of fiscal 2018. The operating loss of $5.9 million in fiscal 2019 reflects reductions of revenue and related operating losses based on updated evaluations of unsettled claim amounts for two construction projects that were completed in prior years.

Fiscal 2020 and 2019 Earn-Out Adjustments

We review and re-assess the estimated fair value of contingent consideration on a quarterly basis, and the updated fair value could differ materially from the initial estimates. We recorded adjustments to our contingent earn-out liabilities and reported net gains of $15.0 million and losses of $1.1 million in fiscal 2020 and 2019, respectively. The fiscal 2020 net gains primarily resulted from updated valuations of the contingent consideration liabilities for eGlobalTech ("EGT"), Norman, Disney and Young ("NDY"), and Segue Technologies, Inc. ("SEG"). These valuations included updated projections of EGT's, NDY's, and SEG's financial performance during the earn-out periods, which were below our original estimates at their respective acquisition dates. In addition, we recognized charges of $1.6 million and $2.0 million in fiscal 2020 and 2019, respectively, that related to the earn-out for Glumac. These charges were treated as compensation in selling, general and administrative expenses due to the terms of the arrangement, which included an on-going service requirement for a portion of the earn-out.

At September 27, 2020, there was a total maximum of $70.9 million of outstanding contingent consideration related to acquisitions. Of this amount, $32.6 million was estimated as the fair value and accrued on our consolidated balance sheet.

Fiscal 2020 and 2019 Impairment of Goodwill

On September 2, 2020, Australia announced that it had fallen into economic recession, defined as two consecutive quarters of negative growth, for the first time since 1991 including 7% negative growth in the quarter ending in June 2020. This prompted a strategic review of our Asia/Pacific ("ASP") reporting unit, which is in our CIG reportable segment. As a result of the economic recession in Australia, our revenue growth and profit margin forecasts for the ASP reporting unit declined from the previous forecast used for our annual goodwill impairment review as of June 29, 2020. We also performed an interim goodwill impairment review of our ASP reporting unit in September 2020 and recorded a $15.8 million goodwill impairment charge. The impaired goodwill related to our acquisitions of Coffey and NDY. As a result of the impairment charge, the estimated fair value of our ASP reporting unit equals its carrying value of $144.9 million, including $95.5 million of goodwill, at September 27, 2020. If the financial performance of the operations in our ASP reporting unit were to deteriorate or fall below our forecasts, the related goodwill may become further impaired.

During the fourth quarter of fiscal 2019, we performed a strategic review of all operations. As a result, we decided to dispose of our turn-key pipeline activities in Western Canada in our Remediation and Field Services ("RFS") reporting unit, which is in our CIG reportable segment. As a result, we incurred severance and project-related charges related to the disposition of $10.9 million, which were reported in the CIG segment's operating income. We also performed an interim goodwill impairment review of our RFS reporting unit and recorded a $7.8 million goodwill impairment charge. The impaired goodwill related to our acquisition of Parkland Pipeline Contractors Ltd. As a result of the impairment charge, the estimated fair value of the RFS reporting unit equaled its carrying value at September 29, 2019. If the financial performance of the remaining operations in our RFS reporting unit were to deteriorate or fall below our forecasts, the related goodwill may become further impaired.

Fiscal 2019 Compared to Fiscal 2018

Consolidated Results of Operations

	Fiscal Year Ended			
	September 29, 2019	September 30, 2018	Change $	Change %
	($ in thousands)			
Revenue	$ 3,107,348	$ 2,964,148	$ 143,200	4.8%
Subcontractor costs	(717,711)	(763,414)	45,703	6.0
Revenue, net of subcontractor costs [1]	2,389,637	2,200,734	188,903	8.6
Other costs of revenue	(1,981,454)	(1,816,276)	(165,178)	(9.1)
Gross profit	408,183	384,458	23,725	6.2
Selling, general and administrative expenses	(200,230)	(190,120)	(10,110)	(5.3)
Acquisition and integration expenses	(10,351)	—	(10,351)	NM
Contingent consideration – fair value adjustments	(1,085)	(4,252)	3,167	74.5
Impairment of goodwill	(7,755)	—	(7,755)	NM
Income from operations	188,762	190,086	(1,324)	(0.7)
Interest expense – net	(13,626)	(15,524)	1,898	12.2
Income before income tax expense	175,136	174,562	574	0.3
Income tax expense	(16,375)	(37,605)	21,230	56.5
Net income	158,761	136,957	21,804	15.9
Net income attributable to noncontrolling interests	(93)	(74)	(19)	(25.7)
Net income attributable to Tetra Tech	$ 158,668	$ 136,883	$ 21,785	15.9
Diluted earnings per share	$ 2.84	$ 2.42	$ 0.42	17.4

[1] We believe that the presentation of "Revenue, net of subcontractor costs", which is a non-U.S. GAAP financial measure, enhances investors' ability to analyze our business trends and performance because it substantially measures the work performed by our employees. In the course of providing services, we routinely subcontract various services and, under certain USAID programs, issue grants. Generally, these subcontractor costs and grants are passed through to our clients and, in accordance with U.S. GAAP and industry practice, are included in our revenue when it is our contractual responsibility to procure or manage these activities. Because subcontractor services can vary significantly from project to project and period to period, changes in revenue may not necessarily be indicative of our business trends. Accordingly, we segregate subcontractor costs from revenue to promote a better understanding of our business by evaluating revenue exclusive of costs associated with external service providers.
NM = not meaningful

The following table reconciles our reported results to non-U.S. GAAP adjusted results, which exclude RCM results and certain non-operating accounting-related adjustments, such as acquisition and integration costs, gains/losses from adjustments to contingent consideration, and non-recurring tax benefits. Adjusted results also exclude charges from the disposal of our Canadian turn-key pipeline activities in fiscal 2019 and losses from the divestitures of our non-core utility field services operations and other non-core assets in fiscal 2018. The disposal in fiscal 2019 also resulted in a $7.8 million goodwill impairment charge that is excluded from our adjusted results. Our fiscal 2019 adjusted results exclude a reduction of revenue and a corresponding charge to operating income of $13.7 million from a claim that was resolved in the fourth quarter of fiscal 2019 for a remediation project, where the work was substantially performed in prior years. In addition, our fiscal 2018 adjusted results also exclude a reduction of revenue of $10.6 million and a related charge to operating income of $12.5 million from a claim settlement in the fourth quarter of fiscal 2018 for a fixed-price construction project that was completed in fiscal 2014. The effective tax rates applied to the adjustments to EPS to arrive at adjusted EPS averaged 16% and 28% in fiscal 2019 and 2018, respectively. The goodwill impairment charge and certain of the transaction charges in fiscal 2019 did not have a related tax benefit. Excluding these items, the effective tax rate applied to adjustments in fiscal 2019 was 26%. We applied the relevant marginal statutory tax rate based on the nature of the adjustments and tax jurisdiction in which they occur. Both EPS and adjusted EPS were calculated using diluted weighted-average common shares outstanding for the respective periods as reflected in our consolidated statements of income.

	Fiscal Year Ended			
	September 29, 2019	September 30, 2018	Change $	Change %
Revenue	$ 3,107,348	$ 2,964,148	$ 143,200	4.8%
RCM	1,542	(14,199)	15,741	NM
Claims	13,700	10,576	3,124	NM
Adjusted revenue [1]	$ 3,122,590	$ 2,960,525	$ 162,065	5.5
Revenue	$ 3,107,348	$ 2,964,148	$ 143,200	4.8
Subcontractor costs	(717,711)	(763,414)	45,703	NM
Revenue, net of subcontractor costs	$ 2,389,637	$ 2,200,734	$ 188,903	8.6
RCM	2,785	(2,648)	5,433	NM
Claims	13,700	10,576	3,124	NM
Adjusted revenue, net of subcontractor costs [1]	$ 2,406,122	$ 2,208,662	$ 197,460	8.9
Income from operations	$ 188,762	$ 190,086	$ (1,324)	(0.7)
Earn-out expense	3,085	5,753	(2,668)	NM
RCM	5,933	4,573	1,360	NM
Claims	13,700	12,457	1,243	NM
Non-core divestitures	18,701	3,434	15,267	NM
Acquisition/Integration	10,351	—	10,351	NM
Adjusted income from operations [1]	$ 240,532	$ 216,303	$ 24,229	11.2
EPS	$ 2.84	$ 2.42	$ 0.42	17.4
Earn-out expense	0.04	0.08	(0.04)	NM
RCM	0.08	0.06	0.02	NM
Claims	0.18	0.16	0.02	NM
Non-core divestitures	0.28	0.11	0.17	NM
Acquisition/Integration	0.19	—	0.19	NM
Non-recurring tax benefits	(0.44)	(0.19)	(0.25)	NM
Adjusted EPS [1]	$ 3.17	$ 2.64	$ 0.53	20.1

NM = not meaningful
[1] Non-U.S. GAAP financial measure

In fiscal 2019, revenue and revenue, net of subcontractor costs, increased $143.2 million, or 4.8%, and $188.9 million, or 8.6%, respectively, compared to fiscal 2018. Our adjusted revenue and revenue, net of subcontractor costs, increased $162.1

million, or 5.5%, and $197.5 million, or 8.9%, respectively, compared to fiscal 2018. This growth includes contributions from the fiscal 2019 acquisitions of EGT and WYG, partially offset by the impact of the divestiture of our non-core utility field services operations in fiscal 2018. Excluding the net impact from these transactions, our adjusted revenue and revenue, net of subcontractor costs, grew $144.2 million, or 5.0%, and $180.5 million, or 8.3%, in fiscal 2019 compared to fiscal 2018. This growth primarily reflects continued growth in our U.S. state and local government water infrastructure revenue. In addition, our revenue from disaster response and recovery planning projects increased compared to fiscal 2018. Our U.S. state and local government adjusted revenue and revenue, net of subcontractor costs, increased $132.3 million, or 28.8%, and $90.7 million, or 27.1%, respectively, in fiscal 2019 compared to fiscal 2018. Additionally, in fiscal 2019, our international adjusted revenue, net of subcontractor costs, increased $98.6 million, or 16.3%, primarily due to increased activity in Canada.

Our operating income decreased $1.3 million in fiscal 2019 compared to fiscal 2018. Our operating income in fiscal 2019 was reduced by WYG-related acquisition and integration expenses of $10.4 million. For further detailed information regarding these expenses, see "Fiscal 2019 Acquisition and Integration Expenses" below. In addition, our operating income reflects losses of $1.1 million and $4.3 million related to changes in the estimated fair value of contingent earn-out liabilities and related compensation charges of $2.0 million and $1.5 million in fiscal 2019 and 2018, respectively. These earn-out charges are described below under "Fiscal 2019 and 2018 Earn-Out Adjustments." The loss from exited construction activities in our RCM segment was $5.9 million in fiscal 2019 compared to $4.6 million in fiscal 2018. Our RCM results are described below under "Remediation and Construction Management." Additionally, our operating income for fiscal 2019 includes charges of $10.9 million related to the planned disposal of our turn-key pipeline activities in Western Canada. This disposal also resulted in a non-cash goodwill impairment charge of $7.8 million in fiscal 2019. Both of these charges are described above under "Fiscal 2020 and 2019 Impairment of Goodwill." Our operating income in fiscal 2018, also includes losses of $3.4 million related to the divestitures of our non-core utility field services operations and other non-core assets. These losses are reported in selling, general and administrative expenses in our consolidated statements of income.

Excluding these items and the aforementioned claims in fiscal 2019 and 2018, adjusted operating income increased $24.2 million, or 11.2%, in fiscal 2019 compared to fiscal 2018. The increase reflects improved results in both our GSG and CIG segments. GSG's operating income increased $17.1 million in fiscal 2019 compared to fiscal 2018. These results are described below under "Government Services Group." CIG's operating income increased $5.2 million ($17.4 million on an adjusted basis) in fiscal 2019 compared to fiscal 2018. These results are described below under "Commercial/International Services Group."

Interest expense, net of interest income, was $13.6 million in fiscal 2019, compared to $15.5 million in fiscal 2018. The decreases reflect reduced borrowings, partially offset by higher interest rates (primarily LIBOR).

The effective tax rates for fiscal 2019 and 2018 were 9.3% and 21.5%, respectively. These tax rates reflect the impact of the comprehensive tax legislation enacted by the U.S. government on December 22, 2017, which is commonly referred to as the TCJA. The TCJA significantly revised the U.S. corporate income tax regime by, among other things, lowering the U.S. corporate tax rate from 35% to 21% effective January 1, 2018, while also repealing the deduction for domestic production activities, limiting the deductibility of certain executive compensation, and implementing a modified territorial tax system with the introduction of the Global Intangible Low-Taxed Income ("GILTI") tax rules. The TCJA also imposed a one-time transition tax on deemed repatriation of historical earnings of foreign subsidiaries. In fiscal 2019, we finalized our fiscal 2018 U.S. federal tax return and recorded a $2.4 million tax expense with respect to the one-time transition tax on foreign earnings. As we have a September 30 fiscal year-end, our U.S. federal corporate income tax rate was blended in fiscal 2018, resulting in a statutory federal rate of 24.5% (3 months at 35% and 9 months at 21%), and was 21% in fiscal 2019.

U.S. GAAP requires that the impact of tax legislation be recognized in the period in which the tax law was enacted. As a result of the TCJA, we reduced our deferred tax liabilities and recorded a deferred tax benefit of $10.1 million in fiscal 2018 to reflect our estimate of temporary differences in the United States that were to be recovered or settled in fiscal 2018 based on the 24.5% blended corporate tax rate or based on the 21% tax rate in fiscal 2019 and beyond versus the previous enacted 35% corporate tax rate. We finalized this analysis in the first quarter of fiscal 2019 and recorded an additional deferred tax benefit of $2.6 million.

Valuation allowances of $22.3 million in Australia were released due to sufficient positive evidence being obtained in fiscal 2019. The valuation allowances were primarily related to net operating loss and Research and Development credit carry-forwards and other temporary differences. Excluding the net deferred tax benefits from the TCJA and the release of the valuation allowance, our effective tax rate was 21.9% in fiscal 2019 compared to 25.1% in fiscal 2018; the reduction is primarily due to the reduced U.S. corporate income tax rate.

With respect to the GILTI provisions of the TCJA, we had analyzed our structure and global results of operations and expected a GILTI tax of $0.4 million for fiscal 2019, which was included in our fiscal 2019 income tax expense.

Our EPS was $2.84 in fiscal 2019, compared to $2.42 in fiscal 2018. On the same basis as our adjusted operating income and excluding non-recurring tax benefits, adjusted EPS was $3.17 in fiscal 2019, compared to $2.64 in fiscal 2018.

Segment Results of Operations

Government Services Group ("GSG")

	Fiscal Year Ended			
	September 29, 2019	September 30, 2018	Change $	Change %
	($ in thousands)			
Revenue	$ 1,820,671	$ 1,694,871	$ 125,800	7.4%
Subcontractor costs	(491,290)	(482,537)	(8,753)	(1.8)
Revenue, net of subcontractor costs	$ 1,329,381	$ 1,212,334	$ 117,047	9.7
Income from operations	$ 185,263	$ 168,211	$ 17,052	10.1

Revenue and revenue, net of subcontractor costs, increased $125.8 million, or 7.4%, and $117.0 million, or 9.7%, respectively, in fiscal 2019 compared to fiscal 2018. These increases include contributions from the aforementioned acquisitions in fiscal 2019. Excluding these contributions, revenue and revenue, net of subcontractor costs, increased 4.8% and 6.9%, respectively, in fiscal 2019 compared to fiscal 2018. These increases reflect continued broad-based growth in our U.S. state and local government project-related infrastructure revenue. In addition, our revenue from disaster response and recovery planning projects increased compared to fiscal 2018. Overall, our U.S. state and local government adjusted revenue, net of subcontractor costs, increased $136.7 million and $85.7 million, respectively in fiscal 2019 compared to fiscal 2018. Operating income increased $17.1 million in fiscal 2019 compared to fiscal 2018, primarily reflecting the higher U.S. state and local revenue. Our operating margin, based on revenue, net of subcontractor costs, was stable at 13.9% in both fiscal 2019 and 2018.

Commercial/International Services Group ("CIG")

	Fiscal Year Ended			
	September 29, 2019	September 30, 2018	Change $	Change %
	($ in thousands)			
Revenue	$ 1,342,509	$ 1,323,142	$ 19,367	1.5%
Subcontractor costs	(279,468)	(337,390)	57,922	17.2
Revenue, net of subcontractor costs	$ 1,063,041	$ 985,752	$ 77,289	7.8
Income from operations	$ 79,633	$ 74,451	$ 5,182	7.0

Revenue and revenue, net of subcontractor costs, increased $19.4 million, or 1.5%, and $77.3 million, or 7.8%, respectively, in fiscal 2019 compared to fiscal 2018. Our fiscal 2019 results included a reduction of revenue and a corresponding non-cash charge to operating income of $13.7 million from a claim that was resolved in the fourth quarter of fiscal 2019 for a remediation project, where the work was substantially performed in prior years. Excluding this claim and the net impact of the aforementioned acquisitions/divestiture, revenue and revenue, net of subcontractor costs, increased 4.0% and 10.3%, respectively, in fiscal 2019 compared to fiscal 2018. These increases primarily reflect increased international revenue, particularly for broad-based activities in Canada and renewable energy projects globally. Operating income increased $5.2 million in fiscal 2019 compared to fiscal 2018 reflecting the higher revenue. In addition to the aforementioned claim resolution, operating income in fiscal 2019 included the previously described charges of $10.9 million related to the planned disposal of our Canadian turn-key pipeline operations. Operating income in fiscal 2018 included a $12.5 million charge for a claim settlement for a fixed-price construction project that was completed in fiscal 2014. Excluding these charges, our operating income increased $17.4 million in fiscal 2019 compared to fiscal 2018, and our operating margin, based on revenue, net of subcontractor costs, improved to 9.8% in fiscal 2019 from 8.8% in fiscal 2018.

Remediation and Construction Management ("RCM")

	Fiscal Year Ended			
	September 29, 2019	September 30, 2018	Change	
			$	%
	($ in thousands)			
Revenue	$ (1,542)	$ 14,199	$ (15,741)	NM
Subcontractor costs	(1,243)	(11,551)	10,308	89.2
Revenue, net of subcontractor costs	$ (2,785)	$ 2,648	$ (5,433)	NM
Loss from operations	$ (5,933)	$ (4,573)	$ (1,360)	(29.7)

NM = not meaningful

RCM's projects were substantially complete at the end of fiscal 2018. The operating loss of $5.9 million in fiscal 2019 reflects reductions of revenue and related operating losses based on updated evaluations of unsettled claim amounts for two construction projects that were completed in prior years. The operating loss in fiscal 2018 primarily reflects legal costs related to outstanding claims. We recorded no material gains or losses related to claims in fiscal 2018.

Fiscal 2019 Acquisition and Integration Expenses

In fiscal 2019, we incurred acquisition and integration expenses of $10.4 million related to the WYG acquisition. These expenses included $3.3 million of acquisition expenses that were primarily for professional services, such as legal and investment banking, to support the transaction and were all paid in the fourth quarter of fiscal 2019. Subsequent to the acquisition date, we also recorded charges of $7.1 million for integration activities, including the elimination of redundant general and administrative costs, real estate consolidation, and conversion of information technology platforms, substantially all of which were paid in fiscal 2020.

Fiscal 2019 and 2018 Earn-Out Adjustments

We review and re-assess the estimated fair value of contingent consideration on a quarterly basis, and the updated fair value could differ materially from the initial estimates. We recorded adjustments to our contingent earn-out liabilities and reported losses of $1.1 million and $4.3 million in fiscal 2019 and 2018, respectively. The fiscal 2018 losses resulted from updated valuations of the contingent consideration liabilities for NDY, Eco Logical Australia ("ELA") and Cornerstone Environmental Group ("CEG"). These valuations included updated projections of NDY's, ELA's, and CEG's financial performance during the earn-out periods, which exceeded our original estimates at their respective acquisition dates. In addition, we recognized charges of $2.0 million and $1.5 million in fiscal 2019 and 2018, respectively, that related to the earn-out for Glumac. These charges were treated as compensation in selling, general and administrative expenses due to the terms of the arrangement, which included an on-going service requirement for a portion of the earn-out.

At September 29, 2019, there was a total maximum of $72.4 million of outstanding contingent consideration related to acquisitions. Of this amount, $53.0 million was estimated as the fair value and accrued on our consolidated balance sheet.

FINANCIAL CONDITION, LIQUIDITY AND CAPITAL RESOURCES

Capital Requirements. As of September 27, 2020, we had $157.5 million of cash and cash equivalents and access to an additional $722 million of borrowings available under our credit facility. During fiscal 2020, we generated $262 million of cash from operations. To date, we have not experienced any significant deterioration in our financial condition or liquidity due to the COVID-19 pandemic and our credit facilities remain available.

Our primary sources of liquidity are cash flows from operations and borrowings under our credit facilities. Our primary uses of cash are to fund working capital, capital expenditures, stock repurchases, cash dividends and repayment of debt, as well as to fund acquisitions and earn-out obligations from prior acquisitions. We believe that our existing cash and cash equivalents, operating cash flows and borrowing capacity under our credit agreement, as described below, will be sufficient to meet our capital requirements for at least the next 12 months including any additional resources needed to address the COVID-19 pandemic.

We use a variety of tax planning and financing strategies to manage our worldwide cash and deploy funds to locations where they are needed. At September 27, 2020, undistributed earnings of our foreign subsidiaries, primarily in Canada, amounting to approximately $66.9 million are expected to be permanently reinvested in these foreign countries. Accordingly, no provision for foreign withholding taxes has been made. Upon distribution of those earnings, we would be subject to foreign withholding taxes. Assuming the permanently reinvested foreign earnings were repatriated under the laws and rates applicable at September 27, 2020, the incremental foreign withholding taxes applicable to those earnings would be approximately $2.0 million. We currently have no need or plans to repatriate undistributed foreign earnings in the foreseeable future; however, this could change due to varied economic circumstances or modifications in tax law.

On November 5, 2018, the Board of Directors authorized a stock repurchase program ("2019 Program") under which we could repurchase up to $200 million of our common stock. This was in addition to the $25 million remaining as of fiscal 2018 year-end under the previous stock repurchase program ("2018 Program"). On January 27, 2020, the Board of Directors authorized a new $200 million stock repurchase program ("2020 Program"). In fiscal 2019, we expended $100 million to repurchase our stock under these programs. In fiscal 2020, we paid an additional $117.2 million for share repurchases. As a result, we had a remaining balance of $207.8 million available under the 2019 and 2020 programs. We declared and paid common stock dividends totaling $34.7 million, or $0.64 per share, in fiscal 2020 compared to $29.7 million, or $0.54 per share, in fiscal 2019.

Subsequent Event. On November 9, 2020, the Board of Directors declared a quarterly cash dividend of $0.17 per share payable on December 11, 2020 to stockholders of record as of the close of business on November 30, 2020.

Cash and Cash Equivalents. As of September 27, 2020, cash and cash equivalents were $157.5 million, an increase of $36.6 million compared to the fiscal 2019 year-end. The increase was due to net cash provided by operating activities, primarily due to shorter collection periods for accounts receivable, and increased proceeds from sale of equipment. These increases were partially offset by stock repurchases, dividends, acquisitions and contingent earn-out payments.

Operating Activities. For fiscal 2020, net cash provided by operating activities was $262.5 million compared to $208.5 million in fiscal 2019. The increase was primarily due to strong cash collections on our accounts receivable.

Investing Activities. Net cash used in investing activities was $63.0 million in fiscal 2020, a decrease of $36.7 million compared to last year. The change resulted from lower payments for acquisitions in fiscal 2020 compared to last year and the proceeds from sales of equipment related to the disposal of our Canadian turn-key pipeline activities.

Financing Activities. For fiscal 2020, net cash used in financing activities was $163.0 million, an increase of $28.0 million compared to fiscal 2019. The change was primarily due to increased stock repurchases and contingent earn-out payments.

Debt Financing. On July 30, 2018, we entered into a Second Amended and Restated Credit Agreement ("Amended Credit Agreement") with a total borrowing capacity of $1 billion that will mature in July 2023. The Amended Credit Agreement is a $700 million senior secured, five-year facility that provides for a $250 million term loan facility (the "Amended Term Loan Facility"), a $450 million revolving credit facility (the "Amended Revolving Credit Facility"), and a $300 million accordion feature that allows us to increase the Amended Credit Agreement to $1 billion subject to lender approval. The Amended Credit Agreement allows us to, among other things, (i) refinance indebtedness under our Credit Agreement dated as of May 7, 2013; (ii) finance certain permitted open market repurchases of our common stock, permitted acquisitions, and cash dividends and distributions; and (iii) utilize the proceeds for working capital, capital expenditures and other general corporate purposes. The Amended Revolving Credit Facility includes a $100 million sublimit for the issuance of standby letters of credit, a $20 million sublimit for swingline loans, and a $200 million sublimit for multicurrency borrowings and letters of credit.

The entire Amended Term Loan Facility was drawn on July 30, 2018. The Amended Term Loan Facility is subject to quarterly amortization of principal at 5% annually beginning December 31, 2018. We may borrow on the Amended Revolving Credit Facility, at our option, at either (a) a Eurocurrency rate plus a margin that ranges from 1.00% to 1.75% per annum, or (b) a base rate for loans in U.S. dollars (the highest of the U.S. federal funds rate plus 0.50% per annum, the bank's prime rate or the Eurocurrency rate plus 1.00%) plus a margin that ranges from 0% to 0.75% per annum. In each case, the applicable margin is based on our Consolidated Leverage Ratio, calculated quarterly. The Amended Term Loan Facility is subject to the same interest rate provisions. The Amended Credit Agreement expires on July 30, 2023, or earlier at our discretion upon payment in full of loans and other obligations.

At September 27, 2020, we had $254.9 million in outstanding borrowings under the Amended Credit Agreement, which was comprised of $228.1 million under the Amended Term Loan Facility and $26.8 million outstanding under the Amended Revolving Credit Facility at a year-to-date weighted-average interest rate of 2.31% per annum. In addition, we had $0.7 million in standby letters of credit under the Amended Credit Agreement. Our average effective weighted-average interest rate on borrowings outstanding during the year-to-date period ended September 27, 2020 under the Amended Credit Agreement, including the effects of interest rate swap agreements described in Note 14, "Derivative Financial Instruments" of the "Notes to Consolidated Financial Statements" included in Item 8, was 3.52%. At September 27, 2020, we had $422.4 million of available credit under the Amended Revolving Credit Facility, all of which could be borrowed without a violation of our debt covenants. Commitment fees related to our revolving credit facilities were $0.7 million, $0.7 million, and $0.6 million for fiscal 2020, 2019 and 2018, respectively.

The Amended Credit Agreement contains certain affirmative and restrictive covenants, and customary events of default. The financial covenants provide for a maximum Consolidated Leverage Ratio of 3.00 to 1.00 (total funded debt/ EBITDA, as defined in the Amended Credit Agreement) and a minimum Consolidated Interest Coverage Ratio of 3.00 to 1.00 (EBITDA/Consolidated Interest Charges, as defined in the Amended Credit Agreement). Our obligations under the Amended Credit Agreement are guaranteed by certain of our domestic subsidiaries and are secured by first priority liens on (i) the equity interests of certain of our subsidiaries, including those subsidiaries that are guarantors or borrowers under the Amended Credit Agreement, and (ii) the accounts receivable, general intangibles and intercompany loans, and those of our subsidiaries that are guarantors or borrowers. At September 27, 2020, we were in compliance with these covenants with a consolidated leverage ratio of 1.10x and a consolidated interest coverage ratio of 19.76x.

In addition to the Amended Credit Agreement, we maintain other credit facilities, which may be used for bank overdrafts, short-term cash advances and bank guarantees. At September 27, 2020, there was $36.6 million outstanding under these facilities and the aggregate amount of standby letters of credit outstanding was $69.7 million. As of September 27, 2020, we had bank overdrafts of $33.6 million related to our U.S. disbursement bank accounts. This balance is reported in the "Current portion of long-term debt and other short-term borrowings" within our fiscal 2020 year-end consolidated balance sheet. The change in bank overdraft balance is classified as cash flows from financing activities within our consolidated statements of cash flows as we believe these overdrafts to be a form of short-term financing from the bank due to our ability to fund the overdraft with the $50.0 million overdraft protection on the bank accounts or our other credit facilities if needed.

Inflation. We believe our operations have not been, and, in the foreseeable future, are not expected to be, materially adversely affected by inflation or changing prices due to the average duration of our projects and our ability to negotiate prices as contracts end and new contracts begin.

Dividends. Our Board of Directors has authorized the following dividends:

	Dividend Per Share	Record Date	Total Maximum Payment (in thousands)	Payment Date
November 11, 2019	$ 0.15	December 2, 2019	$ 8,190	December 13, 2019
January 27, 2020	$ 0.15	February 12, 2020	$ 8,225	February 28, 2020
April 27, 2020	$ 0.17	May 13, 2020	$ 9,175	May 27, 2020
July 27, 2020	$ 0.17	August 21, 2020	$ 9,153	September 4, 2020
November 9, 2020	$ 0.17	November 30, 2020	N/A	December 11, 2020

Contractual Obligations. The following sets forth our contractual obligations at September 27, 2020:

	Total	Year 1	Years 2 - 3	Years 4 - 5	Beyond
			(in thousands)		
Debt:					
Credit facility	$ 291,522	$ 49,127	$ 242,395	$ —	$ —
Other debt	137	137	—	—	—
Interest [(1)]	9,326	3,439	5,887	—	—
Operating leases [(2)]	333,810	88,069	141,736	56,513	47,492
Contingent earn-outs [(3)]	32,617	16,142	16,475	—	—
Other long-term obligations [(4)]	39,599	1,841	2,561	245	34,952
Unrecognized tax benefits [(5)]	9,650	7,633	1,694	323	—
Total	$ 716,661	$ 166,388	$ 410,748	$ 57,081	$ 82,444

(1) Interest primarily related to the Term Loan Facility is based on a weighted-average interest rate at September 27, 2020, on borrowings that are presently outstanding.
(2) Predominantly represents leases for our Corporate and project office spaces.
(3) Represents the estimated fair value recorded for contingent earn-out obligations for acquisitions. The remaining maximum contingent earn-out obligations for these acquisitions total $70.9 million.
(4) Predominantly represents deferred compensation liability.
(5) Represents liabilities for unrecognized tax benefits related to uncertain tax positions, excluding amounts related primarily to outstanding refund claims. For more information, see Note 8, "Income Taxes" of the "Notes to Consolidated Financial Statements" included in Item 8.

Income Taxes

We evaluate the realizability of our deferred tax assets by assessing the valuation allowance and adjust the allowance, if necessary. The factors used to assess the likelihood of realization are our forecast of future taxable income and available tax planning strategies that could be implemented to realize the net deferred tax assets. The ability or failure to achieve the forecasted taxable income in the applicable taxing jurisdictions could affect the ultimate realization of deferred tax assets. Based on future operating results in certain jurisdictions, it is possible that the current valuation allowance positions of those jurisdictions could be adjusted in the next 12 months, particularly in the United Kingdom where we have a valuation allowance of approximately $14 million primarily related to the realizability of net operating loss carry-forwards.

As of September 27, 2020 and September 29, 2019, the liability for income taxes associated with uncertain tax positions was $9.7 million and $8.8 million, respectively.

It is reasonably possible that the amount of the unrecognized benefit with respect to certain of our unrecognized tax positions may significantly decrease within the next 12 months. These changes would be the result of ongoing examinations.

Off-Balance Sheet Arrangements

In the ordinary course of business, we may use off-balance sheet arrangements if we believe that such arrangements would be an efficient way to lower our cost of capital or help us manage the overall risks of our business operations. We do not believe that such arrangements have had a material adverse effect on our financial position or our results of operations.

The following is a summary of our off-balance sheet arrangements:

- Letters of credit and bank guarantees are used primarily to support project performance and insurance programs. We are required to reimburse the issuers of letters of credit and bank guarantees for any payments they make under the outstanding letters of credit or bank guarantees. Our Amended Credit Agreement and additional letter of credit facilities cover the issuance of our standby letters of credit and bank guarantees and are critical for our normal operations. If we default on the Amended Credit Agreement or additional credit facilities, our inability to issue or renew standby letters of credit and bank guarantees would impair our ability to maintain normal operations. At September 27, 2020, we had $0.7 million in standby letters of credit outstanding under our Amended Credit Agreement and $69.7 million in standby letters of credit outstanding under our additional letter of credit facilities.

- From time to time, we provide guarantees and indemnifications related to our services. If our services under a guaranteed or indemnified project are later determined to have resulted in a material defect or other material deficiency, then we may be responsible for monetary damages or other legal remedies. When sufficient information about claims on guaranteed or indemnified projects is available and monetary damages or other costs or losses are determined to be probable, we recognize such guaranteed losses.

- In the ordinary course of business, we enter into various agreements as part of certain unconsolidated subsidiaries, joint ventures, and other jointly executed contracts where we are jointly and severally liable. We enter into these agreements primarily to support the project execution commitments of these entities. The potential payment amount of an outstanding performance guarantee is typically the remaining cost of work to be performed by or on behalf of third parties under engineering and construction contracts. However, we are not able to estimate other amounts that may be required to be paid in excess of estimated costs to complete contracts and, accordingly, the total potential payment amount under our outstanding performance guarantees cannot be estimated. For cost-plus contracts, amounts that may become payable pursuant to guarantee provisions are normally recoverable from the client for work performed under the contract. For lump sum or fixed-price contracts, this amount is the cost to complete the contracted work less amounts remaining to be billed to the client under the contract. Remaining billable amounts could be greater or less than the cost to complete. In those cases where costs exceed the remaining amounts payable under the contract, we may have recourse to third parties, such as owners, co-venturers, subcontractors or vendors, for claims.
- In the ordinary course of business, our clients may request that we obtain surety bonds in connection with contract performance obligations that are not required to be recorded in our consolidated balance sheets. We are obligated to reimburse the issuer of our surety bonds for any payments made thereunder. Each of our commitments under performance bonds generally ends concurrently with the expiration of our related contractual obligation.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of our financial statements in conformity with U.S. GAAP requires us to make estimates and assumptions in the application of certain accounting policies that affect amounts reported in our consolidated financial statements and accompanying footnotes included in Item 8 of this report. In order to understand better the changes that may occur to our financial condition, results of operations and cash flows, readers should be aware of the critical accounting policies we apply and estimates we use in preparing our consolidated financial statements. Although such estimates and assumptions are based on management's best knowledge of current events and actions we may undertake in the future, actual results could differ materially from those estimates.

Our significant accounting policies are described in the "Notes to Consolidated Financial Statements" included in Item 8. Highlighted below are the accounting policies that management considers most critical to investors' understanding of our financial results and condition, and that require complex judgments by management.

Revenue Recognition and Contract Costs

To determine the proper revenue recognition method for contracts under ASC 606, we evaluate whether multiple contracts should be combined and accounted for as a single contract and whether the combined or single contract should be accounted for as having more than one performance obligation. The decision to combine a group of contracts or separate a combined or single contract into multiple performance obligations may impact the amount of revenue recorded in a given period. Contracts are considered to have a single performance obligation if the promises are not separately identifiable from other promises in the contracts.

At contract inception, we assess the goods or services promised in a contract and identify, as a separate performance obligation, each distinct promise to transfer goods or services to the customer. The identified performance obligations represent the "unit of account" for purposes of determining revenue recognition. In order to properly identify separate performance obligations, we apply judgment in determining whether each good or service provided is: (a) capable of being distinct, whereby the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer, and (b) distinct within the context of the contract, whereby the transfer of the good or service to the customer is separately identifiable from other promises in the contract.

Contracts are often modified to account for changes in contract specifications and requirements. We consider contract modifications to exist when the modification either creates new or changes the existing enforceable rights and obligations. Most of our contract modifications are for goods or services that are not distinct from existing contracts due to the significant integration provided or significant interdependencies in the context of the contract and are accounted for as if they were part of the original contract. The effect of a contract modification on the transaction price and our measure of progress for the performance obligation to which it relates, is recognized as an adjustment to revenue (either as an increase in or a reduction of revenue) on a cumulative catch-up basis.

We account for contract modifications as a separate contract when the modification results in the promise to deliver additional goods or services that are distinct and the increase in price of the contract is for the same amount as the stand-alone selling price of the additional goods or services included in the modification.

The transaction price represents the amount of consideration to which we expect to be entitled in exchange for transferring promised goods or services to our customers. The consideration promised within a contract may include fixed amounts, variable amounts, or both. The nature of our contracts gives rise to several types of variable consideration, including claims, award fee incentives, fiscal funding clauses, and liquidated damages. We recognize revenue for variable consideration when it is probable that a significant reversal in the amount of cumulative revenue recognized for the contract will not occur. We estimate the amount of revenue to be recognized on variable consideration using either the expected value or the most likely amount method, whichever is expected to better predict the amount of consideration to be received. Project mobilization costs are generally charged to project costs as incurred when they are an integrated part of the performance obligation being transferred to the client.

Claims are amounts in excess of agreed contract prices that we seek to collect from our clients or other third parties for delays, errors in specifications and designs, contract terminations, change orders in dispute or unapproved as to both scope and price, or other causes of unanticipated additional costs. Factors considered in determining whether revenue associated with claims (including change orders in dispute and unapproved change orders in regard to both scope and price) should be recognized include the following: (a) the contract or other evidence provides a legal basis for the claim, (b) additional costs were caused by circumstances that were unforeseen at the contract date and not the result of deficiencies in our performance, (c) claim-related costs are identifiable and considered reasonable in view of the work performed, and (d) evidence supporting the claim is objective and verifiable. This can lead to a situation in which costs are recognized in one period and revenue is recognized in a subsequent period when a client agreement is obtained, or a claims resolution occurs. In some cases, contract retentions are withheld by clients until certain conditions are met or the project is completed, which may be several months or years. In these cases, we have not identified a significant financing component under ASC 606 as the timing difference in payment compared to delivery of obligations under the contract is not for purposes of financing.

For contracts with multiple performance obligations, we allocate the transaction price to each performance obligation using a best estimate of the standalone selling price of each distinct good or service in the contract. The standalone selling price is typically determined using the estimated cost of the contract plus a margin approach. For contracts containing variable consideration, we allocate the variability to a specific performance obligation within the contract if such variability relates specifically to our efforts to satisfy the performance obligation or transfer the distinct good or service, and the allocation depicts the amount of consideration to which we expect to be entitled.

We recognize revenue over time as the related performance obligation is satisfied by transferring control of a promised good or service to our customers. Progress toward complete satisfaction of the performance obligation is primarily measured using a cost-to-cost measure of progress method. The cost input is based primarily on contract cost incurred to date compared to total estimated contract cost. This measure includes forecasts based on the best information available and reflects our judgment to faithfully depict the value of the services transferred to the customer. For certain on-call engineering or consulting and similar contracts, we recognize revenue in the amount which we have the right to invoice the customer if that amount corresponds directly with the value of our performance completed to date.

Due to uncertainties inherent in the estimation process, it is possible that estimates of costs to complete a performance obligation will be revised in the near-term. For those performance obligations for which revenue is recognized using a cost-to-cost measure of progress method, changes in total estimated costs, and related progress towards complete satisfaction of the performance obligation, are recognized on a cumulative catch-up basis in the period in which the revisions to the estimates are made. When the current estimate of total costs indicates a loss, a provision for the entire estimated loss on the contract is made in the period in which the loss becomes evident.

Contract Types

Our services are performed under three principal types of contracts: fixed-price, time-and-materials and cost-plus. Customer payments on contracts are typically due within 60 days of billing, depending on the contract.

Fixed-Price. Under fixed-price contracts, clients pay us an agreed fixed-amount negotiated in advance for a specified scope of work.

Time-and-Materials. Under time-and-materials contracts, we negotiate hourly billing rates and charge our clients based on the actual time that we spend on a project. In addition, clients reimburse us for our actual out-of-pocket costs for materials and other direct incidental expenditures that we incur in connection with our performance under the contract. Most of our time-and-material contracts are subject to maximum contract values, and also may include annual billing rate adjustment provisions.

Cost-Plus. Under cost-plus contracts, we are reimbursed for allowed or otherwise defined costs incurred plus a negotiated fee. The contracts may also include incentives for various performance criteria, including quality, timeliness, ingenuity, safety and cost-effectiveness. In addition, our costs are generally subject to review by our clients and regulatory audit agencies, and such reviews could result in costs being disputed as non-reimbursable under the terms of the contract.

Insurance Matters, Litigation and Contingencies

In the normal course of business, we are subject to certain contractual guarantees and litigation. Generally, such guarantees relate to project schedules and performance. Most of the litigation involves us as a defendant in contractual disagreements, workers' compensation, personal injury and other similar lawsuits. We maintain insurance coverage for various aspects of our business and operations. However, we have elected to retain a portion of losses that may occur through the use of various deductibles, limits and retentions under our insurance programs. This practice may subject us to some future liability for which we are only partially insured or are completely uninsured.

We record in our consolidated balance sheets amounts representing our estimated liability for self-insurance claims. We utilize actuarial analyses to assist in determining the level of accrued liabilities to establish for our employee medical and workers' compensation self-insurance claims that are known and have been asserted against us, as well as for self-insurance claims that are believed to have been incurred based on actuarial analyses but have not yet been reported to our claims administrators at the balance sheet date. We include any adjustments to such insurance reserves in our consolidated statements of income.

Except as described in Note 17, "Commitments and Contingencies" of the "Notes to Consolidated Financial Statements" included in Item 8, we do not have any litigation or other contingencies that have had, or are currently anticipated to have, a material impact on our results of operations or financial position. As additional information about current or future litigation or other contingencies becomes available, management will assess whether such information warrants the recording of additional expenses relating to those contingencies. Such additional expenses could potentially have a material impact on our results of operations and financial position.

Goodwill and Intangibles

The cost of an acquired company is assigned to the tangible and intangible assets purchased and the liabilities assumed on the basis of their fair values at the date of acquisition. The determination of fair values of assets and liabilities acquired requires us to make estimates and use valuation techniques when a market value is not readily available. Any excess of purchase price over the fair value of net tangible and intangible assets acquired is allocated to goodwill. Goodwill typically represents the value paid for the assembled workforce and enhancement of our service offerings.

Identifiable intangible assets include backlog, non-compete agreements, client relations, trade names, patents and other assets. The costs of these intangible assets are amortized over their contractual or economic lives, which range from one to ten years. We assess the recoverability of the unamortized balance of our intangible assets when indicators of impairment are present based on expected future profitability and undiscounted expected cash flows and their contribution to our overall operations. Should the review indicate that the carrying value is not fully recoverable, the excess of the carrying value over the fair value of the intangible assets would be recognized as an impairment loss.

We perform our annual goodwill impairment review at the beginning of our fiscal fourth quarter. In addition, we regularly evaluate whether events and circumstances have occurred that may indicate a potential change in recoverability of goodwill. We perform interim goodwill impairment reviews between our annual reviews if certain events and circumstances have occurred, including a deterioration in general economic conditions, an increased competitive environment, a change in management, key personnel, strategy or customers, negative or declining cash flows, or a decline in actual or planned revenue or earnings compared with actual and projected results of relevant prior periods (see Note 6, "Goodwill and Intangible Assets" of the "Notes to Consolidated Financial Statements" in Item 8 for further discussion).

We believe the methodology that we use to review impairment of goodwill, which includes a significant amount of judgment and estimates, provides us with a reasonable basis to determine whether impairment has occurred. However, many of the factors employed in determining whether our goodwill is impaired are outside of our control and it is reasonably likely that assumptions and estimates will change in future periods. These changes could result in future impairments.

The goodwill impairment review involves the determination of the fair value of our reporting units, which for us are the components one level below our reportable segments. This process requires us to make significant judgments and estimates, including assumptions about our strategic plans with regard to our operations as well as the interpretation of current economic indicators and market valuations. Furthermore, the development of the present value of future cash flow projections includes assumptions and estimates derived from a review of our expected revenue growth rates, operating profit margins, business plans, discount rates, and terminal growth rates. We also make certain assumptions about future market conditions, market prices, interest rates and changes in business strategies. Changes in assumptions or estimates could materially affect the determination of the fair value of a reporting unit. This could eliminate the excess of fair value over carrying value of a reporting unit entirely and, in some cases, result in impairment. Such changes in assumptions could be caused by a loss of one or more significant contracts, reductions in government or commercial client spending, or a decline in the demand for our services due to changing economic conditions. In the event that we determine that our goodwill is impaired, we would be required to record a non-cash charge that could result in a material adverse effect on our results of operations or financial position.

We use two methods to determine the fair value of our reporting units: (i) the Income Approach and (ii) the Market Approach. While each of these approaches is initially considered in the valuation of the business enterprises, the nature and characteristics of the reporting units indicate which approach is most applicable. The Income Approach utilizes the discounted cash flow method, which focuses on the expected cash flow of the reporting unit. In applying this approach, the cash flow available for distribution is calculated for a finite period of years. Cash flow available for distribution is defined, for purposes of this analysis, as the amount of cash that could be distributed as a dividend without impairing the future profitability or operations of the reporting unit. The cash flow available for distribution and the terminal value (the value of the reporting unit at the end of the estimation period) are then discounted to present value to derive an indication of the value of the business enterprise. The Market Approach is comprised of the guideline company method and the similar transactions method. The guideline company method focuses on comparing the reporting unit to select reasonably similar (or "guideline") publicly traded companies. Under this method, valuation multiples are (i) derived from the operating data of selected guideline companies; (ii) evaluated and adjusted based on the strengths and weaknesses of the reporting units relative to the selected guideline companies; and (iii) applied to the operating data of the reporting unit to arrive at an indication of value. In the similar transactions method, consideration is given to prices paid in recent transactions that have occurred in the reporting unit's industry or in related industries. For our annual impairment analysis, we weighted the Income Approach and the Market Approach at 70% and 30%, respectively. The Income Approach was given a higher weight because it has the most direct correlation to the specific economics of the reporting unit, as compared to the Market Approach, which is based on multiples of broad-based (i.e., less comparable) companies. Our last review at June 29, 2020 (i.e. the first day of our fourth quarter in fiscal 2020), indicated that we had no impairment of goodwill, and all of our reporting units had estimated fair values that were in excess of their carrying values, including goodwill. Our ASP reporting unit was the only reporting unit that had an estimated fair value that exceeded its carrying value by less than 20%.

On September 2, 2020, Australia announced that it had fallen into economic recession, defined as two consecutive quarters of negative growth, for the first time since 1991 including 7% negative growth in the quarter ending in June 2020. This prompted a strategic review of our ASP reporting unit, which is in our CIG reportable segment. As a result of the economic recession in Australia, our revenue growth and profit margin forecasts for the ASP reporting unit declined from the previous forecast used for our annual goodwill impairment review as of June 29, 2020. We also performed an interim goodwill impairment review of our ASP reporting unit in September 2020 and recorded a $15.8 million goodwill impairment charge. The impaired goodwill related to our acquisitions of Coffey and NDY. As a result of the impairment charge, the estimated fair value of our ASP reporting unit equals its carrying value of $144.9 million, including $95.5 million of goodwill, at September 27, 2020.

Contingent Consideration

Certain of our acquisition agreements include contingent earn-out arrangements, which are generally based on the achievement of future operating income thresholds. The contingent earn-out arrangements are based upon our valuations of the acquired companies and reduce the risk of overpaying for acquisitions if the projected financial results are not achieved.

The fair values of these earn-out arrangements are included as part of the purchase price of the acquired companies on their respective acquisition dates. For each transaction, we estimate the fair value of contingent earn-out payments as part of the initial purchase price and record the estimated fair value of contingent consideration as a liability in "Estimated contingent earn-out liabilities" and "Long-term estimated contingent earn-out liabilities" on the consolidated balance sheets. We consider several factors when determining that contingent earn-out liabilities are part of the purchase price, including the following: (1) the valuation of our acquisitions is not supported solely by the initial consideration paid, and the contingent earn-out formula is a critical and material component of the valuation approach to determining the purchase price; and (2) the former shareholders of acquired companies that remain as key employees receive compensation other than contingent earn-out payments at a reasonable level compared with the compensation of our other key employees. The contingent earn-out payments are not affected by employment termination.

We measure our contingent earn-out liabilities at fair value on a recurring basis using significant unobservable inputs classified within Level 3 of the fair value hierarchy (See Note 2, "Basis of Presentation and Preparation – Fair Value of Financial Instruments" of the "Notes to Consolidated Financial Statements" included in Item 8). We use a probability weighted discounted income approach as a valuation technique to convert future estimated cash flows to a single present value amount. The significant unobservable inputs used in the fair value measurements are operating income projections over the earn-out period (generally two or three years), and the probability outcome percentages we assign to each scenario. Significant increases or decreases to either of these inputs in isolation would result in a significantly higher or lower liability with a higher liability capped by the contractual maximum of the contingent earn-out obligation. Ultimately, the liability will be equivalent to the amount paid, and the difference between the fair value estimate and amount paid will be recorded in earnings. The amount paid that is less than or equal to the liability on the acquisition date is reflected as cash used in financing activities in our consolidated statements of cash flows. Any amount paid in excess of the liability on the acquisition date is reflected as cash used in operating activities in our consolidated statements of cash flows.

We review and re-assess the estimated fair value of contingent consideration on a quarterly basis, and the updated fair value could differ materially from the initial estimates. Changes in the estimated fair value of our contingent earn-out liabilities related to the time component of the present value calculation are reported in interest expense. Adjustments to the estimated fair value related to changes in all other unobservable inputs are reported in operating income.

Income Taxes

We file a consolidated U.S. federal income tax return. In addition, we file other returns that are required in the states, foreign jurisdictions and other jurisdictions in which we do business. We account for certain income and expense items differently for financial reporting and income tax purposes. Deferred tax assets and liabilities are computed for the differences between the financial statement and tax bases of assets and liabilities that will result in taxable or deductible amounts in the future based on enacted tax laws and rates applicable to the periods in which the differences are expected to reverse. In determining the need for a valuation allowance on deferred tax assets, management reviews both positive and negative evidence, including current and historical results of operations, future income projections and potential tax planning strategies. Based on our assessment, we have concluded that a portion of the deferred tax assets at September 27, 2020, primarily loss carryforwards, will not be realized, and we have reserved accordingly.

According to the authoritative guidance on accounting for uncertainty in income taxes, we may recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position should be measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. For more information related to our unrecognized tax benefits, see Note 8, "Income Taxes" of the "Notes to Consolidated Financial Statements" included in Item 8.

RECENT ACCOUNTING PRONOUNCEMENTS

For a discussion of recent accounting standards and the effect they could have on the consolidated financial statements, see Note 2, "Basis of Presentation and Preparation" of the "Notes to Consolidated Financial Statements" included in Item 8.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

We do not enter into derivative financial instruments for trading or speculation purposes. In the normal course of business, we have exposure to both interest rate risk and foreign currency transaction and translation risk, primarily related to the Canadian and Australian dollar, and British Pound.

We are exposed to interest rate risk under our Amended Credit Agreement. We can borrow, at our option, under both the Amended Term Loan Facility and Amended Revolving Credit Facility. We may borrow on the Amended Revolving Credit Facility, at our option, at either (a) a Eurocurrency rate plus a margin that ranges from 1.00% to 1.75% per annum, or (b) a base rate for loans in U.S. dollars (the highest of the U.S. federal funds rate plus 0.50% per annum, the bank's prime rate or the Eurocurrency rate plus 1.00%) plus a margin that ranges from 0% to 0.75% per annum. Borrowings at the base rate have no designated term and may be repaid without penalty any time prior to the Facility's maturity date. Borrowings at a Eurodollar rate have a term no less than 30 days and no greater than 180 days and may be prepaid without penalty. Typically, at the end of such term, such borrowings may be rolled over at our discretion into either a borrowing at the base rate or a borrowing at a Eurodollar rate with similar terms, not to exceed the maturity date of the Facility. The Facility matures on July 30, 2023. At September 27, 2020, we had borrowings outstanding under the Credit Agreement of $254.9 million at a weighted-average interest rate of 2.31% per annum.

In August 2018, we entered into five interest rate swap agreements with five banks to fix the variable interest rate on $250 million of our Amended Term Loan Facility. The objective of these interest rate swaps was to eliminate the variability of our cash flows on the amount of interest expense we pay under our Credit Agreement. As of September 27, 2020, the notional principal of our outstanding interest swap agreements was $228.1 million ($45.6 million each.) Our year-to-date average effective interest rate on borrowings outstanding under the Credit Agreement, including the effects of interest rate swap agreements, at September 27, 2020, was 3.52%. For more information, see Note 14, "Derivative Financial Instruments" of the "Notes to Consolidated Financial Statements" in Item 8.

Most of our transactions are in U.S. dollars; however, some of our subsidiaries conduct business in foreign currencies, primarily the Canadian and Australian dollar, and British Pound. Therefore, we are subject to currency exposure and volatility because of currency fluctuations. We attempt to minimize our exposure to these fluctuations by matching revenue and expenses in the same currency for our contracts. We reported $1.3 million of foreign currency losses in fiscal 2020 and $0.5 million of foreign currency gains in fiscal 2019 in "Selling, general and administrative expenses" on our consolidated statements of income.

We have foreign currency exchange rate exposure in our results of operations and equity primarily because of the currency translation related to our foreign subsidiaries where the local currency is the functional currency. To the extent the U.S. dollar strengthens against foreign currencies, the translation of these foreign currency denominated transactions will result in reduced revenue, operating expenses, assets and liabilities. Similarly, our revenue, operating expenses, assets and liabilities will increase if the U.S. dollar weakens against foreign currencies. For fiscal 2020 and 2019, 29.6% and 27.7% of our consolidated revenue, respectively, was generated by our international business. For fiscal 2020, the effect of foreign exchange rate translation on the consolidated balance sheets was an increase in equity of $3.4 million compared to a decrease in equity of $21.1 million in fiscal 2019. These amounts were recognized as an adjustment to equity through other comprehensive income.

Item 8. Financial Statements and Supplementary Data

INDEX TO FINANCIAL STATEMENTS AND FINANCIAL STATEMENT SCHEDULE

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Tetra Tech, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Tetra Tech, Inc. and its subsidiaries (the "Company") as of September 27, 2020 and September 29, 2019, and the related consolidated statements of income, comprehensive income, equity and cash flows for each of the three years in the period ended September 27, 2020, including the related notes and financial statement schedule listed in the accompanying index (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of September 27, 2020, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of September 27, 2020 and September 29, 2019, and the results of its operations and its cash flows for each of the three years in the period ended September 27, 2020 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of September 27, 2020, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in fiscal 2020.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Revenue Recognition - Determination of Total Estimated Contract Cost for Fixed-price Contracts

As described in Note 3 to the consolidated financial statements, $1.1 billion of the Company's total revenues for the year ended September 27, 2020 was generated from fixed-price contracts. As disclosed by management, under fixed-price contracts, the Company's clients pay an agreed fixed-amount negotiated in advance for a specified scope of work. Revenue is recognized over time as the related performance obligation is satisfied by transferring control of a promised good or service to the Company's customers. Progress toward complete satisfaction of the performance obligation is primarily measured using a cost-to-cost measure of progress method. The cost input is based primarily on contract cost incurred to date compared to total estimated contract cost. This measure includes forecasts based on the best information available and reflects the judgement to faithfully depict the value of the services transferred to the customer. Due to uncertainties inherent in the estimation process, it is possible that estimates of costs to complete a performance obligation will be revised in the near-term. For those performance obligations for which revenue is recognized using a cost-to-cost measure of progress method, changes in total estimated costs, and related progress towards complete satisfaction of the performance obligation, are recognized on a cumulative catch-up basis in the period in which the revisions to the estimates are made. As a result, the Company recognized net favorable operating income adjustments of $0.8 million as of September 27, 2020, exclusive of the amounts related to claims described below. Changes in revenue and cost estimates could also result in a projected loss, determined at the contract level, which would be recorded immediately in earnings. The anticipated losses and estimated cost to complete the related contracts was $13.2 million and $118 million as of September 27, 2020. Claims are amounts in excess of agreed contract prices that the Company seeks to collect from clients or other third parties. Claims were approximately $14 million as of September 27, 2020.

The principal considerations for our determination that performing procedures relating to revenue recognition - determination of total estimated contract cost for fixed-price contracts is a critical audit matter are the significant amount of judgment required by management in determining the total estimated contract cost for fixed-price contracts which, in turn, led to a high degree of auditor judgment, subjectivity and audit effort in performing procedures and in evaluating the audit evidence obtained related to the total estimated contract costs for fixed-price contracts with cumulative catch-up adjustments, anticipated losses or claims.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the revenue recognition process, including controls over the determination of total estimated contract cost for fixed-price contracts. These procedures also included, among others, (i) evaluating and testing management's process for determining the total estimated contract cost for a sample of contracts with cumulative catch-up adjustments, anticipated losses or claims, which included evaluating the contract terms and other documents that support those estimates, and testing of underlying contract costs; (ii) assessing management's ability to reasonably estimate total contract costs by performing a comparison of the actual total estimated contract cost as compared with prior period estimates, including evaluating the timely identification of circumstances that may warrant a modification to the total estimated contract cost; and (iii) evaluating, for certain contracts, management's methodologies and assessing the consistency of management's approach over the life of the contract.

Goodwill Impairment Assessment - Asia/Pacific Reporting Unit

As described in Notes 2 and 6 to the consolidated financial statements, the Company's consolidated goodwill balance was $993.5 million as of September 27, 2020, and the goodwill associated with the Asia/Pacific (ASP) reporting unit was $95.5 million. Management performs an annual goodwill impairment review at the beginning of the fiscal fourth quarter, June 29, 2020, or more frequently when an event occurs or circumstances indicate that the carrying value of the asset may not be recoverable. On September 2, 2020, Australia announced that it had fallen into economic recession in the quarter ending in June 2020. Management performed an interim goodwill impairment review of the ASP reporting unit and recorded a $15.8 million goodwill impairment charge. The impairment test for goodwill involves the comparison of the estimated fair value of each reporting unit to the reporting unit's carrying value, including goodwill. Management estimates the fair value of reporting units based on a comparison and weighting of the income approach, specifically the discounted cash flow method and the market approach. The development of the present value of future cash flow projections include assumptions and estimates derived from expected revenue growth rates, operating profit margins, discount rates and the terminal growth rates.

The principal considerations for our determination that performing procedures relating to the goodwill impairment assessment of the ASP reporting unit is a critical audit matter are (i) the significant judgment by management when developing the fair value measurement of the reporting unit ; (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures to evaluate management's significant assumptions related to revenue growth rates, operating profit margins, discount rates and terminal growth rates: and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's goodwill impairment assessment, including controls over the valuation of the ASP reporting unit. These procedures also included, among others, (i) testing management's process for developing the fair value estimate; (ii) evaluating the appropriateness of the discounted cash flow method; and the market approach; (iii) testing the completeness and accuracy of underlying data used in the valuation approaches; and (iv) evaluating the significant assumptions used by management related to the expected revenue growth rates, operating margins, discount rates and the terminal growth rates. Evaluating management's assumptions related to expected revenue growth rates and operating profit margins involved evaluating whether the assumptions used by management were reasonable considering (i) the current and past performance of the reporting unit; (ii) the consistency with external market and industry data; and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in the evaluation of the Company's discounted cash flow method and market approach and management's assumptions related to the discount rates and terminal growth rates.

/s/ PricewaterhouseCoopers LLP
Los Angeles, California
November 23, 2020

We have served as the Company's auditor since 2004.

Tetra Tech, Inc.
Consolidated Balance Sheets
(in thousands, except par value)

ASSETS	September 27, 2020	September 29, 2019
Current assets:		
Cash and cash equivalents	$ 157,515	$ 120,732
Accounts receivable, net	649,035	768,720
Contract assets	92,632	114,324
Prepaid expenses and other current assets	81,094	62,196
Income taxes receivable	19,509	13,820
Total current assets	999,785	1,079,792
Property and equipment, net	35,507	39,441
Right-of-use assets, operating leases	239,396	—
Investments in unconsolidated joint ventures	7,332	6,873
Goodwill	993,498	924,820
Intangible assets, net	13,943	16,440
Deferred tax assets	32,052	28,385
Other long-term assets	57,045	51,657
Total assets	$ 2,378,558	$ 2,147,408
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	$ 111,804	$ 206,609
Accrued compensation	199,801	203,384
Contract liabilities	171,905	165,611
Short-term lease liabilities, operating leases	69,650	—
Current portion of long-term debt and other short-term borrowings	49,264	12,500
Current contingent earn-out liabilities	16,142	24,977
Other current liabilities	174,890	156,873
Total current liabilities	793,456	769,954
Deferred tax liabilities	16,316	12,971
Long-term debt	242,395	263,934
Long-term lease liabilities, operating leases	191,955	—
Long-term contingent earn-out liabilities	16,475	28,015
Other long-term liabilities	80,588	83,070
Commitments and contingencies (Note 17)		
Equity:		
Preferred stock – Authorized, 2,000 shares of $0.01 par value; no shares issued and outstanding at September 27, 2020 and September 29, 2019	—	—
Common stock – Authorized, 150,000 shares of $0.01 par value; issued and outstanding, 53,797 and 54,565 shares at September 27, 2020 and September 29, 2019, respectively	538	546
Additional paid-in capital	—	78,132
Accumulated other comprehensive loss	(161,786)	(160,584)
Retained earnings	1,198,567	1,071,192
Tetra Tech stockholders' equity	1,037,319	989,286
Noncontrolling interests	54	178
Total stockholders' equity	1,037,373	989,464
Total liabilities and stockholders' equity	$ 2,378,558	$ 2,147,408

See accompanying Notes to Consolidated Financial Statements.

Tetra Tech, Inc.
Consolidated Statements of Income
(in thousands, except per share data)

	Fiscal Year Ended September 27, 2020	Fiscal Year Ended September 29, 2019	Fiscal Year Ended September 30, 2018
Revenue	$ 2,994,891	$ 3,107,348	$ 2,964,148
Subcontractor costs	(646,319)	(717,711)	(763,414)
Other costs of revenue	(1,902,037)	(1,981,454)	(1,816,276)
Gross profit	446,535	408,183	384,458
Selling, general and administrative expenses	(204,615)	(200,230)	(190,120)
Acquisition and integration expenses	—	(10,351)	—
Contingent consideration – fair value adjustments	14,971	(1,085)	(4,252)
Impairment of goodwill	(15,800)	(7,755)	—
Income from operations	241,091	188,762	190,086
Interest income	1,375	1,732	1,824
Interest expense	(14,475)	(15,358)	(17,348)
Income before income tax expense	227,991	175,136	174,562
Income tax expense	(54,101)	(16,375)	(37,605)
Net income	173,890	158,761	136,957
Net income attributable to noncontrolling interests	(31)	(93)	(74)
Net income attributable to Tetra Tech	$ 173,859	$ 158,668	$ 136,883
Earnings per share attributable to Tetra Tech:			
Basic	$ 3.21	$ 2.89	$ 2.46
Diluted	$ 3.16	$ 2.84	$ 2.42
Weighted-average common shares outstanding:			
Basic	54,235	54,986	55,670
Diluted	55,022	55,936	56,598

See accompanying Notes to Consolidated Financial Statements.

Tetra Tech, Inc.
Consolidated Statements of Comprehensive Income
(in thousands)

	Fiscal Year Ended		
	September 27, 2020	September 29, 2019	September 30, 2018
Net income	$ 173,890	$ 158,761	$ 136,957
Other comprehensive income, net of tax			
Foreign currency translation adjustments, net of tax	3,436	(21,109)	(29,656)
(Loss) gain on cash flow hedge valuations, net of tax	(4,638)	(12,125)	806
Other comprehensive loss attributable to Tetra Tech, net of tax	(1,202)	(33,234)	(28,850)
Other comprehensive income (loss) attributable to noncontrolling interests, net of tax	(1)	243	(64)
Comprehensive income, net of tax	$ 172,687	$ 125,770	$ 108,043
Comprehensive income attributable to Tetra Tech, net of tax	$ 172,657	$ 125,434	$ 108,033
Comprehensive income attributable to noncontrolling interests, net of tax	30	336	10
Comprehensive income, net of tax	$ 172,687	$ 125,770	$ 108,043

See accompanying Notes to Consolidated Financial Statements.

Tetra Tech, Inc.
Consolidated Statements of Cash Flows
(in thousands)

	Fiscal Year Ended		
	September 27, 2020	September 29, 2019	September 30, 2018
Cash flows from operating activities:			
Net income	$ 173,890	$ 158,761	$ 136,957
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	24,611	28,844	38,636
Equity in income of unconsolidated joint ventures	(6,605)	(4,073)	(4,008)
Distributions of earnings from unconsolidated joint ventures	6,310	4,048	3,440
Amortization of stock-based awards	19,424	17,618	19,582
Deferred income taxes	565	(37,615)	(29,360)
Provision for doubtful accounts	1,267	16,964	7,167
Impairment of goodwill	15,800	7,755	—
Fair value adjustments to contingent consideration	(14,971)	1,085	4,252
(Gain) loss on sale of assets and divested business	(11,066)	(232)	1,045
Changes in operating assets and liabilities, net of effects of business acquisitions:			
Accounts receivable and contract assets	154,748	(10,226)	(46,273)
Prepaid expenses and other assets	(11,321)	2,568	(12,638)
Accounts payable	(102,162)	39,011	(16,032)
Accrued compensation	(8,173)	18,359	27,492
Contract liabilities	5,894	(6,039)	15,228
Other liabilities	19,460	(16,929)	24,998
Income taxes receivable/payable	(5,192)	(11,386)	17,596
Cash settled contingent earn-out liability	—	—	(2,349)
Net cash provided by operating activities	262,479	208,513	185,733
Cash flows from investing activities:			
Payments for business acquisitions, net of cash acquired	(68,488)	(84,159)	(68,256)
Capital expenditures	(12,245)	(16,198)	(9,726)
Proceeds from sale of assets and divested business, net	17,710	651	35,348
Net cash used in investing activities	(63,023)	(99,706)	(42,634)
Cash flows from financing activities:			
Proceeds from borrowings	344,991	417,262	401,965
Repayments on long-term debt	(331,066)	(415,491)	(485,946)
Repurchases of common stock	(117,188)	(100,000)	(75,000)
Taxes paid on vested restricted stock	(11,166)	(6,893)	(8,871)
Payments of contingent earn-out liabilities	(22,900)	(12,018)	(1,412)
Debt pre-payment costs	—	—	(1,737)
Stock options exercised	10,334	11,751	13,520
Dividends paid	(34,743)	(29,674)	(24,477)
Principal payments on finance leases	(1,311)	—	—
Net cash used in financing activities	(163,049)	(135,063)	(181,958)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	207	(1,727)	(4,947)
Net increase (decrease) in cash, cash equivalents and restricted cash	36,614	(27,983)	(43,806)
Cash, cash equivalents and restricted cash at beginning of year	120,901	148,884	192,690
Cash, cash equivalents and restricted cash at end of year	$ 157,515	$ 120,901	$ 148,884
Supplemental information:			
Cash paid during the year for:			
Interest	$ 13,256	$ 12,310	$ 15,570
Income taxes, net of refunds received of $1.4 million, $5.2 million and $2.5 million	$ 55,039	$ 66,038	$ 49,842
Reconciliation of cash, cash equivalents and restricted cash:			
Cash and cash equivalents	$ 157,515	$ 120,732	$ 146,185
Restricted cash included in other current assets	—	169	2,699
Total cash, cash equivalents and restricted cash	$ 157,515	$ 120,901	$ 148,884

See accompanying Notes to Consolidated Financial Statements.

Tetra Tech, Inc.
Consolidated Statements of Equity
Fiscal Years Ended September 30, 2018, September 29, 2019, and September 27, 2020
(in thousands)

	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Total Tetra Tech Equity	Non-Controlling Interests	Total Equity
BALANCE AT OCTOBER 1, 2017	55,873	$ 559	$ 193,835	$ (98,500)	$ 832,559	$ 928,453	$ 171	$ 928,624
Comprehensive income, net of tax:								
Net income					136,883	136,883	74	136,957
Foreign currency translation adjustments				(29,656)		(29,656)	(64)	(29,720)
Gain on cash flow hedge valuations				806		806		806
Comprehensive income, net of tax						108,033	10	108,043
Distributions paid to noncontrolling interests							(52)	(52)
Cash dividends of $0.44 per common share					(24,477)	(24,477)		(24,477)
Stock-based compensation			19,582			19,582		19,582
Stock options exercised	549	5	13,506			13,511		13,511
Restricted & performance shares released	277	3	(8,874)			(8,871)		(8,871)
Shares issued for Employee Stock Purchase Plan	142	1	5,739			5,740		5,740
Stock repurchases	(1,492)	(15)	(74,985)			(75,000)		(75,000)
BALANCE AT SEPTEMBER 30, 2018	55,349	553	148,803	(127,350)	944,965	966,971	129	967,100
Comprehensive income, net of tax:								
Net income					158,668	158,668	93	158,761
Foreign currency translation adjustments				(21,109)		(21,109)	243	(20,866)
Gain on cash flow hedge valuations				(12,125)		(12,125)		(12,125)
Comprehensive income, net of tax						125,434	336	125,770
Distributions paid to noncontrolling interests							(287)	(287)
Cash dividends of $0.54 per common share					(29,674)	(29,674)		(29,674)
Stock-based compensation			17,618			17,618		17,618
Restricted & performance shares released	183	2	(6,895)			(6,893)		(6,893)
Stock options exercised	448	5	11,746			11,751		11,751
Shares issued for Employee Stock Purchase Plan	148	2	6,844			6,846		6,846
Stock repurchases	(1,563)	(16)	(99,984)			(100,000)		(100,000)
Cumulative effect of accounting changes					(2,767)	(2,767)		(2,767)

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Total Tetra Tech Equity	Non-Controlling Interests	Total Equity
	Shares	Amount						
BALANCE AT SEPTEMBER 29, 2019	54,565	546	78,132	(160,584)	1,071,192	989,286	178	989,464
Comprehensive income, net of tax:								
Net income					173,859	173,859	31	173,890
Foreign currency translation adjustments				3,436		3,436	(1)	3,435
Loss on cash flow hedge valuations				(4,638)		(4,638)		(4,638)
Comprehensive income, net of tax						172,657	30	172,687
Distributions paid to noncontrolling interests							(154)	(154)
Cash dividends of $0.64 per common share					(34,743)	(34,743)		(34,743)
Stock-based compensation			19,424			19,424		19,424
Restricted & performance shares released	212	2	(11,168)			(11,166)		(11,166)
Stock options exercised	361	4	10,330			10,334		10,334
Shares issued for Employee Stock Purchase Plan	168	1	8,714			8,715		8,715
Stock repurchases	(1,509)	(15)	(105,432)		(11,741)	(117,188)		(117,188)
BALANCE AT SEPTEMBER 27, 2020	53,797	$ 538	$ —	$ (161,786)	$ 1,198,567	$ 1,037,319	$ 54	$ 1,037,373

See accompanying Notes to Consolidated Financial Statements.

Tetra Tech, Inc.
Notes to Consolidated Financial Statements

1. Description of Business

We are a leading global provider of consulting and engineering services that focuses on water, environment, sustainable infrastructure, resource management, energy, and international development. We are a global company that is *Leading with Science®* to provide innovative solutions for our public and private clients. We typically begin at the earliest stage of a project by identifying technical solutions and developing execution plans tailored to our clients' needs and resources. Our solutions may span the entire life cycle of consulting and engineering projects and include applied science, data analysis, research, engineering, design, construction management, and operations and maintenance.

We manage our business under two reportable segments. Our Government Services Group ("GSG") reportable segment primarily includes activities with U.S. government clients (federal, state and local) and all activities with development agencies worldwide. Our Commercial/International Services Group ("CIG") reportable segment primarily includes activities with U.S. commercial clients and international clients other than development agencies. This alignment allows us to capitalize on our growing market opportunities and enhance the development of high-end consulting and technical solutions to meet our growing client demand. We continue to report the results of the wind-down of our non-core construction activities in the Remediation and Construction Management ("RCM") reportable segment. Certain reclassifications were made to the prior years to conform to the current-year presentation.

2. Basis of Presentation and Preparation

Principles of Consolidation and Presentation. The consolidated financial statements include our accounts and those of joint ventures of which we are the primary beneficiary. All significant intercompany balances and transactions have been eliminated in consolidation.

Fiscal Year. We report results of operations based on 52 or 53-week periods ending on the Sunday nearest September 30. Fiscal years 2020, 2019 and 2018 each contained 52 weeks.

Use of Estimates. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") requires us to make estimates and assumptions. These estimates and assumptions affect the amounts reported in our consolidated financial statements and accompanying notes. Although such estimates and assumptions are based on management's best knowledge of current events and actions we may take in the future, actual results could differ materially from those estimates.

Cash and Cash Equivalents. Cash and cash equivalents include highly liquid investments with original maturities of 90 days or less. We classify cash and cash equivalents as restricted when we are unable to freely use such cash and cash equivalents for our general operating purposes. Restricted cash balances are reported within our "Prepaid expenses and other current assets" on the consolidated balance sheets. Occasionally, we have book overdrafts which represent checks issued in excess of funds on deposit in our bank accounts that have not yet been paid by the applicable bank at the balance sheet date. Bank overdrafts occur when a bank honors disbursements in excess of funds on deposit in our bank accounts. We classify book and bank overdrafts as short-term borrowings on our consolidated balance sheets, and report the change in overdrafts as a financing activity in our consolidated statements of cash flows.

Insurance Matters, Litigation and Contingencies. In the normal course of business, we are subject to certain contractual guarantees and litigation. In addition, we maintain insurance coverage for various aspects of our business and operations. We record in our consolidated balance sheets amounts representing our estimated liability for these legal and insurance obligations. Any adjustments to these liabilities are recorded in our consolidated statements of income.

Accounts Receivable – Net. Net accounts receivable consists of billed and unbilled accounts receivable, and allowances for doubtful accounts. Billed accounts receivable represent amounts billed to clients that have not been collected. Unbilled accounts receivable, which represent an unconditional right to payment subject only to the passage of time, include unbilled amounts typically resulting from revenue recognized but not yet billed pursuant to contract terms or billed after the period end date. Most of our unbilled receivables at September 27, 2020 are expected to be billed and collected within 12 months. Unbilled accounts receivable also include amounts related to requests for equitable adjustment to contracts that provide for price redetermination. These amounts are recorded only when they can be reliably estimated and realization is probable. The allowance for doubtful accounts represents amounts that are expected to become uncollectible or unrealizable in the future. We determine an estimated allowance for uncollectible accounts based on management's consideration of trends in the actual and forecasted credit quality of our clients, including delinquency and payment history; type of client, such as a government agency or a commercial sector client; and general economic and industry conditions, including the potential impacts of the coronavirus disease 2019 ("COVID-19") pandemic, that may affect our clients' ability to pay.

Contract Assets and Contract Liabilities. Contract assets represent revenue recognized in excess of the amounts for which we have the contractual right to bill our customers. Contract retentions, included in contract assets, represent amounts withheld by clients until certain conditions are met or the project is completed, which may extend beyond one year. Contract liabilities represent the amount of cash collected from clients and billings to clients on contracts in advance of work performed and revenue recognized. The majority of these amounts are expected be earned within 12 months and are classified as current liabilities.

Property and Equipment. Property and equipment are recorded at cost and depreciated over their estimated useful lives using the straight-line method. When property and equipment are retired or otherwise disposed of, the cost and accumulated depreciation are removed from our consolidated balance sheets and any resulting gain or loss is reflected in our consolidated statements of income. Expenditures for maintenance and repairs are expensed as incurred. Generally, estimated useful lives range from three to seven years for equipment, furniture and fixtures. Leasehold improvements are amortized on a straight-line basis over the shorter of their estimated useful lives or the lease term. Assets held for sale are measured at the lower of carrying amount (i.e., net book value) and fair value less cost to sell, and are reported within "Prepaid expenses and other current assets" on our consolidated balance sheets. Once assets are classified as held for sale, they are no longer depreciated.

Long-Lived Assets. Our policy is to evaluate the recoverability of our long-lived assets when the facts and circumstances suggest that the assets may be impaired. This assessment is performed based on the estimated undiscounted cash flows compared to the carrying value of the assets. If the future cash flows (undiscounted and without interest charges) are less than the carrying value, a write-down would be recorded to reduce the related asset to its estimated fair value.

Leases. We determine if an arrangement is a lease at inception. Operating leases are included in operating lease right-of-use ("ROU") assets, and current and long-term operating lease liabilities in the consolidated balance sheets. Our finance leases are reported in "Other long-term assets", "Other current liabilities", and "Other long-term liabilities" on our consolidated balance sheet.

ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As most of our leases do not provide an implicit rate, incremental borrowing rates are used based on the information available at commencement date in determining the present value of lease payments. The operating lease ROU asset also includes any lease payments made and excludes lease incentives. Lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. Lease expense for operating lease payments is recognized on a straight-line basis over the lease term.

Our operating leases are primarily for corporate and project office spaces. To a much lesser extent, we have operating leases for vehicles and equipment. Our operating leases have remaining lease terms of one month to twelve years, some of which may include options to extend the leases for up to five years. We also have finance leases which are primarily related to IT equipment.

We recognize a liability for contract termination costs associated with an exit activity for costs that will continue to be incurred under a lease for its remaining term without economic benefit to us, initially measured at its fair value at the cease-use date. The fair value is determined based on the remaining lease rentals, adjusted for the effects of any prepaid or deferred items recognized under the lease, and reduced by estimated sublease rentals.

Business Combinations. The cost of an acquired company is assigned to the tangible and intangible assets purchased and the liabilities assumed based on their fair values at the date of acquisition. The determination of fair values of these assets and liabilities requires us to make estimates and use valuation techniques when a market value is not readily available. Any excess of purchase price over the fair value of net tangible and intangible assets acquired is allocated to goodwill. Goodwill typically represents the value paid for the assembled workforce and enhancement of our service offerings. Transaction costs associated with business combinations are expensed as incurred.

Goodwill and Intangible Assets. Goodwill represents the excess of the aggregate purchase price over the fair value of the net assets acquired in a business acquisition. Following an acquisition, we perform an analysis to value the acquired company's tangible and identifiable intangible assets and liabilities. With respect to identifiable intangible assets, we consider backlog, non-compete agreements, client relations, trade names, patents and other assets. We amortize our intangible assets based on the period over which the contractual or economic benefits of the intangible assets are expected to be realized. We assess the recoverability of the unamortized balance of our intangible assets when indicators of impairment are present based on expected future profitability and undiscounted expected cash flows and their contribution to our overall operations. Should the review indicate that the carrying value is not fully recoverable, the excess of the carrying value over the fair value of the intangible assets would be recognized as an impairment loss.

We test our goodwill for impairment on an annual basis, and more frequently when an event occurs, or circumstances indicate that the carrying value of the asset may not be recoverable. We believe the methodology that we use to review impairment of goodwill, which includes a significant amount of judgment and estimates, provides us with a reasonable basis to determine whether impairment has occurred. However, many of the factors employed in determining whether our goodwill is impaired are outside of our control and it is reasonably likely that assumptions and estimates will change in future periods. These changes could result in future impairments.

We perform our annual goodwill impairment review at the beginning of our fiscal fourth quarter. Our last annual review was performed at June 29, 2020 (i.e., the first day of our fiscal fourth quarter). In addition, we regularly evaluate whether events and circumstances have occurred that may indicate a potential change in recoverability of goodwill. We perform interim goodwill impairment reviews between our annual reviews if certain events and circumstances have occurred, including a deterioration in general economic conditions, an increased competitive environment, a change in management, key personnel, strategy or customers, negative or declining cash flows, or a decline in actual or planned revenue or earnings compared with actual and projected results of relevant prior periods. We assess goodwill for impairment at the reporting unit level, which is defined as an operating segment or one level below an operating segment, referred to as a component. Our operating segments are the same as our reportable segments and our reporting units for goodwill impairment testing are the components one level below our reportable segments. These components constitute a business for which discrete financial information is available and where segment management regularly reviews the operating results of that component. We aggregate components within an operating segment that have similar economic characteristics.

The impairment test for goodwill involves the comparison of the estimated fair value of each reporting unit to the reporting unit's carrying value, including goodwill. We estimate the fair value of reporting units based on a comparison and weighting of the income approach, specifically the discounted cash flow method and the market approach, which estimates the fair value of our reporting units based upon comparable market prices and recent transactions and also validates the reasonableness of the multiples from the income approach. The development of the present value of future cash flow projections includes assumptions and estimates derived from a review of our expected revenue growth rates, operating profit margins, discount rates, and the terminal growth rate. If the fair value of a reporting unit exceeds its carrying amount, the goodwill of that reporting unit is not considered impaired. However, if its carrying value exceeds its fair value, our goodwill is impaired, and we are required to record a non-cash charge that could have a material adverse effect on our consolidated financial statements. An impairment loss recognized, if any, should not exceed the total amount of goodwill allocated to the reporting unit.

Contingent Consideration. Most of our acquisition agreements include contingent earn-out arrangements, which are generally based on the achievement of future operating income thresholds. The contingent earn-out arrangements are based upon our valuations of the acquired companies and reduce the risk of overpaying for acquisitions if the projected financial results are not achieved.

The fair values of these earn-out arrangements are included as part of the purchase price of the acquired companies on their respective acquisition dates. For each transaction, we estimate the fair value of contingent earn-out payments as part of the initial purchase price and record the estimated fair value of contingent consideration as a liability in "Current contingent earn-out liabilities" and "Long-term contingent earn-out liabilities" on the consolidated balance sheets. We consider several factors when determining that contingent earn-out liabilities are part of the purchase price, including the following: (1) the valuation of our acquisitions is not supported solely by the initial consideration paid, and the contingent earn-out formula is a critical and material component of the valuation approach to determining the purchase price; and (2) the former owners of acquired companies that remain as key employees receive compensation other than contingent earn-out payments at a reasonable level compared with the compensation of our other key employees. The contingent earn-out payments are not affected by employment termination.

We measure our contingent earn-out liabilities at fair value on a recurring basis using significant unobservable inputs classified within Level 3 of the fair value hierarchy. We use a probability weighted discounted income approach as a valuation technique to convert future estimated cash flows to a single present value amount. The significant unobservable inputs used in the fair value measurements are operating income projections over the earn-out period (generally two or three years), and the probability outcome percentages we assign to each scenario. Significant increases or decreases to either of these inputs in isolation would result in a significantly higher or lower liability, with a higher liability capped by the contractual maximum of the contingent earn-out obligation. Ultimately, the liability will be equivalent to the amount paid, and the difference between the fair value estimate and amount paid will be recorded in earnings. The amount paid that is less than or equal to the contingent earn-out liability on the acquisition date is reflected as cash used in financing activities in our consolidated statements of cash flows. Any amount paid in excess of the contingent earn-out liability on the acquisition date is reflected as cash used in operating activities in our consolidated statements of cash flows.

We review and re-assess the estimated fair value of contingent consideration on a quarterly basis, and the updated fair value could differ materially from the initial estimates. Changes in the estimated fair value of our contingent earn-out liabilities related to the time component of the present value calculation are reported in interest expense. Adjustments to the estimated fair value related to changes in all other unobservable inputs are reported in operating income.

Fair Value of Financial Instruments. We determine the fair values of our financial instruments, including short-term investments, debt instruments and derivative instruments based on inputs or assumptions that market participants would use in pricing an asset or a liability. We categorize our instruments using a valuation hierarchy for disclosure of the inputs used to measure fair value. This hierarchy prioritizes the inputs into three broad levels as follows: Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities; Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument; and Level 3 inputs are unobservable inputs based on our own assumptions used to measure assets and liabilities at fair value. The classification of a financial asset or liability within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

The carrying amounts of cash and cash equivalents, accounts receivable and accounts payable approximate fair values based on their short-term nature. The carrying amounts of our revolving credit facility approximates fair value because the interest rates are based upon variable reference rates. Certain other assets and liabilities, such as contingent earn-out liabilities and amounts related to cash-flow hedges, are required to be carried in our consolidated financial statements at fair value.

Our fair value measurement methods may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Although we believe our valuation methods are appropriate and consistent with those used by other market participants, the use of different methodologies or assumptions to determine fair value could result in a different fair value measurement at the reporting date.

Derivative Financial Instruments. We account for our derivative instruments as either assets or liabilities and carry them at fair value. For derivative instruments that hedge the exposure to variability in expected future cash flows that are designated as cash flow hedges, the effective portion of the gain or loss on the derivative instrument is reported as a component of accumulated other comprehensive income (loss) in stockholders' equity and reclassified into income in the same period or periods during which the hedged transaction affects earnings. The ineffective portion of the gain or loss on the derivative instrument, if any, is recognized in current income. To receive hedge accounting treatment, cash flow hedges must be highly effective in offsetting changes to expected future cash flows on hedged transactions.

The net gain or loss on the effective portion of a derivative instrument that is designated as an economic hedge of the foreign currency translation exposure generated by the re-measurement of certain assets and liabilities denominated in a non-functional currency in a foreign operation is reported in the same manner as a foreign currency translation adjustment. Accordingly, any gains or losses related to these derivative instruments are recognized in current income. Derivatives that do not qualify as hedges are adjusted to fair value through current income.

Deferred Compensation. We maintain a non-qualified defined contribution supplemental retirement plan for certain key employees and non-employee directors that is accounted for in accordance with applicable authoritative guidance on accounting for deferred compensation arrangements where amounts earned are held in a rabbi trust and invested. Employee deferrals are deposited into a rabbi trust, and the funds are generally invested in individual variable life insurance contracts that we own and are specifically designed to informally fund savings plans of this nature. Our consolidated balance sheets reflect our investment in variable life insurance contracts in "Other long-term assets." Our obligation to participating employees is reflected in "Other long-term liabilities." The net gains and losses related to the deferred compensation plan are reported as part of "Selling, general and administrative expenses" in our consolidated statements of income.

Income Taxes. We file a consolidated U.S. federal income tax return. In addition, we file other returns that are required in the states, foreign jurisdictions and other jurisdictions in which we do business. We account for certain income and expense items differently for financial reporting and income tax purposes. Deferred tax assets and liabilities are computed for the difference between the financial statement and tax bases of assets and liabilities that will result in taxable or deductible amounts in the future based on enacted tax laws and rates applicable to the periods in which the differences are expected to reverse. In determining the need for a valuation allowance, management reviews both positive and negative evidence, including current and historical results of operations, future income projections, scheduled reversals of deferred tax amounts, availability of carrybacks, and potential tax planning strategies. Based on our assessment, we have concluded that a portion of the deferred tax assets will not be realized.

According to the authoritative guidance on accounting for uncertainty in income taxes, we may recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position should be measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. This guidance also addresses de-recognition, classification, interest and penalties on income taxes, accounting in interim periods and disclosure requirements for uncertain tax positions.

Concentration of Credit Risk. Financial instruments that subject us to credit risk consist primarily of cash and cash equivalents and net accounts receivable. In the event that we have surplus cash, we place our temporary cash investments with lower risk financial institutions and, by policy, limit the amount of investment exposure to any one financial institution. Approximately 28% of accounts receivable were due from various agencies of the U.S. federal government at fiscal 2020 year-end. The remaining accounts receivable are generally diversified due to the large number of organizations comprising our client base and their geographic dispersion. We perform ongoing credit evaluations of our clients and maintain an allowance for potential credit losses. Approximately 48%, 22% and 30% of our fiscal 2020 revenue was generated from our U.S. government, U.S. commercial and international clients, respectively.

Foreign Currency Translation. We determine the functional currency of our foreign operating units based upon the primary currency in which they operate. These operating units maintain their accounting records in their local currency, primarily Canadian and Australian dollars, and British pounds. Where the functional currency is not the U.S. dollar, translation of assets and liabilities to U.S. dollars is based on exchange rates at the balance sheet date. Translation of revenue and expenses to U.S. dollars is based on the average rate during the period. Translation gains or losses are reported as a component of other comprehensive income (loss). Gains or losses from foreign currency transactions are included in income from operations.

Recently Issued Accounting Pronouncements Adopted in Fiscal 2020.

In February 2016, the Financial Accounting Standards Board ("FASB") issued ASU 2016-02 “Leases (Topic 842)”, which is a new standard related to leases to increase transparency and comparability among organizations by requiring the recognition of ROU assets obtained in exchange for lease liabilities on the balance sheet. Most prominent among the changes in the standard is the recognition of ROU assets and lease liabilities by lessees for those leases classified as operating leases. Under the standard, disclosures are required to meet the objective of enabling users of financial statements to assess the amount, timing, and uncertainty of cash flows arising from leases. In the first quarter of fiscal 2020, we adopted the standard using the modified retrospective method. The standard was applied to leases that existed or were entered into on or after September 30, 2019. Our fiscal 2020 financial statements have been presented under this standard. However, the prior-year financial statements have not been adjusted and continue to be reported in accordance with previous guidance. See Note 10, "Leases" for further discussion of the adoption and the impact on our consolidated financial statements.

In August 2017, the FASB issued accounting guidance on hedging activities. The amendment better aligns an entity’s risk management activities and financial reporting for hedging relationships through changes to both the designation and measurement guidance for qualifying hedging relationships and the presentation of hedge results. The guidance was effective for fiscal years and interim periods within those fiscal years, beginning after December 15, 2018 (first quarter of fiscal 2020 for us). The adoption of this guidance had no impact on our consolidated financial statements.

In February 2018, the FASB issued guidance on reclassification of certain tax effects from accumulated comprehensive income, which allows for a reclassification of stranded tax effects from the Tax Cuts and Jobs Act ("TCJA") from accumulated other comprehensive income to retained earnings. The guidance was effective for fiscal years beginning after December 15, 2018 (first quarter of fiscal 2020 for us). We did not reclassify our stranded effects from the TCJA, which were immaterial.

Recently Issued Accounting Pronouncements Not Yet Adopted.

In June 2016, the FASB issued updated guidance, Accounting Standards Update ("ASU") 2016-13, related to the measurement of credit losses for certain financial assets. This guidance replaces the current incurred loss methodology with an expected credit loss methodology. It requires us to recognize an allowance equal to our current estimate of all contractual cash flows that we do not expect to collect. Our estimate would consider relevant information about past events, current conditions, and reasonable and supportable forecasts impacting the collectability of the reported amounts. The guidance is effective for fiscal years and interim periods within those fiscal years, beginning after December 15, 2019 (first quarter of fiscal 2021 for us). In anticipation of our adoption of ASU 2016-13, we have updated our presentation of gross receivables and the allowance for doubtful accounts to reflect only expected credit losses in the allowance. We do not expect the adoption in the first quarter of fiscal 2021 to have a material impact on our consolidated financial statements.

In August 2018, the FASB issued updated guidance modifying certain fair value measurement disclosures. The guidance contains additional disclosures to enable users of the financial statements to better understand the entity’s assumption used to develop significant unobservable inputs for Level 3 fair value measurements, but also eliminates the requirement for entities to disclose the amount of and reasons for transfers between Level 1 and Level 2 investments within the fair value hierarchy. This guidance is effective for fiscal years and interim periods within those fiscal years, beginning after December 15, 2019 (first quarter of fiscal 2021 for us). Early adoption is permitted. We do not expect the adoption of this guidance to have a significant impact on our consolidated financial statements.

In December 2019, the FASB issued guidance simplifying the accounting for income taxes by removing certain exceptions to general principles in Topic 740 and amending certain existing guidance for clarity. This guidance is effective for fiscal years and interim periods within those fiscal years, beginning after December 15, 2020 (first quarter of fiscal 2022 for us). Early adoption is permitted. We do not expect the adoption of this guidance to have an impact on our consolidated financial statements.

In May 2020, the Securities and Exchange Commission issued guidance amending certain financial disclosures about acquired and disposed businesses. The amendments are designed to assist registrants in making more meaningful determinations of whether a subsidiary or an acquired or disposed business is significant, and to improve the related disclosure requirements. The guidance is effective for fiscal years beginning after December 31, 2020 (first quarter of fiscal 2022 for us). We do not expect the adoption of this guidance to have an impact on our consolidated financial statements.

3. Revenue and Contract Balances

We recognize revenue over time as the related performance obligation is satisfied by transferring control of a promised good or service to our customers. Progress toward complete satisfaction of the performance obligation is primarily measured using a cost-to-cost measure of progress method. The cost input is based primarily on contract cost incurred to date compared to total estimated contract cost. This measure includes forecasts based on the best information available and reflects our judgement to faithfully depict the value of the services transferred to the customer. For certain on-call engineering or consulting and similar contracts, we recognize revenue in the amount which we have the right to invoice the customer if that amount corresponds directly with the value of our performance completed to date.

Due to uncertainties inherent in the estimation process, it is possible that estimates of costs to complete a performance obligation will be revised in the near-term. For those performance obligations for which revenue is recognized using a cost-to-cost measure of progress method, changes in total estimated costs, and related progress towards complete satisfaction of the performance obligation, are recognized on a cumulative catch-up basis in the period in which the revisions to the estimates are made. When the current estimate of total costs indicates a loss, a provision for the entire estimated loss on the contract is made in the period in which the loss becomes evident.

Disaggregation of Revenue

We disaggregate revenue by client sector and contract type, as we believe it best depicts how the nature, timing, and uncertainty of revenue and cash flows are affected by economic factors. The following tables present revenue disaggregated by client sector and contract type:

	Fiscal Year Ended		
	September 27, 2020	September 29, 2019	September 30, 2018
	(in thousands)		
Client Sector:			
U.S. state and local government	$ 439,019	$ 587,364	$ 469,231
U.S. federal government [(1)]	993,835	941,102	974,384
U.S. commercial	674,605	719,314	788,398
International [(2)]	887,432	859,568	732,135
Total	$ 2,994,891	$ 3,107,348	$ 2,964,148
Contract Type:			
Fixed-price	$ 1,078,432	$ 1,048,157	$ 986,910
Time-and-materials	1,391,592	1,509,901	1,395,148
Cost-plus	524,867	549,290	582,090
Total	$ 2,994,891	$ 3,107,348	$ 2,964,148

(1) Includes revenue generated under U.S. federal government contracts performed outside the United States.
(2) Includes revenue generated from foreign operations, primarily in Canada, Australia, the United Kingdom, and revenue generated from non-U.S. clients.

Other than the U.S. federal government, no single client accounted for more than 10% of our revenue for the twelve months ended months ended September 27, 2020 and September 29, 2019.

Contract Assets and Contract Liabilities

We invoice customers based on the contractual terms of each contract. However, the timing of revenue recognition may differ from the timing of invoice issuance.

Contract assets represent revenue recognized in excess of the amounts for which we have the contractual right to bill our customers. Such amounts are recoverable from customers based upon various measures of performance, including achievement of certain milestones or completion of a contract. In addition, many of our time and materials arrangements are billed in arrears pursuant to contract terms that are standard within the industry, resulting in contract assets and/or unbilled receivables being recorded, as revenue is recognized in advance of billings. Contract retentions, included in contract assets, represent amounts withheld by clients until certain conditions are met or the project is completed, which may extend beyond one year.

Contract liabilities consist of billings in excess of revenue recognized. Contract liabilities decrease as we recognize revenue from the satisfaction of the related performance obligation and increase as billings in advance of revenue recognition occur. Contract assets and liabilities are reported in a net position on a contract-by-contract basis at the end of each reporting period. There were no substantial non-current contract assets or liabilities for the periods presented. Net contract assets/ liabilities consisted of the following:

	Balance at	
	September 27, 2020	September 29, 2019
	(in thousands)	
Contract assets [1]	$ 92,632	114,324
Contract liabilities	171,905	165,611
Net contract liabilities	$ (79,273)	$ (51,287)

[1] Includes $12.3 million and $26.5 million of contract retentions as of September 27, 2020 and September 29, 2019, respectively.

In fiscal 2020, we recognized revenue of approximately $118 million from amounts included in the contract liability balance at the end of fiscal 2019, compared to approximately $90 million for the comparative prior-year period.

We recognize revenue primarily using the cost-to-cost measure of progress method, which involves the estimates of progress towards completion. Changes in those estimates could result in the recognition of cumulative catch-up adjustments to the contract's inception-to-date revenue, costs and profit in the period in which such changes are made. As a result, we recognized net favorable operating income adjustments of $0.8 million for both fiscal 2020 and fiscal 2019, exclusive of the amounts related to claims described below. Changes in revenue and cost estimates could also result in a projected loss, determined at the contract level, which would be recorded immediately in earnings. As of September 27, 2020 and September 29, 2019, our consolidated balance sheets included liabilities for anticipated losses of $13.2 million and $11.5 million, respectively. The estimated cost to complete the related contracts as of September 27, 2020 was approximately $118 million.

Accounts Receivable, Net

Net accounts receivable consisted of the following:

	Balance at	
	September 27, 2020	September 29, 2019
	(in thousands)	
Billed	$ 402,818	$ 496,985
Unbilled	253,364	282,297
Total accounts receivable	656,182	779,282
Allowance for doubtful accounts	(7,147)	(10,562)
Total accounts receivable, net	$ 649,035	$ 768,720

Billed accounts receivable represent amounts billed to clients that have not been collected. Unbilled accounts receivable, which represent an unconditional right to payment subject only to the passage of time, include unbilled amounts typically resulting from revenue recognized but not yet billed pursuant to contract terms or billed after the period end date. Most of our unbilled receivables at September 27, 2020 are expected to be billed and collected within 12 months. The allowance for doubtful accounts represents amounts that are expected to become uncollectible or unrealizable in the future. We determine an estimated allowance for uncollectible accounts based on management's consideration of trends in the actual and forecasted credit quality of our clients, including delinquency and payment history; type of client, such as a government agency or a commercial sector client; and general economic and industry conditions, including the potential impacts of the COVID-19 pandemic, that may affect our clients' ability to pay.

Total accounts receivable at September 27, 2020 and September 29, 2019 included approximately $14 million and $15 million, respectively, related to claims, including requests for equitable adjustment, on contracts that provide for price redetermination. Claims are amounts in excess of agreed contract prices that we seek to collect from our clients or other third parties for delays, errors in specifications and designs, contract terminations, change orders in dispute or unapproved as to both scope and price, or other causes of unanticipated additional costs. Factors considered in determining whether revenue associated with claims (including change orders in dispute and unapproved change orders in regards to both scope and price) should be recognized include the following: (a) the contract or other evidence provides a legal basis for the claim, (b) additional costs were caused by circumstances that were unforeseen at the contract date and not the result of deficiencies in our performance, (c) claim-related costs are identifiable and considered reasonable in view of the work performed, and (d) evidence supporting the claim is objective and verifiable. This can lead to a situation in which costs are recognized in one period and revenue is recognized in a subsequent period when a client agreement is obtained, or a claims resolution occurs.

We regularly evaluate all unsettled claim amounts and record appropriate adjustments to operating earnings when it is probable that the claim will result in a different contract value than the amount previously estimated. In fiscal 2020, we recorded net losses in operating income related to claims of $4.4 million in our CIG segment. In fiscal 2019, we recognized reductions of revenue of $26.7 million and $4.6 million, and related losses in operating income of $28.2 million and $5.7 million in our CIG and RCM segments, respectively, primarily due to the resolution of several claims in fiscal 2019 for amounts lower than we previously expected.

No single client accounted for more than 10% of our accounts receivable at September 27, 2020 and September 29, 2019.

Remaining Unsatisfied Performance Obligations ("RUPOs")

Our RUPOs represent a measure of the total dollar value of work to be performed on contracts awarded and in progress. We had $3.2 billion of RUPOs as of September 27, 2020. RUPOs increase with awards from new contracts or additions on existing contracts and decrease as work is performed and revenue is recognized on existing contracts. RUPOs may also decrease when projects are canceled or modified in scope. We include a contract within our RUPOs when the contract is awarded and an agreement on contract terms has been reached.

We expect to satisfy our RUPOs as of September 27, 2020 over the following periods:

	Amount (in thousands)
Within 12 months	$ 1,846,527
Beyond	1,372,446
Total	$ 3,218,973

Although RUPOs reflect business that is considered to be firm, cancellations, deferrals or scope adjustments may occur. RUPOs are adjusted to reflect any known project cancellations, revisions to project scope and cost, foreign currency exchange fluctuations and project deferrals, as appropriate. Our operations and maintenance contracts can generally be terminated by the clients without a substantive financial penalty. Therefore, the remaining performance obligations on such contracts are limited to the notice period required for the termination (usually 30, 60, or 90 days).

4. Stock Repurchase and Dividends

On November 5, 2018, the Board of Directors authorized a stock repurchase program ("2019 Program") under which we could repurchase up to $200 million of our common stock. This was in addition to the $25 million remaining as of fiscal 2018 year-end under the previous stock repurchase program ("2018 Program"). On January 27, 2020, the Board of Directors authorized a new $200 million stock repurchase program ("2020 Program"). As of September 27, 2020, we had a remaining balance of $207.8 million available under the 2019 and 2020 programs. The following table summarizes stock repurchases in the open market and settled in fiscal 2019 and fiscal 2020:

Fiscal Year	Stock Repurchase Program	Shares Repurchased	Average Price Paid per Share	Total Cost (in thousands)
2019	2018 Program	430,559	$ 58.06	$ 25,000
2019	2019 Program	1,131,962	$ 66.26	75,000
2019 Total		**1,562,521**	**$ 64.00**	**$ 100,000**
2020	**2019 Program**	**1,508,747**	**$ 77.67**	**$ 117,188**

The following table presents dividends declared and paid in fiscal 2020 and 2019:

Declare Date	Dividend Paid Per Share	Record Date	Payment Date	Dividends Paid (in thousands)
November 11, 2019	$ 0.15	December 2, 2019	December 13, 2019	$ 8,190
January 27, 2020	$ 0.15	February 12, 2020	February 28, 2020	8,225
April 27, 2020	$ 0.17	May 13, 2020	May 29, 2020	9,175
July 27, 2020	$ 0.17	August 21, 2020	September 4, 2020	9,153
Total dividends paid as of September 27, 2020				$ 34,743
November 5, 2018	$ 0.12	November 30, 2018	December 14, 2018	$ 6,654
January 28, 2019	$ 0.12	February 13, 2019	February 28, 2019	6,616
April 29, 2019	$ 0.15	May 15, 2019	May 31, 2019	8,219
July 29, 2019	$ 0.15	August 14, 2019	August 30, 2019	8,185
Total dividends paid as of September 29, 2019				$ 29,674

Subsequent Event. On November 9, 2020, the Board of Directors declared a quarterly cash dividend of $0.17 per share payable on December 11, 2020 to stockholders of record as of the close of business on November 30, 2020.

5. Acquisitions and Divestitures

In fiscal 2018, we acquired Glumac, headquartered in Portland, Oregon. Glumac is a leader in sustainable infrastructure design with more than 300 employees and is part of our GSG segment. The fair value of the purchase price for Glumac was $38.4 million. This amount is comprised of $20.0 million of initial cash payments made to the sellers and $18.4 million for the estimated fair value of contingent earn-out obligations, with a maximum of $20.0 million payable, based upon the achievement of specified operating income targets in each of the three years following the acquisition.

In fiscal 2018, we acquired Norman Disney & Young ("NDY"), a leader in sustainable infrastructure engineering design. NDY is an Australian-based global engineering design firm with more than 700 professionals operating in offices throughout Australia, the Asia-Pacific region, the United Kingdom, and Canada and is part of our CIG segment. The fair value of the purchase price for NDY was $56.1 million. This amount is comprised of $46.9 million of initial cash payments made to the sellers, $1.6 million held in escrow, and $7.6 million for the estimated fair value of contingent earn-out obligations, with a maximum amount of $20.2 million, based upon the achievement of specified operating income targets in each of the three years following the acquisition.

In fiscal 2018, we divested our non-core utility field services operations in the CIG segment for net proceeds after transaction costs of $30.2 million. This operation generated approximately $70 million in annual revenue primarily from our U.S. commercial clients. We also divested non-core assets during the third quarter of fiscal 2018 resulting in a pre-tax loss of $3.4 million, which is included in selling, general and administrative expenses for fiscal 2018.

In fiscal 2019, we acquired eGlobalTech ("EGT"), a high-end information technology solutions, cloud migration, cybersecurity, and management consulting firm based in Arlington, Virginia. EGT is part of our GSG segment. The fair value of the purchase price was $49.1 million. This amount was comprised of a $24.7 million promissory note issued to the sellers (which was subsequently paid in full in the third quarter of fiscal 2019), $3.3 million of payables related to estimated post-closing adjustments for net assets acquired, and $21.1 million for the estimated fair value of contingent earn-out obligations, with a maximum of $25.0 million, based upon the achievement of specified operating income targets in each of the three years following the acquisition.

In fiscal 2019, we acquired WYG plc ("WYG"), which employs approximately 1,600 staff primarily in the United Kingdom and Europe, delivering consulting and engineering solutions for complex projects across key service areas including planning, water and environment, transport, infrastructure, the built environment, architecture, urban design, surveying, asset management, program management, and international development. WYG's United Kingdom based consulting and engineering business is part of our CIG segment, while its international development business is part of our GSG segment. The fair value of the purchase price was $54.2 million, entirely paid in cash. In addition, we assumed net debt of $11.5 million, which was subsequently paid in full in the fourth quarter of fiscal 2019. We also incurred $10.4 million in acquisition and integration costs related to the WYG acquisition in the fourth quarter of fiscal 2019.

In fiscal 2020, we acquired Segue Technologies, Inc. ("SEG"), a leading information technology management consulting firm based in Arlington, Virginia. SEG is part of our GSG segment. The fair value of the purchase price was $40.9 million. This amount was comprised of $29.6 million in initial cash payments made to the sellers and $11.3 million for the estimated fair value of contingent earn-out obligations, with a maximum of $20.0 million, based upon the achievement of specified operating income targets in each of the three years following the acquisition.

In fiscal 2020, we acquired BlueWater Federal Solutions, Inc. ("BWF"), a leading information technology management consulting firm based in Chantilly, Virginia. BWF is part of our GSG segment. The fair value of the purchase price was $48.5 million. This amount was comprised of $41.8 million in initial cash payments made to the sellers, $1.5 million of payables related to estimated post-closing adjustments for net assets acquired, and $5.2 million for the estimated fair value of contingent earn-out obligations, with a maximum of $8.0 million, based upon the achievement of specified operating income targets in each of the three years following the acquisition.

Goodwill additions resulting from the above business combinations are primarily attributable to the existing workforce of the acquired companies and the synergies expected to arise after the acquisitions. The goodwill additions related to our fiscal 2019 acquisitions represent the value of a workforce with emerging technology and new techniques that incorporate artificial intelligence, data analytics and advanced cybersecurity solutions for government and commercial clients, and expanding our geographic presence in the United Kingdom with a strong platform for growth in the United Kingdom and Europe. The fiscal 2020 goodwill additions represent the value of a workforce with distinct expertise in the high-end information technology field, in the areas of data analytics, modeling and simulation, cloud, and agile software development. In addition, these acquired capabilities, when combined with our existing global consulting and engineering business, result in opportunities that allow us to provide services under contracts that could not have been pursued individually by either us or the acquired companies. The results of these acquisitions were included in our consolidated financial statements from their respective closing dates. These acquisitions were not considered material to our consolidated financial statements. As a result, no pro forma information has been provided.

Backlog, client relations and trade name intangible assets include the fair value of existing contracts and the underlying customer relationships with lives ranging from one to ten years, and trade names with lives ranging from three to five years.

Most of our acquisition agreements include contingent earn-out agreements, which are generally based on the achievement of future operating income thresholds. The contingent earn-out arrangements are based on our valuations of the acquired companies and reduce the risk of overpaying for acquisitions if the projected financial results are not achieved. The fair values of any earn-out arrangements are included as part of the purchase price of the acquired companies on their respective acquisition dates. For each transaction, we estimate the fair value of contingent earn-out payments as part of the initial purchase price and record the estimated fair value of contingent consideration as a liability in "Current contingent earn-out liabilities" and "Long-term contingent earn-out liabilities" on the consolidated balance sheets. We consider several factors when determining that contingent earn-out liabilities are part of the purchase price, including the following: (1) the valuation of our acquisitions is not supported solely by the initial consideration paid, and the contingent earn-out formula is a critical and material component of the valuation approach to determining the purchase price; and (2) the former owners of acquired companies that remain as key employees receive compensation other than contingent earn-out payments at a reasonable level compared with the compensation of our other key employees. The contingent earn-out payments are not affected by employment termination.

We measure our contingent earn-out liabilities at fair value on a recurring basis using significant unobservable inputs classified within Level 3 of the fair value hierarchy. We use a probability-weighted discounted income approach as a valuation technique to convert future estimated cash flows to a single present value amount. The significant unobservable inputs used in the fair value measurements are operating income projections over the earn-out period (generally two or three years), and the probability outcome percentages we assign to each scenario. Significant increases or decreases to either of these inputs in isolation would result in a significantly higher or lower liability, with a higher liability capped by the contractual maximum of the contingent earn-out obligation. Ultimately, the liability will be equivalent to the amount paid, and the difference between the fair value estimate and amount paid will be recorded in earnings. The amount paid that is less than or equal to the contingent earn-out liability on the acquisition date is reflected as cash used in financing activities in our consolidated statements of cash flows. Any amount paid in excess of the contingent earn-out liability on the acquisition date is reflected as cash used in operating activities in our consolidated statements of cash flows.

We review and re-assess the estimated fair value of contingent consideration on a quarterly basis, and the updated fair value could differ materially from the initial estimates. Changes in the estimated fair value of our contingent earn-out liabilities related to the time component of the present value calculation are reported in interest expense. Adjustments to the estimated fair value related to changes in all other unobservable inputs are reported in operating income. In each quarter during fiscal 2020, we evaluated our estimates for contingent consideration liabilities for the remaining earn-out periods for each individual acquisition, which included a review of their financial results to-date, the status of ongoing projects in their RUPOs, and the inventory of prospective new contract awards. In addition, we considered the potential impact of the global economic disruption due to the COVID-19 pandemic on our operating income projections over the various earn-out periods.

During fiscal 2020, we recorded adjustments to our contingent earn-out liabilities and reported related net gains in operating income of $15.0 million, substantially all in the fourth quarter. These gains primarily resulted from updated valuations of the contingent consideration liabilities for NDY, EGT, and SEG.

The acquisition agreement for NDY included a contingent earn-out agreement based on the achievement of operating income thresholds (in Australian dollars) in each of the first three years beginning on the acquisition date, which was in the second quarter of fiscal 2018. The maximum earn-out obligation over the three-year earn-out period was A$25 million (A$7.4 million in year one, and A$8.8 million each in years two and three). These amounts could be earned primarily on a pro-rata basis for operating income within a predetermined range in each year. NDY was required to meet a minimum operating income threshold in each year to earn any contingent consideration.

The determination of the fair value of the purchase price for NDY on the acquisition date included our estimate of the fair value of the related contingent earn-out obligation. The initial valuation was primarily based on probability-weighted internal estimates of NDY's operating income during each earn-out period. Based on these estimates, we calculated an initial fair value at the acquisition date of A$9.4 million for NDY's contingent earn-out liability in the second quarter of fiscal 2018. In determining that NDY would earn 38% of the maximum potential earn-out, we considered several factors including NDY's recent historical revenue and operating income levels and growth rates. We also considered the recent trend in NDY's backlog level.

NDY's actual financial performance in the first two earn-out periods exceeded our original estimates at the acquisition date. As a result, we increased the related contingent consideration liability and recognized losses of $2.1 million (A$3.0 million) and $5.4 million (A$7.9 million) in fiscal 2018 and fiscal 2019, respectively. In the fourth quarter of fiscal 2020, we evaluated our estimate of NDY's contingent consideration liability for the third and final earn-out period. This assessment included a review of NDY's actual and forecasted results for the third earn-out period, which included an evaluation of the status of ongoing projects in NDY's backlog, and the inventory of prospective new contract awards and the impact of the COVID-19 pandemic on the Australian economy and NDY's operations. As a result of this assessment, we concluded that NDY's operating income in the third earn-out period would be lower than previously estimated, and we reduced NDY's contingent earn-out liability to $1.8 million (A$2.6 million), which resulted in a gain of $3.7 million (A$5.2 million).

The acquisition agreement for EGT included a contingent earn-out agreement based on the achievement of operating income thresholds in each of the first three years beginning on the acquisition date, which was in the second quarter of fiscal 2019. The maximum earn-out obligation over the three-year earn-out period was $25 million ($8.5 million in year one, $9.0 million in year two, and $7.5 million in year three). In each of the first two earn-out years, EGT was to receive a portion of the contingent consideration if EGT achieved a minimum operating income threshold. The remaining contingent consideration could be earned primarily on a pro-rata basis for operating income within a predetermined range in each year. EGT was required to meet a minimum operating income threshold in each year to earn any of this contingent consideration.

The determination of the fair value of the purchase price for EGT on the acquisition date included our estimate of the fair value of the related contingent earn-out obligation. The initial valuation was primarily based on probability-weighted internal estimates of EGT's operating income during each earn-out period. Based on these estimates, we calculated an initial fair value at the acquisition date of $21.1 million for EGT's contingent earn-out liability in the second quarter of fiscal 2019. In determining that EGT would earn 84% of the maximum potential earn-out, we considered several factors including EGT's recent historical revenue and operating income levels and growth rates. We also considered the recent trend in EGT's backlog level and the prospects for the U.S. federal information technology market.

In the third quarter of fiscal 2020, EGT achieved and was paid the maximum earn-out obligation for the first earn-out period. Subsequently, we evaluated our estimate of EGT's contingent consideration liability for the second and third earn-out periods. This assessment included a review of EGT's actual and forecasted results for the second and third earn-out periods, which included an evaluation of the status of ongoing projects in EGT's backlog, and the inventory of prospective new contract awards. As a result of this assessment, we concluded that EGT's operating income in the second and third earn-out period would be lower than previously estimated. Accordingly, in the fourth quarter of fiscal 2020, we reduced EGT's contingent earn-out liability to $7.5 million, which resulted in a gain of $4.7 million.

The acquisition agreement for SEG included a contingent earn-out agreement based on the achievement of operating income thresholds in each of the first three years beginning on the acquisition date, which was in the second quarter of fiscal 2020. The maximum earn-out obligation over the three-year earn-out period was $20 million ($5.0 million, $7.0 million and $8.0 million for years one, two and three, respectively). SEG was to receive a portion of the contingent consideration if SEG achieved a minimum operating income threshold in each year of the earn-out period. The remaining contingent consideration could be earned primarily on a pro-rata basis for operating income within a predetermined range in each year. SEG was required to meet a minimum operating income threshold in each year to earn any of this contingent consideration.

The determination of the fair value of the purchase price for SEG on the acquisition date included our estimate of the fair value of the related contingent earn-out obligation. The initial valuation was primarily based on probability-weighted internal estimates of SEG's operating income during each earn-out period. Based on these estimates, we calculated an initial fair value at the acquisition date of $11.3 million for SEG's contingent earn-out liability in the second quarter of fiscal 2020. In determining that SEG would earn 57% of the maximum potential earn-out, we considered several factors including SEG's recent historical revenue and operating income levels and growth rates. We also considered the recent trend in SEG's backlog level and the prospects for the U.S. federal information technology market.

SEG's actual financial performance in the first earn-out period on a year to date basis was below our original expectation at the acquisition date. As a result, in the fourth quarter of fiscal 2020, we evaluated our estimate of SEG's contingent consideration liability for all earn-out periods. This assessment included a review of SEG's financial results in the first earn-out period, the status of ongoing projects in SEG's backlog, the inventory of prospective new contract awards, and future synergies with other Tetra Tech operating units. As a result of this assessment, we concluded that SEG's operating income in all earn-out periods would be lower than originally anticipated. Accordingly, in the fourth quarter of fiscal 2020, we reduced the SEG contingent earn-out liability to $8.1 million, which resulted in a gain of $3.4 million.

In fiscal 2019, we recorded adjustments to our contingent earn-out liabilities and reported a related net loss of $1.1 million in operating income. These adjustments resulted from the updated valuations of the contingent consideration liabilities, which reflect updated projections of acquired companies' financial performance during their respective earn-out periods.

In fiscal 2018, we recorded adjustments to our contingent earn-out liabilities and reported related losses in operating income of $4.3 million. These losses resulted from updated valuations of the contingent consideration liabilities for NDY, Eco Logical Australia and Cornerstone Environmental Group, as the actual and expected financial performance during the earn-out periods exceeded our original estimates at the acquisition dates.

At September 27, 2020, there was a total potential maximum of $70.9 million of outstanding contingent consideration related to acquisitions. Of this amount, $32.6 million was estimated as the fair value and accrued on our consolidated balance sheet. If the global economic disruption due to the COVID-19 pandemic is prolonged, we could have more significant reductions in our contingent earn-out liabilities and related gains in operating income in future periods.

The following table summarizes the changes in the carrying value of estimated contingent earn-out liabilities:

	Fiscal Year Ended		
	September 27, 2020	**September 29, 2019**	**September 30, 2018**
		(in thousands)	
Beginning balance	$ 52,992	$ 35,290	$ 2,438
Acquisition date fair value of contingent earn-out liabilities	16,581	27,704	32,210
Change in fair value of contingent earn-out liabilities	1,162	1,489	1,005
Re-measurement of contingent earn-out liabilities	(14,971)	1,085	4,252
Foreign exchange impact	(247)	(558)	(854)
Earn-out payments:			
Reported as cash used in operating activities	—	—	(2,349)
Reported as cash used in financing activities	(22,900)	(12,018)	(1,412)
Ending balance	$ 32,617	$ 52,992	$ 35,290

6. Goodwill and Intangible Assets

The following table summarizes the changes in the carrying value of goodwill:

	GSG	CIG	Total
		(in thousands)	
Balance at September 30, 2018	$ 389,741	$ 409,079	$ 798,820
Acquisitions	53,098	93,601	146,699
Impairment	—	(7,755)	(7,755)
Translation and other	(1,037)	(11,907)	(12,944)
Balance at September 29, 2019	441,802	483,018	924,820
Acquisitions	74,882	5,294	80,176
Impairment	—	(15,800)	(15,800)
Translation and other	(369)	4,671	4,302
Balance at September 27, 2020	$ 516,315	$ 477,183	$ 993,498

The goodwill additions related to our fiscal 2020 acquisitions of SEG and BWF and adjustments of the final valuations for our fiscal 2019 acquisitions. The purchase price allocations for the SEG and BWF acquisitions are preliminary and subject to adjustment based upon the final determinations of the net assets acquired and information to perform the final valuations. Our goodwill was also impacted by foreign currency translation related to the goodwill balances of our foreign subsidiaries with functional currencies that are different than our reporting currency.

We perform our annual goodwill impairment review at the beginning of our fiscal fourth quarter. Our last review at June 29, 2020 (i.e. the first day of our fourth quarter in fiscal 2020), indicated that we had no impairment of goodwill, and all of our reporting units had estimated fair values that were in excess of their carrying values, including goodwill. All of our reporting units had estimated fair values that exceeded their carrying values by more than 80%, with the exception of our Asia/Pacific ("ASP") reporting unit, which is in our CIG reportable segment. Our ASP reporting unit had an estimated fair value that exceeded its carrying value by less than 20%.

We also regularly evaluate whether events and circumstances have occurred that may indicate a potential change in the recoverability of goodwill. We perform interim goodwill impairment reviews between our annual reviews if certain events and circumstances have occurred, such as a deterioration in general economic conditions; an increase in the competitive environment; a change in management, key personnel, strategy or customers; negative or declining cash flows; or a decline in actual or planned revenue or earnings compared with actual and projected results of relevant prior periods. Although we believe that our estimates of fair value for these reporting units are reasonable, if financial performance for these reporting units falls significantly below our expectations or market prices for similar business decline, the goodwill for these reporting units could become impaired.

On September 2, 2020, Australia announced that it had fallen into economic recession, defined as two consecutive quarters of negative growth, for the first time since 1991 including 7% negative growth in the quarter ending in June 2020. This prompted a strategic review of our ASP reporting unit. As a result of the economic recession in Australia, our revenue growth and profit margin forecasts for the ASP reporting unit declined from the previous forecast used for our annual goodwill impairment review as of June 29, 2020. We also performed an interim goodwill impairment review of our ASP reporting unit in September 2020 and recorded a $15.8 million goodwill impairment charge. The impaired goodwill related to our acquisitions of Coffey and NDY. As a result of the impairment charge, the estimated fair value of our ASP reporting unit equaled its carrying value of $144.9 million, including $95.5 million of goodwill, at September 27, 2020.

During the fourth quarter of fiscal 2019, we performed an interim goodwill impairment review of our RFS reporting unit and recorded a $7.8 million goodwill impairment charge. As a result of the impairment charge, the estimated fair value of the RFS reporting unit equaled its carrying value of $61 million at September 29, 2019, including the remaining $48.8 million of goodwill.

The gross amounts of goodwill for GSG were $534.0 million and $459.5 million at fiscal 2020 and 2019 year-ends, respectively, excluding accumulated impairment of $17.7 million for each period. The gross amounts of goodwill for CIG were $598.7 million and $588.7 million at fiscal 2020 and 2019 year-ends, respectively, excluding accumulated impairment of $121.5 million and $105.7 million, respectively.

The following table presents the gross amount and accumulated amortization of our acquired identifiable intangible assets with finite useful lives included in "Intangible assets, net" on the consolidated balance sheets:

	Fiscal Year Ended				
	September 27, 2020			September 29, 2019	
	Weighted-Average Remaining Life (in years)	Gross Amount	Accumulated Amortization	Gross Amount	Accumulated Amortization
			($ in thousands)		
Client relations	2.9	$ 60,775	$ (53,392)	$ 56,779	$ (50,455)
Backlog	0.7	37,682	(32,761)	32,229	(24,968)
Technology and trade names	1.8	7,964	(6,325)	7,714	(4,859)
Total		$ 106,421	$ (92,478)	$ 96,722	$ (80,282)

Foreign currency translation adjustments reduced net identifiable intangible assets by $0.4 million and $0.3 million in fiscal 2020 and 2019, respectively. Amortization expense for the identifiable intangible assets for fiscal 2020, 2019 and 2018 was $11.6 million, $11.6 million and $18.2 million, respectively.

Estimated amortization expense for the succeeding four fiscal years is as follows:

	Amount
	(in thousands)
2021	$ 8,786
2022	2,652
2023	1,915
2024	590
Total	$ 13,943

7. Property and Equipment

Property and equipment consisted of the following:

	Fiscal Year Ended	
	September 27, 2020	September 29, 2019
	(in thousands)	
Equipment, furniture and fixtures	$ 90,942	$ 114,652
Leasehold improvements	34,382	34,881
Land and buildings	187	371
Total property and equipment	125,511	149,904
Accumulated depreciation	(90,004)	(110,463)
Property and equipment, net	$ 35,507	$ 39,441

The depreciation expense related to property and equipment was $13.0 million, $17.3 million and $19.6 million for fiscal 2020, 2019 and 2018, respectively. As of September 29, 2019, we classified $5.4 million of net assets related to the disposal of our Canadian turn-key pipeline activities as held-for-sale, and reported them as "Prepaid expenses and other current assets" on our consolidated balance sheet. These assets were sold during fiscal 2020 resulting in a net gain of $8.5 million, which is reported in "Other costs of revenue" on the consolidated statement of income.

8. Income Taxes

Income before income taxes, by geographic area, was as follows:

	Fiscal Year Ended		
	September 27, 2020	September 29, 2019	September 30, 2018
		(in thousands)	
Income before income taxes:			
United States	$ 209,443	$ 185,535	$ 180,034
Foreign	18,548	(10,399)	(5,472)
Total income before income taxes	$ 227,991	$ 175,136	$ 174,562

Income tax expense consisted of the following:

	Fiscal Year Ended		
	September 27, 2020	September 29, 2019	September 30, 2018
		(in thousands)	
Current:			
Federal	$ 24,102	$ 30,051	$ 46,840
State	6,872	8,923	9,228
Foreign	20,398	15,016	10,897
Total current income tax expense	51,372	53,990	66,965
Deferred:			
Federal	2,187	(9,108)	(22,072)
State	870	(1,195)	(1,471)
Foreign	(328)	(27,312)	(5,817)
Total deferred income tax expense	2,729	(37,615)	(29,360)
Total income tax expense	$ 54,101	$ 16,375	$ 37,605

Total income tax expense was different from the amount computed by applying the U.S. federal statutory rate to pre-tax income as follows:

	Fiscal Year Ended		
	September 27, 2020	September 29, 2019	September 30, 2018
Tax at federal statutory rate	21.0%	21.0%	24.5%
State taxes, net of federal benefit	2.7	3.4	4.2
Research and Development ("R&D") credits	(2.2)	(4.7)	(1.4)
Domestic production deduction	—	—	(0.2)
Tax differential on foreign earnings	0.7	1.0	0.5
Non-taxable foreign interest income	(1.1)	(1.7)	(2.0)
Goodwill	1.5	0.9	1.7
Stock compensation	(2.2)	(2.4)	(2.7)
Valuation allowance	1.6	(13.5)	(0.5)
Change in uncertain tax positions	0.4	2.4	1.9
Revaluation of deferred taxes	—	(1.4)	(8.4)
Deferred tax adjustments	(1.3)	(0.4)	2.1
Transition tax on foreign earnings	—	1.4	—
Other	2.6	3.3	1.8
Total income tax expense	23.7%	9.3%	21.5%

The effective tax rates for fiscal 2020, 2019 and 2018 were 23.7%, 9.3% and 21.5%, respectively. The goodwill impairment charges in fiscal 2020 and fiscal 2019 and certain of the transaction charges in fiscal 2019 did not have related tax benefits. Income tax expense was reduced by $8.3 million, $6.4 million, $5.1 million of excess tax benefits on share-based payments in fiscal 2020, 2019, and 2018, respectively. Additionally, we analyzed our deferred tax liabilities for the Tax Cuts and Jobs Act's ("TCJA's") lower tax rates and recorded a deferred tax benefit of $2.6 million and $10.1 million in fiscal 2019 and fiscal 2018, respectively. Also, valuation allowances of $22.3 million in Australia were released due to sufficient positive evidence obtained during the second quarter of fiscal 2019. The valuation allowances were primarily related to net operating loss and research and development credit carryforwards and other temporary differences. We evaluated the positive evidence against any negative evidence and determined that it was more likely than not that the deferred tax assets would be realized. The factors used to assess the likelihood of realization were the past performance of the related entities, our forecast of future taxable income, and available tax planning strategies that could be implemented to realize the deferred tax assets.

Excluding the impact of the non-deductible goodwill impairment charges and transaction costs, the excess tax benefits on share-based payments, the net deferred tax benefits from the TCJA, and the valuation allowance release, our effective tax rates in fiscal 2020, 2019, and 2018 were 25.6%, 24.6%, and 30.3% respectively.

We are currently under examination by the Internal Revenue Service for fiscal year 2018, the Canada Revenue Agency for fiscal years 2011 through 2016, and the California Franchise Tax Board for fiscal years 2014 through 2016. We are also subject to various other state audits.

Temporary differences comprising the net deferred income tax asset shown on the accompanying consolidated balance sheets were as follows:

	Fiscal Year Ended	
	September 27, 2020	September 29, 2019
	(in thousands)	
Deferred Tax Assets:		
State taxes	$ 1,146	$ 764
Reserves and contingent liabilities	6,262	5,500
Allowance for doubtful accounts	6,283	7,506
Accrued liabilities	28,223	28,232
Lease liabilities, operating leases	66,941	—
Stock-based compensation	5,905	6,700
Loss carry-forwards	43,475	39,782
Valuation allowance	(24,395)	(20,543)
Total deferred tax assets	133,840	67,941
Deferred Tax Liabilities:		
Unbilled revenue	(14,451)	(21,886)
Prepaid expense	(5,967)	(3,026)
Right-of-use assets, operating leases	(66,941)	—
Intangibles	(29,130)	(26,482)
Property and equipment	(1,615)	(1,133)
Total deferred tax liabilities	(118,104)	(52,527)
Net deferred tax assets	$ 15,736	$ 15,414

At September 27, 2020, undistributed earnings of our foreign subsidiaries, primarily in Canada, amounting to approximately $66.9 million are expected to be permanently reinvested. Accordingly, no provision for foreign withholding taxes has been made. Upon distribution of those earnings, we would be subject to foreign withholding taxes. Assuming the permanently reinvested foreign earnings were repatriated under the laws and rates applicable at September 27, 2020, the incremental foreign withholding taxes applicable to those earnings would be approximately $2.0 million.

At September 27, 2020, we had available unused state net operating loss ("NOL") carry forwards of $43.7 million that expire at various dates from 2024 to 2037; and available foreign NOL carry forwards of $138.4 million, of which $31.6 million expire at various dates from 2024 to 2040, and $106.8 million have no expiration date. In addition, we had foreign capital loss carryforwards of $13.8 million and foreign research and development credits of $4.3 million that do not have expiration dates. We have performed an assessment of positive and negative evidence regarding the realization of the deferred tax assets. This assessment included the evaluation of scheduled reversals of deferred tax liabilities, availability of carrybacks, cumulative losses in recent years, estimates of projected future taxable income, and tax planning strategies. Although realization is not assured, based on our assessment, we have concluded that it is more likely than not that the assets will be realized except for the assets related to the loss carry-forwards and certain foreign intangibles for which a valuation allowance of $24.4 million has been provided.

At September 27, 2020, we had $9.2 million of unrecognized tax benefits, all of which, if recognized, would affect our effective tax rate. It is reasonably possible that the amount of the unrecognized tax benefits with respect to certain of our unrecognized tax positions may significantly decrease in the next 12 months. These changes would be the result of ongoing examinations. A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

	Fiscal Year Ended		
	September 27, 2020	September 29, 2019	September 30, 2018
		(in thousands)	
Beginning balance	$ 9,169	$ 8,328	$ 9,337
Additions for current year tax positions	700	1,342	1,928
Additions for prior year tax positions	—	356	1,116
Reductions for prior year tax positions	(641)	(100)	—
Settlements	—	(757)	(4,053)
Ending balance	$ 9,228	$ 9,169	$ 8,328

We recognize potential interest and penalties related to unrecognized tax benefits in income tax expense. During fiscal years 2020, 2019 and 2018, we accrued additional interest and penalties of $0.8 million, $2.6 million and $0.6 million, respectively, and recorded reductions in accrued interest and penalties of $0, $0.2 million and $0.3 million, respectively, as a result of audit settlements and other prior-year adjustments. The amount of interest and penalties accrued at September 27, 2020, September 29, 2019 and September 30, 2018 was $4.4 million, $3.6 million and $1.2 million, respectively.

9. Long-Term Debt

Long-term debt consisted of the following:

	Fiscal Year Ended	
	September 27, 2020	September 29, 2019
	(in thousands)	
Credit facilities	$ 291,659	$ 276,434
Less: Current portion of long-term debt and other short-term borrowings	(49,264)	(12,500)
Long-term debt, less current portion and other short-term borrowings	$ 242,395	$ 263,934

On July 30, 2018, we entered into a Second Amended and Restated Credit Agreement ("Amended Credit Agreement") with a total borrowing capacity of $1 billion that will mature in July 2023. The Amended Credit Agreement is a $700 million senior secured, five-year facility that provides for a $250 million term loan facility (the "Amended Term Loan Facility"), a $450 million revolving credit facility (the "Amended Revolving Credit Facility"), and a $300 million accordion feature that allows us to increase the Amended Credit Agreement to $1 billion subject to lender approval. The Amended Credit Agreement allows us to, among other things, (i) refinance indebtedness under our Credit Agreement dated as of May 7, 2013; (ii) finance certain permitted open market repurchases of our common stock, permitted acquisitions, and cash dividends and distributions; and (iii) utilize the proceeds for working capital, capital expenditures and other general corporate purposes. The Amended Revolving Credit Facility includes a $100 million sublimit for the issuance of standby letters of credit, a $20 million sublimit for swingline loans, and a $200 million sublimit for multicurrency borrowings and letters of credit.

The entire Amended Term Loan Facility was drawn on July 30, 2018. The Amended Term Loan Facility is subject to quarterly amortization of principal at 5% annually beginning December 31, 2018. We may borrow on the Amended Revolving Credit Facility, at our option, at either (a) a Eurocurrency rate plus a margin that ranges from 1.00% to 1.75% per annum, or (b) a base rate for loans in U.S. dollars (the highest of the U.S. federal funds rate plus 0.50% per annum, the bank's prime rate or the Eurocurrency rate plus 1.00%) plus a margin that ranges from 0% to 0.75% per annum. In each case, the applicable margin is based on our Consolidated Leverage Ratio, calculated quarterly. The Amended Term Loan Facility is subject to the same interest rate provisions. The Amended Credit Agreement expires on July 30, 2023, or earlier at our discretion upon payment in full of loans and other obligations.

At September 27, 2020, we had $254.9 million in outstanding borrowings under the Amended Credit Agreement, which was comprised of $228.1 million under the Amended Term Loan Facility and $26.8 million outstanding under the Amended Revolving Credit Facility at a year-to-date weighted-average interest rate of 2.31% per annum. In addition, we had $0.7 million in standby letters of credit under the Amended Credit Agreement. Our average effective weighted-average interest rate on borrowings outstanding during the year-to-date period ended September 27, 2020 under the Amended Credit Agreement, including the effects of interest rate swap agreements described in Note 14, "Derivative Financial Instruments", was 3.52%. At September 27, 2020, we had $422.4 million of available credit under the Amended Revolving Credit Facility, all of which could be borrowed without a violation of our debt covenants.

The Amended Credit Agreement contains certain affirmative and restrictive covenants, and customary events of default. The financial covenants provide for a maximum Consolidated Leverage Ratio of 3.00 to 1.00 (total funded debt/ EBITDA, as defined in the Amended Credit Agreement) and a minimum Consolidated Interest Coverage Ratio of 3.00 to 1.00 (EBITDA/Consolidated Interest Charges, as defined in the Amended Credit Agreement). Our obligations under the Amended Credit Agreement are guaranteed by certain of our domestic subsidiaries and are secured by first priority liens on (i) the equity interests of certain of our subsidiaries, including those subsidiaries that are guarantors or borrowers under the Amended Credit Agreement, and (ii) the accounts receivable, general intangibles and intercompany loans, and those of our subsidiaries that are guarantors or borrowers. At September 27, 2020, we were in compliance with these covenants with a consolidated leverage ratio of 1.10x and a consolidated interest coverage ratio of 19.76x.

In addition to the Amended Credit Agreement, we maintain other credit facilities, which may be used for bank overdrafts, short-term cash advances and bank guarantees. At September 27, 2020, there was $36.6 million outstanding under these facilities and the aggregate amount of standby letters of credit outstanding was $69.7 million. As of September 27, 2020, we had bank overdrafts of $33.6 million related to our U.S. disbursement bank accounts. This balance is reported in the "Current portion of long-term debt and other short-term borrowings" within our fiscal 2020 year-end consolidated balance sheet. The change in bank overdraft balance is classified as cash flows from financing activities within our consolidated statements of cash flows as we believe these overdrafts to be a form of short-term financing from the bank due to our ability to fund the overdraft with the $50.0 million overdraft protection on the bank accounts or our other credit facilities if needed.

The following table presents scheduled maturities of our long-term debt:

	Amount (in thousands)
2021	49,264
2022	15,625
2023	226,770
Total	$ 291,659

10. Leases

In February 2016, the FASB issued Leases (Topic 842), which is a new standard related to leases to increase transparency and comparability among organizations by requiring the recognition of ROU assets obtained in exchange for lease liabilities on the balance sheet. Most prominent among the changes in the standard is the recognition of ROU assets and lease liabilities by lessees for those leases classified as operating leases. Under the standard, disclosures are required to meet the objective of enabling users of financial statements to assess the amount, timing, and uncertainty of cash flows arising from leases.

We elected to adopt the standard, and available practical expedients, effective September 30, 2019 (the first day of our fiscal 2020). These practical expedients allowed us to keep the lease classification assessed under the previous lease accounting standard (ASC 840) without reassessment under the new standard, and allowed all separate lease components, including non-lease components, to be accounted for as a single lease component for all existing leases prior to adoption of the new standard.

We adopted this new standard under the modified retrospective transition approach without adjusting comparative periods in the financial statements, as allowed under Leases (Topic 842), and implemented internal controls and key system functionality to enable the preparation of financial information on adoption. The standard had a material impact on our consolidated balance sheets but did not have an impact on the consolidated income statements. The most significant impact was the recognition of ROU assets and lease liabilities for operating leases, while accounting for finance leases remained substantially unchanged. Our finance leases are primarily for certain IT equipment and the related ROU and lease liabilities were immaterial, and included in "Other current liabilities" and "Other long-term liabilities" accordingly in the consolidated balance sheet at September 27, 2020 .

We determine if an arrangement is a lease at inception. Operating leases are included in operating lease ROU assets and current and long-term operating lease liabilities in the consolidated balance sheets.

ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As most of our leases do not provide an implicit rate, incremental borrowing rates are used based on the information available at commencement date in determining the present value of lease payments. The operating lease ROU asset also includes any lease payments made and excludes lease incentives. Lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. Lease expense for operating lease payments is recognized on a straight-line basis over the lease term.

Our operating leases are primarily for corporate and project office spaces. To a much lesser extent, we have operating leases for vehicles and equipment. Our operating leases have remaining lease terms of one month to twelve years, some of which may include options to extend the leases for up to five years.

The components of lease costs for the fiscal year ended September 27, 2020 are as follows:

	Fiscal Year Ended (in thousands)
Operating lease cost	$ 87,348
Sublease income	(2,216)
Other	72
Total lease cost	$ 85,204

Supplemental cash flow information related to leases for fiscal 2020 is as follows:

	Amount (in thousands)
Operating cash flows for operating leases	$ 80,289
Right-of-use assets obtained in exchange for new operating lease liabilities	$ 317,587

Supplemental balance sheet and other information related to leases as of September 27, 2020 are as follows:

	Amount (in thousands)
Operating leases:	
Right-of-use assets	$ 239,396
Lease liabilities:	
Current	$ 69,650
Long-term	191,955
Total operating lease liabilities	$ 261,605
Weighted-average remaining lease term:	
Operating leases	5 years
Weighted-average discount rate:	
Operating leases	2.5 %

As of September 27, 2020, we have no material additional operating leases that have not yet commenced.

A maturity analysis of the future undiscounted cash flows associated with our operating lease liabilities as of September 27, 2020 is as follows:

	Amount (in thousands)
2021	$ 75,074
2022	64,972
2023	44,733
2024	30,991
2025	21,466
Beyond	44,169
Total lease payments	281,405
Less: imputed interest	(19,800)
Total present value of lease liabilities	$ 261,605

As of September 29, 2019, $343.5 million of minimum rental commitments on operating leases was payable as follows: $108.8 million in fiscal 2020, $66.4 million in fiscal 2021, $51.4 million in fiscal 2022, $36.5 million in fiscal 2023, $25.8 million in fiscal 2024, and $54.6 million thereafter. Rental expense for fiscal 2019 was $79.3 million.

11. Stockholders' Equity and Stock Compensation Plans

At September 27, 2020, we had the following stock-based compensation plans:

- *Employee Stock Purchase Plan ("ESPP").* Purchase rights to purchase common stock are granted to our eligible full and part-time employees, and shares of common stock are issued upon exercise of the purchase rights. An aggregate of 611,265 shares may be issued pursuant to such exercise. The maximum amount that an employee can contribute during a purchase right period is $5,000. The exercise price of a purchase right is the lesser of 100% of the fair market value of a share of common stock on the first day of the purchase right period (the business day preceding January 1) or 85% of the fair market value on the last day of the purchase right period (December 15, or the business day preceding December 15 if December 15 is not a business day).
- *2005 Equity Incentive Plan.* Key employees and non-employee directors may be granted equity awards, including stock options, restricted stock and restricted stock units ("RSUs"). Options granted before March 6, 2006 vested at 25% on the first anniversary of the grant date, and the balance vests monthly thereafter, such that these options become fully vested no later than four years from the date of grant. These options expire no later than ten years from the date of grant. Options granted on and after March 6, 2006 vest at 25% on each anniversary of the grant date. These options expire no later than eight years from the grant date. RSUs granted to date vest at 25% on each anniversary of the grant date.
- *2015 Equity Incentive Plan ("2015 EIP").* Key employees and non-employee directors may be granted equity awards, including stock options, performance share units ("PSUs") and RSUs. Shares issued with respect to awards granted under the 2015 EIP other than stock options or stock appreciation rights, which are referred to as "full value awards", are counted against the 2015 EIP's aggregate share limit as three shares for every share or unit actually issued. No awards have been made under the 2015 Equity Incentive Plan since the adoption of the 2018 Equity Incentive Plan on March 8, 2018 described below.
- *2018 Equity Incentive Plan ("2018 EIP").* Key employees and non-employee directors may be granted equity awards, including stock options, PSUs and RSUs. Shares issued with respect to awards granted under the 2018 EIP other than stock options or stock appreciation rights, which are referred to as "full value awards", are counted against the 2018 EIP's aggregate share limit as one share for every share or unit issued. At September 27, 2020, there were 2.5 million shares available for future awards pursuant to the 2018 EIP.

The following table presents our stock-based compensation and related income tax benefits:

	Fiscal Year Ended		
	September 27, 2020	September 29, 2019	September 30, 2018
		(in thousands)	
Total stock-based compensation	$ 19,424	$ 17,618	$ 19,582
Income tax benefit related to stock-based compensation	(4,318)	(4,016)	(5,288)
Stock-based compensation, net of tax benefit	$ 15,106	$ 13,602	$ 14,294

Stock Options

The following table presents our stock option activity for fiscal year ended September 27, 2020:

	Number of Options (in thousands)	Weighted-Average Exercise Price per Share	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding on September 29, 2019	894	$ 33.28		
Exercised	(355)	28.63		
Forfeited	—	—		
Outstanding at September 27, 2020	539	36.34	5.04	$ 29,623
Vested or expected to vest at September 27, 2020	539	36.34	5.04	29,623
Exercisable on September 27, 2020	437	34.17	4.62	24,932

The aggregate intrinsic value in the table above represents the total intrinsic value (the difference between our closing stock price on the last trading day of fiscal 2020 and the exercise price, times the number of shares) that would have been received by the in-the-money option holders if they had exercised their options on September 27, 2020. This amount will change based on the fair market value of our stock. At September 27, 2020, we expect to recognize $0.7 million of unrecognized compensation cost related to stock option grants over a weighted-average period of one year.

No stock options were granted in fiscal 2019 and fiscal 2020. The weighted-average fair value of stock options granted during fiscal 2018 was $14.82. The aggregate intrinsic value of options exercised during fiscal 2020, 2019 and 2018 was $22.4 million, $20.4 million and $14.4 million, respectively.

The fair value of our stock options was estimated on the date of grant using the Black-Scholes option pricing model. There were no options granted in fiscal 2020 and 2019. The following assumptions were used in the calculation for fiscal 2018:

	Fiscal Year Ended
	September 30, 2018
Dividend yield	1.0%
Expected stock price volatility	36.1% - 38.8%
Risk-free rate of return, annual	1.7% - 2.9%

For purposes of the Black-Scholes model, forfeitures were estimated based on historical experience. For the fiscal 2018 year-end, we based our expected stock price volatility on historical volatility behavior and current implied volatility behavior. Our risk-free rate of return was based on constant maturity rates provided by the U.S. Treasury. The expected life was based on historical experience.

Net cash proceeds from the exercise of stock options were $10.3 million, $11.8 million and $13.5 million for fiscal 2020, 2019 and 2018, respectively. Our policy is to issue shares from our authorized shares upon the exercise of stock options. The actual income tax benefit realized from exercises of nonqualified stock options and disqualifying dispositions of qualified options for fiscal 2020, 2019 and 2018 was $8.3 million, $6.4 million and $5.1 million, respectively.

RSU and PSU

RSU awards are granted to our key employee and non-employee directors. The fair value of the RSU was determined at the date of grant using the market price of the underlying common stock as of the date of grant. All of the RSUs have time-based vesting over a four-year period, except that RSUs awarded to directors vest after one year. The total compensation cost of the awards is then amortized over their applicable vesting period on a straight-line basis.

PSU awards are granted to our executive officers and non-employee directors. All of the PSUs are performance-based and vest, if at all, after the conclusion of the three-year performance period. The number of PSUs that ultimately vest is based on 50% growth in our EPS and 50% on our relative total shareholder return over the vesting period. For these performance-based awards, our expected performance is reviewed to estimate the percentage of shares that will vest. The total compensation cost of the awards is then amortized over their applicable vesting period on a straight-line basis.

A summary of the RSU and PSU activity under our stock plans is as follows:

	RSU		PSU	
	Number of Shares (in thousands)	Weighted-Average Grant Date Fair Value per Share	Number of Shares (in thousands)	Weighted-Average Grant Date Fair Value per Share
Nonvested balance at October 1, 2017	511	$ 33.19	376	$ 36.05
Granted	199	48.16	99	57.40
Vested	(184)	31.85	(270)	31.66
Adjustment (1)	—	—	131	31.66
Forfeited	(38)	36.39	(13)	41.80
Nonvested balance at September 30, 2018	488	39.56	323	44.27
Granted	179	66.26	90	80.41
Vested	(180)	36.95	(108)	31.63
Adjustment (1)	—	—	79	31.63
Forfeited	(17)	48.56	—	—
Nonvested balance at September 29, 2019	470	50.42	384	53.67
Granted	168	83.92	74	99.85
Vested	(178)	46.87	(162)	47.28
Adjustment (1)	—	—	64	48.36
Forfeited	(16)	65.43	(5)	83.98
Nonvested balance at September 27, 2020	444	63.93	355	64.83

(1) For fiscal 2018, includes a payout adjustment of 130,730 PSUs due to the actual performance level achieved for PSUs granted in fiscal 2015 that vested fiscal 2018. For fiscal 2019, includes a payout adjustment of 79,465 PSUs due to the actual performance level achieved for PSUs granted in fiscal 2016 that vested during fiscal 2019. For fiscal 2020 includes a payout adjustment of 63,643 PSUs due to the actual performance level achieved for PSUs granted in fiscal 2017 that vested during fiscal 2020.

During fiscal 2020, 2019 and 2018, we awarded 167,525, 179,478 and 198,960 shares of RSUs, respectively, to our key employees and non-employee directors. The weighted-average grant-date fair value of RSUs granted during fiscal 2020, 2019 and 2018 was $83.92, $66.26 and $48.16, respectively. At September 27, 2020, there were 443,504 RSUs outstanding. RSU forfeitures result from employment terminations prior to vesting. Forfeited shares return to the pool of authorized shares available for award.

During fiscal 2020, 2019 and 2018, we awarded 74,011, 89,816 and 99,217 shares of PSUs, respectively, to our executive officers and non-employee directors. The weighted-average grant-date fair value of PSUs granted during fiscal 2020, 2019 and 2018 was $99.85, $80.41 and $57.40, respectively.

The stock-based compensation expense related to RSUs and PSUs for fiscal 2020, 2019 and 2018 was $17.7 million, $15.4 million and $15.5 million, respectively, and was included in total stock-based compensation expense. At September 27, 2020, there was $27.7 million of unrecognized stock-based compensation costs related to nonvested RSUs and PSUs that will be substantially recognized by the end of fiscal 2022.

ESPP

The following table summarizes shares purchased, weighted-average purchase price, and cash received for shares purchased under the ESPP:

	Fiscal Year Ended		
	September 27, 2020	September 29, 2019	September 30, 2018
	(in thousands, except for purchase price)		
Shares purchased	168	148	141
Weighted-average purchase price per share	$ 51.77	$ 46.38	$ 40.38
Cash received from exercise of purchase rights	$ 8,715	$ 6,844	$ 5,727

The grant date fair value of each award granted under the ESPP was estimated using the Black-Scholes option pricing model with the following assumptions:

	Fiscal Year Ended		
	September 27, 2020	September 29, 2019	September 30, 2018
Dividend yield	1.0%	1.0%	1.0%
Expected stock price volatility	26.5%	26.7%	24.0%
Risk-free rate of return, annual	1.6%	2.6%	1.8%
Expected life (in years)	1	1	1

For fiscal 2020, 2019 and 2018, we based our expected stock price volatility on historical volatility behavior and current implied volatility behavior. The risk-free rate of return was based on constant maturity rates provided by the U.S. Treasury. The expected life was based on the ESPP terms and conditions.

Stock-based compensation expense for fiscal 2020, 2019 and 2018 included $1.2 million, $0.9 million and $0.6 million, respectively, related to the ESPP. The unrecognized stock-based compensation costs for awards granted under the ESPP at fiscal 2020 and 2019 year-ends were $0.3 million and $0.2 million, respectively. At September 27, 2020, ESPP participants had accumulated $8.5 million to purchase our common stock.

12. Retirement Plans

We have defined contribution plans in various countries where we have employees. This primarily includes 401(k) plans in the United States. For fiscal 2020, 2019 and 2018, employer contributions to the U.S. plans were $25.0 million, $23.3 million and $22.4 million, respectively.

Additionally, we have established a non-qualified deferred compensation plan for certain key employees and non-employee directors. These eligible employees and non-employee directors may elect to defer the receipt of salary, incentive payments, restricted stock, PSU and RSU awards, and non-employee director fees. The plan is accounted for in accordance with applicable authoritative guidance on accounting for deferred compensation arrangements where amounts earned are held in a rabbi trust and invested. Employee deferrals are deposited into a rabbi trust, and the funds are generally invested in individual variable life insurance contracts that we own and are specifically designed to informally fund savings plans of this nature. At September 27, 2020 and September 29, 2019, the consolidated balance sheets reflect assets of $35.1 million and $30.4 million, respectively, related to the deferred compensation plan in "Other long-term assets," and liabilities of $35.0 million and $29.5 million, respectively, related to the deferred compensation plan in "Other long-term liabilities." The net gains and losses related to the deferred compensation plan are reported as part of "Selling, general and administrative expenses" in our consolidated statements of income. These related net gains and losses were immaterial for fiscal 2020, 2019 and 2018.

13. Earnings per Share

The following table sets forth the number of weighted-average shares used to compute basic and diluted EPS:

	Fiscal Year Ended		
	September 27, 2020	September 29, 2019	September 30, 2018
	(in thousands, except per share data)		
Net income attributable to Tetra Tech	$ 173,859	$ 158,668	$ 136,883
Weighted-average common shares outstanding – basic	54,235	54,986	55,670
Effect of diluted stock options and unvested restricted stock	787	950	928
Weighted-average common stock outstanding – diluted	55,022	55,936	56,598
Earnings per share attributable to Tetra Tech:			
Basic	$ 3.21	$ 2.89	$ 2.46
Diluted	$ 3.16	$ 2.84	$ 2.42

For fiscal 2020 and 2019, no options were excluded from the calculation of dilutive potential common shares. For fiscal 2018, 0.1 million options were excluded from the calculation of dilutive potential common shares. These options were not included in the computation of dilutive potential common shares because the assumed proceeds per share exceeded the average market price per share for that period. Therefore, their inclusion would have been anti-dilutive.

14. Derivative Financial Instruments

We often use certain interest rate derivative contracts to hedge interest rate exposures on our variable rate debt. Also, we may enter into foreign currency derivative contracts with financial institutions to reduce the risk that cash flows and earnings could adversely be affected by foreign currency exchange rate fluctuations. Our hedging program is not designated for trading or speculative purposes.

We recognize derivative instruments as either assets or liabilities on the accompanying consolidated balance sheets at fair value. We record changes in the fair value (i.e., gains or losses) of the derivatives that have been designated as cash flow hedges in our consolidated balance sheets as accumulated other comprehensive income, and in our consolidated statements of income for those derivatives designated as fair value hedges.

In fiscal 2018, we entered into five interest rate swap agreements that we designated as cash flow hedges to fix the interest rates on the borrowings under our term loan facility. As of September 27, 2020, the notional principal of our outstanding interest swap agreements was $228.1 million ($45.6 million each.) The interest rate swaps have a fixed interest rate of 2.79% and expire in July 2023 for all five agreements. At September 27, 2020 and September 29, 2019, the fair value of the effective portion of our interest rate swap agreements designated as cash flow hedges before tax effect was $(15.5) million and $(10.9) million, respectively, of which we expect to reclassify $5.8 million from accumulated other comprehensive loss to interest expense within the next 12 months.

The fair values of our outstanding derivatives designated as hedging instruments were as follows:

	Balance Sheet Location	Fair Value of Derivative Instruments as of September 27, 2020	Fair Value of Derivative Instruments as of September 29, 2019
		(in thousands)	
Interest rate swap agreements	Other current liabilities	$ 15,512	$ 11,009

Changes in the fair value of the interest rate swap agreements are presented on the consolidated statements of comprehensive income as follows:

	Fiscal Year Ended September 27, 2020	September 29, 2019	September 30, 2018
		(in thousands)	
(Loss) gain recognized in other comprehensive income, net of tax			
Interest rate swap agreements	(4,638)	(12,125)	806

There were no ineffective portions of derivative instruments. Accordingly, no amounts were excluded from effectiveness testing for our interest rate swap agreements. We had no other derivative instruments that were not designated as hedging instruments for fiscal 2020, 2019 and 2018.

15. Reclassifications Out of Accumulated Other Comprehensive Income (Loss)

The accumulated balances and reporting period activities for fiscal 2020 and 2019 related to reclassifications out of accumulated other comprehensive income are summarized as follows:

	Foreign Currency Translation Adjustments	Gain (Loss) on Derivative Instruments	Accumulated Other Comprehensive Income (Loss)
		(in thousands)	
Balances at September 30, 2018	$ (128,602)	$ 1,252	$ (127,350)
Other comprehensive loss before reclassifications	(21,109)	(11,247)	(32,356)
Amounts reclassified from accumulated other comprehensive income			
Interest rate contracts, net of tax [1]	—	(878)	(878)
Net current-period other comprehensive loss	(21,109)	(12,125)	(33,234)
Balances at September 29, 2019	$ (149,711)	$ (10,873)	$ (160,584)
Other comprehensive income before reclassifications	3,436	(599)	2,837
Amounts reclassified from accumulated other comprehensive income			
Interest rate contracts, net of tax [1]	—	(4,039)	(4,039)
Net current-period other comprehensive income (loss)	3,436	(4,638)	(1,202)
Balances at September 27, 2020	$ (146,275)	$ (15,511)	$ (161,786)

(1) This accumulated other comprehensive component is reclassified to "Interest expense" in our consolidated statements of income. See Note 14, "Derivative Financial Instruments", for more information.

16. Fair Value Measurements

Derivative Instruments. For additional information about our derivative financial instruments (see Note 2, "Basis of Presentation and Preparation" and Note 14, "Derivative Financial Instruments").

Contingent Consideration. We measure our contingent earn-out liabilities at fair value on a recurring basis (see Note 2, "Basis of Presentation and Preparation" and Note 5, "Acquisitions and Divestitures" for further information).

Debt. The fair value of long-term debt was determined using the present value of future cash flows based on the borrowing rates currently available for debt with similar terms and maturities (Level 2 measurement). The carrying value of our long-term debt approximated fair value at September 27, 2020 and September 29, 2019. At September 27, 2020, we had borrowings of $254.9 million outstanding under our Amended Credit Agreement, which were used to fund our business acquisitions, working capital needs, stock repurchases, dividends, capital expenditures and contingent earn-outs.

17. Commitments and Contingencies

We are subject to certain claims and lawsuits typically filed against the consulting and engineering profession, alleging primarily professional errors or omissions. We carry professional liability insurance, subject to certain deductibles and policy limits, against such claims. However, in some actions, parties are seeking damages that exceed our insurance coverage or for which we are not insured. While management does not believe that the resolution of these claims will have a material adverse effect, individually or in aggregate, on our financial position, results of operations or cash flows, management acknowledges the uncertainty surrounding the ultimate resolution of these matters.

On July 15, 2019, following an initial January 14, 2019 filing, the Civil Division of the United States Attorney's Office filed an amended complaint in intervention in three qui tam actions filed against our subsidiary, Tetra Tech EC, Inc. ("TtEC"), in the U.S. District Court for the Northern District of California. The complaint alleges False Claims Act violations and breach of contract related to TtEC's contracts to perform environmental remediation services at the former Hunters Point Naval Shipyard in San Francisco, California. TtEC disputes the claims and will defend this matter vigorously. We are currently unable to determine the probability of the outcome of this matter or the range of reasonably possible loss, if any.

18. Reportable Segments

We managed our operations under two reportable segments. Our GSG reportable segment primarily includes activities with U.S. government clients (federal, state and local) and all activities with development agencies worldwide. Our CIG reportable segment primarily includes activities with U.S. commercial clients and international clients other than development agencies. Additionally, we continue to report the results of the wind-down of our non-core construction activities in the RCM reportable segment.

Our reportable segments are described as follows:

GSG: GSG provides consulting and engineering services primarily to U.S. government clients (federal, state and local) and development agencies worldwide. GSG supports U.S. government civilian and defense agencies with services in water, environment, sustainable infrastructure, information technology, and disaster management. GSG also provides engineering design services for U.S. municipal and commercial clients, especially in water infrastructure, solid waste, and high-end sustainable infrastructure designs. GSG also leads our support for development agencies worldwide, especially in the United States, United Kingdom, and Australia.

CIG: CIG primarily provides consulting and engineering services to U.S. commercial clients, and international clients that include both commercial and government sectors. CIG supports commercial clients across the Fortune 500, energy utilities, industrial, manufacturing, aerospace, and resource management markets. CIG also provides infrastructure and related environmental, engineering and project management services to commercial and local government clients across Canada, in Asia Pacific (primarily Australia and New Zealand), the United Kingdom, as well as Brazil and Chile.

RCM: We continued to report the results of the wind-down of our non-core construction activities in the RCM reportable segment for fiscal 2020. As of September 27, 2020, there was no remaining backlog for RCM as the projects were complete.

Management evaluates the performance of these reportable segments based upon their respective segment operating income before the effect of amortization expense related to acquisitions, and other unallocated corporate expenses. We account for inter-segment revenues and transfers as if they were to third parties; that is, by applying a negotiated fee onto the costs of the services performed. All significant intercompany balances and transactions are eliminated in consolidation.

The following tables present summarized financial information of our reportable segments:

Reportable Segments

	Fiscal Year Ended		
	September 27, 2020	September 29, 2019	September 30, 2018
		(in thousands)	
Revenue			
GSG	$ 1,778,922	$ 1,820,671	$ 1,694,871
CIG	1,266,059	1,342,509	1,323,142
RCM	198	(1,542)	14,199
Elimination of inter-segment revenue	(50,288)	(54,290)	(68,064)
Total revenue	**$ 2,994,891**	**$ 3,107,348**	**$ 2,964,148**
Income from operations			
GSG	$ 168,669	$ 185,263	$ 168,211
CIG	114,022	79,633	74,451
RCM	—	(5,933)	(4,573)
Corporate (1)	(41,600)	(70,201)	(48,003)
Total income from operations	**$ 241,091**	**$ 188,762**	**$ 190,086**

(1) Includes goodwill and intangible assets impairment charges, amortization of intangibles, other costs and other income not allocable to segments. The intangible asset amortization expense for fiscal 2020, 2019 and 2018 was $11.6 million, $11.6 million and $18.2 million, respectively. Additionally, Corporate results included income (loss) for fair value adjustments to contingent consideration liabilities of $15.0 million, $(1.1) million and $(4.3) million for fiscal 2020, 2019 and 2018, respectively. Corporate results in fiscal 2020 and 2019 also included $15.8 million and $7.8 million goodwill impairment charges, respectively. See Note 6 - "Goodwill and Intangible Assets" for more information.

	Balance at	
	September 27 2020 [1]	September 29, 2019
	(in thousands)	
Total Assets		
GSG	$ 649,417	$ 587,040
CIG	479,238	450,276
RCM	14,258	15,608
Corporate [2]	1,235,645	1,094,484
Total assets	**$ 2,378,558**	**$ 2,147,408**

[1] Fiscal 2020 includes recognition of ROU assets for leases (substantially all operating leases) upon the adoption of ASU 2016-02 in the first quarter of fiscal 2020.
[2] Corporate assets consist of intercompany eliminations and assets not allocated to our reportable segments including goodwill, intangible assets, deferred income taxes and certain other assets.

Geographic Information

	Fiscal Year Ended					
	September 27, 2020		September 29, 2019		September 30, 2018	
	Revenue	Long-Lived Assets [2,3]	Revenue	Long-Lived Assets [2]	Revenue	Long-Lived Assets [2]
United States	$ 2,107,457	$ 230,933	$ 2,247,780	$ 51,859	$ 2,232,013	$ 57,256
Foreign countries [1]	887,434	108,348	859,568	46,113	732,135	28,235

[1] Includes revenue and long-lived assets from our foreign operations, primarily in Canada, Australia and the United Kingdom, and revenue generated from non-U.S. clients.
[2] Excludes goodwill, intangible assets and deferred income taxes.
[3] Includes recognition of ROU assets for leases (substantially all operating leases) upon the adoption of ASU 2016-02 in the first quarter of fiscal 2020.

19. Related Party Transactions

We often provide services to unconsolidated joint ventures. Our revenue related to services we provided to unconsolidated joint ventures for fiscal 2020, 2019 and 2018 was $88.2 million, $99.1 million and $75.0 million, respectively. Our related reimbursable costs for fiscal 2020, 2019 and 2018 were approximately $86.4 million, $98.5 million and $76.6 million, respectively. Our consolidated balance sheets also included the following amounts related to these services:

	Balance at	
	September 27, 2020	September 29, 2019
	(in thousands)	
Accounts receivable, net	$ 20,884	$ 19,351
Contract assets	3,261	9,681
Contract liabilities	478	111

20. Quarterly Financial Information – Unaudited

In the opinion of management, the following unaudited quarterly data for the fiscal years ended September 27, 2020 and September 29, 2019 reflect all adjustments necessary for a fair statement of the results of operations.

In the second quarter of fiscal 2020, we incurred incremental costs totaling $8.2 million to address the COVID-19 pandemic. In the fourth quarter of fiscal 2020, we recorded adjustments to our contingent earn-out liabilities and reported related net gains in operating income of $13.5 million. Additionally, we recorded a $15.8 million goodwill impairment charge related to the ASP reporting unit, which is in our CIG segment. We sold non-core equipment related to the disposal of our Canadian turn-key pipeline activities throughout fiscal 2020 which resulted in gains of $0.8 million, $2.2 million, $4.5 million, and $1.0 million in the first, second, third, and fourth quarters of fiscal 2020, respectively.

In the second quarter of fiscal 2019, deferred tax valuation allowances of $22.3 million in Australia were released due to sufficient positive evidence obtained. During the fourth quarter of fiscal 2019, we decided to dispose of the Canadian turn-key pipeline activities in our CIG segment. As a result, we recorded a $7.8 million goodwill impairment charge and other charges for severance and other disposition costs totaling $10.9 million. Also in the fourth quarter of fiscal 2019, we incurred acquisition and transaction charges of $10.4 million related to the acquisition of WYG.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(in thousands, except per share data)			
Fiscal Year 2020				
Revenue	$ 797,623	$ 734,133	$ 709,771	$ 753,364
Income from operations	63,302	47,530	63,525	66,735
Net income attributable to Tetra Tech	47,310	36,397	45,497	44,654
Earnings per share attributable to Tetra Tech:				
Basic	$ 0.87	$ 0.67	$ 0.84	$ 0.83
Diluted	$ 0.85	$ 0.66	$ 0.83	$ 0.82
Weighted-average common shares outstanding:				
Basic	54,560	54,699	53,985	53,841
Diluted	55,438	55,463	54,692	54,603
Fiscal Year 2019				
Revenue	$ 717,431	$ 722,621	$ 825,793	$ 841,502
Income from operations	55,711	47,545	64,841	20,665
Net income attributable to Tetra Tech	41,997	55,911	49,233	11,527
Earnings per share attributable to Tetra Tech:				
Basic	$ 0.76	$ 1.01	$ 0.90	$ 0.21
Diluted	$ 0.75	$ 1.00	$ 0.88	$ 0.21
Weighted-average common shares outstanding:				
Basic	55,390	55,143	54,819	54,617
Diluted	56,366	55,985	55,768	55,618

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of disclosure controls and procedures and changes in internal control over financial reporting

At September 27, 2020, we carried out an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures. Based on our management's evaluation (with the participation of our principal executive officer and principal financial officer), our principal executive officer and principal financial officer have concluded that, as of the end of the period covered by this report, our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act), were effective.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. As defined in Exchange Act Rule 13a-15(f), internal control over financial reporting is a process designed by, or under the supervision of, our principal executive and principal financial officer and effected by our Board of Directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with U.S. GAAP. Internal controls include those policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our consolidated financial statements. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Accordingly, even effective internal control over financial reporting can only provide reasonable assurance of achieving their control objectives.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we assessed the effectiveness of our internal control over financial reporting at September 27, 2020, based on the criteria in *Internal Control – Integrated Framework* (2013) issued by the COSO. Based upon this assessment, management has concluded that our internal control over financial reporting was effective at September 27, 2020.

PricewaterhouseCoopers LLP, the independent registered public accounting firm that audited the consolidated financial statements included in this Form 10-K, has issued a report on our internal control over financial reporting. This report, dated November 23, 2020, appears on pages 58-60 of this Form 10-K.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during the three months ended September 27, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item relating to our directors and nominees, regarding compliance with Section 16(a) of the Exchange Act, and regarding our Audit Committee is included under the captions "Item No. 1 – Election of Directors" and "Section 16(a) Beneficial Ownership Reporting Compliance" in our Proxy Statement related to the 2021 Annual Meeting of Stockholders and is incorporated by reference.

Pursuant to General Instruction G(3) of Form 10-K, the information required by this item relating to our executive officers is included under the caption "Executive Officers of the Registrant" in Part I of this Report.

We have adopted a code of ethics that applies to our principal executive officer and all members of our finance department, including our principal financial officer and principal accounting officer. This code of ethics, entitled "Finance Code of Professional Conduct," is posted on our website. The Internet address for our website is www.tetratech.com, and the code of ethics may be found through a link to the Investor Relations section of our website.

We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K for any amendment to, or waiver from, a provision of this code of ethics by posting any such information on our website, at the address and location specified above.

Item 11. Executive Compensation

The information required by this item is included under the captions "Item No. 1 – Election of Directors" and "Executive Compensation Tables" in our Proxy Statement related to the 2021 Annual Meeting of Stockholders and is incorporated by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this item relating to security ownership of certain beneficial owners and management, and securities authorized for issuance under equity compensation plans, is included under the caption "Security Ownership of Management and Significant Stockholders" in our Proxy Statement related to the 2021 Annual Meeting of Stockholders and is incorporated by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item relating to review, approval or ratification of transactions with related persons is included under the caption "Related Person Transactions," and the information required by this item relating to director independence is included under the caption "Item No. 1 – Election of Directors," in each case in our Proxy Statement related to the 2021 Annual Meeting of Stockholders and is incorporated by reference.

Item 14. Principal Accounting Fees and Services

The information required by this item is included under the caption "Item No. 4 – Ratification of Independent Registered Public Accounting Firm" in our Proxy Statement related to the 2021 Annual Meeting of Stockholders and is incorporated by reference.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a.) 1 **Financial Statements**

The Index to Financial Statements and Financial Statement Schedule on page 57 is incorporated by reference as the list of financial statements required as part of this Report.

2 **Financial Statement Schedule**

The Index to Financial Statements and Financial Statement Schedule on page 57 is incorporated by reference as the list of financial statement schedules required as part of this Report.

3 **Exhibits**

The exhibit list in the Index to Exhibits on pages 101 is incorporated by reference as the list of exhibits required as part of this Report.

Tetra Tech, Inc.
SCHEDULE II – VALUATION AND QUALIFYING ACCOUNTS AND RESERVES

For the Fiscal Years Ended
September 30, 2018, September 29, 2019 and September 27, 2020
(in thousands)

	Balance at Beginning of Period	Charged to Costs and Expenses	Deductions [2]	Other [3]	Balance at End of Period
Allowance for doubtful accounts [1]:					
Fiscal 2018	$ 3,987	$ 1,496	$ (295)	—	$ 5,188
Fiscal 2019	5,188	7,242	(1,868)	—	10,562
Fiscal 2020	10,562	1,472	(4,887)	—	7,147
Income tax valuation allowance:					
Fiscal 2018	$ 25,326	$ 900	$ —	$ (4,747)	$ 21,479
Fiscal 2019	21,479	255	(23,714)	22,523	20,543
Fiscal 2020	20,543	3,852	—	—	24,395

(1) Reflects updated presentation of allowance for doubtful accounts to include expected credit losses in anticipation of our adoption of ASU 2016-13 in the first quarter of fiscal 2021.

(2) Primarily represents write-offs of uncollectible amounts, net of recoveries for the allowance for doubtful accounts. The income tax valuation amount represents the release of valuation allowances in Australia.

(3) Includes loss in foreign jurisdictions, currency adjustments, and valuation allowance adjustments related to net operating loss carry-forwards.

INDEX TO EXHIBITS

3.1 Restated Certificate of Incorporation of the Company (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K dated February 26, 2009).

3.2 Bylaws of the Company (amended and restated as of April 2009) (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K dated April 24, 2009), and amended as of November 7, 2016 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K dated November 9, 2016).

10.1 Second Amended and Restated Credit Agreement dated as of July 30, 2018 among Tetra Tech, Inc., Tetra Tech Canada Holding Corporation, Coffey UK Limited, Coffey Services Australia Pty. Ltd., the lenders party thereto and Bank of America, N.A., as Administrative Agent (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated August 1, 2018).

10.2 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.2 to the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 2012).

10.3 2005 Equity Incentive Plan (as amended through November 7, 2011) (incorporated by reference to the Company's Proxy Statement for its 2012 Annual Meeting of Stockholders held on February 28, 2012).*

10.4 First Amendment to the 2005 Equity Incentive Plan (as amended through November 7, 2011) (incorporated by reference to Exhibit 10.9 to the Company's Annual Report on Form 10-K for the fiscal year ended September 29, 2013).*

10.5 2015 Equity Incentive Plan (incorporated by reference to the Company's Proxy Statement for its 2015 Annual Meeting of Stockholders held on March 5, 2015).*

10.6 2018 Equity Incentive Plan (incorporated by reference to the Company's Proxy Statement for its 2018 Annual Meeting of Stockholders held on March 8, 2018).*

10.7 Form of Indemnity Agreement entered into between the Company and each of its directors and executive officers (incorporated by reference to Exhibit 10.20 to the Company's Annual Report on Form 10-K for the fiscal year ended October 3, 2004).*

10.8 Amended and Restated Deferred Compensation Plan (incorporated by reference to Exhibit 10 to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended March 29, 2020).*

10.9 Change of Control Severance Plan effective March 26, 2018 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated March 9, 2018).*

10.10 Executive Compensation Plan (as amended and restated November 14, 2013) (incorporated by reference to Exhibit 10.23 to the Company's Annual Report on Form 10-K for the fiscal year ended September 29, 2013).*

21. Subsidiaries of the Company.+

23 Consent of Independent Registered Public Accounting Firm (PricewaterhouseCoopers LLP).+

24. Power of Attorney (included on page 103 of this Annual Report on Form 10-K).

31.1 Chief Executive Officer Certification pursuant to Rule 13a-14(a)/15d-14(a). Executive Officer Certification pursuant to Rule 13a-14(a)/15d-14(a).+

31.2 Chief Financial Officer Certification pursuant to Rule 13a-14(a)/15d-14(a).+

32.1 Certification of Chief Executive Officer pursuant to Section 1350.+

32.2 Certification of Chief Financial Officer pursuant to Section 1350.+

95. Mine Safety Disclosures.+

101	The following financial information from our Company's Annual Report on Form 10-K, for the period ended September 27, 2020 , formatted in Inline eXtensible Business Reporting Language: (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Income, (iii) Consolidated Statement of Comprehensive Income, (iv) Consolidated Statements of Equity, (v) Consolidated Statements of Cash Flows, (vi) Notes to Consolidated Financial Statements. +(1)

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* Indicates a management contract or compensatory arrangement.

\+ Filed herewith.

(1) Pursuant to Rule 406T of Regulation S-T, the XBRL related information in Exhibit 101 to this Annual Report on Form 10-K shall not be deemed to be "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liability of the section, and shall not be deemed part of a registration statement, prospectus or other document filed under the Securities Act or the Exchange Act, except as shall be expressly set forth by specific reference in such filings.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

TETRA TECH, INC.

By: /s/ DAN L. BATRACK

Date: November 20, 2020

Dan L. Batrack
Chairman and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Dan L. Batrack and Steven M. Burdick, jointly and severally, his attorney-in-fact, each with the full power of substitution, for such person, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might do or could do in person, hereby ratifying and confirming all that each of said attorneys-in-fact and agents, or his substitute, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report on Form 10-K has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ DAN L. BATRACK Dan L. Batrack	Chairman and Chief Executive Officer (Principal Executive Officer)	November 20, 2020
/s/ STEVEN M. BURDICK Steven M. Burdick	Executive Vice President, Chief Financial Officer (Principal Financial Officer)	November 20, 2020
/s/ BRIAN N. CARTER Brian N. Carter	Senior Vice President, Corporate Controller (Principal Accounting Officer)	November 20, 2020
/s/ GARY R. BIRKENBEUEL Gary R. Birkenbeuel	Director	November 20, 2020
/s/ PATRICK C. HADEN Patrick C. Haden	Director	November 20, 2020
/s/ J. CHRISTOPHER LEWIS J. Christopher Lewis	Director	November 20, 2020
/s/ JOANNE M. MAGUIRE Joanne M. Maguire	Director	November 20, 2020
/s/ KIMBERLY E. RITRIEVI Kimberly E. Ritrievi	Director	November 20, 2020
/s/ J. KENNETH THOMPSON J. Kenneth Thompson	Director	November 20, 2020
/s/ KIRSTEN M. VOLPI Kirsten M. Volpi	Director	November 20, 2020

COMPANY INFORMATION

BOARD OF DIRECTORS

Dan L. Batrack
Chairman and Chief Executive Officer,
Tetra Tech, Inc.

Gary R. Birkenbeuel
Retired Regional Managing Partner,
Ernst & Young LLP

Patrick C. Haden
President, Wilson Avenue Consulting

J. Christopher Lewis
Managing Director,
Riordan, Lewis & Haden

Joanne M. Maguire
Retired Executive Vice President,
Lockheed Martin Space Systems
Company

Kimberly E. Ritrievi
President, The Ritrievi Group LLC

J. Kenneth Thompson
President and Chief Executive Officer,
Pacific Star Energy, LLC

Kirsten M. Volpi
Executive Vice President, COO,
CFO, and Treasurer, Colorado
School of Mines

CORPORATE LEADERSHIP

Dan L. Batrack
Chairman and Chief Executive Officer

Leslie L. Shoemaker
President

Steven M. Burdick
Executive Vice President,
Chief Financial Officer

William R. Brownlie
Senior Vice President,
Chief Engineer

Brian N. Carter
Senior Vice President, Corporate
Controller and Chief Accounting Officer

Craig L. Christensen
Senior Vice President,
Chief Information Officer

Preston Hopson
Senior Vice President,
General Counsel and Secretary

Richard A. Lemmon
Senior Vice President,
Corporate Administration

Brendan M. O'Rourke
Senior Vice President,
Enterprise Risk Management

OPERATIONAL LEADERSHIP

Derek G. Amidon
President, Commercial/International
Services Group and President,
Client Account Management Division

Roger R. Argus
President, Government
Services Group and President,
U.S. Government Division

Keith Brown
President, Global Development
Services Division

Mark A. Rynning
President, Resilient and
Sustainable Infrastructure Division

Bernard Teufele
President, Canada and
South America Division

CHAIRMAN EMERITUS

Li-San Hwang
Former Chairman and
Chief Executive Officer, Tetra Tech, Inc.

TETRA TECH

CORPORATE HEADQUARTERS

Tetra Tech, Inc.
3475 East Foothill Boulevard
Pasadena, California 91107-6024 USA

Telephone: +1 (626) 351-4664
Fax: +1 (626) 351-5291
tetratech.com

SHAREHOLDER INQUIRIES

Telephone: +1 (626) 470-2844
Email: investor.relations@tetratech.com

TRANSFER AGENT AND REGISTRAR

Computershare Trust Company, N.A.
250 Royall Street
Canton, Massachusetts 02021-1011 USA

Telephone: +1 (800) 962-4284

STOCK LISTING

The Company's common stock is traded on the NASDAQ Global Select Market (Symbol: TTEK)

CONFIDENTIAL

Postlethwaite & Netterville, APAC
Balance Sheets

	Apr 2020	Apr 2019	Apr 2018
Assets			
Current Assets			
Cash	$ 12,725,589	$ 3,932,072	$ 5,495,264
Receivables - accounts receivables and work in progress	15,707,338	17,616,140	17,650,175
Prepaid expenses	221,734	302,426	332,754
Total current assets	28,654,660	21,850,639	23,478,193
Fixed Assets			
Office Furnishing & Equipment	4,117,249	4,317,322	5,049,501
Building - Gonzales	275,447	275,447	269,452
Leasehold Improvements	399,850	391,330	354,799
Accumulated Depreciation	(3,664,943)	(3,695,255)	(4,036,781)
Land - Gonzales	25,000	25,000	25,000
Total fixed assets	1,152,603	1,313,844	1,661,972
Total Other Assets	432,734	741,326	714,018
Total Assets	$ 30,239,998	$ 23,905,809	$ 25,854,183
Liabilities and Stockholders' Equity			
Current Liabilities			
Accounts Payable	$ 754,510	$ 239,159	$ 156,401
Loan Payable	6,588,464	-	-
Notes payable	1,348,474	979,006	534,445
Accrued payables	3,637,844	3,374,940	3,772,423
Total current liabilities	12,329,292	4,593,105	4,463,268
Total long term liabilities	4,034,261	4,092,588	3,054,995
Total Liabilities	16,363,554	8,685,693	7,518,264
Stockholders Equity			
Common Stock	100,000	100,000	100,000
Retained Earnings	13,776,444	15,120,116	18,235,920
Total stockholders' equity	13,876,444	15,220,116	18,335,920
Total Liabilities and Stockholders' Equity	$ 30,239,998	$ 23,905,809	$ 25,854,183

Note: The statement for fiscal year ending April 30, 2018 excludes a temporary division due to the short term nature of the engagement.

CONFIDENTIAL

Postlethwaite & Netterville, APAC

	Year to Date		
	Apr 2020	**Apr 2019**	**Apr 2018**
Gross fees	59,526,191	59,876,288	59,186,975
Write Up/Down and adjustments	(6,033,429)	(5,006,276)	(6,244,506)
Net fees	53,492,762	54,870,012	52,942,469
Salaries and other personnel costs	40,366,307	42,006,357	42,829,727
Operating margin	13,126,455	12,863,655	10,112,742
Total operating expenses	8,360,675	8,692,499	8,388,723
Income from Operations	4,765,780	4,171,156	1,724,019
Other income (expense)	368,271	464,463	419,855
Net Income	5,134,051	4,635,619	2,143,875

Note: The statement for fiscal year ending April 30, 2018 excludes a temporary division due to the short term nature of the engagement.

EXHIBIT “B”

Rates or Charges

2. Cost Proposal

2.1 Recommended Classifications, Descriptions, and Hourly Rates

Item No.	Labor Category/Job Title	Hourly Rate	Position Description
1	**Principal-in-Charge**	$225.00	Is an owner/operator of the firm; can obligate the firm. Serves as the engagement executive and/or senior subject matter specialist in an area of relevant management consulting such as risk management, technology strategy, operations, program/portfolio management, financial management or a related field. Has overall responsibility for quality assurance on consulting engagements.
2	**Project Executive**	$225.00	Serves as an engagement leader or subject matter specialist in an area of relevant management consulting such as risk management, operations, program/portfolio management, financial strategy and operations. Determines the nature, timing, and extent of procedures and has the final authority in the conduct of engagements and full responsibility for the work performed.
3	**Subject Matter Expert**	$295.00	Serves as a subject matter specialist on programs or projects related to an area of relevant management consulting such as ARPA, COVID-19 funding areas, program/portfolio management, financial strategy and operations including public/private partnerships, financial management, or a related field. When performing the duties of an engagement leader, determines the nature, timing, and extent of procedures and has the final authority in the conduct of engagements and full responsibility for the work performed.
4	**Program Manager**	$195.00	Serves as a program manager on projects related to an area of relevant management consulting such as risk management, program/portfolio management, financial strategy and operations. Assists the management executive in the development of the overall engagement approach.
5	**Deputy Program Manager**	$180.00	Serves as the deputy program manager on projects related to an area of relevant management consulting such as risk management, program/portfolio management, financial strategy and operations. Assists the management executive in the development of the overall engagement approach.
6	**Project Manager**	$165.00	Serves as a project manager on projects related to an area of relevant management consulting such as risk management, program/portfolio management, financial strategy and operations including public/private partnerships, financial management, or a related field. Responsibility generally is the same as senior project manager for less complex engagements or assigned tasks.
7	**Disaster Recovery Consultant V**	$155.00	Serves as a consulting team lead or senior consultant on projects related to an area of relevant management consulting such as risk management, program/portfolio management, financial strategy and operations including public/private partnerships, financial management, or a related field. Performs testing and analysis, drafts reports and findings, supervises and reviews the work of junior staff and contributes to the engagement planning.

Item No.	Labor Category/Job Title	Hourly Rate	Position Description
8	**Disaster Recovery Consultant IV**	$145.00	Serves as a consulting team lead or senior consultant on projects related to an area of relevant management consulting such as risk management, program/portfolio management, financial strategy and operations including public/private partnerships, financial management, or a related field. Performs the detail tests and procedures under the supervision and review of a more experienced professional.
9	**Disaster Recovery Consultant III**	$135.00	Serves as a staff/team member on projects related to an area of relevant management consulting such as risk management, program/portfolio management, financial strategy and operations including public/private partnerships, financial management, or a related field. Performs the detail tests and procedures under the supervision and review of a more experienced professional.
10	**Disaster Recovery Consultant II**	$125.00	Serves as a staff/team member on projects related to an area of relevant management consulting such as risk management, program/portfolio management, financial strategy and operations including public/private partnerships, financial management, or a related field. Typically performs specific and limited portions of broader assignments under direct supervision, such as data entry and database updates, including collection of information, performing calculations, dissemination of reports, research, meeting minutes, writing, and other duties.
11	**Disaster Recovery Consultant I**	$115.00	Serves as a staff/team member on projects related to an area of relevant management consulting such as risk management, program/portfolio management, financial strategy and operations including public/private partnerships, financial management, or a related field. Typically performs specific and limited portions of broader assignments under direct supervision, such as data entry and database updates, including collection of information, performing calculations, dissemination of reports, research, meeting minutes, writing, and other duties.
12	**Analyst II**	$120.00	Serves as support analyst to project teams in carrying out large scale repeatable processes in a number of roles, including but not limited to project coordination, quality assurance testing, graphic artistry, help desk support, data entry, communications, technical writing, training development and delivery with little or no supervision.
13	**Analyst I**	$110.00	Serves as support staff to project teams in carrying out large scale repeatable processes in a number of roles, including but not limited to project coordination, quality assurance testing, graphic artistry, help desk support, data entry, communications, technical writing, training development and delivery with little of no supervision.
14	**Senior Administrator**	$95.00	Serves as support staff to project teams in carrying out large scale repeatable processes in a number of roles, including but not limited to project coordination, quality assurance testing, graphic artistry, help desk support, data entry, communications, technical writing, training development and delivery with some supervision.
15	**Administrator**	$65.00	Serves as administrative support staff to consulting teams; duties can include administrative support (meeting scheduling, conference logistics), consulting records and documentation support (gathering, publishing, retention, organization), communications support and related project team support performed with some supervision.

2.2 Recommended Classifications to Match Scope

3.2.1 COVID-19 Cost Recovery:	Principal in Charge	Project Executive	Subject Matter Expert	Program Manager	Deputy Program Manager	Project Manager	Disaster Recovery Consultant V	Disaster Recovery Consultant IV	Disaster Recovery Consultant III	Disaster Recovery Consultant II	Disaster Recovery Consultant I	Analyst II	Analyst I	Senior Administrator	Administrator
• Develop, prepare, and/or complete: o Writing and assembly of FEMA project applications to apply for funding, which includes collaborating with the City on project formulation, information gathering, and project development (define both small and large projects' scope, size, and damages, including cost estimating that will be the basis of each Project Worksheet). o FEMA forms for reimbursement. o Approach and language for appeal(s) and Requests for Information (RFIs). o Documentation on cost recovery and funding administration processes and workflows as requested, and recommendations on potential improvements. o Templates for required FEMA forms, including tools that would make filling them out more efficient. o Grant close-out services to ensure funding is retained.							•	•	•	•	•	•	•	•	•
• Review: o All non-labor disaster related costs for FEMA cost eligibility, by project. o All labor disaster related costs for eligibility, accuracy of calculations, and compliance with FEMA requirements (spot checking), by project.										•	•	•	•		
• Consult and advise the City on: o Planning and coordination of COVID-19 cost recovery efforts. o Interpreting and adhering to relevant federal, state, and other agency guidelines. o Development/presentation of labor summary and supporting data. o Developing new grant management division (and associated policies) tasked with managing any current and future assistance funds. o Navigating federal agency web portals and processes.	•	•	•	•	•	•									
• Help the City develop and train staff on: o A successful approach to FEMA project application development. o A process for reviewing and categorize all disaster-related costs (labor and non-labor) as FEMA-eligible or non-eligible; if eligible, assign to appropriate FEMA project/guideline.			•				•	•	•	•	•				
• Issue written documentation outlining: o Project development in response to an emergency.			•				•	•	•	•	•				

	Principal in Charge	Project Executive	Subject Matter Expert	Program Manager	Deputy Program Manager	Project Manager	Disaster Recovery Consultant V	Disaster Recovery Consultant IV	Disaster Recovery Consultant III	Disaster Recovery Consultant II	Disaster Recovery Consultant I	Analyst II	Analyst I	Senior Administrator	Administrator
o Funding sources. o Procurement. o Supporting documentation requirements. o Project financial management: Labor, Contracted work, Materials, Equipment o Cost recovery review. o Drawdown and reimbursement. o FEMA audit. o Appeals process. • Provide expert and technical accounting assistance, including: o Compile, analyze, and identify necessary corrections to labor reports and supporting data in accordance with FEMA and Single Audit requirements. o Develop worksheets and prepare templates supporting financial transactions. o Review procurement documents for compliance with Single Audit.			•				•	•	•						
3.2.2 ARPA and Similar Assistance Programs from State, Federal, and Other Agencies															
• Assist the City with planning and coordination of funding administration efforts.	•	•	•	•	•	•									
• Provide well-informed interpretation of regulations/eligibility requirements from the Department of Treasury.	•	•	•	•	•	•									
• Provide guidance regarding third party contractors administering grant programs.			•				•	•	•						
• Perform compliance monitoring.							•	•	•	•	•	•	•	•	•
• Perform mock single audits of programs on a quarterly or semi-annual basis to identify areas of non-compliance that need to be corrected throughout the program period.							•	•	•	•	•	•	•	•	•
• Perform on-site assessments for specific City programs for appropriate implementation of the City's program guidelines.							•	•	•	•	•				
• Develop processes and documentation requirements around sub-recipient risk assessment, monitoring, and management, including training of sub-recipients on grant requirements.			•				•	•	•	•	•				

2.3 Additional/Incidental Costs

Tetra Tech has estimated $75,000 for Travel costs during Year One of this engagement. Tetra Tech derived this from our understanding of the needs of the City at this time from the information available in the RFP and the written Addendum (Q&A) which includes:

- 2 months onsite to assist with program for senior consultant(s) to assist in program design
- 1 week every other month for on-going support during the first 6 months

This budget estimate will be further refined during the task order process. Other additional incidental costs, such as software licensing, specialized software configuration, and/or additional tools and systems required by the project will also be assessed on an as-needed basis and billed through the task order process.

2.4 Cost Assumptions

- **Budget and Level of Effort.** Tetra Tech's actual Level of Effort and Budget for services requested by the City of Long Beach (City) will be developed upon award based on the requirements of the COVID-19 FEMA PA and ARPA related programs.
- **Remote Support.** Due to the ongoing nature of the COVID-19 pandemic, work will be performed remotely to the greatest extent possible. In-person meetings will be held in compliance with the most up-to-date social distancing guidance provided to the community.

EXHIBIT "C"

City's Representative:

Sarah Castillo, Grants Accounting Officer

(562) 570-5479

Sarah.Castillo@longbeach.gov

EXHIBIT “D”

Materials/Information Furnished: None

EXHIBIT “E”

Consultant’s Key Employee:

Mike Schaub, Project Manager
(719) 210-4774 |
mike.schaub@tetratech.com