

This is **EXHIBIT K**, consisting of 6 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated August 17, 2021.

**AMENDMENT TO OWNER-ENGINEER AGREEMENT  
Amendment No. 07**

The Effective Date of this Amendment is: July 3, 2024.

Background Data

Effective Date of Owner-Engineer Agreement:      September 9, 2021

Owner:      Town of Johnstown, Colorado

Engineer:      Burns & McDonnell Engineering Company, Inc.

Project:      Johnstown Water Treatment Plant Design

Nature of Amendment: [Check those that are applicable and delete those that are inapplicable.]

- Additional Services to be performed by Engineer
- Modifications to services of Engineer
- Modifications to responsibilities of Owner
- Modifications of payment to Engineer
- Modifications to time(s) for rendering services
- Modifications to other terms and conditions of the Agreement

Description of Modifications:

**Scope of Services**

The following tasks summarize the scope of services for engineering construction phase services for the Water Treatment Plant expansion.

The scope of services is based on the construction agreement between the Town (Owner) and MWH Constructors Inc. (Contractor), as presented to Town Council on October 16, 2023. The

schedule is based on that provided by MWH Constructions dated March 15, 2024, and as updated with the Contractor's 100% Guaranteed Maximum Price (GMP) Proposal of June 21, 2024:

- Notice to Proceed, Work Authorization 1 – December 8, 2023
- Substantial Completion – December 14, 2026
- Construction Duration – 157 weeks (37.5 months)

The scope of services shall be completed within 37.5 months and are based on the Contractor achieving Substantial Completion in that timeframe. If the Contractor does not achieve Substantial Completion and the Engineer has performed the scope of services, this shall be considered as additional services, and Engineer will request additional time/cost for completion.

#### **TASK SERIES 2000 – CONSTRUCTION ADMINISTRATION SERVICES**

The Scope of Services described herein represents the Engineer's professional engineering activities necessary for engineering services during construction and post-construction activities. Engineer's construction administration services will in no way relieve the Contractor(s) of their obligations for complete compliance with the drawings and specifications. Engineer shall not make exhaustive or continuous on-site assessments to check the quality or quantity of such work. Engineer shall not be responsible for the means, methods, techniques, sequences, or procedures of Contractor, or for their safety precautions and programs incident to their work. Engineer shall not be responsible for the failure of Contractor to perform the work in accordance with their Contract Documents. Notwithstanding the foregoing, if Engineer becomes aware of any deficiencies or defects in the work, or any lack of conformity of the work to the drawings and specifications, Engineer will bring such deficiencies, defects, or lack of conformity to Owner's attention.

Insofar as job site safety is concerned, Engineer is only responsible for its employees' activities on the job site, and this shall not be construed to relieve Owner or any Contractors from their responsibilities for maintaining a safe job site. Neither the professional activities of Engineer, nor presence of Engineer or its employees and subcontractors shall be construed to imply Engineer has any responsibility for methods of work performance, superintendence, sequencing of construction, or safety in, on or about the job site. Owner agrees that the Contractors are solely responsible for job site safety, and this intent shall be made evident in Owner's agreement with all Contractors. Owner and Engineer shall be made additional insureds under the Contractors' general liability insurance policy.

Engineer will not be a party to any construction contract and all authority and responsibility to stop work belongs to the Owner. Engineer shall not be liable for the results of any interpretations or decisions rendered by it in good faith when acting as an arbitrator or interpreter of the design documents; provided, however, that all interpretations and decisions of Engineer shall be consistent with the intent of, and reasonably inferable from, the design documents and shall be in writing or in the form of drawings.

By recommending any payment to others, Engineer will not thereby be deemed to have represented that continuous or exhaustive examinations have been made by Engineer to check the quality or quantity of the work or to review the means, methods, sequences, techniques or procedures of construction or safety precautions or programs incident thereto or that Engineer has made an examination to ascertain how or for what purposes any person(s) has used the moneys paid on account, or that title to any of work, materials or equipment has passed to the Owner free and clear of any lien, claims, security interests or encumbrances, or that others have completed their work exactly in accordance with the Contract Documents. Notwithstanding the foregoing, it is agreed that, by recommending any payment to others, Engineer does thereby represent that, based on Engineer's evaluation of the work and the data comprising the Contractor's Application for Payment, that, to the best of Engineer's knowledge, information and belief, the work has progressed to the point indicated, the quality of the work is in accordance with the design documents, that the Contractor is entitled to payment in the amount certified by Contractor, and that Engineer knows of no legitimate reason that such payment or any part thereof may or should be withheld.

Construction will be administered through three (3) Work Authorizations (WA):

1. WA1 – Early Site Work: Includes mobilization, site preparation, stormwater control and dewatering. Includes relocation of existing raw and treated piping during low water demand season 2023/2024 to create construction areas for proposed facilities on the project's critical path (i.e., the new Treatment Building). Includes deep foundations for proposed Treatment Building (Membrane Feed Pump Station Wet Well).

Issued for Construction documents: December 2023

Completion of Yard Pipe and Site Work: November 2024

Completion of Concrete/Structural: December 2024

2. WA2 – Early Procurement Supply Packages: Includes membrane filtration system, GAC system, vertical turbine pumps, emergency generators, and electrical switchgear.

Issued for procurement specifications: December and January 2024

Submittal review: January to December 2024

Notice to proceed for equipment packages: January to December 2024

3. WA3 – Balance of Work: Includes supply, installation, startup and testing of the remaining project scope.

Issued for Construction documents: May 2024

Start-up and testing: February 2026

Substantial Completion: December 2026

The previously approved Amendment 06 included the scope of services for WA1 and WA2 only, starting in December 2023 and ending October 31, 2024. Amendment 06 represents forty-seven (47) weeks of the total construction duration of one hundred fifty-seven (157) weeks.

This scope of services covers WA3, which is based on the Contractor's GMP proposal of June 21, 2024. This scope of services represents the remaining one hundred ten (110) weeks of the total construction duration of one hundred fifty-seven (157) weeks.

#### **Task 2001 – Overall Project and Construction Administration**

This task includes office administrative tasks to be performed throughout the construction phase, including:

- Receive and review submittals provided by the Contractor in accordance with the Issued for Construction design documents. Maintain and transmit reviewed documents to the Owner's project manager.
- Provide the Owner's project manager with observations regarding defects or deficiencies in the Contractor's work relating to compliance with Issued for Construction design documents.
- Preparation of Engineer's monthly invoices and cover sheet.

This represents one hundred ten (110) weeks of the total construction duration of one hundred fifty-seven (157) weeks.

#### **Task 2002 – Pre-Construction Conference**

Excluded from this scope of services.

#### **Task 2003 – Construction Progress Meetings**

Engineer will attend meetings for 110-weeks construction period for WA3 on a weekly basis. It is anticipated that the construction meetings will be attended by the Owner's project manager, the Contractor's project manager, the Engineer's project manager, the Engineer's project engineer, and the Engineer's resident project representative. The Engineer's project manager will attend 25% of the meetings in-person and 75% remotely. The Engineer's project engineer will attend all meetings remotely. The Engineer's resident project representative will attend the meetings in-person. The resident project representative hours are included in Task 2101.

#### **Task 2004 – Periodic Site visits by Project Manager or Project Engineer**

This includes one (1) site visit per month for one (1) discipline engineer and two (2) site visits per month for either the project manager or engineer for the 110-weeks of the 157-week construction period, as related to WA3

This task includes as-needed geotechnical engineering consultation services during construction of the project by Terracon. This amount is based on a not-to-exceed amount of forty thousand dollars (\$40,000). Please refer to Terracon's proposal attached for scope and applicable rates.

#### **Task 2005 – Answer Contractor's Question through written RFI Process**

Engineer will provide formal written responses to RFI's to the Contractor and the Owner within 14 days of receipt.

#### **Task 2006 – Submittal and Resubmittal Reviews**

Engineer will review submittals for the project and provide a response and status for each submittal to the Contractor and Owner within 14 days of receipt.

#### **Task 2007 – Change Management**

At the request of the Owner's project manager, Engineer will review Contractor's requests for Contract Amendments, Work Authorizations, Change Order, Work Change Directive or Field Orders and provide a summary of their review and/or recommendations to the Owner. The Engineer's review will be focused on whether or not the scope associated with the change order should have been originally contemplated and included in the Contractor's scope.

#### **Task 2008 – Applications for Payment**

Engineer will review Contractor's monthly applications for payment. Task includes a cursory review of supporting documents against worksite progress, coordination with Contractor and approval by Owner.

#### **Task 2009 – Substantial Completion Inspection and Punchlist**

Engineer will participate in the field walks of the site with the Owner and the Contractor. Engineer will generate a punch list of incomplete and construction items to correct in the field and prepare the substantial completion letter with final completion requirements outlined.

#### **Task 2010 – Final Completion Inspection and Punchlist**

Once the Contractor has indicated that they have corrected the punch list items, a final field visit will be conducted to confirm that the work is complete. Based on the findings and final punch list, letters of final completion will be prepared and submitted.

### **TASK SERIES 2100 – RESIDENT PROJECT REPRESENTATIVE AND START-UP SERVICES**

#### **Task 2101 – Full-Time Resident Project Representative**

Engineer will provide a Resident Project Representative (RPR) or field engineer to observe and record the construction progress and quality of the work as is reasonably necessary at various stages of construction to determine if the work is proceeding in general accordance with the design documents. It is estimated that the RPR or field engineer will be on site for eighty (80) of the one hundred fifty-seven (157) week construction period. The RPR is not required for the first twelve (12) weeks as the contractor prepares to mobilize and works on procurement and subcontracting items.

- Phase 1 – Part Time (March 1 to June 30, 2024): The RPR or field engineer will be onsite for an estimated 2-days per week for the next 17 weeks during work included in WA1 to witness work that will be buried. Exposed work that will not be buried, as work progresses, will be observed by the RPR when onsite during phase. This effort is included in Amendment 06.
- Phase 2 – Full Time (July 1, 2024 to June 30, 2025): The RPR or field engineer increases time to 5-days per week starting with the preparation of the subgrade for the Membrane Feed Pump Station wet well for twelve (12) months. (52 weeks). The first seventeen (17)

week of this phase is covered in Amendment 06. The remaining 35-weeks are included in this Amendment 07.

- Phase 3 – Part Time (July 1, 2025 to June 30, 2026) The RPR or field engineer then reduces time to 2-days per week for the next 52 weeks prior to during start-up, testing and punch list item closeout.

The RPR will:

- Provide observation of construction progress and of the quality of the work as is reasonably necessary at various stages of construction to determine if the work is proceeding in general accordance with the design documents.
- Examine and review delivered and on-site materials for conformance with the design documents and approved submittals.
- Prepare and submit daily construction observation reports to the Owner on a weekly basis.
- Provide construction photos of construction activities.
- Conduct weekly progress meetings, provide meeting agendas, and take and distribute meeting minutes.
- Participate with Contractor and Owner regarding start-up, testing, and commissioning. The Contractor will be responsible for start-up, testing, and commissioning.
- Report to Project Engineer, opinions and suggestions based on observations regarding defects or deficiencies in the work and compliance with drawings and specifications.
- Advise Project Engineer and Contractor immediately of any work requiring shop drawing review prior to work commencement.
- Observe and document differing subsurface and physical conditions encountered.
- Review Contractor's construction schedule for conformance with milestones, and other project requirements.
- Observe onsite quality assurance testing and maintain copies of testing results on site.
- Review as-built construction mark-ups on a weekly basis to observe if contractor is accurately documenting field changes to the work in a common set of drawings/specifications.
- Conduct special inspections of the following:
  - Reinforced steel
  - Anchors cast in concrete
  - Anchors post installed in concrete
  - Concrete mix design
  - Concrete placement
  - Inspection of formwork
  - Subgrade preparation
  - Welding

- Masonry construction
- Mortar and grout placement
- Open web steel joist installation
- The following special inspections will be provided by the Contractor and are not the responsibility of Engineer:
  - Fabricate specimens for strength, perform slump, air content and temperature.
  - Verification and inspection of soils by the geotech.
  - Verifications of grout and mortar are in compliance with the specifications
  - Structural steel welding

**Task 2102 – Start-Up Coordination Meetings**

To aide in the start-up planning, the project manager and project engineer will participate in start-up coordination meetings with the Owner and Contractor prior to introducing water into each process at the facility.

**Task 2103 – Start-up Assistance**

This task includes assisting Owner and the Contractor in starting up the treatment facility. It is assumed that this task will involve reviewing the Contractor’s procedures for bringing the facility online. Labor assumptions for this task are based on the following:

1. DAF system – 2 weeks
2. UF system – 5 weeks
3. GAC system – 1 week
4. Pumping systems – 1 week
5. Electrical and power – 4 weeks
6. Control system – 4 weeks
7. Chemical systems – 3 weeks

Expenses for laboratory analysis of water quality samples are excluded.

**Task 2104 – Equipment Operations Training Assistance**

Equipment training requirements shall be included within the contract documents. The Contractor shall be responsible for ensuring that equipment vendors complete the training requirements as outlined in the contract documents.

**TASK 2200 SERIES – PROJECT CLOSE OUT**

**Task 2201 – Compile O&M Manual**

Following the construction of the Project, and prior to recommendation of the final payment to the Contractor, the Contractor will be required to provide a complete set of red lined drawings indicating any changes that took place in the field during construction of the project.

Engineer will prepare conforming to construction drawings from the Contractor supplied redlines. A hard copy, pdf copy, point files and/or AutoCAD files of the information will be provided to the Owner.

**Task 2202 – Prepare and Furnish Conforming to Construction Records**

Following the construction of the Project, and prior to recommendation of the final payment to the Contractor, the Contractor will be required to provide a complete set of red lined drawings indicating any changes that took place in the field during construction of the project.

Engineer will prepare conforming to construction drawings from the Contractor supplied redlines. A hard copy, pdf copy, point files and/or AutoCAD files of the information will be provided to the Owner.

**Task 2203 – Project Closeout**

This task includes provisions for the project manager to close out the project’s documentation. This task will be conducted in the office and will include final coordination with the Contractor, punch list items, final payment, conforming to construction drawings, and other documents required by the contract documents for final completion and final payment.

**Task 2204 – Warranty Period Support**

This task includes provisions for the project manager and discipline engineers to support the Owner with the initial operations period and quality/warranty issues. Task includes travel to site, coordination calls and communications with the Contractor.

**Task 2205 – Correction Period Site Walks**

Engineer will participate in the two (2) field walks of the site with the Owner and the Contractor. Task is intended to ascertain whether any portion of the Work or the repair of any damage to the Site or adjacent areas is defective and therefore subject to correction by the Contractor.

Agreement Summary (Basic Services):

Original Agreement:	\$2,059,442
Net Change for Prior Amendments:	\$2,317,962
This Amendment Amount:	\$2,836,594
Adjusted Agreement Amount:	\$7,213,998*
Change in Time of Services	774 days
(Days or Date, As Applicable):	December 14, 2026

\* Basic Services only. Excludes approved Additional Services of \$831,280.

The foregoing Agreement Summary is for reference only and does not alter the terms of the Agreement, including those set forth in Exhibit C.



Owner and Engineer hereby agree to modify the above-referenced Agreement as set forth in this Amendment. All provisions of the Agreement not modified by this, or previous Amendments remain in effect.

OWNER:

ENGINEER:

\_\_\_\_\_  
By: \_\_\_\_\_  
Print  
name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date Signed: \_\_\_\_\_

\_\_\_\_\_  
By: \_\_\_\_\_  
Print  
name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date Signed: \_\_\_\_\_

**Town of Johnstown**  
**Water Treatment Plant Expansion from 5 to 12.0 mgd**

**Amendment 07 - Work Breakdown Structure and Fee Schedule - Remaining Construction Phase Services**

Activity	Project Manager	Quality Control	Project Engineer	Asst. Project Engineer	Structural	Architectural	Civil	Mechanical	Electrical, Instrumentation & Controls	Construction	CAD / Designer	Fire Protection	Field Representation	BMcD Total Labor		Expenses	Sub-Consultants	Total Cost
	Pugh	Schaefer	Huth	Wetz	Kienholz	DalGLISH Lang	Strobel Lee	Olsen	Patwari Elliott	Kuntz Waddell	Mimiaga	Ginsburg DeGroff	Hendricks	Hours	Cost	Direct	Cost	
	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Cost	Direct	Cost	
<b>TASK SERIES 2000 - Construction Administration Services</b>																		
2001 - Overall Project and Construction Administration	200		200											400	\$116,340	\$4,650		\$ 120,990
2002 - Pre-Construction Conference														0	\$0	\$0		\$ -
2003 - Progress Meetings (Weekly)	240		140	80	40	20	36	40	60					656	\$182,578	\$13,759		\$ 196,337
2004 - Periodic Site Visits by PM or PE	300		150	150	80	40	30	30	150			20		950	\$260,883	\$13,615	\$44,000	\$ 318,498
2005 - Answer Contractor Questions Through Written RFI Process	36		60	60	60	30	30	30	56					362	\$97,203	\$3,890		\$ 101,093
2006 - Submittal and Resubmittal Review	20		90	220	120	80	80	100	150			20		880	\$228,806	\$9,150		\$ 237,956
2007 - Change Management	80		160	270	100	60	60	100	270		80	20		1,200	\$304,784	\$12,190		\$ 316,974
2008 - Pay Applications	38			530										568	\$123,547	\$4,940		\$ 128,487
2009 - Substantial Completion Inspection & Punchlist	12		12		12	12	12	12	12					84	\$23,436	\$1,023		\$ 24,459
2010 - Final Completion Inspection & Punchlist	12		12		12				12					48	\$13,444	\$623		\$ 14,067
<b>Sub-Total Series 2000</b>	<b>938</b>	<b>0</b>	<b>824</b>	<b>1310</b>	<b>412</b>	<b>254</b>	<b>248</b>	<b>312</b>	<b>710</b>	<b>0</b>	<b>80</b>	<b>60</b>	<b>0</b>	<b>5,148</b>	<b>\$1,351,021</b>	<b>\$63,840</b>	<b>\$44,000</b>	<b>\$1,458,861</b>
<b>TASK SERIES 2100 - Resident Project Representative &amp; Start Up Services</b>																		
2101 - Resident Project Representative x 8 hour days														0	\$0	\$0		\$ -
Phase 1 - Part Time (2 days per week for 26 weeks)																		
Phase 2 - Full Time (5 days per week for 35 weeks)													1380	1,380	\$390,540	\$80,113		\$ 470,653
Phase 3 - Part Time (2 days per week for 52 weeks)													840	840	\$237,720	\$30,752		\$ 268,472
2102 - Start Up Coordination Meetings	30		30						30					90	\$25,200	\$1,010		\$ 26,210
2103 - Start-Up Assistance																		
1 - DAF Start Up Support	8	4	40						80					132	\$35,318	\$3,350		\$ 38,668
2 - Ultrafiltration Start Up Support	40	4	200						40					284	\$78,679	\$7,324		\$ 86,002
3 - GAC Start Up Support	16	4	40											60	\$17,115	\$1,562		\$ 18,677
4 - Pumping Systems Start Up Support	8	4	40						8					60	\$16,720	\$1,552		\$ 18,272
5 - Electrical Power Systems Start Up Support	8		40					8	120					176	\$46,796	\$4,456		\$ 51,253
6 - Control Systems Start Up Support	8	4	40					16	120					188	\$50,404	\$4,783		\$ 55,187
7 - Chemical Systems	16	4	72					8	40					140	\$38,594	\$3,597		\$ 42,191
2104 - Equipment Operations & Training Assistance	16		48						16					80	\$22,210	\$890		\$ 23,100
<b>Sub-Total Series 2100</b>	<b>150</b>	<b>24</b>	<b>550</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>454</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2220</b>	<b>3,430</b>	<b>\$959,296</b>	<b>\$139,388</b>	<b>\$0</b>	<b>\$1,098,684</b>
<b>TASK SERIES 2200 - Project Close Out</b>																		
2201 - Compile O&M Manual	8	2		40					20					70	\$16,685	\$670		\$ 17,355
2202 - Conforming to Construction Drawings	40		40	80	40	40	40	40	100		440			860	\$182,574	\$7,300		\$ 189,874
2203 - Project Close Out	40		40											80	\$23,268	\$930		\$ 24,198
2204 - Warranty Period Support	30		40		4		6	10	30					120	\$33,514	\$1,838		\$ 35,352
2205 - Correction Period Site Walks	20		20											40	\$11,634	\$636		\$ 12,270
<b>Sub-Total Series 2200</b>	<b>138</b>	<b>2</b>	<b>140</b>	<b>120</b>	<b>44</b>	<b>40</b>	<b>46</b>	<b>50</b>	<b>150</b>	<b>0</b>	<b>440</b>	<b>0</b>	<b>0</b>	<b>1,170</b>	<b>\$267,674</b>	<b>\$11,375</b>	<b>\$0</b>	<b>\$279,049</b>
<b>Project Subtotals</b>	<b>1226</b>	<b>26</b>	<b>1514</b>	<b>1430</b>	<b>456</b>	<b>294</b>	<b>294</b>	<b>394</b>	<b>1314</b>	<b>0</b>	<b>520</b>	<b>60</b>	<b>2220</b>	<b>9748</b>	<b>\$2,577,991</b>	<b>\$214,603</b>	<b>\$44,000</b>	<b>\$2,836,594</b>
<b>Project Total</b>																		<b>\$2,836,594</b>

**Notes:**

1. Expected active construction period is expected to last 38 months, per MWH Constructor's schedule dated March 15, 2024 and updated June 21, 2024
2. Refer to the attached scope of work for phased RPR and office staff site visits.
3. Construction document control through MWH Constructor's web interface. Construction document control software charges are excluded.
4. For outside expenses incurred by Burns & McDonnell, such as authorized travel and subsistence, and for services rendered by others such as subconsultants, the client shall pay the cost to Burns & McDonnell plus 10%
5. The services of contract/agency and/or any personnel of a Burns & McDonnell subsidiary or affiliate shall be billed to Owner according to the rate sheet as if such personnel is a direct employee of Burns & McDonnell.
6. The rates shown above are effective for services through December 31, 2024, and are subject to revision thereafter.



1510 44th Street, Unit 1  
Evans, CO 80620  
P (970) 351-0460  
**Terracon.com**

Attachment 01 - Task 2004

June 27, 2024

Burns & McDonnell Engineering Company, Inc.  
9785 Maroon Circle, Suite 400  
Centennial, Colorado 80112

**Attn:** Mr. Brett Pugh, P.E.  
P: (303) 583-0335  
E: bdpugh@burnsmcd.com

**RE:** Proposal for Geotechnical Engineering Consultation Services During Construction  
Johnstown Water Treatment Plant Expansion  
23205 County Road 13  
Johnstown, Colorado  
Terracon Proposal No. P21225052

Dear Mr. Pugh:

Previously, Terracon Consultants, Inc. (Terracon) prepared a Geotechnical Engineering Report (Project No. 21225052; report dated December 5, 2023) for the project referenced above. Terracon also prepared an additional report presenting supplemental geotechnical engineering recommendations for utility trench subgrade stabilization and thrust block design (Project No. 21225052; report dated June 12, 2024) for the project. Terracon has been requested to provide on-going geotechnical engineering consultation services during construction of the project. We anticipate our services may include, but may not be limited to, review of RFIs, project team meetings, site visits to observe subsurface conditions, and providing supplemental reports and recommendations for the project.

*Not to Exceed \$40,000 B. Pugh, 7/03/2024*

We will provide our services on a time and materials basis according to the unit rates presented on the attached Fee Schedule. At your request, we will not exceed a total fee of ~~\$20,000~~ without your written approval. We are available to provide a separate proposal describing a specific scope of service and associated fee to be performed as part of this proposal, upon your request.

Your authorization for Terracon to proceed in accordance with this proposal can be issued by sending us a change order/supplement to the Work Authorization (Work Authorization No. TRCN523G: dated June 27, 2022) previously executed for this project for our review and signature. The change order/supplement should also reference this proposal and attached Fee Schedule.

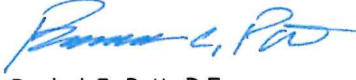
**Proposal for Geotechnical Engineering Consultation Services**  
Johnstown Water Treatment Plant Expansion | Johnstown, Colorado  
June 27, 2024 | Terracon Proposal No. P21225052



We appreciate the opportunity to submit this proposal to Burns & McDonnell Engineering Company, Inc. and look forward to continuing working with you and the project team on this project. If you have any questions or concerns regarding the content of this proposal, please feel free to contact us.

Sincerely,  
**Terracon**

  
Eric D. Bernhardt, P.E.  
Regional Geotechnical Manager

  
Rachel C. Pott, P.E.  
Geotechnical Group Manager

Attachments: Fee Schedule



## TERRACON CONSULTANTS 2024 FEE SCHEDULE

### Personnel Rates

Service / Personnel / Expenses	Hourly Rate
Subject Matter Expert/Senior Consultant	\$290.00
Principal/Regional Geotechnical Manager	\$215.00
Senior Engineer, Project Manager	\$190.00
Senior Geologist/Scientist	\$185.00
Project Engineer	\$170.00
Project Geologist/Scientist, Geotechnical Group Manager	\$155.00
Senior Staff Engineer	\$150.00
Senior Staff Geologist/Scientist	\$145.00
Staff Engineer	\$130.00
Staff Geologist/Scientist	\$120.00
Field Engineer/Geologist/Scientist/Professional	\$115.00
Geophysicist	\$150.00
CAD or GIS Operator/Engineering Draftsperson	\$105.00
CWI, IFC, Wood Framing, Fireproofing Inspectors	\$110.00
Asbestos/LBP Inspector/(CABI)/AMS	\$95.00
Structural Steel – Weld-Bolted Connection	\$100.00
Special Inspector	\$100.00
Floor Flatness/Levelness Technician	\$110.00
Senior Administrative Staff	\$120.00
Administrative Staff	\$80.00
Senior Field/Laboratory Technician (NICET, State DOT Certification)	\$100.00
Field/Laboratory Technician	\$95.00
Per Diem and Lodging	\$60.00/day + cost of lodging
Vehicle Charge	\$1/mile
Services provided outside normal business hours (7:00 am to 6:00 pm, Monday through Friday), on holidays, weekends, or in excess of ten hours on one workday will be billed at 150% of listed rates.	

## Laboratory Testing Services

Soils		
Specification	Service / Test	Rates
ASTM D6913 and D1140	Standard Sieves 3-inch through No. 200	\$140/Each
	Standard Sieves 3-inch through No. 200 and Hydrometer	\$200/Each
	Percent Passing No. 200 Mesh Sieve Only	\$90/Each
ASTM D2488	Visual Classification	\$30/Each
ASTM D4318	Liquid-Plastic Limit	\$130/Each
ASTM D854	Specific Gravity	\$130/Each
ASTM D2216	Moisture Content	\$15/Each
ASTM D2937	Density & Moisture Content	\$60/Each
ASTM D698 / AASHTO T99	Standard Proctor	\$205/Each
ASTM D1557 / AASHTO T180	Modified Proctor	\$235/Each
ASTM D1883	CBR	\$420/Each
ASTM D2434	Permeability	\$420/Each
	Permeability using Triaxial Cell, Undisturbed or Remolded	\$400/Each
ASTM D2844	R Value	\$500/Each
	Sulfate Content	\$60/Each
	pH and Resistivity (Lab)	\$80/Each
	pH, Sulfide, Redox and Resistivity (Lab)	\$150/Each
	Corrosive Suite: pH, Sulfate, Sulfide, Chloride, Redox, Total Salts, and Resistivity (Lab)	\$250/Each
	Direct Shear	\$300/Point
	Unconfined Compressive Strength (Soil)	\$120/Each
	Unconfined Compressive Strength (Rock)	\$200/Each
ASTM D4253 and D4254	Relative Density	\$220/Each
ASTM D2435	One-Dimensional Time-Rate Consolidation	\$600/Each
ASTM D2435	One-Dimensional Swell	\$150/Each
	Triaxial Shear: Unconsolidated – Undrained, Saturated	\$250/Each
	Triaxial Shear: Consolidated – Undrained	\$550/Each
	Triaxial Shear: Consolidated – Drained	\$650/Each
	Triaxial Shear: Recompacting Fee	\$130/Point

Aggregates		
Specification	Service / Test	Rates
ASTM C136 and C117	Sieve Analysis: Coarse aggregate Above No. 4	\$120/Each
	Sieve Analysis: Fine Aggregate No. 4 through No. 200	\$110/Each
	Sieve Analysis: Coarse & Fine Aggregates through No. 200	\$130/Each



Aggregates		
Specification	Service / Test	Rates
	Sieve Analysis: Large Pit-Run Samples (+3 in.), per hour	\$85/Hour
ASTM C127 and C128	Specific Gravity & Absorption, Coarse or Fine	\$110/Each
ASTM C29	Unit Weight	\$70/Each
ASTM C131 or C535	Los Angeles Abrasion	\$170/Each
ASTM D6928 or applicable DOT	Micro-Deval	\$220/Each
ASTM C88	Sodium or Magnesium Sulfate Soundness	\$350/Each
ASTM C40	Organic Impurities	\$75/Each
ASTM C142	Clay Lumps and Friable Particles	\$130/Each
ASTM D4791	Flat and Elongated Particles	\$110/Each
ASTM C123	Lightweight Particles-SpG 2.0 & 2.4	\$420/Each
ASTM D5821 (or applicable DOT std.)	Fractured Faces	\$110/Each
ASTM C1260 or C1567	Alkali Silica Reactivity	\$850/Each
ASTM C1252, Method C	Fine Aggregate Angularity	\$110/Each

Portland Cement Concrete and Masonry		
Specification	Specification	Rates
ASTM F1869/F2170	Vapor Emission Rate (Calcium Chloride)	\$140/Per Location
ASTM C39	Concrete Cylinders – Compressive Strength	\$30/Each
ASTM C1019	Grout Prisms – Compressive Strength	\$25/Each
ASTM C140	Masonry Units – Compressive Strength	\$65/Each
ASTM C140	Masonry Prisms – Compressive Strength	\$65/Each
ASTM C780	Mortar Cubes – Compressive Strength	\$25/Each
ASTM C42	Concrete Core – Compressive Strength	\$65/Each
ASTM C78	Flexural Strength	\$75/Each
ASTM C496	Splitting Tensile Strength	\$65/Each
	Provide Cylinder Molds	\$5/Each
	Masonry Block/Prism Assemblage Compressive Strength – 8" Unit	\$120/Each
	Masonry Block/Prism Assemblage Compressive Strength – 12" Unit	\$130/Each
	Masonry Unit Delivery Charge	\$85/hour + mileage
ASTM C567	Unit Weight of Cylinder or Core	\$25/Each
Concrete Mix Design (Aggregate Tests & Travel Not Included)		
	Compressive (lab batched)	\$1,900/Each



Portland Cement Concrete and Masonry		
Specification	Specification	Rates
	Compressive (truck batched)	\$1,500/Each
	Flexural (truck batch/lab tested)	\$2,400/Each
ASTM C42	Coring Concrete	\$250/Each
	Add Bit Charge, per inch depth	\$5/inch

Hot Mix Asphalt		
Specification	Specification	Rates
ASTM D2172 or D6307	Extraction of Asphalt	\$175/Each
ASTM D2172 or D6307	Extraction and Gradation	\$345/Each
ASTM D6926-6927	HMA Properties Test (3 specimens) includes stability, flow, air voids & Marshall unit weight	\$360/Each
ASTM D979	Coring Hot Mix Asphalt - 4" diameter cores, per each	\$250/Each
ASTM D2726	Bulk Specific Gravity & Thickness	\$50/Each
HMA Trial Mix Design: (Aggregate Tests Not Included)		
	Marshall or Hveem Method (3 bin mix max.)	\$2,000/Each
	Superpave SHRP Gyrotory (3 bin mix max.)	\$3,500/Each
ASTM D2041	Theoretical Maximum Specific Gravity	\$170/Point
ASTM D1074 & D1075/ AASHTO T283	Immersion-Compression or Lottman	\$500/Each
	Design unit weight one-point verification (pre-mixed)	\$360/Each

Note: Samples Will Be Discarded 30 Days After Testing Completion If Not Otherwise Advised.  
 \*Storage And Shipping Costs Are The Responsibility Of The Client.  
 Note: Special Test Pricing Available Upon Request.

### Drilling Services

Drilling – Hourly Rates	Rates
Truck Mounted Drill Rig: Mobilization, Drilling (solid-stem augers), Coring, Moving, Water Haul	\$340 - \$390/Hour
Hollow-Stem Augers Downhole Hammer (Odex)	\$5/Foot \$30/Foot – Footage Rate Is In Addition To Hourly Rate
Air Compressor	\$500/Day
Support Truck	\$300/Day
Decontamination Equipment	\$150/Day
Vehicle Mileage	Current IRS Rate