

PUBLIC WORKS MEMORANDUM
#53-2022

DATE: Nov. 14, 2022

TO: Honorable Mayor Meredith Leighty and City Council Members

THROUGH: Heather Geyer, City Manager *Hmg*

FROM: Kent Kisselman, PE - Director of Public Works *KK*

SUBJECT: CR-165 – 120th Avenue Improvements Materials Testing

PURPOSE

To consider CR-165, a resolution approving a contract with Terracon for materials testing on the 120th Avenue Improvements project.

BACKGROUND

The 120th Avenue Improvements project includes the widening of 120th Avenue, construction of traffic measures associated with the Karl's Farm development, a traffic signal at Race Street, and improvements to match the roadway section into the City of Thornton. When completed, 120th Avenue will have three lanes in each direction. This will significantly reduce traffic congestion, speed up travel time during peak hours and improve safety from Interstate 25 to Colorado Boulevard.

Below is a list of previous contracts awarded on this project:

- On June 24, 2019, the City awarded a Professional Services Agreement to Stanley Consultants for \$96,950 to provide technical services in project management; intergovernmental coordination with the Colorado Department of Transportation (CDOT) and the Federal Highway Administration; management of engineering design; and post-design services.
- On March 9, 2020, the City awarded a Professional Services Agreement to Felsburg Holt & Ullevig (FHU) for engineering design services for the 120th Avenue Corridor Improvements project for \$1,036,774. Two addendums to the FHU contract were executed to cover additional design costs due to unforeseen design changes, bringing the contract total to \$1,404,654.
- On April 25, 2022, the City awarded a Professional Services Agreement to RockSol Consulting Group, Inc. for construction management services for the 120th Avenue Improvements project for \$341,616.
- On Oct. 24, 2022, the City awarded a Trade Contractor Agreement to American West Construction for construction of the 120th Avenue Improvements project for \$14,787,718.26.

The Project Design/Construction Assistance Team consists of the following:

- Stanley Consultants – Project administration
- Felsburg Holt & Ullevig – Engineering services
- The City of Northglenn – Owner
- CDOT
- RockSol Consulting Group, Inc. – Construction management services
- American West Construction – Contractor

Based on past performance, responsiveness, and quality of work, Terracon was selected to perform the materials testing work for the 120th Avenue Improvements project and act as the City's quality control contractor. The contract amount for this work is \$215,361.30.

BUDGET/TIME IMPLICATIONS

Funds for this project would come out of multiple funding sources as detailed in the 120th Avenue Improvements Project Overview memo from Oct. 24. The proposed construction budget for this project is \$15,799,752.26 and includes only services required during construction.

	Amount
Proposed budget	\$15,799,752.26
Terracon Materials testing contract	(\$215,361.30)
<i>American West construction contract</i>	<i>(\$14,787,718.70)</i>
<i>Adams 12 fiber relocation</i>	<i>(\$49,875.76)</i>
<i>RockSol Independent Assurance Testing contract</i>	<i>(\$7,410.56)</i>
<i>5% owner's contingency</i>	<i>(\$739,385.94)</i>
Remaining Budget	\$0

The contractor has 280 days to complete this project after notice to proceed.

STAFF RECOMMENDATION

Attached to this memorandum is CR-165, a resolution that, if approved, would authorize the Mayor to execute an agreement between the City of Northglenn and Terracon for materials testing on the 120th Avenue Improvements project in an amount not to exceed \$215,361.30. Staff recommends approval of CR-165.

STAFF REFERENCE

If Council members have any questions, please contact Kent Kisselman, Director of Public Works, at kkisselman@northglenn.org or 303.450.4005.

CR-165 – 120th Avenue Improvements Materials Testing
 120th Avenue Improvements Materials Testing Contract

SPONSORED BY: MAYOR LEIGHTY

COUNCIL MEMBER'S RESOLUTION

RESOLUTION NO.

No. CR-165
Series of 2022

Series of 2022

A RESOLUTION APPROVING A PROFESSIONAL SERVICES AGREEMENT BETWEEN THE CITY OF NORTHGLENN AND TERRACON CONSULTANTS, INC. FOR THE 120TH AVENUE IMPROVEMENTS MATERIALS TESTING

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF NORTHGLENN, COLORADO THAT:

Section 1. The Professional Services Agreement between the City of Northglenn and Terracon Consultants, Inc., attached hereto, in an amount not to exceed \$215,361.30, for materials testing services for the 120th Avenue Improvements Project is hereby approved and the Mayor is authorized to execute same on behalf of the City of Northglenn.

DATED, at Northglenn, Colorado, this _____ day of _____, 2022.

MEREDITH LEIGHTY
Mayor

ATTEST:

JOHANNA SMALL, CMC
City Clerk

APPROVED AS TO FORM:

COREY Y. HOFFMANN
City Attorney

AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT is made and entered into this _____ day of _____ 20_____, by and between the City of Northglenn, State of Colorado (hereinafter referred to as the "City") and Terracon (hereinafter referred to as "Consultant").

RECITALS:

A. The City requires professional services.

B. Consultant has held itself out to the City as having the requisite expertise and experience to perform the required work for the Project.

NOW, THEREFORE, it is hereby agreed for the consideration hereinafter set forth, that Consultant shall provide to the City, professional consulting services for the Project.

I. SCOPE OF SERVICES

Consultant shall furnish all labor and materials to perform the work and services required for the complete and prompt execution and performance of all duties, obligations, and responsibilities for the Project which are described or reasonably implied from **Exhibit A** which is attached hereto and incorporated herein by this reference.

II. THE CITY'S OBLIGATIONS/CONFIDENTIALITY

The City shall provide Consultant with reports and such other data as may be available to the City and reasonably required by Consultant to perform hereunder. No project information shall be disclosed by Consultant to third parties without prior written consent of the City or pursuant to a lawful court order directing such disclosure. All documents provided by the City to Consultant shall be returned to the City. Consultant is authorized by the City to retain copies of such data and materials at Consultant's expense.

III. OWNERSHIP OF WORK PRODUCT

The City acknowledges that the Consultant's work product is an instrument of professional service. Nevertheless, the products prepared under this Agreement shall become the property of the City upon completion of the work.

IV. COMPENSATION

A. In consideration for the completion of the services specified herein by Consultant, the City shall pay Consultant an amount not to exceed two hundred fifteen thousand three hundred sixty-one and 30/100 dollars (\$215,361.30). Payment shall be made in accordance with the schedule of charges in **Exhibit B** which is attached hereto and incorporated herein by this reference. Invoices will be itemized and include hourly breakdown for all personnel and other charges. The maximum fee specified herein shall include all fees and expenses incurred by Consultant in performing all services hereunder.

B. Consultant may submit monthly or periodic statements requesting payment. Such request shall be based upon the amount and value of the work and services performed by Consultant under this Agreement except as otherwise supplemented or accompanied by such supporting data as may be required by the City.

1. All invoices, including Consultant's verified payment request, shall be submitted by Consultant to the City no later than the twenty-fourth (24th) day of each month for payment pursuant to the terms of this Agreement. In the event Consultant fails to submit any invoice on or before the

twenty-fourth (24th) day of any given month, Consultant defers its right to payment pursuant to said late invoice until the twenty-fourth (24th) day of the following month.

2. Progress payments may be claimed on a monthly basis for reimbursable costs actually incurred to date as supported by detailed statements, including hourly breakdowns for all personnel and other charges. The amounts of all such monthly payments shall be paid within thirty (30) days after the timely receipt of invoice as provided by this Agreement.

C. The City has the right to ask for clarification on any Consultant invoice after receipt of the invoice by the City.

D. In the event payment for services rendered has not been made within forty-five (45) days from the receipt of the invoice for any uncontested billing, interest will accrue at the legal rate of interest. In the event payment has not been made within ninety (90) days from the receipt of the invoice for any uncontested billing, Consultant may, after giving seven (7) days written notice and without penalty or liability of any nature, suspend all work on all authorized services specified herein. In the event payment in full is not received within thirty (30) days of giving the seven (7) days written notice, Consultant may terminate this Agreement. Upon receipt of payment in full for services rendered, Consultant will continue with all authorized services.

E. Final payment shall be made within sixty (60) calendar days after all data and reports (which are suitable for reproduction and distribution by the City) required by this Agreement have been turned over to and approved by the City and upon receipt by the City of Consultant's certification that services required herein by Consultant have been fully completed in accordance with this Agreement and all data and reports for the Project.

V. COMMENCEMENT AND COMPLETION OF WORK

Within seven (7) days of receipt from the City of a Notice to Proceed, Consultant shall commence work on all its obligations as set forth in the Scope of Services or that portion of such obligations as is specified in said Notice. Except as may be changed in writing by the City, the Project shall be complete, and Consultant shall furnish the City the specified deliverables as provided in **Exhibit A**.

VI. CHANGES IN SCOPE OF SERVICES

A change in the Scope of Services shall constitute any material change or amendment of services or work which is different from or additional to the Scope of Services specified in Section I of this Agreement. No such change, including any additional compensation, shall be effective, or paid unless authorized by written amendment executed by the City. If Consultant proceeds without such written authorization, then Consultant shall be deemed to have waived any claim for additional compensation, including a claim based on the theory of unjust enrichment, quantum meruit or implied contract. Except as expressly provided herein, no agent, employee, or representative of the City shall have the authority to enter into any changes or modifications, either directly or implied by a course of action, relating to the terms and scope of this Agreement.

VII. PROFESSIONAL RESPONSIBILITY

A. Consultant hereby warrants that it is qualified to assume the responsibilities and render the services described herein and has all requisite corporate authority and professional licenses in good standing, required by law.

B. The work performed by Consultant shall be in accordance with generally accepted professional practices and the level of competency presently maintained by other practicing professional firms in the same or similar type of work in the applicable community.

C. Consultant shall be responsible for the professional quality, technical accuracy, timely completion, and the coordination of all designs, drawings, specifications, reports, and other services furnished by Consultant under this Agreement. Consultant shall, without additional compensation, correct or resolve any errors or deficiencies in his designs, drawings, specifications, reports, and other services, which fall below the standard of professional practice, and reimburse the City for construction costs caused by errors and omissions which fall below the standard of professional practice.

D. Approval by the City of drawings, designs, specifications, reports, and incidental work or materials furnished hereunder shall not in any way relieve Consultant of responsibility for technical adequacy of the work. Neither the City's review, approval or acceptance of, nor payment for, any of the services shall be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement, and Consultant shall be and remain liable in accordance with applicable performance of any of the services furnished under this Agreement.

E. The rights and remedies of the City provided for under this Agreement are in addition to any other rights and remedies provided by law.

VIII. INDEMNIFICATION

A. **INDEMNIFICATION – GENERAL:** The City cannot and by this Agreement does not agree to indemnify, hold harmless, exonerate or assume the defense of the Consultant or any other person or entity whatsoever, for any purpose whatsoever. Provided that the claims, demands, suits, actions or proceedings of any kind are not the result of professional negligence, the Consultant, to the fullest extent permitted by law, shall defend, indemnify and hold harmless the City, its Council members, officials, officers, directors, agents and employees from any and all claims, demands, suits, actions or proceedings of any kind or nature whatsoever, including worker's compensation claims, in any way resulting from or arising from the services rendered by Consultant, its employees, agents or subconsultants, or others for whom the Consultant is legally liable, under this Agreement; provided, however, that the Consultant need not indemnify or save harmless the City, its Council members, its officers, agents and employees from damages resulting from the negligence of the Council members, officials, officers, directors, agents and employees.

B. **INDEMNIFICATION FOR PROFESSIONAL NEGLIGENCE:** The Consultant shall, to the fullest extent permitted by law, defend, indemnify and hold harmless the City, its Council members, and any of its officials, officers, directors, and employees from and against damages, liability, losses, costs and expenses, including reasonable attorneys fees, but only to the extent caused by or arising out of the negligent acts, errors or omissions of the Consultant, its employees, agents or subconsultants, or others for whom the Consultant is legally liable, in the performance of professional services under this Agreement. The Consultant is not obligated under this subparagraph IX.B. to indemnify the City for the negligent acts of the City, its Council members, or any of its officials, officers, directors, agents and employees.

C. **INDEMNIFICATION – COSTS:** Consultant shall, to the fullest extent permitted by law, defend, investigate, handle, respond to, and provide defense for and defend against, any such liability, claims or demands at the sole expense of Consultant or, at the option of the City, agrees to pay the City or reimburse the City for the defense costs incurred by the City in connection with any such liability, claims or demands. Consultant shall, to the fullest extent permitted by law, defend and bear all other costs and expenses related thereto, including court costs and attorney fees, whether or not any such liability, claims or demands alleged are groundless, false or fraudulent. If it is determined by the final judgment of a court of any competent jurisdiction that such injury, loss or damage was caused in whole or in part by the act, omission or other fault of the City, its Council members, officials, officers, directors, agents and employees, the City shall reimburse Consultant for the portion of the judgment attributable to such act, omission or other fault of the City, its Council members, officials, officers, directors, agents and employees.

D. To the extent this Agreement is subject to C.R.S. § 13-50.5-102(8), Contractor's liability under this provision shall be to the fullest extent of, but shall not exceed, that amount represented by the degree or

percentage of negligence or fault attributable to Contractor, any subcontractor of Contractor, or any officer, employee, representative, or agent of Contractor or of any subcontractor of Contractor. If Contractor is providing architectural, engineering, surveying or other design services under this Agreement, the extent of Contractor's obligation to defend, indemnify and hold harmless the City may be determined only after Contractor's liability or fault has been determined by adjudication, alternative dispute resolution or otherwise resolved by mutual agreement of the Parties, as provided by C.R.S. § 13-50.5-102(8)(c).

IX. INSURANCE

A. Consultant agrees to procure and maintain, at its own cost, a policy or policies of insurance sufficient to insure against all liability, claims, demands, and other obligations assumed by Consultant pursuant to Section IX, above. Such insurance shall be in addition to any other insurance requirements imposed by this Agreement or by law. Consultant shall not be relieved of any liability, claims, demands, or other obligations assumed pursuant to Section IX, above, by reason of its failure to procure or maintain insurance, or by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types.

B. Consultant shall procure and maintain and shall cause any subcontractor of Consultant to procure and maintain, the minimum insurance coverages listed below. Such coverages shall be procured and maintained with forms and insurers acceptable to the City. All coverages shall be continuously maintained to cover all liability, claims, demands, and other obligations assumed by Consultant pursuant to Section IX, above. In the case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage.

1. Worker's Compensation Insurance to cover obligations imposed by applicable laws for any employee engaged in the performance of work under this Contract, and Employer's Liability Insurance with minimum limits of five hundred thousand dollars (\$500,000) each incident, five hundred thousand dollars (\$500,000) disease - policy limit, and five hundred thousand dollars (\$500,000) disease - each employee.

2. Commercial general liability insurance with minimum combined single limits of one million dollars (\$1,000,000) each occurrence and two million dollars (\$2,000,000) general aggregate. The policy shall be applicable to all premises and operations. The policy shall include coverage for bodily injury, broad form property damage (including completed operations), personal injury (including coverage for contractual and employee acts), blanket contractual, products, and completed operations. The policy shall contain a severability of interests provision.

3. Professional liability insurance with minimum limits of six hundred thousand dollars (\$600,000) each claim and one million dollars (\$1,000,000) general aggregate.

C. The policy required by paragraph 2. above shall be endorsed to include the City and the City's officers, employees, and consultants as additional insureds. Every policy required above shall be primary insurance, and any insurance carried by the City, its officers, its employees, or its consultants shall be excess and not contributory insurance to that provided by Consultant. No additional insured endorsement to the policy required by paragraph 1. above shall contain any exclusion for bodily injury or property damage arising from completed operations. Consultant shall be solely responsible for any deductible losses under any policy required above.

D. The certificate of insurance provided for the City shall be completed by Consultant's insurance agent as evidence that policies providing the required coverages, conditions, and minimum limits are in full force and effect, and shall be reviewed and approved by the City prior to commencement of the Agreement. No other form of certificate shall be used. If the City is named as an additional insured on any policy which does not allow for the automatic addition of additional insureds, the Consultant's insurance agent shall also provide a copy of all accompanying endorsements recognizing the City as an additional insured. The certificate shall identify this Agreement and shall provide that the coverages afforded under the policies shall not be cancelled, terminated or materially changed until at least thirty

(30) days prior written notice has been given to the City. The completed certificate of insurance shall be sent to:

City of Northglenn
Attn: Kathy Kvasnicka
11701 Community Center Drive
Northglenn, Colorado 80233-8061

E. Failure on the part of Consultant to procure or maintain policies providing the required coverages, conditions, and minimum limits shall constitute a material breach of agreement upon which the City may immediately terminate this Agreement, or at its discretion, the City may procure or renew any such policy or any extended reporting period thereto and may pay any and all premiums in connection therewith, and all monies so paid by the City shall be repaid by Consultant to the City upon demand, or the City may offset the cost of the premiums against any monies due to Consultant from the City.

F. The City reserves the right to request and receive a certified copy of any policy and any endorsement thereto.

G. The parties hereto understand and agree that the City, its officers, and its employees, are relying on, and do not waive or intend to waive by any provision of this Agreement, the monetary limitations (presently three hundred fifty thousand dollars (\$350,000) per person and nine hundred ninety thousand dollars (\$990,000) per occurrence) or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, Colo. Rev. Stat., §§ 24-10-101, et seq., as from time to time amended, or otherwise available to the City, its officers, or its employees.

X. NON-ASSIGNABILITY

Neither this Agreement, nor any of the rights or obligations of the parties hereto, shall be assigned by either party without the written consent of the other.

XI. TERMINATION

This Agreement shall terminate at such time as the work in Section I is completed and the requirements of this Agreement are satisfied, or upon the City's providing Consultant with seven (7) days advance written notice, whichever occurs first. In the event the Agreement is terminated by the City's issuance of said written notice of intent to terminate, the City shall pay Consultant for all work previously authorized and completed prior to the date of termination. If, however, Consultant has substantially or materially breached the standards and terms of this Agreement, the City shall have any remedy or right of set-off available at law and equity. If the Agreement is terminated for any reason other than cause prior to completion of the Project, any use of documents by the City thereafter shall be at the City's sole risk, unless otherwise consented to by Consultant.

XII. CONFLICT OF INTEREST

The Consultant shall disclose any personal or private interest related to property or business within the City. Upon disclosure of any such personal or private interest, the City shall determine if the interest constitutes a conflict of interest. If the City determines that a conflict of interest exists, the City may treat such conflict of interest as a default and terminate this Agreement.

XIII. VENUE

This Agreement shall be governed by the laws of the State of Colorado, and any legal action concerning the provisions hereof shall be brought in the County of Adams, State of Colorado.

XIV. INDEPENDENT CONTRACTOR

Consultant is an independent contractor. Notwithstanding any provision appearing in this Agreement, all personnel assigned by Consultant to perform work under the terms of this Agreement shall be, and remain at all times, employees or agents of Consultant for all purposes. Consultant shall make no representation that it is the employee of the City for any purposes.

XV. NO WAIVER

Delays in enforcement or the waiver of any one or more defaults or breaches of this Agreement by the City shall not constitute a waiver of any of the other terms or obligation of this Agreement.

XVI. ENTIRE AGREEMENT

This Agreement and the attached **Exhibits A and B** is the entire Agreement between Consultant and the City, superseding all prior oral or written communications. None of the provisions of this Agreement may be amended, modified, or changed, except as specified herein.

XVII. SUBJECT TO ANNUAL APPROPRIATION

Consistent with Article X, Section 20 of the Colorado Constitution, any financial obligations of the City not to be performed during the current fiscal year are subject to annual appropriation, and thus any obligations of the City hereunder shall extend only to monies currently appropriated.

XVIII. NOTICE

Any notice or communication between Consultant and the City which may be required, or which may be given, under the terms of this Agreement shall be in writing, and shall be deemed to have been sufficiently given when directly presented or sent pre-paid, first class United States Mail, addressed as follows:

The City: City of Northglenn
11701 Community Center Drive
Northglenn, Colorado 80233-8061

Consultant: Terracon
10625 W-I70 Frontage Rd. N., Ste 3
Wheatridge, CO 80033

IN WITNESS WHEREOF, the parties hereto each herewith subscribe the same in duplicate.

CITY OF NORTHGLENN, COLORADO

By: _____

ATTEST:

Print Name

Johanna Small, CMC
City Clerk

Date

Title

Date

APPROVED AS TO FORM:

Corey Y. Hoffmann
City Attorney

Date

CONSULTANT:

By:  _____

ATTEST:

Mathew Fielding
Print Name

By:  _____

Vice President 10/18/22
Title Date

F. Stewart Ward
Print Name

Senior Engineer 10/19/22
Title Date



10625 W. I-70 Frontage Rd. N., Ste. 3
 Wheat Ridge, Colorado 80033
P (303) 423-3300
F (303) 423-3353
Terracon.com

September 21, 2022

City of Northglenn
 11701 Community Center Drive
 Northglenn, Colorado 80233

Attn: Ms. Kiran Bhusal

Re: Proposal for Materials Testing Services
 120th Avenue Corridor Improvements
 from Sylvia Drive to Claud Court
 Northglenn/Thornton, Colorado
 Terracon Proposal No. P25221241

Dear Ms. Bhusal:

Terracon Consultants, Inc. (Terracon) appreciates the opportunity to submit this proposal to provide construction materials testing services for the 120th Avenue Corridor Improvements project. Our proposal includes an outline of the project information, our proposed scope of services, estimated quantities, unit rates, and a total estimated fee for our services.

1.0 Project Information

Our understanding of the required construction materials testing services for this project is based upon information provided by your firm, our experience with other projects of this type, and the following information:

- Special Provisions Document by Colorado Department of Transportation (CDOT), dated 08/15/2022;
- Construction Documents by CDOT, dated 08/15/2022; and
- Geotechnical report by Martinez Associates, dated 09/08/2020.

A construction schedule was not provided to Terracon prior to the issuance of this proposal, therefore our assumptions on the schedule should be considered an estimate until we can review the contractor’s schedule. Pertinent project information is summarized below:

Item	Description
Location	120 th Avenue from Sylvia Drive to Claude Court in Northglenn, Colorado with a portion of the project being in Thornton.
Project Description	We understand the project will consist of constructing a new lane of traffic on the eastbound lanes of 120 th Avenue from Sylvia Drive to Irma Drive. Another new lane will be constructed for both east and westbound traffic from Irma Drive to Claude Court. The total project is approximately 4,713.90 linear feet. We understand the project will include pavement subgrade, reconditioning, aggregate road base, hot mix asphalt, concrete pavement, drilled piers for new traffic signals, underground utility installation, and concrete flatwork construction.

Proposal for Materials Testing Services

120th Avenue Corridor Improvements ■ Northglenn/Thornton, Colorado
September 21, 2022 ■ Terracon Proposal No. P25221241



Item	Description
Geotechnical Investigation	The subgrade investigation and pavement thickness geotechnical report was prepared by Martinez Associates, dated 09/08/2020 (Project No. 20-0062).
Off-site improvements	Off-site improvements are not anticipated in this scope of work.

2.0 Scope of Services

Terracon proposes to provide materials testing services as summarized below:

Item	Description
Overexcavation & Backfill Observation	<p>During over-excavation operations, observations of the excavated material stockpiles and the condition of soils found at the bottom of the excavations will be performed. We will observe moisture conditioning and backfill operations, and perform moisture/density tests on the backfill materials.</p> <ul style="list-style-type: none"> ■ Per the geotechnical report - in preparation of the subgrade for the roadway, claystone bedrock encountered in the exposed subgrade, should be removed from the subgrade to a maximum depth of 3 feet, processed to less than 3 inches in size, moisture conditioned and replaced as an engineered fill.
Earthwork & Aggregates	Terracon will obtain samples for laboratory tests, perform in-place field density testing and perform periodic or full-time observations for reconditioning, underground utility trench backfill, flatwork subgrade, aggregate base course, and pavement subgrade preparation.
Concrete	<p>During concrete placements, observation, sampling and testing will be performed by Terracon for the concrete used for construction. The concrete will be sampled and tested for slump, air content, unit weight, and temperature at the time of placement. Cylinders will be made and initially cured on site. A technician will return to the site within 2 days to bring the cylinders to our laboratory for final curing and compressive strength testing. Testing will be performed in general accordance with project plans and specifications.</p> <ul style="list-style-type: none"> ■ Cast 1 set of 6 (4-inch by 8-inch) cylinders for each 50 cubic yards or fraction thereof
Asphalt Concrete Pavement	Relative field density-compaction testing by nuclear methods will be performed during asphalt concrete paving operations. The density-compaction of the asphalt concrete will be evaluated utilizing information from the paving contractor’s asphalt mix design. Asphalt samples will be obtained during asphalt paving and tested in accordance with the project specifications and CDOT requirements.

Proposal for Materials Testing Services

120th Avenue Corridor Improvements ■ Northglenn/Thornton, Colorado
September 21, 2022 ■ Terracon Proposal No. P25221241



Item	Description
Project Management	<p>A project manager will be assigned to the project to review the daily activity and assist in scheduling the work. Field and laboratory tests will be reviewed prior to final submittal. The project manager will be responsible for the project budget, communicating with the contractor regarding schedule, deviations, and documenting the resolution of outstanding deviations.</p> <p>To help create a good working relationship with the contractor and for the contractor to better understand our scope of work for the project, we request that Terracon be invited to preconstruction meetings prior to each phase of construction.</p>

Additional services available

Upon request, we are available to perform the following services, for an additional fee.

Item	Description
Asphalt Concrete Pavement	<p>At the request of the City, additional asphalt samples can be performed in accordance with the following rates.</p> <ul style="list-style-type: none"> ■ Micro Deval - \$315/each ■ Fractured Faces and Void Content in Aggregate - \$100/each ■ Longitudinal Joint Density Testing - \$50/each ■ Hveem Stability - \$345/each ■ Air Voids/Voids in Mineral Aggregate - \$225/set of 3

Scope Assumptions/Exclusions:

- We have assumed that when feasible, multiple tasks will be occurring concurrently and that our inspectors/technicians will provide multiple services in a single visit (such as soils and concrete in the same visit or soils and asphalt).
- We assume the asphalt will use gradation acceptance.
- We have excluded any coring of the completed pavements. If required, we are available to perform this service, for an additional fee.
- We have excluded any concrete testing for thrust blocks. If this is required, we are available to perform testing of concrete, for an additional fee.

Commitment to Timely Report Turnaround:

We understand the importance of report turnaround to our clients and we are committed to delivering test results on a timely basis as well as the following reporting standards:

- Failing tests or non-conformance items will be communicated to the designated parties prior to leaving the site and handwritten draft reports are available at the end of each day.
- Final reports with non-conformances (Deviation Reports) will be provided within 24 hours of testing.
- Final reports without non-conformances will be provided within five business days.
- Final laboratory test reports will be provided within two days of test completion.

Proposal for Materials Testing Services

120th Avenue Corridor Improvements ■ Northglenn/Thornton, Colorado
September 21, 2022 ■ Terracon Proposal No. P25221241



Terracon Field Representative:

In addition to the above services, our field personnel will provide the following services during their visit:

- Check in with the project general superintendent upon arrival on-site.
- Confirm that current approved construction documents are available during our visit.
- Notify the general contractor of our field observations and test results prior to leaving the site.
- Submit a written draft report to the Terracon project manager for review.
- Our field personnel have the right to decline work if they believe the conditions are not safe.

Scheduling of Services:

We understand that the client may not be involved with scheduling our services; this is typically the responsibility of the general contractor. We request that the following information be passed on to whom will be responsible for scheduling our services.

- Scheduling testing services must be requested no later than 3:00 pm on the business day preceding the work.
- Scheduling is performed through our dispatcher by calling (303) 572-7000; or emailing denver-scheduling@terracon.com.
- Cancellation of services should be done prior to a Terracon representative mobilizing to the project. Failure to do so will result in a cancellation fee of the minimum personnel hourly charge, report fee, and vehicle charge.
- Terracon will not be responsible for tests that are not performed due to a failure to schedule our services on the project.
- Testing and observations will only determine compliance with project specifications at the test locations, at the time our services are performed.

COVID-19 Safety Measures:

Terracon retains the right to stop work without penalty at any time we believe it is in the best interests of our employees or subcontractors to do so to reduce the risk of exposure to the coronavirus. Our Client agrees they will respond quickly to all requests for information made by us related to our pre-task planning and risk assessment processes. Our Client acknowledges their responsibility for notifying us of any circumstances that present a risk of exposure to the coronavirus or individuals who have tested positive for COVID-19 or are self-quarantining due to exhibiting symptoms associated with the coronavirus.

3.0 Compensation

Based on the project information available for our review, our time and materials estimated budget to perform the proposed scope of services is \$215,361.30. A summary of our unit rates, estimated quantities, and the resulting costs is included on the attached Fee Estimate. Fees for services provided will be based on the unit rates shown in that exhibit. Please note that this is only a budget estimate and not a not-to-exceed price. Any additional out of scope items will be performed in accordance with our current fee schedule.

A Project Management fee will be billed at a minimum of 10% of each invoice amount or one-hour Project Management time, whichever is greater. This fee will cover project setup, internal/client kick off meetings, scheduling activities, review of reports, phone calls, invoice review and onsite visits. Additional Project Management / Project Engineering (\$150 per hour) time may be billed for, but not limited to, preconstruction meetings, contractor or client-initiated meetings, and consulting.

Proposal for Materials Testing Services

120th Avenue Corridor Improvements ■ Northglenn/Thornton, Colorado
September 21, 2022 ■ Terracon Proposal No. P25221241



Many factors, including those out of our control, such as weather and the contractor’s schedule including overtime and weekend work, and the need for re-testing will dictate the final fee for our services. We will not exceed our budget without first notifying you, and providing a summary of work performed to date and remaining work. We will track the costs of re-testing, stand-by time, and cancellations separately.

For purposes of our proposal, overtime is defined as all hours in excess of 8 hours per day and all hours worked on Saturdays & Sundays, Night hours (between 9:00 PM and 5:00 AM), and Terracon recognized Holidays (New Year’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day After Thanksgiving & Christmas Day). Overtime rates will be 1.5 times the hourly rate quoted. All charges are portal to portal. Minimum of 3 hours will be charged for each site visit with the exception of sample pick-ups.

4.0 Assumptions

- We have assumed that contractors on the site will work a single shift, typical schedule of 5 days per week;
- An out of scope charge at the applicable unit rate will be applied for all stand-by time and/or time spent on activities which are not cancelled with prior notice;
- Staff time, laboratory testing and extra trips required for re-testing and re-inspections will be denoted on the monthly invoices as such and be considered out-of-scope or additional items not included in the above estimated budget.

5.0 Authorization

This proposal may be accepted by issuing a Professional Services Agreement. Please be aware that we will be unable to distribute field and laboratory reports until a signed contract is received. This proposal is valid only if authorized within 45 days from the proposal date.

We appreciate the opportunity to provide this proposal and look forward to working with you. Please give us a call if you have any questions or comments regarding this proposal.

Sincerely,
Terracon Consultants, Inc.

Jessica A. Haynes
Marketing Specialist

F. Stewart Ward, P.E.
Senior Engineer

Travis P. Iverson, P.E.
Senior Engineer / APR

Copies to: Addressee (via e-mail)

Enclosures: Fee Estimate



FEE ESTIMATE

Construction Materials Services

120th Avenue Corridor Improvements (CDOT Project No. AQC M945-004), Northglenn, Colorado

Terracon Proposal No. P25221241

Service	Rate	Quantity	Units	Trips/Events	Total Quantity	Cost
Earthwork / Field Density Testing / Aggregates						
Engineering Technician	\$68.00	3	hours/trip	171	513	\$34,884.00
Engineering Technician (with Concrete Testing)	\$68.00	2	hours/trip	129	258	\$17,544.00
Standard Proctor Test	\$200.00	4	each		4	\$800.00
Modified Proctor Test	\$225.00	1	each		1	\$225.00
Sieve Analysis	\$75.00	5	each		5	\$375.00
Atterberg Limits	\$90.00	5	each		5	\$450.00
LA Abrasion	\$260.00	1	each		1	\$260.00
R-Value	\$360.00	1	each		1	\$360.00
Vehicle Charge	\$35.00	171	round trip		171	\$5,985.00
Report Fee	\$40.00	307	each		307	\$12,280.00
Subtotal						\$73,163.00
Concrete Testing						
Engineering Technician	\$68.00	3	hours/trip	129	387	\$26,316.00
Engineering Technician (with Soil Testing)	\$68.00	2	hours/trip	129	258	\$17,544.00
Engineering Technician - cylinder pick-ups	\$68.00	1.5	hours/trip	100	150	\$10,200.00
Concrete Cylinders - Compressive Strength	\$20.00	6	cylinders/set	253	1518	\$30,360.00
Concrete Cylinders - (high-early at bus pads)	\$20.00	7	cylinders/set	5	35	\$700.00
Vehicle Charge	\$35.00	358	round trip		358	\$12,530.00
Report Fee	\$40.00	258	each		258	\$10,320.00
Subtotal						\$107,970.00
Asphalt Testing						
Engineering Technician	\$68.00	4	hours/trip	20	80	\$5,440.00
Asphalt Content (Ignition)	\$65.00	20	each		20	\$1,300.00
Asphalt Gradation	\$50.00	20	each		20	\$1,000.00
Maximum Theoretical Density	\$115.00	20	each		20	\$2,300.00
Vehicle Charge	\$35.00	20	round trip		20	\$700.00
Report Fee	\$40.00	40	each		40	\$1,600.00
Subtotal						\$12,340.00
Project Management / Engineering						
Project Manager - Preconstruction Meeting/Site Visits	\$150.00	12	hours		12	\$1,800.00
Project Management (minimum of 10% of each invoice)	\$19,578.30	1			1	\$19,578.30
Letter of Compliance	\$300.00	1	each		1	\$300.00
Vehicle Charge (pre-con meetings/site visits)	\$35.00	6	round trip		6	\$210.00
Subtotal						\$21,888.30
TOTAL						\$ 215,361.30

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