

**RESOLUTION NO. 2020-24**

Introduced by Christine Crawford

**A RESOLUTION AUTHORIZING THE INTERIM CITY MANAGER TO ACCEPT THE PROPOSAL AND ENTER INTO AN AGREEMENT WITH CTL ENGINEERING, INC., FOR ENGINEERING INSPECTION SERVICES RELATED TO THE US 6 PHASE I PAVING PROJECT (ERI-6-17.49) IN AN AMOUNT NOT TO EXCEED TWO HUNDRED EIGHTEEN THOUSAND NINE HUNDRED TWELVE AND 00/100 DOLLARS (\$218,912.00)**

**BE IT RESOLVED BY THE COUNCIL OF THE CITY OF HURON, OHIO:**

**SECTION 1.** That the City having advertised Requests for Proposals relative to Letters of Interest for engineering inspection services for the US 6 Phase I Paving Project (ERI-6-17.49), the Interim City Manager shall be, and he hereby is, authorized and directed to accept the proposal and enter into an agreement with the said CTL Engineering, Inc., for engineering inspection services on the US 6 Phase I Paving Project, in an amount not to exceed Two Hundred Eighteen thousand Nine Hundred Twelve and 00/100 Dollars (\$218,912.00), which agreement shall be in substantially in the form of Exhibit "A" attached hereto and made a part hereof.


**SECTION 2.** That this Council hereby finds and determines that all formal actions relative to the adoption of this Resolution were taken in an open meeting of this Council and that all deliberations of this Council and of its Committees, if any, which resulted in formal action, were taken in meetings open to the public in full compliance with applicable legal requirements, including O.R.C. §121.22.

**SECTION 3.** That this Resolution shall be in full force and effect from and immediately after its adoption.



Sam Artino, Mayor

ATTEST:

  
Clerk of Council

ADOPTED:

31 MAR 2020



REPORT OF THE COMMISSIONER  
OF THE LAND OFFICE

THE LAND OFFICE HAS THE HONOR TO ACKNOWLEDGE THE RECEIPT OF THE REPORT OF THE COMMISSIONER OF THE LAND OFFICE, AND TO INFORM YOU THAT THE SAME HAS BEEN FORWARDED TO THE SECRETARY OF THE INTERIOR, FOR HIS CONSIDERATION.

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Very respectfully,  
Your obedient servant,  
[Signature]



AGREEMENT FOR ENGINEERING AND TESTING SERVICES

THIS AGREEMENT ("Agreement") is by and between CTL Engineering, Inc. ("CTL"), and

**City of Huron**  
**417 Main Street**  
**Huron, OH - 44839**  
**USA**

("CLIENT"), who agree as follows:

PROJECT DESCRIPTION. CLIENT desires to engage CTL to provide Engineering and related technical services and other services in connection with CLIENT'S project ("PROJECT"). The project is described as follows:

Project Name    **ERI-US6-17.49**  
Project No.      **20I02I0022ICLEI-**  
Proposal No.    **20I02I0013ICLEIPPL**

SCOPE OF SERVICES. CTL shall provide for CLIENT, Engineering and related technical services for the PROJECT in accordance with the accompanying proposal made a part hereof and entitled "Proposal".

In consideration of the foregoing, CTL and CLIENT agree as follows:

If to CTL,

**CTL Engineering, Inc.**  
**Attn: Mr. C. K. Satyapriya**  
**3085 Interstate Parkway**  
**Brunswick, Ohio - 44212**  
**USA**

If to CLIENT,

**City of Huron**  
**Attn : Green Doug**  
**417 Main Street**  
**Huron, OH - 44839**  
**USA**

Authorization by the Client to proceed, whether oral or written, constitutes acceptance of the terms and conditions of this Agreement, without modification, addition or deletion. In the event Client's acknowledgement, invoice or other forms state terms additional to or different from those set forth herein, this shall be deemed a notification of objection to such additional and/or different terms and a rejection thereof. No waiver or modification of the terms and conditions set forth herein shall be binding upon CTL Engineering unless made in writing and signed by CTL Engineering's authorized representative.

**CTL Engineering, Inc.**

(CTL)

Signature

Gregory R. Kronstain, Reg. Mgr. Transp. Services

Print Name & Title

3/24/2020

Date

**City of Huron**

(CLIENT)

Signature

Mike Spafford, Interim City Manager

Print Name & Title

4/1/2020

Date

## Article 1. CLIENT'S RESPONSIBILITIES

1.1 Client shall provide to CTL such information as is available to CLIENT and CLIENT's consultants and contractors, and CTL shall be entitled to rely upon the accuracy and completeness thereof.

1.2 CLIENT agrees, to the fullest extent permitted by law, to indemnify, protect, defend, save and to hold CTL and CTL's sub-consultants harmless from and against all liability, damage, loss, claims demand, actions and expenses, (including attorney's fees and all other cost of defense) that arise out of, or are claimed to arise out of or be connected to the performance of the Client's Responsibilities under this Agreement (including inaccuracies or incompleteness with regard to information provided by or through CLIENT). The promise of indemnification in this Section shall not be construed to indemnify CTL for any loss or damage attributable to the negligent acts or omissions of CTL.

1.3 Entry. CLIENT shall ensure the right to entry onto PROJECT site for CTL.

## Article 2. GENERAL CONDITIONS

2.1 CTL shall not be responsible for acts or omissions of any party or parties involved in the design or construction of the PROJECT when not retained directly by CTL.

2.2 Project Documents. When CTL does not prepare the Project Documents, CLIENT waives all claims against CTL arising from or in any way connected with errors, omissions, conflicts, or ambiguities.

2.3 CTL will not be responsible for and will not have control or charge of specific means, methods, techniques, sequences, or procedures of construction or other field activities selected by CLIENT or its contractors, or safety precautions and programs incident thereto.

2.4 CTL Personnel. If CTL personnel are required to participate in claims involving the PROJECT arising from the work of others, CLIENT agrees to compensate CTL personnel for the time expended at CTL personnel's standard fee schedule. Upon request, CLIENT agrees to advance to CTL personnel a retainer for the estimated expected services.

2.5 Samples and Records. Unless stated otherwise in the accompanying Proposal, CTL will retain samples for a period of 30 days following submission of the report, unless requested otherwise, after which samples will be discarded. CTL will retain all pertinent records relating to the services performed for a period of one (1) year following submission of the report, during which period the records will be made available to CLIENT.

2.6 Various Investigations. If the scope of CTL's services includes a particular investigation of specific areas of buildings or samples of materials, CLIENT acknowledges that the investigation conducted and resulting report is not intended to represent an inspection of the entire building or of the materials sampled. There is and can be no guarantee that conditions at the point of testing will be identical to that of the entire testing site. Accordingly, CLIENT understands that conditions discovered during the course of the PROJECT, may result in variance to the original report and cause delay or increased cost.

2.7 CTL shall retain the copyright on all reports, plans, specifications, field data, notes and other documents, including all documents on electronic media, prepared by CTL as instruments of service. CTL will distribute reports only to those persons, organizations or agencies specifically designated in writing by CLIENT or its authorized representative or as required by law.

## Article 3. INSURANCE & BONDS

3.1 CTL maintains the following insurance for which it will provide an insurance certificate upon request: Worker's Compensation

Insurance; Professional Liability Insurance; General Liability Insurance; Auto Insurance.

3.2 Additional Insurance/Bonds. If CTL is required to obtain additional insurance to what it normally maintains or payment/performance bonds, the cost of such additional insurance/bonds shall be a reimbursable additional expense.

## Article 4. LIMITATIONS ON LIABILITY / STANDARD OF CARE

4.1 To the maximum extent permitted by law, Client agrees to limit CTL's liability for CLIENT's damages, in contract, tort or otherwise, including consequential, exemplary, special, incidental or punitive damages and lost profits, to the sum of \$10,000 or CTL's fee, as provided in the Proposal, whichever is greater. This limitation shall apply to all causes of action in the aggregate.

4.2 CTL will exercise that degree of care and skill ordinarily exercised by engineering/testing firms providing similar services. Notwithstanding anything to the contrary CTL makes no other warranties, express or implied. CTL will provide only those services that, in the opinion of CTL, lie within the technical professional areas of skill of CTL and which CTL is adequately staffed and equipped to perform under the general direction of a Registered Professional Engineer.

## Article 5. PAYMENT

5.1 CLIENT will pay CTL for services and expenses in accordance with the Unit Rates stated in the Proposal and if applicable, in accordance with CTL's Standard Fee Schedule. CTL's invoices will be presented at the completion of its work or monthly and shall be paid in full within thirty (30) days of receipt by CLIENT or its authorized representative.

5.2 Invoices that remain unpaid beyond thirty (30) days will be considered delinquent and shall be subject to a service charge at a rate of 1.0% per month of the unpaid balance amount. In the event that any invoice remains delinquent for 90 days or more, CTL reserves the right to suspend or terminate this Agreement and pursue any remedies available by law. In the event of suspension/termination CTL shall have no liability to client for delay or damages caused by such suspension or termination. If collection proceedings are initiated against CLIENT for any delinquent amount, CLIENT agrees to pay CTL's attorney's fees and collection costs.

5.3 CTL shall be paid in full for all services under this Agreement, including any overruns, or unforeseen services exceeding original contract requirements. Payment for such services shall be made irrespective of any claim by CLIENT or others for compensation as a result of additional work completed. Such claims shall not delay payment of fees for services performed by CTL.

## Article 6. NON-SOLICITATION AND LIQUIDATED DAMAGES

From the date of commencement of services until one year following the completion of services, CLIENT agrees that it shall not solicit or offer or provide employment to any CTL employee performing the services under this Agreement without the express written permission of an authorized CTL representative. CLIENT agrees that any such solicitation, offer or employment of any CTL employee who performed services under this Agreement would cause great or irreparable harm to CTL and that CTL would be damaged in an amount difficult to ascertain, but which would likely exceed double the annual compensation of the CTL employee (or former employee as the case may be) representing the cost of training a new employee. Accordingly, CLIENT agrees to pay CTL as liquidated damages an amount equal to double the employee's (or former employee's) annual compensation including bonus.

## Article 7. TERMINATION

This Agreement may be terminated by either party upon receipt of written notice or by mutual written agreement. Termination shall be effective upon receipt of written notice by the non-terminating party, or immediately upon execution of a mutual written agreement. If this Agreement is terminated by either party, CTL shall be paid in full for all services, including overhead and profit, performed through the termination date and those expenses caused by the termination., CLIENT shall be provided with a complete report of the results of tests and analysis conducted prior to termination.

## Article 8. MISCELLANEOUS

8.1 Integration and Binding Effect. This Agreement supersedes all prior understandings and agreements between the parties and binds the parties hereto, and their assigns and legal representatives of any type whatsoever, and shall not be modified unless done so in writing and signed by both parties.

8.2 Governing Law. This Agreement shall be interpreted, construed by and in accordance with the laws of the State of Ohio. In the event of litigation between the parties arising under or in connection with this Agreement, such litigation shall be brought in the Franklin County Court of Common Pleas or in the United States District Court for the Southern District of Ohio.

8.3 Severability. The invalidity or unenforceability of any term or provision of this Agreement shall not impair or affect the provisions hereof, which shall remain in full force and effect.

8.4 Mediation. In the effort to resolve any conflicts that arise CLIENT and CTL agree that as a condition precedent to litigation as provided in Section 8.2, all disputes between them arising out of or relating to the Agreement shall be submitted to non-binding mediation unless the parties mutually agree in writing otherwise. CLIENT and CTL further agree to include a similar mediation provision in all agreements with independent contractors and consultants retained for the PROJECT and to require all independent contractors and consultants also to include a similar mediation provision in all agreements with sub-contractors, sub-consultants, suppliers or fabricators so retained, thereby providing for mediation as the primary method for dispute resolution between the parties for those agreements.

8.5 Assignment. Neither CLIENT nor CTL may delegate, assign, sublet or transfer his duties or interest in this Agreement without the written consent of the other party.

8.6 Waiver. The waiver by either party of any breach by the other party of this Agreement, in any one or more instances, shall in no way be construed as a waiver of any subsequent breach (whether or not of a similar nature) of this Agreement.

8.7 Prevailing Wages. The Parties acknowledge that this Agreement is for professional services and is not subject to prevailing wage laws.

8.8 Equal Opportunity. CTL will comply with all applicable federal, state, and local government laws concerning discrimination. CTL does not discriminate against any party in violation of applicable laws for reasons including but not limited to: age, ancestry, citizenship, ethnicity, disability, race, religion, sex, sexual orientation, and veteran status.

8.9 Notices. Any notice required under this Agreement will be in writing, addressed to the appropriate party and given personally, or by registered or certified mail, or by commercial courier service. All notices shall be effective upon the date of receipt and shall be mailed to the addresses below.

8.10 Relationship. Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the CLIENT or CTL. CTL's services under this Agreement are being performed solely for the CLIENT's benefit, and no other party or entity shall have any claim against CTL because of this Agreement or the performance or nonperformance of services hereunder. Other than to CLIENT, CTL disclaims any duty to any other party or entity with respect to the materials or reports produced or services provided by CTL under this Agreement and no other party or entity may rely upon such without advance and express written permission of CTL and without such party or entity agreeing to be bound by the limitations, qualifications, terms, conditions, and indemnities set forth in this Agreement.





March 18, 2020

Doug Green  
City of Huron Engineer's Office  
417 Main St.  
Huron, OH 44839

Attention: Mr. Doug Green

Reference: Letter of Interest for Construction Inspection and Construction Administration Services  
ERI-6-17.49, PID 100421  
CTL Engineering Proposal Number 20020013CLE

Mr. Green:

CTL Engineering, Inc. (CTL) is pleased to submit this proposal for providing construction administration, inspection, and field testing services for the ERI-6-17.49 project. This proposal outlines our understanding of the project, CTL's scope of work and fees.

#### **GENERAL PROJECT DESCRIPTION**

The services include Construction Inspection and Construction Administration services for the resurfacing of U.S.6 from Williams Street to the eastern city limits. Included in this project is curbing, decorative crosswalks, sidewalks, upgraded ADA facilities, upgraded signal at Main Street, and remove signal at Berlin Road.

#### **SCOPE OF SERVICES**

CTL Engineering will provide construction administration and construction inspection for the duration of the project. We will provide on-site services on a full-time or part-time basis, depending on the scope and schedule of the work item, including project administration and project inspection of all work activities. We anticipate that our services will include the following:

1. Developing and maintaining project records using Appia Construction Management Software to administer the project.
2. Providing direction to the contractor on "as directed items".
3. Preparing and processing change orders.
4. Performing quality control inspections and monitoring compliance with contract requirements.
5. Monitoring and Documentation of Materials Management Process
6. Performing measurements and preparing quantity determinations.
7. Preparing daily inspection reports and providing support documentation for accurate pay estimate preparation.
8. Preparing partial and final estimates.
9. Monitoring EEO and DBE compliance.
10. Performing project close out reports.

March 18, 2020

## **FEE PROPOSAL**

CTL proposes to provide qualified technical personnel to perform the necessary tasks in accordance with the project specifications. CTL will invoice using audited ODOT overhead and cost-of-money rates and approved net fee with actual pay rates for personnel services, ODOT approved rates for equipment, and CTL standard rates for laboratory testing services that may be required. Attached please find a schedule of unit rates and an hourly rate calculations form for personnel pay rates. All invoicing will be done monthly and will be based on the actual quantity of work performed in accordance with the rates quoted on the attached fee proposal.

Also attached is an estimated cost proposal totaling \$ 218,912 for Construction Administration, Construction Inspection and testing services. A detailed project schedule has not been developed for this project to date by the contractor. However, the following assumptions are made for this cost proposal:

- 1) Working 5 days/week @ 8 hours/day (typical) with an estimated 1 hour/day overtime
- 2) Project bid in Feb 2020
- 3) Tentative start date June 1, 2020 for construction
- 4) Estimated duration of work, 22 weeks.

## **CLOSING**

We sincerely appreciate the opportunity to submit this cost proposal and look forward to working with you on this project. If you have any questions or need further information, please feel free to contact me at your earliest convenience.

Respectfully submitted,

CTL ENGINEERING, INC.



David Breitfeller, P.E.  
Vice President

Attachments: Construction Services Unit Rates  
Hourly Rate Calculations  
Base Cost Estimate



# Hourly Rate Calculations

Agreement No.:

C-R-S:

Firm Name:

ERI-US6-17.49
CTL Engineering, Inc.

Company Overhead: 163.35%

Average Overhead: 156.68%

Cost of Money: 2.70%

Net Fee %: 10%

The company records OT premium as: Direct Labor

Does the company anticipate billing overtime? Yes

Classification	1.5X OT?	Pay Rate Range	Overhead	C.O.M	Net Fee	Computed Straight Time/OT Exempt Billing Rate <sup>1</sup>	Computed Overtime Billing Rate <sup>1</sup>
Project Inspector	Yes	\$30.00	\$49.01	\$0.81	\$7.70	\$88	\$131
Project Inspector	Yes	\$35.00	\$57.17	\$0.95	\$8.98	\$102	\$153
Traffic Signal and Lighting Inspector	Yes	\$35.00	\$57.17	\$0.95	\$8.98	\$102	\$153
Asphalt Monitor	Yes	\$22.00	\$35.94	\$0.59	\$5.65	\$64	\$96
Documentation Clerk	No	\$28.50	\$46.55	\$0.77	\$7.32	\$83	N/A
Construction Engineer Level 1	No	\$38.50	\$62.89	\$1.04	\$9.88	\$112	N/A
Construction Engineer Level 2	No	\$65.00	\$106.18	\$1.76	\$16.68	\$190	N/A
Project Manager	No	\$65.00	\$106.18	\$1.76	\$16.68	\$190	N/A

<sup>1</sup> **Note:** Rounded the nearest dollar.



## CONSTRUCTION SERVICES UNIT RATES

### PERSONNEL

Project Inspector (1015).....per Hourly Rate Calculations  
Administrative/Secretarial (Documentation Clerk) (1006) .....per Hourly Rate Calculations  
Construction Engineer Level 1 (1002) ..... per Hourly Rate Calculations  
Project Manager (1003) ..... per Hourly Rate Calculations

*Note: Fees for part-time or intermittent services will apply portal-to-portal.*

### EQUIPMENT

Coring Gun, Generator (2CORE) .....\$220.00/day  
Nuclear Densometer for Soil Moisture-Density or Bituminous Density Testing  
ASTM D2922, ASTM D2950 (2NUC) .....\$40.00/day  
Concrete Test Kit (2CON) .....\$15.00/day  
Vehicle – Automobile or Truck (2ODOTVEH) .....\$49.00/day

### LABORATORY TESTS

#### CONCRETE:

Standard Compression Strength Cylinder (Includes Mold), ASTM C 39 (6C003)..... \$20.00/each  
Concrete Beam, Modulus of Rupture (ASTM C-293, C-78) (6C005) ..... \$60.00/each

#### ASPHALT:

Bulk Specific Gravity and Density ASTM D-2726 (6B010): ..... \$50.00/each  
Extraction for AC Content Method A or Method B, ASTM D-2172 (6B006) or (6B007):..... \$200.00/each

*Note: Fees for laboratory tests not listed above will be quoted upon request.*

### MISCELLANEOUS EXPENSES

#### Overtime

Saturday and excess of 8 hours/day .....per Hourly Rate Calculations  
Sunday and Holidays .....per Hourly Rate Calculations



### **GENERAL NOTES AND CONDITIONS**

1. These prices are applicable for the duration of the project.
2. The CTL operations are organized into several different departments. Fee schedules for any of the other department services are available by contacting our marketing department.
3. Testing services are typically performed in the order in which samples are received in the laboratory. Routine turnaround time on analytical samples is one to two weeks. A surcharge of 50 percent for overtime rates may be applied for rush work.
4. Upon completion of testing, samples remaining after testing are typically kept one month and then discarded. Any extension of this time should be requested in writing. An invoice for storage charges will be submitted on an annual basis. Samples containing toxic or hazardous materials may be returned to the client for disposal. If CTL is required to perform disposal, our client will be billed for disposal costs.
5. Clients are expected to inform CTL of any known or suspected hazards in the samples submitted. Samples containing hazardous levels of radioactivity will not be accepted by the laboratory.
6. Samples submitted for testing should include the sample source and type, the time of collection if applicable, a purchase order, chain of custody form and a list of the analysis to be completed by CTL. Chain of custody forms are available from CTL laboratory personnel if needed. Label each sample clearly and completely.
7. Reports and copies of reports will be sent only to the client unless the client formally requests us otherwise in writing. CTL maintains strict confidentiality with our clients. All data, reports, proprietary information and records associated with clients are maintained in strict confidence.
8. CTL states that analytical work shall be performed in accordance with good laboratory practices and professional standards. No other warranty is expressed or implied.
9. Payment terms are Net 30 Days from date of invoice, with a 1.5% per month service charge applied to past due balances.



## COST ESTIMATE

### Phase 1 - US6

42 days	project inspector	8 hrs/d	\$95.00 \$/hr	\$31,920.00
42 days	overtime	1 hrs/d	\$142.00 \$/hr	\$5,964.00
42 days	vehicle/truck	1 truck	\$49.00 \$/d	\$2,058.00
10 days	project inspector/concrete tech	8 hrs/d	\$95.00 \$/hr	\$7,600.00
10 days	overtime	1 hrs/d	\$142.00 \$/hr	\$1,420.00
10 days	vehicle/truck	1 truck	\$49.00 \$/d	\$490.00
10 days	Concrete Test Kit	1 kit	\$ 15.00 \$/d	\$ 150.00
5 days	traffic signal and lighting inspector	8 hrs/d	\$102.00 \$/hr	\$4,080.00
5 days	vehicle/truck	1 truck	\$49.00 \$/d	\$245.00
5 days	Asphalt Monitor	8 hrs/d	\$64.00 \$/d	\$2,560.00
5 days	Vehicle/Truck	1 vehicle	\$49.00 \$/d	\$245.00
10 weeks	documentation clerk	10 hrs/wk	\$83.00 \$/hr	\$8,300.00
45 days	Project Engineer 1	2 hrs/d	\$112.00 \$/hr	\$10,080.00
25 days	Vehicle/Truck	1 vehicle	\$49.00 \$/d	\$1,225.00
10 weeks	Project manager/constr engineer 2	10 hrs/w	\$190.00 \$/hr	\$19,000.00
10 days	Vehicle/Truck	1 vehicle	\$49.00 \$/d	\$490.00
Lab Testing				
	Extraction For AC Content and Gradatio	5 each	\$200.00 \$/ea	\$1,000.00
	Bulk Specific Gravity and Density	40 each	\$65.00 \$/ea	\$2,600.00
	Concrete Beam Modulus of Rupture	15 each	\$ 60.00 \$/ea	\$ 900.00
	Standard Compression Stength Cylinder	24 each	\$ 20.00 \$/ea	\$ 480.00

**subtotal** **\$100,807.00**

### Phases 2 - US6

42 days	project inspector	8 hrs/d	\$95.00 \$/hr	\$31,920.00
42 days	overtime	1 hrs/d	\$142.00 \$/hr	\$5,964.00
42 days	vehicle/truck	1 truck	\$49.00 \$/d	\$2,058.00
10 days	project inspector/concrete tech	8 hrs/d	\$95.00 \$/hr	\$7,600.00
10 days	overtime	1 hrs/d	\$142.00 \$/hr	\$1,420.00
10 days	vehicle/truck	1 truck	\$49.00 \$/d	\$490.00
10 days	Concrete Test Kit	1 kit	\$ 15.00 \$/d	\$ 150.00
5 days	traffic signal and lighting inspector	8 hrs/d	\$102.00 \$/hr	\$4,080.00
5 days	vehicle/truck	1 truck	\$49.00 \$/d	\$245.00
5 days	Asphalt Monitor	8 hrs/d	\$64.00 \$/d	\$2,560.00
5 days	Vehicle/Truck	1 vehicle	\$49.00 \$/d	\$245.00
10 weeks	documentation clerk	10 hrs/wk	\$83.00 \$/hr	\$8,300.00
45 days	Project Engineer 1	2 hrs/d	\$112.00 \$/hr	\$10,080.00
25 days	Vehicle/Truck	1 vehicle	\$49.00 \$/d	\$1,225.00
2 weeks	Project manager/constr engineer 2	10 hrs/w	\$190.00 \$/hr	\$3,800.00
8 days	Vehicle/Truck	1 vehicle	\$49.00 \$/d	\$392.00
5 days	Coring Equipment	1 coring	\$220.00 \$d	\$1,100.00
5 days	Nuclear Gauge	1 gauge	\$40.00 \$/d	\$200.00

**Lab Testing**

Extraction For AC Content	4 each	\$200.00 \$/ea	\$800.00
Bulk Specific Gravity and Density	40 each	\$65.00 \$/ea	\$2,600.00
Concrete Beam Modulus of Rupture	15 each	\$ 60.00 \$/ea	\$ 900.00
Standard Compression Stength Cylinder	24 each	\$ 20.00 \$/ea	\$ 480.00

**subtotal \$86,609.00**

**\*\*Phases 3 and 4 completed concurrently with phases 1 and 2.**

**Phase 4- US6**

8 days	project inspector	8 hrs/d	\$95.00 \$/hr	\$6,080.00
8 days	overtime	1 hrs/d	\$142.00 \$/hr	\$1,136.00
8 days	vehicle/truck	1 truck	\$49.00 \$/d	\$392.00
2 weeks	documentation clerk	10 hrs/wk	\$83.00 \$/hr	\$1,660.00
10 days	Project Engineer 1	2 hrs/d	\$112.00 \$/hr	\$2,240.00
10 days	Vehicle/Truck	1 vehicle	\$49.00 \$/d	\$490.00
2 weeks	Project manager/constr engineer 2	10 hrs/w	\$190.00 \$/hr	\$3,800.00
2 days	Vehicle/Truck	1 vehicle	\$49.00 \$/d	\$98.00

**subtotal \$15,896.00**

**Project closeout-**

15 days	documentation clerk	8 hrs/d	\$83.00 \$/hr	\$9,960.00
15 days	Project Engineer 1	2 hrs/d	\$112.00 \$/hr	\$3,360.00
3 weeks	project manager/constr engineer 2	4 hrs/w	\$190.00 \$/hr	\$2,280.00

**subtotal \$15,600.00**

**Estimated Total \$218,912.00**

**\*\*Phase 5 asphalt contained in phases 1 and 2**

**\*\*If Authorized, concrete sampling and testing for non-QC/QA items of work (regular bid items)**

**Concrete Testing**

30 days	project inspector/concrete tech	8 hrs/d	\$95.00 \$/hr	\$22,800.00
10 days	overtime	1 hrs/d	\$142.00 \$/hr	\$1,420.00
30 days	vehicle/truck	1 truck	\$49.00 \$/d	\$1,470.00
30 days	Concrete Test Kit	1 kit	\$ 15.00 \$/d	\$ 450.00

**Lab Testing**

Standard Compression Stength Cylinder	25 each	\$ 20.00 \$/ea	\$ 500.00
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**\*\*\* concrete testing total \$26,640.00**