PUBLIC WORKS AND UTILITIES MEMORANDUM #08-25

DATE:	October 9, 2008
TO:	Honorable Mayor Kathleen M. Novak and City Council Members
FROM:	David Allen, Acting City Manager / Director of Public Works and Utilities
SUBJECT:	CR-147 – Material Testing Services Contract for Bull Reservoir Outlet and Liner Emergency Repairs

RECOMMENDATION:

Attached to this memorandum is a Resolution which, if approved, would authorize the City Manager to execute the Professional Services Agreement between the City of Northglenn and Joseph A. Cesare and Associates, Inc to provide material testing services for an amount not to exceed \$15,000. Staff recommends approval of the proposed Resolution.

BACKGROUND:

On June 24, 2008 the asphalt liner for Bull Reservoir was severely damaged near the outlet works that discharges the treated effluent from the Waste Water Treatment Plant (WWTP). Staff installed a temporary piping to resume discharges from the new WWTP and to divert flows away from the damaged area so permanent repairs could be completed without affecting normal operations.

On September 25, 2008 Council approved CR-130, CR-131 and CR-142 which authorized the completion of the permanent repairs to the liner and outlet works. The final component of the required work is the independent material testing. Even though this agreement falls below the City Manager's spending authority staff felt it was important to bring this resolution to Council due to the total cost of this project and the need for an appropriation amendment to fund these repairs.

Cesare and Associates was originally selected to compete on the design services contract that was awarded to URS Corp by Council on July 10, 2008. Therefore, staff is recommending Cesare and Associates primarily because they can provide the best independent third party testing and oversight. In addition, Cesare and Associates has a proven track record with J&T Consulting who was selected to provide construction management services for this project.

BUDGET/TIME IMPLICATIONS:

There is no impact to the General Fund. Funds from the 2008 Capital Improvements Fund and supplemental funds from the Connect Charges would be used to fund the material testing services.

STAFF REFERENCE:

If Council Members have any comments or questions, they may contact David Allen at (303) 450-8783 or <u>dallen@northglenn.org</u>.

SPONSORED BY: MAYOR NOVAK

COUNCILMAN'S RESOLUTION

RESOLUTION NO.

No. <u>CR-147</u> Series of 2008

Series of 2008

A RESOLUTION APPROVING THE AGREEMENT FOR PROFESSIONAL SERVICES BETWEEN THE CITY OF NORTHGLENN AND JOSEPH A. CESARE AND ASSOCIATES, INC.

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

Section 1. The Agreement for Professional Services between the City of Northglenn and Joseph A. Cesare and Associates, Inc. in an amount not to exceed \$15,000, attached hereto as **Exhibit 1**, is hereby approved and the Mayor is authorized to execute same on behalf of the City.

DATED at Northglenn, Colorado, this _____ day of ______, 2008.

KATHLEEN M. NOVAK Mayor

ATTEST:

JOHANNA SMALL, CMC Acting 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 ______, 2008, by and between the City of Northglenn, State of Colorado (hereinafter referred to as the "City") and Joseph A. Cesare and Associates, Inc (hereinafter referred to as "Consultant").

<u>RECITALS</u>:

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. <u>SCOPE OF SERVICES</u>

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. <u>COMPENSATION</u>

A. In consideration for the completion of the services specified herein by Consultant, the City shall pay Consultant an amount not to exceed fifteen thousand dollars (\$15,000). 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 merit 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. ILLEGAL ALIENS

A. Certification. By entering into this Agreement, Consultant hereby certifies that, at the time of this certification, it does not knowingly employ or contract with an illegal alien who will perform work under the Agreement and that Consultant will participate in either the E-Verify Program administered by the United States Department of Homeland Security and Social Security Administration or the Department Program administered by the Colorado Department of Labor and Employment in order to confirm the employment eligibility of all employees who are newly hired for employment to perform work under the Agreement.

B. Prohibited Acts. Consultant shall not:

1. Knowingly employ or contract with an illegal alien to perform work under this Agreement; or

2. Enter into a contract with a subcontractor that fails to certify to Consultant that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this Agreement.

C. Verification.

1. Consultant has confirmed the employment eligibility of all employees who are newly hired for employment to perform work under this Agreement through participation in either the E-Verify Program or the Department Program.

2. Consultant shall not use the E-Verify Program or the Department Program procedures to undertake pre-employment screening of job applicants while this Agreement is being performed.

3. If Consultant obtains actual knowledge that a subcontractor performing work under this Agreement knowingly employs or contracts with an illegal alien who is performing work under the Agreement, Consultant shall:

a. Notify the subcontractor and the City within three (3) days that Consultant has actual knowledge that the subcontractor is employing or contracting with an illegal alien who is performing work under the Agreement; and

b. Terminate the subcontract with the subcontractor if within three (3) days of receiving the notice required pursuant to subparagraph (a) hereof, the subcontractor does not stop employing or contracting with the illegal alien who is performing work under the Agreement; except that Consultant shall not terminate the contract with the subcontractor if during such three (3) days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien who is performing work under the Agreement.

D. Duty to Comply with Investigations. Consultant shall comply with any reasonable request by the Colorado Department of Labor and Employment made in the course of an investigation conducted pursuant to C.R.S. § 8-17.5-102(5)(a) to ensure that Consultant is complying with the terms of this Agreement.

E. If Consultant does not currently employ any employees, Consultant shall sign the NO Employee Affidavit attached hereto.

F. If Consultant wishes to verify the lawful presence of newly hired employees who perform work under the Agreement via the Department Program, Consultant shall sign the Department Program Affidavit attached hereto.

IX. INDEMNIFICATION

Consultant agrees to indemnify and hold harmless the City, its officers, employees, and insurers, from and against all liability, claims, and demands, on account of injury, loss, or damage, including without limitation claims arising from bodily injury, personal injury, sickness, disease, death, property loss or damage, if such injury, loss, or damage is caused by the negligence, or other fault of Consultant, any subcontractor of Consultant, or any officer, employee, representative, or agent of Consultant or of any subcontractor of Consultant, or which arise out of any workmen's compensation claim of any employee of Consultant or of any employee of any subcontractor of Consultant. Consultant shall only be liable to the extent and amount of applicable insurance listed herein. Consultant agrees to investigate, handle, respond to, and to provide defense for and defend against any such liability, claims or demands at the sole expense of Consultant 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 officers, or its employees, the City shall reimburse Consultant for the portion of the judgment attributable to such act, omission, or other fault of the City, its officers, or employees.

X. <u>INSURANCE</u>

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, 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. Workmen's compensation insurance to cover obligations imposed by applicable laws for any employee engaged in the performance of work under this Agreement, and Employer's Liability insurance with minimum limits of five hundred thousand dollars (\$500,000) each accident, one million dollars (\$1,000,000) disease - policy limit, and one million dollars (\$1,000,000) disease - each employee. Evidence of qualified self-insured status may be substituted for the workmen's compensation requirements of this paragraph.

2. Commercial general liability insurance with minimum combined single limits of six hundred thousand (\$600,000) each occurrence and one million dollars (\$1,000,000) 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: Eve Craven 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 one hundred fifty thousand dollars (\$150,000) per person and six hundred thousand dollars (\$600,000) per occurrence) or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, Colo. Rev. Stat. \$24-10-101 et seq., Colo. Rev. Stat., as from time to time amended, or otherwise available to the City, its officers, or its employees.

XI. <u>NON-ASSIGNABILITY</u>

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.

XII. 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.

XIII. 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.

XIV. 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.

XV. 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.

XVI. <u>NO WAIVER</u>

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.

XVII. <u>ENTIRE AGREEMENT</u>

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.

XVIII. SUBJECT TO ANNUAL APPROPRIATION

Consistent with Article X, Section 20 of the Colorado Constitution, any financial obligations 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 and shall not constitute a mandatory charge, requirement or liability in any ensuing fiscal conflicting provisions in the Agreement establishing any monetary obligation beyond the current fiscal year.

XIX. 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: Joseph A. Cesare and Associates, Inc 7108 S. Alton Way, Building B Centennial, Colorado 80112

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

CITY OF NORTHGLENN, COLORADO

By:

ATTEST:

Kathleen M. Novak Mayor

City Clerk

APPROVED AS TO FORM:

Corey Y. Hoffmann, City Attorne	\subset	CONSULTANT:	~ PE
ATTEST:	By:	Print Name	Cesapo P.E.
By:		President	9 30 UB
Print Name	<u></u>	City's Contract #	
Title	Date	Name of City's Projec	xt Manager
CIP Revised 06/05/08			

September 30, 2008



Mr. Cory Peterson, E.I. Water and Environmental Services 11701 Community Center Drive P.O. Box 330061 Northglenn, Colorado 80233-8061

RE: Construction Materials Quality Assurance for the Effluent Spillway Structure at Bull Reservoir Dam in Northglenn, Adams County, Colorado Proposal No. D080912

Exhibit A

Dear Mr. Peterson,

Joseph A. Cesare & Associates, Inc. / Construction Technical Services (JAC/CTS) is pleased to provide you with this letter of intent and understanding for the referenced service. We understand our services will be called upon as needed by and for the Construction Manager for the City of Northglenn.

Based on the provided 90 percent draft plans and specifications, and communications between you and Mr. Joe Cesare, P.E. with our office, we anticipate that we will be contacted to provided quality assurance construction materials observation and testing during the "suggested sequence of work" items numbers 7, and 9 through 12, more specifically during the embankment, backfill and compaction of soil and aggregate materials, cast in place concrete and hydraulic asphalt concrete placements.

The aforementioned services will require us to be present periodically to perform on site field observations, sampling and testing, and some laboratory materials testing. However, we cannot provide a more detailed scope of work until we obtain the final material quantities, testing and observation frequencies and anticipated construction schedule. Upon receipt of the above mentioned information, we will be able to provide you and the City with a more detailed scope of services and cost estimate. We anticipate providing our services on a time and materials basis based on our current labor and laboratory fee schedules, copies of which are attached.

Based on our experience in providing services of a similar nature for projects of a similar type and size, we estimate that the fee for our services will be between one and three percent of the total construction cost. As a preliminary estimate, we assume the cost for construction of this project to be approximately \$680,000 and our services would be needed half time for half of the anticipated construction duration of 60 days. We estimate a fee of about \$15,000 or about 2.2% of the assumed cost of construction.

In the development of the proposal for this project, certain technical and financial information and/or documentation may be exchanged between parties. This information may be confidential and as such shall be restricted to disclosure between team members only, unless otherwise granted prior to in writing.

J. A. Cesare and Associates, Inc. / Construction Technical Services

Our commitment to safety, service, quality and continuous improvement will be an asset to the team and project. We are approved by the Colorado Department of Transportation (CDOT) for posting as a pre-qualified prime consultant providing services in Geotechnical & Soil Engineering, and Materials Testing & Inspection (QA/QC). In addition, we are an AASHTO R-18 and Corps of Engineers Accredited Laboratory.

We look forward to serving you and the project. Please do not hesitate to contact us with any questions or comments you may have.

Respectfully submitted,

JOSEPH A. CESARE AND ASSOCIATES, INC./ CONSTRUCTION TECHNICAL SERVICES

Joseph A. Cesare, P.E. Principal

Attachments: Fee Schedules AASHTO & Corps of Engineers Certification

AND ASSOCIATES, INC.	
SCHEDULE OF FEES ⁽¹⁾ Senior Principal	\$170/hour
Principal	\$140/hour
Quality Manager	\$112/hour
Senior Engineer/Scientist/Geologist	\$112/hour
Staff Engineer/Scientist/Geologist	\$95/hour
Project/Lab Manager	\$95/hour
Field Engineer	\$73/hour
Senior Technician/Construction Observer	\$65/hour
Field/Laboratory Technician	\$55/hour
Technical Support	\$48/hour
Computerized Drafting	\$84/hour
Coring Operations	\$90/hour
Expenses	At cost
Outside Services	At cost + 10%
Mileage	\$0.50/mile
Overtime ⁽²⁾	1.3 x rate
JAC/CTS Holiday Rate ⁽³⁾	2.0 x rate
Night Shift Premium (6 p.m 6 a.m.)	Rate + \$5/hour
Equipment Rental	Quoted upon request

⁽¹⁾ Payment is due within 30 days of receipt of our invoice. Accounts unpaid after 30 days will be assessed a service charge of 1-1/2% of the unpaid balance.

⁽²⁾ Overtime Premium applies to Field Engineer and Technician hours exceeding 10 hours per day or 40 hours per week, charged to a single project, and any hours worked on weekends.

⁽³⁾ JAC/CTS holidays are New Years Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving, and Christmas

Effective 01/01/08

FEE SCHEDULE.2008 - 01.01.08

7108 South Alton Way, Building B • Centennial, Colorado 80112-2109 • www.jacesare.com Main Phone 303-220-0300 • Fax 303-220-0442 • Lab Phone 303-783-9965 • Lab Fax 303-783-9964



LABORATORY STATEMENT OF FEES 2008

Provided herewith is our most current Statement of Fees. Please do not hesitate to contact us for combination test packages and volume discounts. This Statement of Fees, dated January 1, 2008, supercedes all previous versions. *Note: Laboratory unit prices include the test, review and initial reporting.*

SOIL TESTING FEES

SOIL TESTING FEES	Accredited Test Procedure	
Soil Tests:	Designations	Fee/each \$:
Atterberg Limits (LL, PL & PI), Method A (multi-point)	D 4318/T 89 & 90	60
Atterberg Limits (LL, PL & PI), Method B (one-point)	D 4318/T 89 & 90	45
Chloride (HACH Method)	***************************************	25
		per personne
Density & Moisture by Nuclear Methods	D 6938/T 310	hourly rates
Direct Shear (CU Test) 3 Point Envelope - In Situ (California L	.iner ~2" dia.)	325
Direct Shear (CU Test) 3 Point Envelope (Includes: specimen	* * * * * * * * * * * * * * * * * * * *	375
Direct Shear (CU Test) 3 Point Envelope (Includes: Proctor &	specimen remolding)	450
Gradation with Minus #200 Wash	C 136 & D 1140/T 27	75
Hydrometer (Includes: Gradation & -#200 Wash, & Specific G	ravity)	175
Ainus #200 Mash	D 1140	25
Anisture Content	D 2216/T 265	15
Inisture/Density Relationship (Proctor)	D 698 & 1557/T 99 & 180	125
Natural Moisture & Density		25
Inganic Content (ASTM D 2974)		50
Н		25
Proctor Check Point		50
Relative Density (Max/Min; Wet or Dry Method)	******	195
$\lambda_{\rm constraint}$	******	75
R-Value	D 2844/T 190	275
Soil Suction		
Checific Gravity (AASHTO T 100)	***************************************	
Swell/Consolidation		
Swell/Consolidation Swell/Consolidation (Remokled)		
Jnconfined Compressive Strength	D 2166/T 208	
Jnconfined Compressive Strength (Includes: M/D)	D 2166/T 208	
Jnconfined Compressive Strength (Remolded; includes: M/D)		
JSCS (Unified Soil Classification System) ASTM D 2487	••••••••••••••••••••••••••••••••••••••	***************************************
Nater Soluble Sulfates		25
Packaged Soil Test items		
Corrosion Suite (Includes: Chloride, pH, Resistivity & Water S	oluble Sulfate)	125
Proctor w/ Classification (Includes: Proctor, Gradation w/-#20		225
Soil Classification (Includes: Gradation w/#200 Wash, Atterbo		115
Soll Stabilization Tests:		Fee/each \$:
Compressive Strength w/ M/D (ASTM D 1633 - cement or D 5	102 - lime) - field developed	35
Compressive Strength w/ M/D (ASTM D 1633 - cement or D 5		45
reezing/Thawing	D 560/T 136	250
Mix Design (Cement or Lime)		1200
Moisture/Density Relationship	D 558/T 134	150
Wetting/Drying	D 559/T 135	250

JAC/CTS

7108 South Alton Way, Building B Centennial, Colorado 80112 Phone: (303) 783-9965; Fax: (303) 783-9964



LABORATORY STATEMENT OF FEES 2008

HOT MIXED ASPHALT (HMA) TESTING FEES

	Accredited Test Procedure	
HMA Tests:	Designations	Fee/each \$:
Binder Ignition Oven (BIO) AC Content	D 6307/T 308	50
with Gradation	D 5444/T 30	125
BIO AC Correction Factor	D 6307/T 308	250
Chemical Extraction AC Content	D 2172/T 164	135
with Gradation	D 5444/T 30	215
Hveem Stability		150
Lottman (Tensile Strength Ratio)	*******	450
Marshall Tests (3 pucks: Sp.G., Stab/Flow & AV)	D 3203/T 245 & 269	145
Maximum Theoretical Specific Gravity (Rice Value)	D 2041/T 209	75
Specific Gravity (Bulk), Air Voids & Thickness	D 2726 & 3203/T 166 & 269	30
Thickness	****	15
Volumetric Properties (Includes: Max (Rice) & Bulk Density)		400
Marshall Mix Design - MS 2 (additional charges may apply for	or aggregate tests)	1700
SuperPave Mix Design (additional charges may apply for ag		1700
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CONCRETE and MASONRY TESTING FEES

	Accredited Test Procedure	
Concrete Tests:	Designations	Fee/each \$:
Abrasion Resistance of Horizontal Concrete Surfaces (ASTM C	C 779, Procedure C), sample delivered	450
Absorption & Density (Unit Weight)		75
Accelerated Cure Specimens		35
Compressive Strength (Core)	C 12/T 21	30
Compressive Strength (Cylinders)	C 31, 617, 1231 & 39/T 23, 231 & 22	15
Compressive Strength (Cylinders) - Cast by Others	C 617, 1231 & 39/T 231 & 22	20
	C 78	40
Flexural Strength (Beam) Flexural Strength (Beam) - Cast by Others	C 78	50
		per personnel
Making & Curing Test Specimens in Lab	C 192/T 126	hourly rates
Mix Design (Compression) (additional charges may apply for a	ggregate tests)	1700
Mix Design (Flexural) (additional charges may apply for aggreg		
Mix Design Verification: Compression (One Point)		500
Mix Design Verification: Flexural (One Point)		600
Rapid Chloride Permeability (ASTM C 1202), 2 Specimens		650
Shrinkage Measuring (03300 modified ASTM C 157) per bar		30
Shrinkage Measuring (ASTM C 157) 3 bars		300
		per personnel
Slab on Ground Moisture Determination (in place)		hourly rates
	C 143, 138, 231 & 1064/T 119, 121 &	per personnel
Slump, Unit Weight, Air Content & Temperature	152	hourly rates
		per personnel
Specimen Saw Cutting/Trimming		hourly rates
Tensile Strength (ASTM C 496)		45
Thickness (Core)		15
Water Soluble Chloride Ion in Concrete (ASTM C 1218), drilled	l sample	65

JAC/CTS

7108 South Alton Way, Building B Centennial, Colorado 80112 Phone: (303) 783-9965; Fax: (303) 783-9964



LABORATORY STATEMENT OF FEES 2008

lasonry Tests:	in an an an an ann an ann an ann an an an	Fee/each \$:
bsorption & Density (Unit Weight) - Full Size Specimen		75
bsorption & Density (Unit Weight) - Coupon Specimen		35
CMU Coupon Compressive Strength (ASTM C 140)		45
MU Freeze/Thaw (ASTM C 1262) @ 100 cycles	***************************************	900
MU Freeze/Thaw (ASTM C 1262) @ 150 cycles	***************************************	1200
MU Prism Compressive Strength		135
Frout & Mortar Cubes (3 Cubes/Set)		40/set
rism Grout	***************************************	35
***************************************	* < * * * * * * * * * * * * * * * * * *	per personne
Specimen Saw Cutting/Trimming		hourly rates
		a dan kana sa bawa kata a
GGREGATE & ROCK TESTING FEES		
	<u>Accredited Test Procedure</u> <u>Designations</u>	Fee/each \$
Aggregate Tests:	Designations D 4318/T 89 & 90	ree/eacn > 45
tterberg Limits (LL, PL & PI), Method B (one-point)	C 142/T 112	
lay Lumps & Friable Particles (per procedure grading)	C 142/T 112 C 29/T 19	
ensity (Unit Weight) & Voids		50
irect Shear (CU Test) 3 Point Envelope (Includes: specimen re		375
irect Shear (CU Test) 3 Point Envelope (Includes: Proctor & s	pecimen remolding)	450
ing Anguagets Angularity (Ilanguagets of Vaid Content)	C 1252/T 304	100
ine Aggregate Angularity (Uncompacted Void Content)	C 1252/1 304	50
lat & Elongated Particles (per procedure grading)		
ractured Faces (per procedure grading)		***************************************
reezing/Thawing of Aggregate (AASHTO T 103), 50 cycles		400
Gradation with Minus #200 Wash	C 136 & 117/T 27 & 11	75
adation with Minus #200 Wash - Pit Run	C 136 & 117/T 27 & 11	150
lydrometer (Includes: Gradation & #200 Wash, & Specific Gra	ivity)	175
ightweight Particles		150
os Angeles Abrasion	С 131/Т 96	115
ficro-Deval Abrasion		150
finus #200 Wash	C 117/T 11	25
loisture Content	C 566/T 255	15
loisture/Density Relationship (Proctor)	D 698 & 1557/T 99 & 180	125
Organic Impurities	C 40/T 21	50
	A 4999	
Potential Alkali Reactivity (Mortar Bar Method) ASTM C 1260	C 1260	575
Potential Alkali Reactivity (Mortar Bar Method) ASTM C 1567 - combinations of cementitious materials & aggregate	C 1567	675
	U 1001	675
AA Modified ASTM C1260 (525)		********************************
AA Modified ASTM C1567 (525a)		775
elative Density (Max/Min; Wet or Dry Method)		195
tiprap Wetting/Drying (ASTM D 5313)		1200
Riprap Freezing/Thawing (ASTM D 5312), 35 cycles		850
R-Value	D 2844/T 190	275
Sand Equivalency	D 2419/T 176	80
Sodium/Magnesium Sulfate Soundness (per procedure grading		70
Specific Gravity & Absorption	C 127 & 128/T 85 & 84	60
Compressive Strength of Rock Cores (ASTM D 7012)		75

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LABORATORY STATEMENT OF FEES 2008

	Accredited Test Procedure	9
PERSONNEL and MISCELLANEOUS FEES	Designations	
Miscellaneous:		Fee \$:
Coring Operations: HMA or Concrete	C 42	90/hr
Equipment Rental		Quote Upon Request
Outsourcing		Cost + 10%
Special Preparation or Process		55/hr
Wood Tests:		Fee/each \$:
Moisture Content (Lab) - Direct		45