

PUBLIC WORKS & UTILITIES COMMITTEE

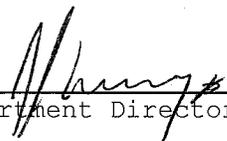
13-0140R

RESOLUTION AUTHORIZING A FIVE-YEAR MASTER SERVICES AGREEMENT WITH BRAUN INTERTEC CORPORATION, FOR PROFESSIONAL GEOTECHNICAL AND MATERIAL TESTING SERVICES FOR A TOTAL ANNUAL AMOUNT NOT TO EXCEED \$50,000, FOR A TOTAL CONTRACT AMOUNT NOT TO EXCEED \$250,000.

CITY PROPOSAL:

RESOLVED, that the proper city officials are hereby authorized to enter into a five-year master services agreement with Braun Intertec Corporation, substantially the same as that on file in the office of the city clerk as Public Document No. _____, for professional geotechnical and material testing services required to support the construction, operation, and maintenance of city systems, in accordance with the consultant's fee schedule, for a blanket annual amount not to exceed \$50,000 in each of fiscal years 2013, 2014, 2015, 2016, 2017, and a total contract amount not to exceed \$250,000; with the blanket annual cost of said services in any fiscal year not to exceed \$50,000 and to be paid from various appropriate funds, departments, agencies, objects, Requisition 13-0219, and Project 1215.

Approved:



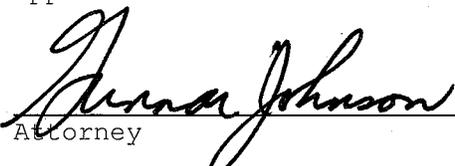
Department Director
Purchasing Agent  _____

Approved for presentation to council:



Chief Administrative Officer

Approved as to form:



Attorney

Approved:



Auditor

STATEMENT OF PURPOSE: This resolution authorizes a five-year master services agreement with Braun Intertec Corporation, for geotechnical and material testing services to support construction, operation, and maintenance of city systems.

This agreement will be a blanket purchase agreement, with projects ordered and billed on an hourly basis, pursuant to a city-issued, written statement of work or similar document. Entering into this agreement does not guarantee a minimum order, and the agreement can be terminated at any time.

Braun Intertec Corporation, a local Duluth firm, has provided such testing services in the past.

Requisition No. 13-0219

MASTER SERVICES AGREEMENT FOR PROFESSIONAL SERVICES

BRAUN INTERTEC CORPORATION AND CITY OF DULUTH

THIS MASTER SERVICES AGREEMENT, effective as of the date of attestation by the City Clerk (the "Effective Date"), is made by and between the CITY OF DULUTH, a municipal corporation under laws of the State of Minnesota, hereinafter referred to as "City," and **BRAUN INTERTEC CORPORATION**, 4511 West First Street, Suite 4, Duluth, Minnesota 55807, hereinafter referred to as "Consultant," for the purpose of rendering services to the City.

WHEREAS, the City desires to utilize Consultant's **geotechnical and material testing services** on a non-exclusive, project by project basis to support the construction, operation, and maintenance of city systems for fiscal years 2013, 2014, 2015, 2016, and 2017;

WHEREAS, Consultant has represented that it is qualified and willing to perform services set forth in its proposal;

NOW, THEREFORE, in consideration of the mutual covenants and conditions hereinafter contained, the parties hereto agree as follows:

I. Services to be Performed.

Consultant will provide, upon written request of the city engineer in the form of a Statement of Work or similar documentation (each a "SOW"), the services identified in the City's letter to Consultant dated January 3, 2013, and potential scope of services, dated March 15, 2013. The January 3rd letter and March 15th list are collectively attached hereto as "**Exhibit A.**" The Consultant's email dated January 28, 2013, with testing fee schedule is attached hereto as "**Exhibit B.**" Provided, however, in the event of any conflict between Exhibit B or a SOW and this Agreement, or Exhibit A, the terms and conditions of this Agreement or Exhibit A, as appropriate, shall be deemed to be controlling. In the event of a conflict between the provisions of Exhibit A and this Agreement, the terms and conditions of this Agreement shall be deemed to be controlling.

II. Professional Fees and Payment.

It is agreed between the parties that Consultant's maximum annual fee for the term of this Agreement shall not exceed the sum of **\$50,000 (Fifty-Thousand and no/100)** dollars, payable from various appropriate funds, departments, agencies, and objects, Project No. 1215, and Requisition 13-0219. All bills for services rendered shall be submitted monthly to the City Engineer, or his/her designee, and shall be accompanied by such documentation as the City shall reasonable expect. Upon receipt of said request and appropriate documentation, the City shall reimburse Service Provider up to the amount set forth above.

II. General Terms and Conditions.

1. Amendments. Any alterations, variations, modifications or waivers of terms of this Agreement including contract price shall be binding upon the City and Consultant only upon being reduced to writing and signed by a duly authorized representative of each party.
2. Assignment. Consultant represents that it will utilize only its own personnel in the performance of the services set forth herein; and further agrees that it will neither assign, transfer or subcontract any rights or obligations under this Agreement without prior written consent of the City.
3. Data and Confidentiality.
 - a. The City agrees that it will make available all pertinent information, data and records under its control for Consultant to use in the performance of this Agreement, or to assist Consultant wherever possible to obtain such records, data and information.
 - b. All reports, data, information, documentation and material given to or prepared by Consultant pursuant to this Agreement will be confidential and will not be released by Consultant without prior authorization from the City.
 - c. All notes, reports, records and other data prepared under this Agreement shall become the property of the City upon completion or termination of the services of the Consultant. Any reuse of notes, reports, records or other data for anything other than its intended purpose will be at the City's sole risk without liability or legal exposure to Consultant.
4. Standard of Performance.

Consultant agrees that all services to be provided to the City pursuant to this Agreement shall be in accordance with the generally accepted standards of the profession for the provisions of services of this type.
5. Contract Period.
 - a. The term of this Agreement shall commence on the Effective Date and shall continue until December 31, 2017, unless terminated earlier as provided for herein.
 - b. The City may, by giving written notice, specifying the effective date thereof, terminate this Agreement in whole or in part without cause. In the event of termination, all property and finished or unfinished documents and other writings prepared by Consultant under this Agreement shall become the property of the City and Consultant shall promptly deliver the same to the City. Consultant shall be entitled to compensation for services properly performed by it to the date of termination of this Agreement. In the event of termination due to breach by Consultant, the City shall retain all other remedies available to it, and the City shall be relieved of payment of any fees

with respect to the services of Consultant which gave rise to such breach.

6. Independent Contractor.

- a. It is agreed that nothing herein contained is intended or should be construed in any manner as creating or establishing the relationship of copartners between the parties hereto or as constituting Consultant as an agent, representative or employee of the City for any purpose or in any manner whatsoever. Consultant and its employees shall not be considered employees of the City, and any and all claims that may or might arise under the Worker's Compensation Act of the State of Minnesota on behalf of Consultant's employees while so engaged, and any and all claims whatsoever on behalf of Consultant's employees arising out of employment shall in no way be the responsibility of City. Except for compensation provided in Section II of this Agreement, Consultant's employees shall not be entitled to any compensation or rights or benefits of any kind whatsoever from City, including without limitation, tenure rights, medical and hospital care, sick and vacation leave, Worker's Compensation, Unemployment Insurance, disability or severance pay and P.E.R.A. (Public Employee Retirement Association). Further, City shall in no way be responsible to defend, indemnify or save harmless Consultant from liability or judgments arising out of Consultant's intentional or negligent acts or omissions of Consultant or its employees while performing the work specified by this Agreement.
- b. The parties do not intend by this Agreement to create a joint venture or joint enterprise, and expressly waive any right to claim such status in any dispute arising out of this Agreement.
- c. Consultant expressly waives any right to claim any immunity provided for in Minnesota Statutes Chapter 466 or pursuant to the official immunity doctrine.

7. Indemnity.

Consultant agrees to defend, save harmless, and indemnify the City of Duluth, its agents, and employees from any loss, cost, or damage by reason of Personal Injury or property damage of whatsoever nature or kind arising out of, or as a result of, the performance of the work by the Consultant, its employees, agents, or subcontractors.

8. Insurance.

- a. Consultant shall provide the following minimum amounts of insurance from insurance companies authorized to do business in the state of Minnesota.
 - (1) Workers' compensation insurance in accordance with the laws of the State of Minnesota.
 - (2) Public Liability and Automobile Liability Insurance with limits not less than **\$1,500,000** Single Limit, and twice the limits provided when a claim arises out of the release or threatened release of a hazardous

substance; shall be in a company approved by the city of Duluth; and shall provide for the following: Liability for Premises, Operations, Completed Operations, Independent Contractors, and Contractual Liability.

- (3) Professional Liability Insurance in an amount not less than **\$1,500,000** Single Limit; provided further that in the event the professional malpractice insurance is in the form of "claims made," insurance, 60 days' notice prior to any cancellation or modification shall be required; and in such event, Consultant agrees to provide the City with either evidence of new insurance coverage conforming to the provisions of this paragraph which will provide unbroken protection to the City, or, in the alternative, to purchase at its cost, extended coverage under the old policy for the period the state of repose runs; the protection to be provided by said "claims made" insurance shall remain in place until the running of the statute of repose for claims related to this Agreement.
 - (4) **City of Duluth shall be named as Additional Insured** under the Public Liability and Automobile Liability, or as an alternate, Contractor may provide Owners-Contractors Protective policy, naming himself and City of Duluth. Consultant shall also provide evidence of Statutory Minnesota Workers' Compensation Insurance. Consultant is to provide Certificate of Insurance evidencing such coverage with 30-days notice of cancellation, non-renewal or material change provisions included. The City of Duluth does not represent or guarantee that these types or limits of coverage are adequate to protect the Contractor's interests and liabilities.
 - (5) If a certificate of insurance is provided, the form of the certificate shall contain an unconditional requirement that the insurer notify the City without fail not less than 30 days prior to any cancellation, non-renewal or modification of the policy or coverages evidenced by said certificate and shall further provide that failure to give such notice to City will render any such change or changes in said policy or coverages ineffective as against the City.
 - (6) **The use of an "Accord" form as a certificate of insurance shall be accompanied by two forms - 1) ISO Additional Insured Endorsement (CG-2010 pre-2004) and 2) Notice of Cancellation Endorsement (IL 7002) or equivalent, as approved by the Duluth City Attorney's Office.**
- b. The insurance required herein shall be maintained in full force and effect

during the life of this Agreement and shall protect Consultant, its employees, agents and representatives from claims and damages including but not limited to personal injury and death and any act or failure to act by Consultant, its employees, agents and representatives in the negligent performance of work covered by this Agreement.

- c. Certificates showing that Consultant is carrying the above described insurance in the specified amounts shall be furnished to the City prior to the execution of this Agreement and a certificate showing continued maintenance of such insurance shall be on file with the City during the term of this Agreement.
- d. The City shall be named as an additional insured on each liability policy other than the professional liability and the workers' compensation policies of the Consultant.
- e. The certificates shall provide that the policies shall not be changed or canceled during the life of this Agreement without at least 30 days advanced notice being given to the City.

9 Notices.

Notice to the City or Service provided for herein shall be sufficient if sent by the regular United States mail, postage prepaid, addressed to the parties at the addresses hereinafter set forth or to such other respective persons or addresses as the parties may designate to each other in writing from time to time.

City

City of Duluth Engineering
411 West First Street, #211
Duluth, MN 55802
Attention: City Engineer

Consultant

Braun Intertec Corporation
4511 West First Street, Suite 4
Duluth, MN 55802
Attention: Project Engineer

10. Laws, Rules and Regulations.

Consultant agrees to observe and comply with all laws, ordinances, rules and regulations of the United States of America, the State of Minnesota and the City with respect to their respective agencies which are applicable to its activities under this Agreement.

11. Applicable Law.

This Agreement, together with all of its paragraphs, terms and provisions is made in the state of Minnesota and shall be construed and interpreted in accordance with the laws of the State of Minnesota.

IN WITNESS WHEREOF, the parties have hereunto set their hands the day and date first above shown.

CITY OF DULUTH

BRAUN INTERTEC CORPORATION

By

By

Mayor

Company Representative

Attest:

City Clerk

Its

Date: _____

Title of Representative

Approved as to form:

Date:

City Attorney

Countersigned:

City Auditor

Department Director

Purchasing Agent

EXHIBIT A

City's Letter to Consultant, January 3, 2013
City's List of Services, March 15, 2013



City of Duluth

DEPARTMENT OF PUBLIC WORKS/UTILITIES
Engineering Division
211 City Hall • Duluth MN 55802
(218) 730-5200 Fax: (218) 730-5907

January 3, 2013

Braun Intertec Corporation
4 West 1st Street
Duluth, MN 55807

RE: Geotechnical and Materials Testing Services for 2013, City Project No. 1215

Dear Consultant,

The City of Duluth will be entering into new contracts for geotechnical and materials testing services in 2013. As has been done under previous contracts, this will be a one year base contract with annual options to extend, with agreement from both parties. Each year, a new schedule of prices and an updated certificate of insurance will be incorporated into the extension.

If you are interested, please forward your fee schedule for 2013 and a current certificate of insurance to my attention by January 25, 2013. Thank you, and please let me know if you have any questions.

Sincerely,

Caroline Pedersen, PE
Chief Engineer of Transportation

Requisitions 13-0219, 13-0220, and 13-0221

Potential Scope of Services:

March 15, 2013

To provide the following examples of geotechnical and material testing services:

1. Laboratory tests of soils;
2. Grain size analysis;
3. Strength and compressibility testing;
4. Construction testing and observations:
 - a. Earthwork (excavation, observation, compaction control testing, special foundation installation)
 - b. Concrete
 - c. Petrographic
 - d. Bituminous

This is not intended to be a comprehensive list.

EXHIBIT B

Consultant's Memo & Fee Schedule

Cari Pedersen

From: Butler, Joe <JButler@braunintertec.com>
Sent: Monday, January 28, 2013 2:01 PM
To: Cari Pedersen
Subject: Geotechnical and Material Testing Services - CP 1215
Attachments: SpecimenCertificate.pdf; Schedule of Charges.pdf

Cari,

See attached current fee schedule. We will provide services for the City of Duluth in 2013 at these rates less 15%

Also attached is our current insurance certificate specimen. We can provide a project specific certificate with signed contracts.

Thanks.

-Joe

BRAUN

INTERTEC

Employee Ownership
working for you

Joseph C. Butler, PE

Associate Principal / Project Engineer

4511 West First Street, Suite 4 | Duluth, MN 55807

218.624.4967 main | 218.969.3179 mobile

jbutler@braunintertec.com

braunintertec.com | [Twitter: Braun Intertec](#) | [LinkedIn: Braun Intertec](#)

BRAUN
INTERTEC

Schedule of Charges
(effective January 1, 2012)
Braun Intertec Corporation
Braun Intertec Great Lakes, Inc.

Service Locations

Minneapolis, MN
St. Paul, MN
Albertville, MN
Duluth, MN
Hibbing, MN
Mankato, MN
Rochester, MN
St. Cloud, MN

Cedar Rapids, IA

St. Louis, MO

Bismarck, ND
Dickinson, ND
Minot, ND
West Fargo, ND
Williston, ND

La Crosse, WI
Milwaukee, WI

Geotechnical Services

Hourly rates apply for regular-time (8 hours or less on weekdays). Hourly rates do not include support truck or carrier rental or use, mileage, supplies consumed in drilling or abandoned in test holes, or per diem expenses.

Drilling Equipment, Services & Personnel

1002	Drilling services	†
1004	Truck or skid mounted drill rig, includes: crew chief and drill rig assistant, per hour	233
1007	Soil borings, 3¼ or 4¼ inch HSA and sampling, per foot	†
Additional for all-terrain drill rig, per hour:		
1062	Flotation tire	62
1063	Track mounted	83
1087	Mobilization	†
5669	Daily mobilization expense (includes support truck rental and mileage, drill rig mileage, plus tractor/lowboy mileage, if applicable, per day	334
1065	Low-boy tractor/trailer, round trip	441
1066	Low-boy tractor/trailer, per mile	3.20
1067	Low-boy tractor/trailer, per day	165
1005	Travel time, drill crew or two-person field crew, per hour	233
1018	Overtime addition to all two-person operations for work on Saturday or in excess of 8 hours per day on weekdays, per hour	43
1019	Overtime addition to all two-person crew operations for work on Sunday, per hour	88
Additional crew person - when special conditions require (in addition to hourly charges of "1004" and "1005" above):		
1014	Regular time basis, per hour	72
1016	Overtime basis, per hour	92
8300	Site layout & utility clearance, per hour	104
Consumable Materials:		
1011	Well materials, 2" PVC, per foot (excludes well protection and protective casing)	8.50
1039	Well materials, 2" black iron, per foot (excludes well screen, well protection and protective casing)	14
1088	Stainless steel well screen, per 10', each	370
1058	Protective casing materials, each	186
1070	Bore hole abandonment materials, per foot	2.10
1073	Sealing records, each	61
1022	Thin-walled sample tubes (ASTM D 1587), each	26
3026	Drum, steel 55 gallon, with lid, each	64
Other Expense Charges and Miscellaneous Services:		
1044	Surcharge for continuous tube sample system (2-1/4" x 5"), per hour	40
1068	Material for specialized unrecoverable installations such as piezometers, monitoring wells, well-points, settlement plates, etc. Rental of road signs or equipment, special insurance, permits. Consumable supplies such as roller bits, drilling fluid additives, grout, level B-C-D protection, etc.	Cost +15%

1072	Subcontracted specialized services such as snow plowing, grading for access, towing, etc.	Cost +15%
1074	Welder or shop person on fabricating, assembly, or loading of specialized equipment, per hour	86
1080	Steam cleaning of drill rig and tools, per steam (equipment only)	124

GeoProbe Equipment, Services & Personnel

6902	GeoProbe services (DT325/DT22), per hour	192
6922	Additional crew person for auger borings, per hour	47
6930	Overtime addition per person for work on Saturday or in excess of 8 hours per day on weekdays, per hour	22
6900	GeoProbe & support vehicle, daily mobilization	326
6904	GeoProbe push probe, per foot	†
6910	GeoProbe grouting/sealing material, per foot	2.20
6912	Water sampling tubing & consumables, per foot	7
6914	Soil gas sampling tubing & expendable tip, per sample	19
6916	Water sampling, per sample	†
6918	Soil gas sampling, per sample	†
6920	Piezometer installation (1" PVC), per foot	†
6007	Piezometer materials (1" PVC), per foot	6

CPT Equipment, Services & Personnel

Both the following charges are required for CPT services:		
6602	CPT rig, 20-ton track & support vehicle, per day	1,485
6604	CPT two-person crew & consumables, per hour	266
6610	Overtime addition to two-person crew, per hour	54
6600	Mobilization	†
6606	SCPTU & CPTU soundings, per foot	†
6608	Track CPT setup charge, per sounding	†
6626	Soil sampling <50' depth, per sample	212
6628	Soil sampling >50' depth, per sample	†
6612	CPT grouting/sealing material, per foot	1.35
6620	Seismic wave analysis	266
6624	Dissipation testing, per 1/4 hour	67
1066	Low-boy tractor/trailer, per mile	3.20
1067	Low-boy tractor/trailer, per day	165

E-Logging Services

1084	Set-up and mobilization, per day	†
1086	E-Log unit, per mile	†
1089	E-Log unit & technician, per day	†

Geotechnical Equipment Rental

1030	Vane shear equipment (ASTM D 2573), per day	308
1032	Electrical resistivity equipment (ASTM G57), per day	230
1040	Pressure meter equipment, per day	635
1041	Pressure meter testing, per test	92
1056	Portable 10-ton capacity CPT equipment (in addition to drill rig charge), per day	463

† Quoted on an individual basis

Laboratory Tests of Soils

1152	Moisture content (ASTM D 2216)	18
1154	Moisture content and density	33

1156	Atterberg Limits: LL and PL (ASTM D 4318)	104
1157	Atterberg Limits: LL and PL (AASHTO T89 and T90 and Wet Preparation (AASHTO T146)	140

Grain Size Analysis

1162	Sieve analysis through No. 200 Sieve (ASTM D 1140, D 6913)	127
1680	Rush surcharge	32
1679	Rush surcharge	18

1170	Hydrometer analysis only (ASTM D 422)	102
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1172	Mechanical (sieve-hydrometer analysis (ASTM D 422)	167
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1174	Organic content (ASTM D 2974)	72
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1176	Specific gravity of fine-grained soils (ASTM D 854)	122
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Permeability

1180	Granular soils, less than 10 percent fines (ASTM D 2434)	338
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1183	Clay perm (ASTM D 5084, EPA 9100, or COE undisturbed sample, includes extrusion)	489
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1185	Clay perm (ASTM D 5084, EPA 9100, or COE remolded sample, does not include Proctor)	585
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Double ring-infiltrometer test (ASTM D 3385):

1193	Granular soils	541
1194	Cohesive soils	758

Guelph permeameter infiltration test:

1177	Granular soils	541
1178	Cohesive soils	758

6102	Equipment rental for double ring-infiltrometer or Guelph permeameter, per test	55
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Strength and Compressibility Testing

1186	Unconfined compression (ASTM D 2166)	88
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1190	Direct shear, granular soil (3 point test) (ASTM D 3080)	564
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1192	Direct shear, cohesive soil (3 point test) (ASTM D 3080)	738
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1196	Consolidation testing, one-dimensional (strain vs. pressure curve only) (ASTM D 2435)	379
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1198	Consolidation testing, time-rate (e-log p curve, time-deflection curves, and cv, Pc, and Cc values) (ASTM D 2435)	566
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One Dimensional Swell Test

1202	Maximum swell pressure (ASTM D 4546)	294
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Triaxial testing (per 3 points, remolded or extruded, does not include Proctor):

1206	Unconsolidated-Undrained (ASTM D 2850)	813
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1208	Consolidated-Undrained (includes pore-pressure measurements) (ASTM D 4767)	1,148
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1210	Consolidated-Drained (includes pore-pressure measurements)	1,495
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1211	Consolidated-Drained (without pore-pressure measurements)	1,495
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Corrosion Potential and Miscellaneous

1214	pH determination (ASTM G 51)	23
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1216	Electrical resistivity of soils (ASTM 187-5)	72
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3238	Thermal conductivity of soil (ASTM D 5334)	294
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1218	Oxidation-reduction	62
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1220	Sulfate (concrete)	37
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6146	Sulfate (soil) (ASTM C 1580-05)	325
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1222	Sulfide (metals)	57
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4084	Sulfate, total (soil)	84
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1226	Topsoil testing, MN/DOT 3877A (without nutrients)	262
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1228	Topsoil testing, MNDOT 3877B (with nutrients)	324
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1229	Topsoil testing, nutrients	62
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1230	Specialty testing	†
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1232	Sample preparation, per hour	74
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1234	Extrusion of thin-walled tube	30
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Construction Testing and Observations

Earthwork (excavation observation, compaction control testing, special foundation installations)

1308	Nuclear moisture-density meter charge in addition to hourly rates in section "100 Personnel Services," per hour	20
1310	Field laboratory rental including utilities, if required	†
1314	Compaction test, Sand-Cone Method (ASTM D 1556), or Nuclear Method (ASTM D 2922) (normal conditions)—(plus standby, travel time and vehicle charges), per test	41
1318	Proctor test (ASTM D 698 or ASTM D 1557)	177
6170	Rush surcharge	43
1322	One-point Proctor check	68
1324	Maximum-minimum density of cohesionless soils (ASTM D 4523, D 4254)	294
A1904	Settlement plates	93

Deep Foundation and Vibration

1340	Special inspection of pile or drilled shaft installation. Hourly rates as shown in section "100 Personnel Services," plus vehicle and mileage	†
1342	Pile Driving Analyzer™ equipment rental, per day	1,126
1343	Wave Equation analysis	270
1344	CAPWAP analysis	553
Seismograph monitor:		
1346	Monitor only, per day	175
1348	Monitor only, per week	402
1349	Monitor only, per month	817
1570	With modem, per day	180
1571	With modem, per week	422
1572	With modem, per month	887
1573	With X100 geophone, per day	185
1574	With X100 geophone, per week	430
1575	With X100 geophone, per month	927
1576	With modem and X100 geophone, per day	190
1577	With modem and X100 geophone, per week	450
1578	With modem and X100 geophone, per month	997

Concrete

1356	Theoretical concrete mix design based on ACI 211 (does not include laboratory testing of materials, trial batching or review of historical data), per mix	†
1357	Concrete strength development curve, each	246
1362	Maturity meter rental, per pour	4.20
1358	Laboratory trial batch concrete mix design (does not include laboratory testing of materials or concrete cylinder compression tests)	†
1360	Special inspection and other on-site observation services. Hourly rates as shown in section "100 Personnel Services", plus vehicle and mileage	†
1361	Quality control testing for concrete placement activities. Hourly rates as shown in section "100 Personnel Services," plus vehicle and mileage	†

Laboratory moist-curing of concrete delivered to laboratories:

1369	Compression testing 4" x 8" cylinders (ASTM C 39) and concrete unit processing, handling and mold (cast by Braun Intertec), per unit	28
1364	Compression testing 6" x 12" cylinders (ASTM C 39) and concrete unit processing, handling and mold (cast by Braun Intertec), per unit	30
1363	Compression testing (ASTM C 39) (cast by others), per unit	32
1366	Accelerated curing and testing (ASTM D 684), per unit	79
1367	Standard curing and testing of flexural beams—includes mold rental and cleanup (ASTM C 78 and ASTM C 293), per unit	114
1368	Splitting tensile strength of 6" x 12" concrete cylinder or concrete cores (ASTM C 496), per sample	86
1370	Sample preparation, per hour	67
1371	Dry unit weight (ASTM C 567), per set	110
1372	Specific gravity and voids (ASTM C 642), per unit	208
1380	Sawing of concrete unit (ASTM C 31), per cut	12.50

Concrete cylinder molds (includes labels and data slips):

1386	Concrete cylinder molds, each	3.10
1392	4" x 4" "cippoc" molds, each	36
1394	Rental of steel mold, per use	29
1395	Specialty mold rental (cubes and beams), per use	45
1385	Curing cooler, each	26
1396	Concrete cylinder "hot box" during winter construction, per month	92
1397	Compressive strength of cippocs (ASTM C 873)	74
1398	Concrete coring—portable core drill with diamond bits at 2- to 12-inch diameter, crew. Excludes mileage, truck rental and bit wear (3-hour minimum), per hour	186
1405	Bit wear and patch material, per core	20
1400	Core truck, per day, plus mileage	120
1401	Compressive strength of concrete cores including physical measurements and trimming (ASTM C 42), each	94

Petrographic

No discounting will apply

Petrographic analysis of concrete (ASTM C 856):

1460	Observations, thin section and hardened air content, per sample	1,391
2101	Observations and thin section only, per sample	979
5182	Observations only, per sample	1,236
5283	Thin section only, per sample	804

2102	Hardened air content analysis (ASTM C 457), per sample	742
2103	Estimated hardened air content (abbreviated ASTM C 457), per sample	464

Petrographic analysis of coarse aggregate (ASTM C 295), includes analysis over 7 screens:

1742	Quarried material, per sample	1,803
2104	Pit-run material, per sample	2,050
2105	Petrographic analysis of fine aggregate (ASTM C 295), includes analysis over 7 screens, per sample	1,545
2108	Petrographic analysis of aggregate, each additional screen	299

† Quoted on an individual basis

Petrographic analysis of mortar (ASTM C 1324):		
2106	Petrographic and chemical analysis (§8 and §9), per sample	3,039
2107	Petrographic analysis only (§8), per sample	1,586
3100	X-ray diffraction analysis (XRD), per sample	†
2109	Fourier transform infrared analysis (FTIR), per sample	†
2110	Special petrographic testing, per sample	†
	♦ No discounting will apply	

Masonry

Concrete Masonry Units - Standard:

1403	Compressive strength (ASTM C 140) RWU, each	45
1404	Compressive strength (ASTM C 140), Block, each	45
1402	Absorption of RWU (ASTM C 140), each	62
1406	Physical measurements and absorption (ASTM C 140), each	64
1407	Net area determination (ASTM C 140), each	45
1408	Brick prism assembly (ASTM C 1314, E 447), each	104
1409	Compressive strength – Hollow block prisms (ASTM C 1314), each	174
1411	Compressive strength – Grout block prisms (ASTM C 1314), each	216
1412	Compressive strength – Grout (ASTM C 1019), each	64
1421	Linear shrinkage (ASTM C 426), each	719
1424	Freeze/thaw of RWU (ASTM C 1262), per set of 5	815
1426	Fire rating (UBC or NCMA), each	20
1414	Specialty testing of brick or block	†
1413	Freeze/thaw of brick and concrete pavers (ASTM C 67), per set	895
1410	Modulus of rupture, per set (ASTM C 67/C 216)	270
1431	Brick weight per unit area (ASTM C 67/C 216)	143
1434	Brick measurement of length change (ASTM C 67/C 216)	716
1435	Brick void area in cored units (ASTM C 67/C 216)	284
1438	Brick void area in deep frogged units (ASTM C 67/C 216)	285
1444	Brick measurement of squareness (ASTM C 67/C 216)	268
1453	Brick shell and web thickness (ASTM C 67/C 216)	227
1454	Brick breaking load (ASTM C 67/C 216)	284
1415	Efflorescence of brick or masonry units (ASTM C 67/C 216), per set of 10 samples	182
1416	Initial rate of absorption (ASTM C 67/C 216), per set	181
1417	Compressive strength (ASTM C 67/C 216), per set	165
1418	Absorption and saturation coefficient (ASTM C 67/C 216), per set	233
1419	Dimensional analysis (ASTM C 67/C 216), per set	227
1423	Warpage (ASTM C 67/C 216), per set	269

Specialty Concrete

1427	Locate reinforcing steel, Pachometer, per hour	114
1432	Compression of cast stone	45
1433	Rental of Windsor probe, Schmidt Hammer or profometer, per day	92
1437	Length change of hardened concrete (ASTM C 157), per set of 3 samples	574
1439	Absorption of cast stone	59
1441	Rapid freeze/thaw (ASTM C 666), per set	921
1448	Water-soluble chloride ion (ASTM C 1218), per sample (\$250 minimum)	136
1449	Acid-soluble chloride ion content (ASTM C 1152), per sample (\$250 minimum)	136

1450	Bulk sample preparation, per sample	108
1456	Rapid chloride permeability (ASTM C 1202), per set of three samples	532
1459	Diffusivity determination, section method, each	764
1436	Rental of V-meter, per day	412
1462	Rental of Windsor pin, per day	271
1463	Adiabatic heat measurement (does not include trial batching), per mix	707
1466	Setting time (ASTM C 403), per sample	306

Cement

1476	Fineness of cement by air permeability (ASTM C 204), per sample	108
1480	Casting of mortar cubes, laboratory mixed (does not include mold rental and cleanup) (ASTM C 109), set of 6	180
1481	Compressive strength of cement mortar cubes (ASTM C 109), per unit	28
1486	Mortar-aggregate ratio test (ASTM C 790 Annex A4)	85

Mortar

Compressive strength of 2" x 2" mortar cube (ASTM C 109):

1490	Field cast, each	28
1492	Laboratory cast, each	32
1493	Compression testing of cylindrical mortar specimens (ASTM C 780), each	28
1464	Rapid set grout	43

Bond Strength of Mortar to Masonry Units (ASTM C 952):

1501	Brick (field cast), each	55
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Flexural bond strength of brick units (ASTM E 518):

1506	Field cast, each	164
1507	Laboratory cast, each	256
1510	Water retention (ASTM C 91), per sample	183

Flexural bond strength of brick units (ASTM C 1072):

1516	Prism testing, per prism	324
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Bituminous

1525	Sample preparation, per hour	74
1526	Marshall design point	196
1528	Rice specific gravity (ASTM D 2041)	78
1529	Gyratory design point	222
1530	Asphalt content (ASTM D 2172/6307)	147
3318	Bulk specific gravity/density, using Corelok (ASTM D 6752)	62
1532	Extracted aggregate gradation (ASTM D 5444)	102
1534	Marshall stability and flow (set of 3) (ASTM D 6926)	62
1540	Marshall density testing, triple specimen (ASTM D 6926)	119
5342	Thickness of pavement core (ASTM D 2726)	16
1542	Thickness and density of pavement core (ASTM D 2726)	49
1544	Moisture susceptibility of bituminous (ASTM D 1075)	312
1545	Draindown characteristics of asphalt (ASHTO T305 or ASTM D6390)	109

1552	Bituminous coring—portable core drill with diamond bits at 2- to 12-inch diameter, crew. Excludes mileage, truck rental and bit wear (3-hour minimum), per hour	186
1555	Bit wear and patch material, per core	19.50
1558	Lottman stripping (AASHTO T283)	337
1562	Laboratory mix design (Marshall)	†
1563	Laboratory mix design (Gyratory)	†
1567	Resilient modulus of bituminous, per core	†
1568	Gyratory gravity (AASHTO T312)	177
1569	Mobile laboratory rental	†

Soil and Aggregate Testing for Concrete, Bituminous, Roofing, etc.

1162	Analysis through #200 sieve (ASTM C 136, C 117)	127
1166	#200 sieve only (ASTM C 117 or D 1140)	72
1684	Lightweight particles 2.0 specific gravity (ASTM C 123)	78
1685	Lightweight particles 2.4 specific gravity (ASTM C 123)	143
1686	Spall material (MN/DOT)	124
1688	Percent crushed (MN/DOT)	78
1692	Coarse aggregate specific gravity (ASTM C 127)	79
1694	Fine aggregate specific gravity (ASTM C 128)	119
1696	Modified Mill Abrasion (RR)	127
1698	Los Angeles Abrasion (ASTM C 131, C 535)	127
1700	Soundness (ASTM C 88), 5 cycles	313
1702	Flatness and elongation (ASTM D 4791)	94
1703	Flakiness index (BS 812)	154
1704	Potential reactivity (ASTM C 289)	1,196
1429	Potential reactivity (ASTM C 1260)	787
1705	Fine aggregate Angularity (FAA) (AASHTO T304)	76
1706	Unit weight (ASTM C 29)	72
1708	Mill abrasion (RR)	127
1712	Moisture content (ASTM C 566)	24
1714	Hardness (Scratch)	78
5396	Hardness (Moh's)	†
1716	Organic impurities (ASTM C 40)	62
1718	Clay lumps (ASTM C 142), per size tested	125
1720	Freeze-thaw (AASHTO T103)	311

Insoluble residue (MN/DOT):

1723	Physical testing	177
1724	Preparation	44

1732	Hveem stabilometer R-Value (MN/DOT) (does not include proctor or classification tests)	437
1734	California bearing ratio, per molded specimen (ASTM D 1883)	289
1736	Sample preparation, per hour	70
1738	Sample crushing, per hour	86
1739	Resilient modulus of fine grain soils (molded)	412
1761	Resilient modulus of coarse grain soils and aggregate	440
1740	Specialized testing	†
1741	Sand equivalent (AASHTO T176)	127

Stone

1746	Compressive strength, includes end cutting (ASTM C 170), per sample	108
1747	Unconfined compressive strength of intact rock core specimen (ASTM D 2938), per sample	108
1750	Absorption and specific gravity of stone (ASTM C 97), per sample	56
1751	Coefficient of linear thermal expansion (ASTM D 5335), per sample	†

Geosynthetic and Pond Liner

1753	Shear/Peel tests on field seams (HDPE, VLDPE), per sample	88
1754	Material property testing (strength, elongation, creep, cyclic stress-stain, etc.)	†

Window

(Note: cost of aerial platform, scaffolding, exterior heat and enclosure, winter conditions are not included and will be priced based on job conditions. Work does not include repair of access holes, replacement of broken window trim, paint or wallpaper repair.)

1772	Air and water infiltration testing, new construction QA (ASTM E 1105), per window	1,354
1778	Specialty testing	†

Fire-Resistive Materials

1784	Thickness/Density, laboratory determination	47
1785	Adhesion/Cohesion testing, per test	42
1786	Specialty testing	†

EIFS

2500	Special inspection and other on-site observation and testing services for EIFS based on unit rates in section "100 Personnel Services," plus vehicle and mileage	†
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Other Specialty Testing

1791	Specialty testing	†
1470	Vapor emission rate testing kit (ASTM F 1869), plus labor and trip charges for preparation, placement and removal	30
1471	Relative humidity probe (ASTM F 2170), plus labor and trip charges for preparation, placement and removal	57
1792	Hydrostatic pressure testing	†
1793	Tensile test	†
1794	Floor flatness	†
1795	Dipstick rental (one week minimum), per week	629
1796	Dipstick rental (one week minimum), per additional day	186
1797	Anchor/pull out tests	†
1798	Pre- or post-condition survey	†
9001	Vapor transmission test	25
3701	Infrared camera – thermography rental (\$250 per day minimum), per hour	77
5128	Blower door testing	†

† Quoted on an individual basis

Nondestructive Examination Services

1602	Computed radiography, per section "100 Personnel Services"	†
1629	Magnetic particle examination, per section "100 Personnel Services"	†
1635	Liquid penetrant examination, per section "100 Personnel Services"	†
1640	Ultrasonic examination, per section "100 Personnel Services"	†
Infrared:		
1656	Services, per hour	195
1657	Services, overtime, per hour	242
1658	Report	190
1699	Thermographic imaging (minimum charge)	693
Positive materials identification (PMI):		
1654	Equipment only, per hour	†
1659	Equipment only, per day	†
1670	Equipment and labor, per hour	†
1671	Equipment and labor, per day	†
1667	Radiography, cobalt, per shot	†
1668	Radiography, iridium, per shot	†
Digital radiography, per day:		
5431	Equipment only	†
5432	Equipment and labor	†
Welding Operator Examination		
1604	Bend tests	236
1611	Radiography, AWS D1.1	126
1612	Bend tests, AWS D1.1	209
1613	Radiography, ASME/ANSI	126
1614	Bend tests, ASME/ANSI	209
1617	3/8" Weld test coupons, AWS D1.1, per set	42
1618	1" Weld test coupons, AWS D1.1, per set	56
1623	AWS D1.5 qualification	150
Weld Procedure Qualifications		
1619	AWS D1.1, client provides machining	1,178
1620	ASME/ANSI, client provides machining	1,178
1622	AWS D1.2, client provides machining	1,178
1624	AWS D1.5, client provides machining	1,500
5569	Charpy test	150
NDE Equipment, per day		
1626	MT yoke	25
6756	Black light	30
5567	Brinell hardness	25
2210	Ultrasonic thickness gauge	50
5269	Ultrasonic shearwave	100

NDE Consumables

1630	Consumable dry powder, per pound	30
1633	Portable visible spray, per can	30
1634	Portable fluorescent spray, per can	30
1636	Portable developer, per can	27
1637	Portable cleaner, per can	27
1638	Portable visible penetrant, per can	27
1639	Portable fluorescent penetrant, per can	30
1642	Cellulose gum (with certifications), per quart	56
1643	High temperature couplant, per 4 oz. tube	140
1646	4-1/2" x 10" film	5.50
1647	4-1/2" x 17" film	9.50
1648	14" x 17" film	33
1649	8" x 10" film	9.50
1650	5" x 7" film	6
1651	7" x 17" film	16.25
1652	10" x 12" film	16.25
70mm film, per weld:		
5440	Up to 6"	17
5441	8" - 12"	21.50
5442	14" - 18"	28
5443	20" - 24"	35
5444	26" - 30"	42.25
5446	30" - 36"	49.50

Geophysical Testing

259	Ground penetrating radar	166
1443	Ground penetrating radar, per hour on site (includes equipment)	173
1447	Ground penetrating radar, per day (includes report)	†
8640	Mobilization	221

Coatings

617	Inspections, per hour	120
627	Inspections, NACE certified, per hour	144
637	Specification review, per hour	120
1606	Elcometer 270 Holiday detector, per day	34
1607	PosiTest AT adhesion tester, per day	29
1608	Adhesion tests, each	15
2217	Field observation report	242
2227	Final report	419
2220	Coating thickness, stereomicroscopic with photographs, per sample	144
2210	Ultrasonic thickness gauge, per day	50

NDE Miscellaneous Expense

1660	Vehicle, per day	42
1661	Vehicle mileage, per mile	†
1662	Mobile darkroom, per day	72
1663	Mobile darkroom, per mile	†
1653	Radiography transponder, per day	59
1664	Trip charge	†
1666	Report	431
2012	Per diem, meals only	35
6579	Per diem, meals & lodging	135

† Quoted on an individual basis

Environmental Site Evaluation Services

Groundwater Sampling

Generator		
5000	Per day	95
5001	Per week	270
Monsoon pump (130') w/low flow control		
5003	Per day	200
5004	Per week	600
Submersible pump (40')		
5005	Per day	25
5006	Per week	70
5007	Flow meter or Stevens recorder, per day	36
Colorimeter (Hach DR\890)		
3103	Per day	45
3104	Per week	200
3093	Field test kit, per reagent parameter	17
Turbidity meter		
5011	Per hour	18
5012	Per day	70
5013	Per week	210
5017	Soil venting test equipment, per day	83
5018	Ordinary consumables, per well	18
Solinst Levellogger		
5137	Per day	67
5138	Per week	202
5139	Per month	500
YSI 556 water meter		
5019	Per hour	58
5020	Per day	229
5021	Per week	687
5025	Disposable bailer, each	18
5027	Field filtering water, per sample	21
Interface probe		
5080	Per hour	18
5081	Per day	88
5082	Per week	290
Water level tape		
5083	Per hour	15
5084	Per day	69
5085	Per week	208
3106	Boat, per day	100
3107	Pond sampling equipment, per day	125

Field Analysis/Air Quality

OVA flame ionization detector (FID)		
5029	Per hour	40
5030	Per day	230
5031	Per week	690
TVA-1000 FID/PID		
5032	Per hour	59
5033	Per day	236
5034	Per week	708
PID w/10.6 eV lamp		
5035	Per hour	35
5036	Per day	163
5037	Per week	540
PID w/11.8 eV lamp		
5038	Per hour	41
5039	Per day	195
5040	Per week	585
MSA Orion 4-gas meter		
5043	Per hour	25
5044	Per day	130
5045	Per week	460
Landtec methane monitor		
5049	Per hour	30
5050	Per day	173
5051	Per week	575
PDR-1000 aerosol monitor		
5052	Per hour	30
5053	Per day	140
5054	Per week	420
3024	Per month	1,260
Surveying equipment (laser level)		
5055	Per hour	18
5124	Per day	88
Lumex mercury monitor		
5063	Per day	404
5064	Per week	1,723
Apex air sampling pump		
5134	Per hour	12.50
5135	Per day	60
5136	Per week	180
Hand auger		
6002	Per day	50
3689	Per week	150
Metal detector/line locator		
5089	Per hour	19
5090	Per day	95
5091	Per week	285
3105	Rotary hammer drill, bit rental and wear, per day	70
5056	Video camera rental, per day	54
5057	Radon canister, each	42
5092	Master locks #2106 (brass), each	25
5093	ISCO sampler, per day	114

† Quoted on an individual basis

Industrial Hygiene Equipment/Supplies

5065	Q-Trak IAQ monitor	†	
5066	Dustrak monitor	†	
5068	Filter cassettes	†	
5069	Sorbent tubes, passive dosimeters	†	
5070	Draeger tubes	†	
Air sampling pump			
5072	Per day	50	
5073	Per week	†	
Draeger pump			
5074	Per day	30	
5075	Per week	†	
5076	Noise dosimeter/sound level meter, per day	†	
XRF spectrum analyzer			
5086	Per hour	118	
5087	Per day	550	
5088	Per week	1,650	
5105	Ventilation smoke tube	†	
5106	Andersen sampler	†	
5107	High volume pump	†	
5111	Zefon filter, each	13	
5117	Optical borescope	†	
5118	Moisture meter	†	
5871	Asbestos field kit, per day	59	
3192	Other miscellaneous	†	

Safety Plans/Equipment

5067	Develop & review health & safety plan for Braun Intertec use only	†	
5108	Confined space tripod/hoist, per day	160	
5112	Confined space blower, per day	80	

Miscellaneous Equipment Rental/Supplies

Peristaltic pump			
3001	Per day		55
3102	Per week		220
Trimble GeoXH GPS (sub-meter horizontal only)			
5096	Per hour		26
5097	Per day		150
5098	Per week		450
Trimble R8 Rover GPS (horizontal and vertical)			
5099	Per hour		57
5100	Per day		309
5101	Per week		1,113

Reliance Letter, per addressee

Greater of \$1,000 or 10% of original project fee

Pavement Evaluation Services

Nondestructive testing and analysis flexible pavements			
8560	Parking lot testing and evaluation services	†	
8510	Surface condition surveys	†	
8620	Falling Weight Deflectometer (FWD) testing, per hour		392
8000	FWD testing (country road), per mile	†	
8640	Mobilization		221

Expenses

1854	Vehicle, per day		†
1856	Vehicle mileage, per mile		†
1861	Trip charge		†
1863	Per diem expenses when working away from headquarters or branch locations		Cost + 15%
1864	Miscellaneous expenses		Cost + 15%
1866	Subcontracted services		Cost + 15%
3715	Project supplies and equipment		Cost + 15%

100	Personnel Services, per hour			Field and office services, regular hourly rates*	
121	Engineer-in-training	120		102	Technician I 70
300	Scientist-in-training	120		106	Technician II 85
				110	Technician III 100
150	Building Sciences Technologist	130		111	Technician IV 110
118	Staff Engineer	130			
320	Staff Scientist	130		138	Project Assistant 85
157	Staff Architect	145		371	CADD/Graphics Operator 105
151	Roofing Specialist	145		375	GIS Technician 105
326	Senior Geologist	150			
				Nondestructive Examination (NDE) Technicians, regular hourly rates**	
327	Industrial Hygienist	160		108	Level II NDE Technician 100
156	Project Architect	160		629	Magnetic Particle
126	Project Engineer	160		635	Liquid Penetrant
330	Project Scientist	160		640	Ultrasonic
				645	Solo Technician-Radiography
128	Senior Engineer	180			
340	Senior Scientist	180		200.	ICC Structural Steel Technician/Observer 105
338	Senior Industrial Hygienist	195		600	RT Forensic 180
155	Principal Architect	205		112	AWS-Certified Weld Inspector 105
130	Principal Engineer	210		613	Radiography, two-man crew (IR-192) 165
350	Principal Scientist	210		619	Radiography, three-man crew (IR-192) 225
257	Forensic Engineering & Architecture	235		254	PMI (positive material identifier) services 190
133	Principal Consultant	260		615	Radiography, two-man crew (Co-60)*** 210
226	Project Manager	†		107	API 510/570/653 Technician 120
228	Senior Project Manager	†		117	Level III NDE services 140
	Rates for litigation support services will include a surcharge	†		602	CR Radiography 200
	Clerical Services				Reduced weekly and monthly rates available for continuous service. Regular hourly rates apply during normal work hours of 7 a.m. to 4 p.m., Monday through Friday. Services provided to meet project requirements or the contractor's construction schedule <i>outside</i> the normal work hours or exceeding 8 hours per day will be invoiced using an overtime rate factor.
1904	Library retrieval for additional copies after initial distribution of report	75			
3766	24" x 36" or larger color plot, each,	9			
3768	24" x 36" or larger black & white plot, each	5.75			
	Computer Aided Drafting (CAD)				* The factor for services provided outside the normal work hours or on Saturday will be 1.25 times the regular hourly rate for the service provided. The factor for services provided on Sunday or legal holidays will be 1.5 times the regular hourly rate for the service provided.
3750	Phase I site map (not to scale)	69			** The factors for NDE services provided outside the normal work hours or on Saturday will be 1.35 times the regular hourly rate for the service provided. The factor for NDE services provided on Sunday or legal holidays will be 1.85 times the regular hourly rate for the service provided.
3751	Phase I site map (to scale)	106			*** Co-60 work may require three-man crew. Code 615 plus Assistant code 614.
3752	Soil boring location sketch (not to scale)	88			
3753	Soil boring location sketch (to scale)	162			
3754	Groundwater contour map (3 pt)	52			
3755	Groundwater contour map (4+ pt)	69			
3756	Soil and groundwater contamination map (single chemical)	52			
3757	Soil and groundwater contamination map (multi chemical)	80			