

Acknowledgment and Agreement of Services

April 18, 2024



The services of American Engineering Testing, Inc., (AET) have been requested for the referenced project by Aaron Praus of the City of Dickinson on April 18, 2024.

Understood information from requesting party includes the following:

Project Name: Dickinson Solid Waste Management Facility – Cell 3B-5 and East Sidewall Construction
Project Address: Dickinson, ND
Proposal No: P-0025687
Client: City of Dickinson
Client Address: 38 1st Street W
Dickinson, ND 58601
Client Contact: Mr. Aaron Praus
aaron.praus@dickinsongov.com

Service Extent/Communication: AET's project Quality Assurance (QA) testing services will be provided on an on-call basis when requested by Client or authorized representative. We understand our materials testing services as indicated below will be provided for this project as an amendment to the current contract we have with the City of Dickinson for the City of Dickinson 2024 Geotechnical Engineering Services for Various Infrastructure and Engineering Improvements Projects.

Understood Scope of Services (*actual services to be determined by requirements of construction documents or at direction of Client or authorized representative*) may include the following:

- Clay liner tests to include field nuclear moisture density (compaction) tests, laboratory standard proctor, grain size distribution, Atterberg limits, soil classification and hydraulic conductivity tests.
- Sand drainage layer and leachate collection gravel to include laboratory grain size distribution, soil classification and hydraulic conductivity tests.
- Prepare reports presenting the results of the services provided.

This proposal is valid for a period of 180 days from the date issued under the assumption that the project construction will take place in 2024.

Estimated Fees: Our services will be provided on a unit cost basis according to the unit rates provided in the attached AET Fee Estimate tabulation. Our monthly invoices will be determined by multiplying the number of personnel hours or tests by their respective unit rates.

We have also estimated a total cost we anticipate will be required to complete the previously described testing services. This estimated total cost is based on the information provided, our

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Phone Office: 701-483-4288 | teamAET.com | AA/EEO

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ACKNOWLEDGEMENT AND AGREEMENT OF SERVICES
DICKINSON LANDFILL CELL 3B-5, DICKINSON, ND
CITY OF DICKINSON
PROPOSAL No. P-0025687
APRIL 18, 2024



experience with similar projects and the 42 site visits we base our estimate on. Our estimated total cost will be approximately \$46,091.00. We refer you to the attached Fee Estimate for an itemization of how we arrived at this estimated cost.

We caution that this is only an estimated cost. Often, variations in the overall cost of the services occur due to reasons beyond our control, such as construction change orders, weather delays, changes in the contractor's schedule, unforeseen conditions or retesting of services. These variations will affect the actual invoice totals, either increasing or decreasing our total costs for the project from those estimated in this proposal. If more time or tests are required, additional fees may be needed to complete the project testing services. If less time or tests are needed, cost savings will be realized. We have also attached our 2023 ND fee schedule for any other out of scope services that may be required.

Terms/Conditions: All AET Services are provided subject to the Terms and Conditions set forth in the above referenced City of Dickinson 2024 Geotechnical Engineering Services for Various Infrastructure and Engineering Improvements Projects Construction Service Agreement—Terms and Conditions, which, upon acceptance of this proposal, are binding upon you as the Client requesting Services, and your successors, assignees, joint venturers, and third-party beneficiaries. Please be advised that additional insured status is granted only upon written acceptance of the proposal.

Acceptance: AET requests written acceptance of this proposal in the Authorized Client Representative section below, but the following actions shall constitute your acceptance of this proposal together with the Terms and Conditions and Amendments: 1) issuing an authorizing purchase order for any of the Services described above, 2) authorizing AET's presence on site or 3) written or electronic notification for AET to proceed with any of the Services described in this proposal. Please indicate your acceptance of this proposal by signing below and returning a copy to us. When you accept this proposal, you represent that you are authorized to accept on behalf of the Client.

Sincerely,
American Engineering Testing, Inc.

A handwritten signature in blue ink, appearing to read 'Will Diemert'.

Will Diemert
Engineer I
701.840.7403

Attachments: AET Fee Estimate
2023 North Dakota Construction Material Fee Schedule

ACKNOWLEDGEMENT AND AGREEMENT OF SERVICES
DICKINSON LANDFILL CELL 3B-5, DICKINSON, ND
CITY OF DICKINSON
PROPOSAL No. P-0025687
APRIL 18, 2024



Authorized Client Representative:

ACCEPTANCE AND AUTHORIZATION: AET Proposal No. P-0025687

SIGNATURE: _____

PRINTED NAME: _____

COMPANY: _____

ADDRESS: _____

PHONE NUMBER AND EMAIL: _____

DATE: _____

INVOICING INFORMATION (Provide Company AP Department Information, if present.)

AP CONTACT NAME: _____

BILLING/MAILING ADDRESS: _____

AP PHONE NUMBER AND INVOICE EMAIL: _____

P.O. NO./ PROJECT NO.: _____

PROJECT TESTING SERVICES FEE SCHEDULE
Dickinson Landfill 3B-5 Construction
QA Testing
Dickinson, ND
AET PROPOSAL No. P-0025687



SERVICE DESCRIPTION	PROJECT BUDGET		
	ESTIMATED UNITS	UNIT RATE	BUDGET AMOUNT
Soil Density Testing - Technician III for soil compaction testing and reporting (assumes 42 trips to the jobsite).	150 hours	\$105.00	\$15,750.00
Personal or company vehicle mileage.	650 miles	\$1.10	\$715.00
Nuclear Density Gauge Rental - Daily	42 days	\$68.00	\$2,856.00
	Section Subtotal:		\$19,321.00
Laboratory Work			
ASTM D422 Particle Size Analysis of Soils (includes gradation)	28 unit	\$230.00	\$6,440.00
ASTM D5084 Hydraulic Conductivity of Saturated Clay by Flexible Wall Permeater	23 unit	\$500.00	\$11,500.00
ASTM D698 Standard Proctor	8 tests	\$240.00	\$1,920.00
ASTM D4318 Atterberg Limits Dry Preparation	17 unit	\$130.00	\$2,210.00
	Section Subtotal:		\$22,070.00
Project Management & Coordination			
Project Management - Engineer II/Project Manager for coordination of AET personnel and activities, attending meetings (if requested), consultation and report preparation.	20 hours	\$160.00	\$3,200.00
Project Administrator for report preparation, review, invoicing.	20 hours	\$75.00	\$1,500.00
	Section Subtotal:		\$4,700.00
	ESTIMATED BUDGET		\$46,091.00

2023 NORTH DAKOTA CONSTRUCTION MATERIAL FEE SCHEDULE



I. ENGINEERING - TECHNICAL - ADMIN PERSONNEL RATES			
Service Item	Unit	Rate	
Project Administrator	Hour	\$	75.00
Technician, Level I	Hour	\$	85.00
Technician, Level II	Hour	\$	95.00
Technician, Level III	Hour	\$	105.00
Technician, Level IV	Hour	\$	115.00
Field Engineer	Hour	\$	125.00
Engineer, Project Manager, Geologist - Level I	Hour	\$	150.00
Engineer, Project Manager, Geologist - Level II	Hour	\$	160.00
Engineer, Project Manager, Geologist - Senior	Hour	\$	195.00
Engineer, Project Manager, Geologist - Principal	Hour	\$	235.00
Above fees + 50% Overtime & 100% Sunday and Holidays may apply			
Per Diem (meals) for out-of-town services	Day	\$	45.00
Direct Project Expenses, i.e. motel, freight	Cost	+ 15%	

II. VEHICLE CHARGES			
A. Mileage	Mile	\$	1.10
B. Vehicle Charge - In Town	Each	\$	50.00
C. Bobcat Rental	Day	\$	750.00

III. EARTHWORK OBSERVATIONS AND TESTING			
A premium will be applied for any RUSH tests			
A. Field Engineering Services	See Section I		
B. Field Density Testing			
1. Trip Charge (time & mileage)	See Section I, II		
2. Field Density, Test Charge, Nuclear Gauge	Test	\$	35.00
3. Field Density, Test Charge, Sand Cone	Test	\$	75.00
4. Field Density, DCP Rental	Day	\$	75.00
5. Field Density, Nuclear Density Gauge Rental	Day	\$	68.00
C. Compaction Laboratory Testing (ASTM D698/D1557 - AASHTO T99/T180)			
1. Proctor Standard or Modified	Test	\$	240.00
2. One Checkpoint (Proctor)	Test	\$	75.00
3. California Bearing Ratio (excludes Proctor)			
a. Three Point	Test	\$	750.00
b. One Point	Test	\$	375.00
D. Unconfined Compression	Test	\$	100.00
E. Permeability tests - (ASTM D5856 & D5854)			
1. Rigid Clay	Test	\$	425.00
2. Remolded Rigid Clay	Test	\$	500.00
3. Sand	Test	\$	295.00
4. Flex Clay	Test	\$	500.00
5. Remolded Flex Clay	Test	\$	625.00

IV. AGGREGATE TESTING			
A. Sieve Analysis (AASHTO T27/T11 & ASTM C136/C117)			
1. Sieve Analysis of Coarse & Fine Aggregate	Test	\$	120.00
2. #200 Wash Only (ASTM D1140 / AASHTO T11)	Test	\$	80.00
3. Hydrometer - includes gradation (ASTM D422)	Test	\$	230.00
4. Coarse Aggregate, Unwashed (ASTM C136)	Test	\$	80.00
5. Specific Gravity & Absorb., Coarse (ASTM C127)	Test	\$	115.00
6. Specific Gravity & Absorbition, Fine (ASTM C128)	Test	\$	115.00
B. Physical Properties - (NDDOT 4)			
1. Fractured Particles Coarse Agg (AASHTO T113)	Test	\$	100.00
2. Lightweight Pieces (shale)	Test	\$	190.00
3. Atterberg Limit /Plasticity (AASHTO T90/T90)	Test	\$	125.00
4. LA Abrasion w/o gradation (AASHTO T96)	Test	\$	275.00
5. Erionite (SEM)	Test	\$	550.00
6. Flat & Elongated Particles	Test	\$	190.00
7. Unit Weight (Loose or Rodded) AASHTO T19			
a. Coarse Aggregate or Pit Run	Test	\$	90.00
b. Fine Aggregate	Test	\$	90.00

Service Item	Unit	Rate	
C. Soundness, NA or MG (ASTM C88)			
1. 5 cycles Coarse Aggregate	Test	\$	350.00
2. 5 cycles Fine Aggregate	Test	\$	350.00
D. Mobile Laboratory Rental			
1. Weekly Laboratory Rental (Concrete, Asphalt, or Soil)	Week	\$	800.00

V. CONCRETE TESTING			
A. Observation/Testing	See Section I, II		
B. Compressive Strength Cylinders			
1. 4" x 8" Cylinders	Each	\$	30.00
2. 6" x 12" Cylinders	Each	\$	40.00
3. Cylinder preparation (ends)	Each	\$	30.00
C. Plastic Cylinder Molds 4x8 or 6x12	Case	\$	80.00
D. Flexural Strength			
1. Concrete Flexural Strength	Each	\$	80.00
2. Beam Mold Rental (including cleanup)	Each	\$	70.00
E. Concrete Mix Design per ACI 211			
1. Mix Design (inclusive of all tests)	quoted per job		
F. Density & Compression of Drilled Cores			
1. Density & Absorbition (ASTM C642)	Test	\$	75.00
2. Compression Test (ASTM C42, Section 7)	Test	\$	100.00
G. Compressive Strength of Mortar/Grout (ASTM C109)			
1. 2" x 4" cylinders	Each	\$	35.00
2. Grout Cubes (set of 3)	Each	\$	85.00
3. CMU Prisms (set of 3)	Each	\$	550.00
H. Field Plastic			
1. Concrete Testing Equipment Rental	Day	\$	25.00
I. Hardened Concrete Testing Equipment			
1. Proflograph Rental	Day	\$	180.00
2. Schmidt Rebound Hammer Rental	Day	\$	80.00
3. Rebar Locator Rental	Day	\$	135.00

VII. BITUMINOUS TESTING			
A. Laboratory Mix Design	quoted per job		
B. Marshall Properties (AASHTO T45, T166, T200)	Test	\$	300.00
C. Marshall Stability & Flow (ASTM D1559)	Test	\$	65.00
D. Pavement Density & Thickness (ASTM D2726)	Test	\$	50.00
E. Extraction Only (ASTM D2172)	Test	\$	225.00
F. Extraction/Gradation (ASTM D2172)	Test	\$	300.00
G. NDDOT Superpave SPV Mix Proportioning (AASHTO T 312)	Test	\$	550.00
H. Gyratory Mix Properties (Suite of tests)	Test	\$	550.00
I. Uncompacted Voids - FAA (ASTM D4791)	Test	\$	135.00
J. Sand Equiv. of Fine Aggregate (AASHTO T 176)	Test	\$	230.00

VIII. Sampling Hardened Concrete Or Bituminous by Coring			
A. Portable Coring Equipment	Hour	\$	55.00
B. Excessive Bit Wear	Inch	\$	7.00
C. Generator (if required)	Day	\$	125.00
D. Patching material	Bag	\$	15.00

IX. ND OIL & GAS SUNDRY TESTING			
A. pH (AASHTO T 289)	Test	\$	35.00
B. Sodium Absorption Ratio (SAR) Method 5E	Test	\$	75.00
C. Cation Exchange Capacity (Method 5A8)	Test	\$	80.00
D. Electrical Conductivity (Method 8A1)	Test	\$	35.00