



ALEDO ISD BOARD MEETING TEMPLATE

MEETING DATE: June 21, 2021

AGENDA ITEM: Consider Approval of Certified Material Testing Cost Increase for Annetta Elementary School Construction Project

PRESENTER: Earl Husfeld, Chief Financial Officer and Tyler Boswell, Director of Construction & Facilities

BACKGROUND INFORMATION:

- Texas Government Code, Chapter 2269.058, states a school district (a) independently of the contractor, construction manager at-risk, or design-build firm, shall provide or contract for the construction materials engineering, testing, and inspection services and the verification testing services necessary for the acceptance of the facility by the governmental agency and (b) the school district shall select the services for which it contracts under this section in accordance with Section 2254.004.
- Texas Government Code, Chapter 2254.004, states a school district must select and award a contract for professional services on the basis of demonstrated competence and qualifications to perform the services for a fair and reasonable price.
- A third-party Certified Materials Testing (CMT) firm, or lab, ensures the materials and processes are in compliance with the plans and specifications of the projects.
- In the fall of 2020, CMJ Engineering, Inc. (CMJ) was hired as the third-party certified material testing (CMT) lab for the Annetta Elementary School project.
- The original estimated amount of the CMJ proposal (\$177,013.75) for the CMT work on this project has been exceeded due to particular characteristics of this project that have required additional site visits, testing, and re-testing by CMJ that include, but are not limited to:
 - a significant amount of heavy rain (particularly in the month of May),
 - studies related to the presence of more ground water than expected and the impact on the Learners Lane box culvert construction and the required additional drainage system on the eastern area of the site,
 - necessary design changes to the wastewater treatment plant to meet all requirements,
 - phasing/compression of schedule due to excessive heavy rain and schedule delays,
- Due to these unforeseen factors, the original estimated amount for CMJ's fees requires an increase of \$97,872.00 to a total of \$274,885.75. This increase will cover the additional cost to complete the Annetta Elementary School project.



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- As this proposed increase is greater than \$50,000.00, we are presenting this item to you for your consideration and approval.

FISCAL INFORMATION:

The estimated increased cost of \$97,872.00 for these CMT services will be paid from 2019 bond funds allocated for this project

ATTACHMENTS:

CMJ Engineering, Inc. Estimate of Construction Materials Testing Services for Elementary School No. 6 (Annetta Elementary School)

ADMINISTRATIVE RECOMMENDATION:

The Administration recommends the Board of Trustees approve the proposed increase of \$97,872.00 for third-party certified material testing services by CMJ Engineering, Inc. for the Annetta Elementary School construction project as presented.

Aledo I.S.D.

Estimate No. 20-155

September 11, 2020

**ESTIMATE
CONSTRUCTION MATERIALS TESTING SERVICES FOR
ELEMENTARY SCHOOL NO. 6
ANNETTA, TEXAS**

**ACTUAL TESTING QUANTITIES &
COST THROUGH MAY 25, 2021 -
PLUS REMAINING TESTING**

<u>DESCRIPTION</u>	<u>NO</u>	<u>FEE</u>	<u>UNIT</u>	<u>AMOUNT</u>	<u>ACTUAL #</u>	<u>AMOUNT</u>	<u>+ / -</u>
<u>Earthwork</u>							
Slake Sieve Analysis (TEX 101/110E)	1	\$ 194.00	each	\$ 194.00	3.0	\$ 582.00	(388.00)
pH Lime Series (Eades and Grim Method)	0	\$ 316.50	each	\$ -	2.0	\$ 633.00	(633.00)
Moisture/Density Relations (ASTM D698)	14	\$ 171.00	each	\$ 2,394.00	16.0	\$ 2,736.00	(342.00)
Oversize Rock Correction (ASTM D4718)	1	\$ 127.00	each	\$ 127.00	2.0	\$ 254.00	(127.00)
Liquid & Plastic Limit (ASTM D4318-B)	26	\$ 60.00	each	\$ 1,560.00	38.0	\$ 2,280.00	(720.00)
Laboratory Sieve Analysis (ASTM C117, D1140)	14	\$ 67.00	each	\$ 938.00	15.0	\$ 1,005.00	(67.00)
Laboratory Sieve Analysis (ASTM C136)	15	\$ 81.50	each	\$ 1,222.50	19.0	\$ 1,548.50	(326.00)
Earthwork Observation/Testing Including all Non-Test Pit							
In-Place Moisture/Density Testing by ASTM D6938 (Min. 4 Hours/Trip)	508	\$ 70.50	hour	\$ 35,814.00	863.5	\$ 60,876.75	(25,062.75)
In-Place Moisture/Density Testing (Min. 4 Hrs/Trip) - Overtime	126	\$ 105.75	hour	\$ 13,324.50	457.5	\$ 48,380.63	(35,056.13)
Additional Fee-Test Pit In-Place Moisture/Density Testing	0	\$ 15.00	each	\$ -	0.0	\$ -	0.00
Project Management - Initial Project Set-up	2	\$ 93.00	hour	\$ 186.00	2.0	\$ 186.00	0.00
Vehicle Trip Charge	97	\$ 54.00	trip	\$ 5,238.00	113.0	\$ 6,102.00	(864.00)
Estimated Total for Earthwork Services:				\$ 60,998.00			
<u>Augered Cast-in-Place Piles Observation</u>							
Grout Cubes (ASTM C109/C270 - 2" x 2" - Min. 3/Set)	192	\$ 31.00	each	\$ 5,952.00	90.0	\$ 2,790.00	3,162.00
Grout Cubes (ASTM C109/C270 - 2" x 2" - Min. 3/Set) - Overtime	36	\$ 46.50	each	\$ 1,674.00	6.0	\$ 279.00	1,395.00
Senior Pier Specialist (Min. 4 Hours/Trip)	268.5	\$ 81.50	hour	\$ 21,882.75	141.0	\$ 11,491.50	10,391.25
Senior Pier Specialist (Min. 4 Hours/Trip) - Overtime	124	\$ 122.25	hour	\$ 15,159.00	64.0	\$ 7,824.00	7,335.00
Project Management	27	\$ 93.00	hour	\$ 2,511.00	8.5	\$ 790.50	1,720.50
Senior Geotechnical Engineer (1.0 Hour Min. Charge)	6	\$ 139.00	hour	\$ 834.00	5.0	\$ 695.00	139.00
Vehicle Trip Charge	30	\$ 54.00	trip	\$ 1,620.00	30.0	\$ 1,620.00	0.00
Estimated Total for Pier Observation Services:				\$ 49,632.75			
<u>HMAC Paving</u>							
Maximum Theoretical Specific Gravity (TEX 227F)	0	\$ 167.00	each	\$ -	1.0	\$ 167.00	(167.00)
In-Place Density by Nuclear Method (TEX 207F/III - Min. 4 Hours/Trip)	0	\$ 70.50	hour	\$ -	8.0	\$ 564.00	(564.00)
In-Place Density by Nuclear Method (TEX 207F/III - Min. 4 Hrs/Trip) - OT	0	\$ 105.75	hour	\$ -	3.5	\$ 370.13	(370.13)
Vehicle Trip Charge	0	\$ 54.00	trip	\$ -	1.0	\$ 54.00	(54.00)
Estimated Total for HMAC Paving Services:				\$ -			

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**ACTUAL TESTING QUANTITIES &
COST THROUGH MAY 25, 2021 -
PLUS REMAINING TESTING**

DESCRIPTION	NO	FEE	UNIT	AMOUNT	ACTUAL #	AMOUNT	+ / -
Concrete Observation/Testing							
Concrete Test Cylinders (ASTM C31/39 - 4" x 8" - Min. 5/Set)	540	\$ 20.50	each	\$ 11,070.00	1114.0	\$ 22,837.00	(11,767.00)
Concrete Test Cylinders (ASTM C31/39 - 4" x 8" - Min. 5/Set) - Overtime	0	\$ 30.75	each	\$ -	83.0	\$ 2,552.25	(2,552.25)
Concrete Testing Technician (Min. 4 hours/trip)	324	\$ 48.50	hour	\$ 15,714.00	325.0	\$ 15,762.50	(48.50)
Concrete Testing Technician (Min. 4 hours/trip) - Overtime	0	\$ 72.75	hour	\$ -	109.5	\$ 7,966.13	(7,966.13)
Reinforcing Steel Observation with Testing	0	\$ 48.50	hour	\$ -	96.5	\$ 4,680.25	(4,680.25)
Reinforcing Steel Observation with Testing - Overtime	0	\$ 72.75	hour	\$ -	56.0	\$ 4,074.00	(4,074.00)
Reinforcing Steel Observation without Testing (Min. 4 Hours/Trip)	56	\$ 65.00	hour	\$ 3,640.00	315.0	\$ 20,475.00	(16,835.00)
Reinforcing Steel Observation without Testing (Min. 4 Hours/Trip) - OT	0	\$ 97.50	hour	\$ -	106.0	\$ 10,335.00	(10,335.00)
Reinforcing Steel Observation w/o Testing (Min. 4 Hrs/Trip)- Sunday/Hol.	0	\$ 130.00	hour	\$ -	15.5	\$ 2,015.00	(2,015.00)
Concrete Core Sampling (ASTM C42 - Min 4/trip - 4" max. dia./6" max. length)	0	\$ 92.00	each	\$ -	4.0	\$ 368.00	(368.00)
Concrete Core Sampling (Additional Depth or Diameter)	0	\$ 4.00	inch	\$ -	6.0	\$ 24.00	(24.00)
Floor Flatness Testing ASTM E1155 - (\$0.04925/sf, Min 20,000 sf/Trip)	1	\$ 985.00	min.	\$ 985.00	0.0	\$ -	985.00
Cylinder Pick Up	14	\$ 194.00	each	\$ 2,716.00	19.0	\$ 3,686.00	(970.00)
Vehicle Trip Charge	1	\$ 54.00	trip	\$ 54.00	159.0	\$ 8,586.00	(8,532.00)
Estimated Total for Concrete Observation/Testing Services:				\$ 34,179.00			
Masonry Testing							
Masonry Grout Prisms (ASTM C1019 - 4/Set)	20	\$ 31.00	each	\$ 620.00	0.0	\$ -	620.00
Engineering Technician for Masonry Construction Observation (Min. 4 Hours/Trip)	120	\$ 70.50	hour	\$ 8,460.00	0.0	\$ -	8,460.00
Masonry Specimen Pick Up	3	\$ 194.00	each	\$ 582.00	0.0	\$ -	582.00
Vehicle Trip Charge	18	\$ 54.00	trip	\$ 972.00	0.0	\$ -	972.00
Estimated Total for Masonry Services:				\$ 10,634.00			
Structural Steel Observation							
Structural Steel Observation by CWI (Min. 5 Hours/Trip)	75	\$ 81.50	hour	\$ 6,112.50	66.0	\$ 5,379.00	733.50
Ultrasonic Testing of Welds by ASNT/NDT (Min. 5 Hours/Trip)	15	\$ 103.00	hour	\$ 1,545.00	1.0	\$ 103.00	1,442.00
Vehicle Trip Charge	18	\$ 54.00	trip	\$ 972.00	13.0	\$ 702.00	270.00
Estimated Total for Structural Steel Services:				\$ 8,629.50			

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DESCRIPTION	NO	FEE	UNIT	AMOUNT	ACTUAL #	AMOUNT	+ / -
Fireproofing							
Fireproofing Thickness/Density (ASTM E 605 - Min. 3/Trip)	45	\$ 81.50	each	\$ 3,667.50	30.0	\$ 2,445.00	1,222.50
Fireproofing Adhesion/Cohesion (ASTM E736 - Min. 3/Trip)	20	\$ 95.00	each	\$ 1,900.00	0.0	\$ -	1,900.00
Engineering Technician for Thickness Observation and Fireproofing Testing (Min. 4 Hours/Trip)	60	\$ 81.50	hour	\$ 4,890.00	40.0	\$ 3,260.00	1,630.00
Engineering Technician for Thickness Observation and Fireproofing Testing (Min. 4 Hours/Trip) - Overtime	0	\$ 122.25	hour	\$ -	12.5	\$ 1,528.13	(1,528.13)
Vehicle Trip Charge	15	\$ 54.00	trip	\$ 810.00	12.0	\$ 648.00	162.00
Estimated Total for Fireproofing Services:				\$ 11,267.50			
Hourly Office Services							
Senior Geotechnical Engineer (1.0 Hr Min Charge) - Compliance Letter	2	\$ 139.00	hour	\$ 278.00	2.0	\$ 278.00	0.00
Project Manager - Reports Review for Compliance Letter	15	\$ 93.00	hour	\$ 1,395.00	42.5	\$ 3,952.50	(2,557.50)
Same-day Insufficient Notice Fee	0	\$ 250.00	each	\$ -	8.0	\$ 2,000.00	(2,000.00)
Estimated Total for Hourly Services:				\$ 1,673.00			
Estimated Total for Above Testing and Observation Services:				\$ 177,013.75		\$ 274,885.75	\$ (97,872.00)

Notes:

- Project Management fees will be charged as follows: 2 hours for initial project setup, foundation reconciliation at 3 minutes per pier, compliance review and statement of same at 3 minutes per report with a 1 hour minimum, post-tensioning compliance review at 0.50 hours per page with a 1.0 hour minimum and a 79G/house pad compliance report review and letter at 10 minutes per lot, if CMJ is informed at the start of this project of this need. Should the client choose not to sign CMJ's agreement and instead request CMJ to sign the client's contract, any time spent reviewing/revising client's contract will be billed at the above listed project management hourly rate. All other services that would be requested of a project manager will be billed as same.
- Overtime rates of 1.5 times the regular rate will be charged for hours worked or services performed over eight (8) hours per day or before 7:00 a.m. and/or after 5:00 p.m. Monday thru Friday. All lab and field services performed on Saturday, will be billed at 1.5 times the regular rate and will be billed at 2.0 times the regular rate for Sundays and recognized holidays.
- All laboratory test fees are F.O.B. our laboratory. Engineering technician minimums and vehicle trip charges will apply to all trips to the job-site including sample pickups and specimen pickups.
- A minimum amount of technician time and a vehicle trip charge will be billed for each call out, sample pickup or specimen pickup unless noted otherwise. Technician time is charged portal-to-portal from our Fort Worth office.
- 4"x8" concrete compression test specimens will be used per ACI 318 requirements unless instructed otherwise.
- Structural steel observation at fabrication shop fees based on facilities located in the Dallas-Fort Worth metroplex area.
- Additional tests not specified in this fee schedule will be quoted upon request, or based on our current fee schedule.
- Vehicle trip charge in excess of 25 miles from CMJ's office will be based on \$0.79/mile plus tolls, portal-to-portal our office.
- Specimen collection fees as stated are either project specific or based on a maximum of 25 miles from CMJ.
- All same-day service requests will be charged a minimum \$250 insufficient notice fee or actual rescheduling costs if greater.
- All test-pit moisture-density testing will be charged a \$15 fee for each test in addition to standard hourly fee.
- CMJ will not supervise or direct work that is performed by the contractor or subcontractors and is not responsible for their means and methods utilized or the resultant outcome of their efforts.