



Commercial Lab Accreditation

2023 PEPS Conference

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23 CFR 637 Part B


Quality Assurance Procedures for Construction

§637.209(a)(1) – All contractor, vendor, and state transportation department testing used in the acceptance decision shall be performed by qualified laboratories.

Quality Assurance Program for Design-Bid-Build Projects

Chapter 8, Laboratory Qualification Program

Section 8.2, “Qualification” – All laboratories performing sampling and testing for TxDOT require qualification, including CEI and commercial laboratories.

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- Ensures that laboratory facilities, including equipment and personnel, are qualified to perform sampling and testing on behalf of TxDOT.
 - Demonstrates competency in performance of TxDOT sampling and testing procedures.
 - Enhances confidence in the quality of materials accepted for use on TxDOT projects.



Federal Highway Administration (FHWA)

AASHTO Re:Source

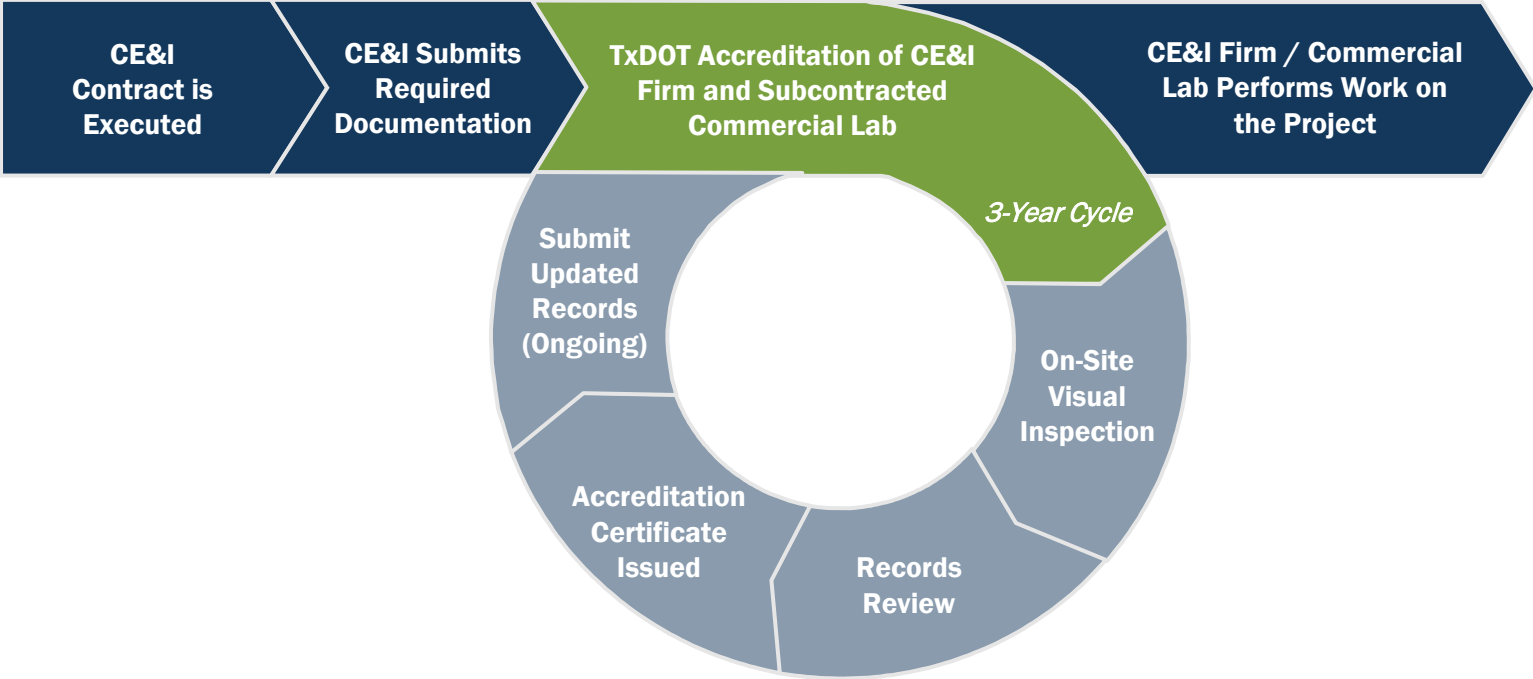
TxDOT Central Laboratory (MTD)

**TxDOT Districts (current)
UT-CTR (future)**

CE&I Firms & Commercial Labs

Quality

CE&I Firm / Commercial Laboratory Qualification Process Overview





Equipment

- ✓ Lab has access to all equipment necessary for testing per minimum laboratory standards (Tex-198-E; Tex-237-F; and Tex-498-A).
- ✓ Equipment is functional and appropriately calibrated.

Technicians

- ✓ Lab has at least one technician qualified to perform each test method.
- ✓ Technicians have demonstrated qualification through: 1) a third-party issued certification or 2) passing a written exam and performance evaluation (i.e., TxDOT-issued certification).

Quality System

- ✓ Equipment calibration records are retained and complete for all required intervals.
- ✓ Technician certification records are retained.



CE&I Firm / Commercial Lab

Form 2682

- Firm location
- Contact information
- Firm's project role
- Scope of testing to be performed

Technician Qualification Records

- Copies of 3rd Party Issued Certificates (e.g., ACI)
- Copies of TxDOT-Issued Certificates (if applicable)

Equipment Calibration Records

- Equipment description/serial number
- Calibration date, results, frequency, and procedure
- Identification of traceable standards
- Name of calibrating technician

Qualifying Authority (TxDOT)

Form 2682

- Verify information provided by accredited firm/lab
- Verify that test methods are available/current
- Document review of applicable technician qualification and equipment calibration records

Visual Equipment Inspection Checklist

- Document that the accredited laboratory has the required equipment to perform scope of testing

Accreditation Certificate

- Firm name and geographic location
- Qualifying authority
- Accreditation effective dates (3-year period)
- Provide certificate to accredited firm & MTD



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Directory of Active Accredited Laboratories

Use this directory listing of accredited laboratories to find information about specific laboratories. The directory includes the following information for each listing:

- Laboratory name, address and contact information
- Accredited test methods
- Certificate

District laboratories	Design-build (DB) commercial laboratories	Design-bid-build (DBB) commercial laboratories
<ul style="list-style-type: none"> Abilene Amarillo Atlanta Austin Beaumont Brownwood Bryan 	<ul style="list-style-type: none"> Alliance Geotechnical Group - Dallas (90ALG001) Atlas - Oakhill Project (90ATLS10) Aviles Laboratory - Houston (90AVI001) Beyond Laboratory - Carrollton (90BET003) EST Inc. Laboratory - Dallas (90EST004) EST Inc. Laboratory - Melissa (90EST001) HVJ - Houston (90HVJ001) 	<ul style="list-style-type: none"> Aguirre & Fields Engineering- FTW (90AG&FIELD) Aguirre & Fields Engineering - Converse (90AGF001) Alliance Geotechnical Group - Fort Worth (90ALG002) Alliance Geotechnical Group - Houston (90ALG004) Alliance Geotechnical Group - Longview (90ALG003) Alpha Testing Inc. - FTW (90ATI002) Arias & Associates - Austin (90A&A002)



During Accreditation...

- Required documentation is not provided timely
- Firms provide expired equipment calibration records
- Equipment records provided to TxDOT are unorganized:
 - Single PDF file with hundreds of scanned pages
 - Files are not clearly labeled (e.g., equipment type, serial number)
- ACI certificates are not provided to TxDOT

During the Project...

- Laboratory performs testing not covered by the TxDOT accreditation scope
- Laboratory location where testing is performed is unclear
- Firms do not notify TxDOT when there are staffing changes on the project
- SiteManager records (i.e., Sample IDs & test reports) are incomplete or inaccurate



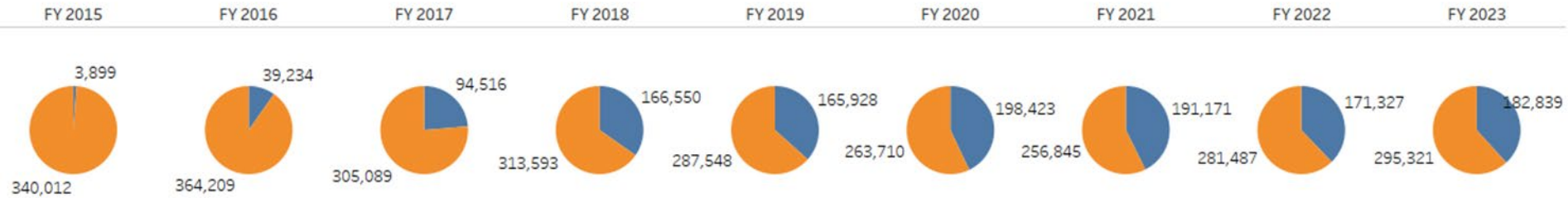
How will the process change?

- University of Texas – Center for Transportation Research will serve as the qualifying authority on behalf of TxDOT.
- Firms will be responsible for requesting accreditation centrally instead of on a per-project basis at the district level.
- Equipment calibration records will be managed centrally:
 - Firms submit documentation annually
 - Districts will not need to request updated calibration records



What are the benefits?

- Minimize duplication of requests / effort for firms and TxDOT
- Ensure consistency in accreditation process
- Conduct accreditation reviews and annual audits more efficiently





Questions and Discussion



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