

CONSTRUCTION MATERIALS TESTING AND INSPECTION SERVICES

Beyond Engineering & Testing, LLC is a TX/NM DBE/MBE HUB construction engineering firm currently employing 90+ engineers, technicians and inspectors in four offices in Texas and New Mexico. Beyond offers construction materials testing (CMT), construction management (CM), construction engineering inspection (CEI), construction quality management, and geotechnical engineering services to our clients in the transportation, government, oil and gas, and commercial/industrial sectors. We currently operate four (4) CMT laboratories in DFW/Carrollton, Round Rock, Midland, Texas, and Carlsbad, New Mexico.

Beyond's CM/CEI/CMT operations are managed by our seasoned principals and project managers. Our professionals have proven track records of delivering services on major capital development projects in Texas while complying with project programs, schedules, quality standards, and budgets including:

- IQF, SH 130 Segments 1-4, Austin District
- IQF and IE, SH 130 Segments 5 and 6, Central Texas
- IQF, SH 71 Express, Austin District
- OVTI, LBJ East, Dallas District
- OVT, PGBT-WE, Dallas District
- OVT, Chisholm Trail Parkway Sec6, Fort Worth District
- Construction QC, SH 214 Phase 1, Lubbock District
- Construction QC, SH 16, San Antonio District
- Construction QC, US 385 Widening, Odessa District
- · CEI, SH 302, Odessa District
- CEI, SH 170, Fort Worth District
- CEI, SH123/IH35, Austin District
- CMT, City of Midland 2020 CIP Projects
- CMT, City of Midland George Bush Convention Center

CONSTRUCTION INSPECTION & TESTING SERVICES

CONSTRUCTION ENGINEERING

- Pavement Design
- Pavement Evaluation
- Materials Engineering
- · Quality Management Planning and Review
- Material Specifications
- · Construction Specifications
- Constructability Review

- Value Engineering
- Source Quality Studies
- Subgrade Heave/Swell Mitigation
- Subgrade and Base Chemical Stabilization/Treatment Design
- Subgrade and Base Chemical Treatment Consultation and Investigation
- Soil and Base Premature Failure Forensic Investigation

CONSTRUCTION INSPECTION

- Plant Inspection
- Roadway Inspection
- Deep Foundation Construction Inspection
- Formwork Inspection
- · Reinforcing Steel Inspection
- Concrete Placement Inspection
- Asphalt Placement Inspection
- Welding Inspection and NDT

SOILS AND BASE MATERIALS

- · Soil and Base Sampling
- Soil Classification
- · Soil Sieve Analysis
- Soil Moisture Content and Specific Gravity
- Soil's Chemical Characterization (pH,Resistivity, Sulfates, and Organics)
 Swell Potential Characterization
- Moisture-Density Relationships
- · Base Classification and Selection
- · Base Strength and Disintegration Determination
- Soil and Base Triaxial Strength
- Subgrade and Base In-Place Density and Thickness Testing

PORTLAND CEMENT CONCRETE

- Concrete Mix Designs
- Aggregate Testing
- · Fresh Concrete Sampling
- Field Sampling and Testing Freshly Mixed Concrete
- Flexural Strength Beams
- Compressive Strength Cylinders
- Coring Services







BITUMINOUS (HOT MIX ASPHALT (HMA) / WARM MIX ASPHALT (WMA)

- · HMA Mix Design
- Production Sampling/Testing
- Roadway Testing
- Laboratory Testing
- Coring Services
- · Forensic Investigation
- Consulting

MASONRY

- Mortar and Grout Mix Design
- Block Prism Testing
- · Mortar and Grout Testing

AGGREGATES

- Aggregate Sampling
- Sieve Analysis of Fine and Coarse Aggregate
- Specific Gravity of Aggregate
- Organic Impurities
- Deleterious Materials
- Decantation
- Fine Modulus of Fine Aggregate
- Los Angeles Abrasion
- · Micro-Deval Degradation
- Sand Equivalent
- Absorption and Saturated Surface-Dry Specific Gravity
- Moisture Content
- Bulk Unit Weight
- · Sodium/Magnesium Sulfate Soundness

REPRESENTATIVE PROJECTS

Fairgrounds Road Extension Phase II, Midland, TX: Performed CMT & construction inspection for this \$7 million, 2-mile roadway project. Assisted the city and the general contractor resolve a potential major change related to subgrade constructability. Beyond helped the general contractor fine tune subgrade construction techniques to achieve specification compliance avoiding the potential change order and major schedule delay.

City of Midland, 2020 CIP Construction Materials Testing, Midland, TX: As the sole CMT consultant selected by the City, performed sampling and testing of embankment, flexible base, prime coat, tack coat, seal coat, and flowable backfill on a variety of projects under the City's 2020 Capital Improvement Projects program.

TxDOT Statewide Materials Engineering, Contract No. 36-0IDP0003: The prime firm on this \$3 million IDIQ statewide materials engineering contract. Performed and supervised sampling, testing, inspection work, and related

services for embankment, subgrade, base, aggregate, asphaltic concrete pavement, Portland concrete pavement, and Portland concrete structure construction on a variety of TxDOT highway projects across Texas.

SH 214 Super 2 Passing Lanes, TXDOT Lubbock District: Performed HMA mix design and Construction Quality Control (CQC) services on this 32-mile, 2-phase Super 2 project. Duties included setting up a mobile HMAC laboratory at batch plant, conducting production HMA Level 1A QC inspection and testing, and Level 1B QC inspection and testing of 80k tons of DG-HMA and 117K tons of SMA. Successful and timely in delivery of QC services for the Phase I project without any quality or safety incident. The general contractor retained Beyond for the Phase II project.

Concrete Batch Plant at TDS Facility, Travis County:

Provided CMT and inspection services to Texas Disposal Systems (TDS) for the new concrete batch plant in south Austin. The project consisted of 20 feet of general fill placed in the 4-acre plant site, with 10 feet of select fill material placed for the building and plant pads. Duties included compaction control testing, concrete testing and reinforcing steel placement observations.

Barbara & George Bush Convention Center, Midland:

Performed CMT, construction inspection and special inspection services for this \$43 million, 24-month construction project. Beyond implemented a site specific testing and inspection plan to verify drilled pier depths, avoiding project delay and resulting in significant saving.

TXDOT FIRM & EMPLOYEE PRE-CERTS

(Categories 11,12,14) (In parentheses, no. of employees pre-certified)

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And: 18.5.1, 20.2.1, 20.3.1, 22.1.1, 22.2.1, 22.3.1, 22.4.1, 23.6.1 & 23.12.1

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