TXDOT RULES & REGULATIONS ~ PERFORMANCE EXPECTATIONS

Heavy Highway Construction
Contracting Capacity Building Program

Presenter:
Bob Lanham, President
Williams Brothers Construction

INTRODUCTION

Success means understanding AND delivering what the client (TxDOT) wants.

The governing contract documents are available to ALL Contractors & Subcontractors through TxDOT website.

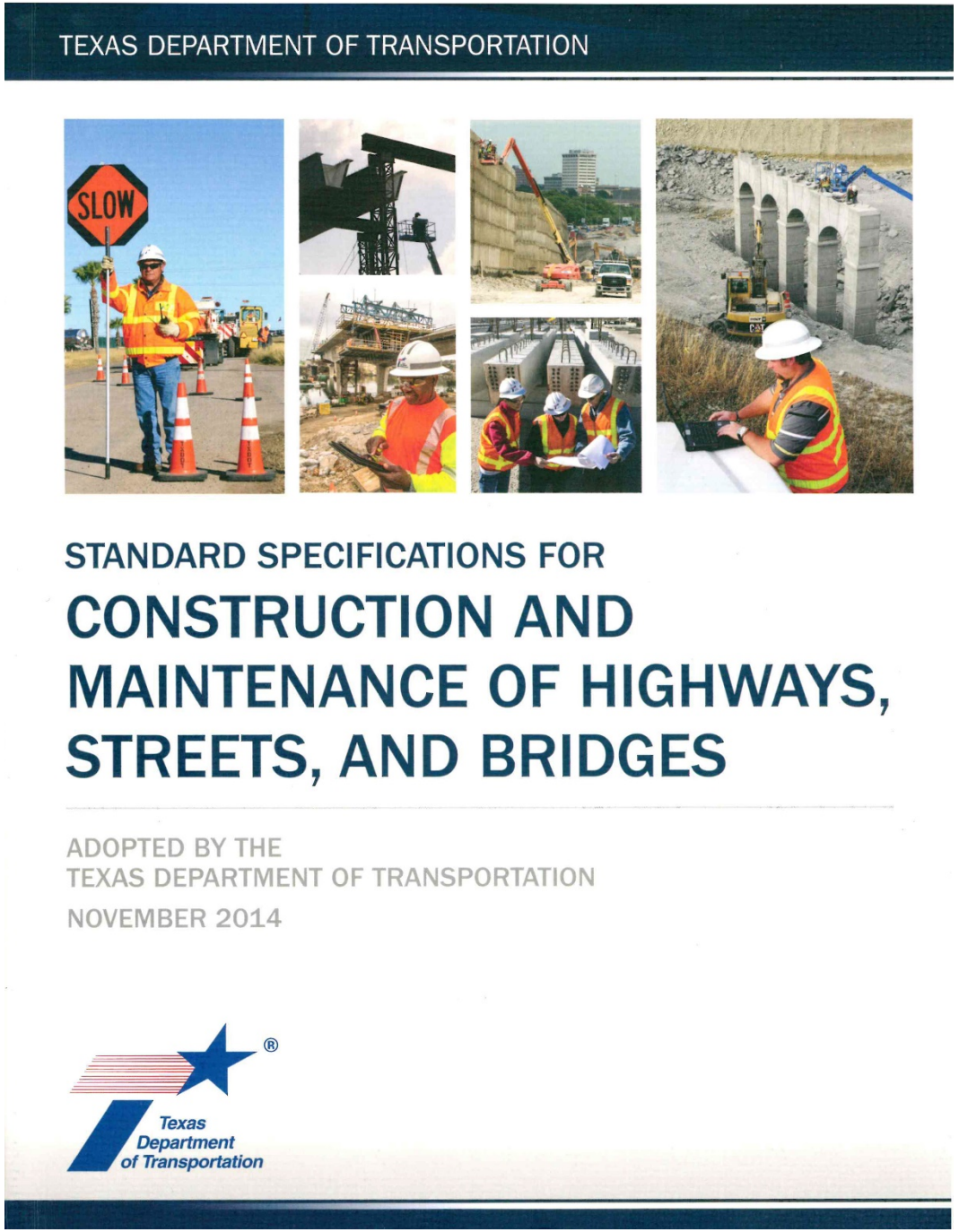
You will learn what it really means when you hear or read "*in accordance with the plans and specifications*"

GOVERNING DOCUMENTS

- Standard Specifications
- Plans
- Bid Proposal
  - Special Provisions
  - Special Specifications
  - General Notes
  - Special Notices

IN THE BEGINNING, TXDOT CREATED…

- Standard Specifications
- Sets forth how TxDOT and the Contractor will conduct business
- Establishes the basic performance criteria for all work



STANDARD SPECS ~ FRAMEWORK FOR BUSINESS

- Items 1 thru 9 of the Standard Specifications
- General conditions of the Prime Contract
- Why is this important?

- Item 1 – Abbreviations & Definitions
- Item 2 – Instructions to Bidders
- Item 3 – Award & Execution of Contract
- Item 4 – Scope of Work
- Item 5 – Control of the Work
- Item 6 – Control of Materials
- Item 7 – Legal Relations & Responsibilities
- Item 8 – Prosecution & Progress
- Item 9 – Measurement & Payment

SO YOU FOUND A JOB TO BID…

Bid advertisements are on TxDOT's website and also available through other bid services…

- Advertisement provides:
  - When job bids
  - Overall job info
  - List of bid items in job

```
COUNTY: HARRIS, ETC              HIGHWAY: SH 146            LENGTH:    3.8830 MI
CONTROL NUMBER: 0389-05-116, ETC                          DBE GOAL:       7.0 %
PROJECT NUMBER: NH 2018(852)
TYPE: GR, STRS & SURFACE
TIME FOR COMPLETION: 1248 WORKING DAYS                GUARANTY:     100,000.00
BIDS RECEIVED UNTIL:  1:00 PM MAY 02, 2018            EST.COST: 192,697,174.71
BIDS WILL BE OPENED:  1:00 PM MAY 02, 2018
  MAIL OR DELIVER BIDS TO:                   FOR PS&E PROJECT QUESTIONS CALL:
  TEXAS DEPARTMENT OF TRANSPORTATION         MELODY GALLAND
  ATTN: CONSTRUCTION DIVISION - ROOM 1A.2    702 FM 1959
  200 E RIVERSIDE                            HOUSTON, TX 77034
  AUSTIN TX 78704-1204                       281/464-5500
  FOR QUESTIONS REGARDING A PROPOSAL CALL 512/416-2498
  TO REQUEST A PROPOSAL GO TO http://www.dot.state.tx.us/business/pr.htm
  FOR ELECTRONIC BIDDING VISIT THE WEBSITE BELOW:
       http://www.txdot.gov/business/letting-bids/ebs.html
```

ALT	ITEM NO.	DES CD.	ITEM DESCRIPTION	UNIT	APPROXIMATE QUANTITIES	BID PRICE	AMOUNT	SEQ
	100	6001	PREPARING ROW	AC	7.000			1
	100	6002	PREPARING ROW	STA	238.700			2
	104	6001	REMOVING CONC (PAV)	SY	86,625.000			3
	104	6009	REMOVING CONC (RIPRAP)	SY	12,048.000			4
	104	6015	REMOVING CONC (SIDEWALKS)	SY	924.000			5
	104	6017	REMOVING CONC (DRIVEWAYS)	SY	5,129.000			6

SO YOU FOUND A JOB TO BID…

- Something to check…

TIME

```
COUNTY: HARRIS, ETC              HIGHWAY: SH 146              LENGTH:    3.8830 MI
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BIDS WILL BE OPENED:  1:00 PM MAY 02, 2018
  MAIL OR DELIVER BIDS TO:                    FOR PS&E PROJECT QUESTIONS CALL:
                                                                  GALLAND
                                                                  195
502  6001 BARRICADES, SIGNS AND TRAFFIC HANDLING    MO          60.000   , TX 77034
506  6020 CONSTRUCTION EXITS (INSTALL) (TY 1)       SY         320.000   -5500
  FOR QUESTIONS REGARDING A PROPOSAL CALL 512/416-2498
  TO REQUEST A PROPOSAL GO TO http://www.dot.state.tx.us/business/pr.htm
  FOR ELECTRONIC BIDDING VISIT THE WEBSITE BELOW:
       http://www.txdot.gov/business/letting-bids/ebs.html
```

THE BID PROPOSAL (INFO COPY)

Download information proposal from TxDOT website. It has important information.

- Familiarize yourself with the contents
- Standard organization of the document
- Check out your bid items. The numbers mean something!

Control	0271-17-163
Project	NH 2018(375)
Highway	IH 610
County	HARRIS

PROPOSAL TO THE TEXAS TRANSPORTATION COMMISSION

2014 SPECIFICATIONS

WORK CONSISTING OF CONSTRUCT BUSWAY FACILITY

HARRIS COUNTY, TEXAS

The quantities in the proposal are approximate. The quantities of work and materials may be increased or decreased as considered necessary to complete the work as planned and contemplated.

This project is to be completed in 873 working days and will be accepted when fully completed and finished to the satisfaction of the Executive Director or designee.

Provide a proposal guaranty in the form of a Cashier's Check, Teller's Check (including an Official Check) or Bank Money Order on a State or National Bank or Savings and Loan Association, or State or Federally chartered Credit Union made payable to the Texas Transportation Commission in the following amount:

ONE HUNDRED THOUSAND (Dollars) ($100,000)

A bid bond may be used as the required proposal guaranty. The bond form may be detached from the proposal for completion. The proposal may not be disassembled to remove the bond form. The bond must be in accordance with Item 2 of the specifications.

Any addenda issued amending this proposal and/or the plans that have been acknowledged by the bidder, become part of this proposal.

By signing the proposal the bidder certifies:

1. the only persons or parties interested in this proposal are those named and the bidder has not directly or indirectly participated in collusion, entered into an agreement or otherwise taken any action in restraint of free competitive bidding in connection with the above captioned project.
2. in the event of the award of a contract, the organization represented will secure bonds for the full amount of the contract.
3. the signatory represents and warrants that they are an authorized signatory for the organization for which the bid is submitted and they have full and complete authority to submit this bid on behalf of their firm.
4. that the certifications and representations contained in the proposal are true and accurate and the bidder intends the proposal to be taken as a genuine government record.

- **Signed:** **

(1) _____ (2) _____ (3) _____

Print Name:

(1) _____ (2) _____ (3) _____

Title:

(1) _____ (2) _____ (3) _____

Company:

(1) _____ (2) _____ (3) _____

- Signatures to comply with Item 2 of the specifications.

**Note: Complete (1) for single venture, through (2) for joint venture and through (3) for triple venture.

*** When the working days field contains an asterisk (*) refer to the Special Provisions and General Notes.**

MY BID ITEMS TO QUOTE

- The "Item" Number has significance
- It refers to the standard specification that governs the work for that item

PROJECT NH 2017(784)
COUNTY HARRIS

Proposal Sheet
TxDOT
FORM 234-B I-61-5M

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	104	6021		REMOVING CONC (CURB) DOLLARS and CENTS	LF	600.000	1
	316	6008		ASPH (A-R TYPE III) DOLLARS and CENTS	GAL	49,015.000	2
	316	6126		AGGR(TY-PB GR-4SAC-A) DOLLARS and CENTS	CY	892.000	3
	347	6001		TOM (ASPHALT) PG 76-22 DOLLARS and CENTS	TON	323.000	4
	347	6002		TOM-C (AGGREGATE) SAC-A DOLLARS and CENTS	TON	5,067.000	5
	506	6038	003	TEMP SEDMT CONT FENCE (INSTALL) DOLLARS and CENTS	LF	1,405.000	100

STANDARD SPECS ~ CONSTRUCTION

- Construction Standard Specifications are in seven groups →
- The basic order and format within each specification follows a standard format

ITM GRP	DESCRIPTION
100	EARTHWORK & LANDSCAPE
200	SUBGRADE TREATMENTS & BASE
300	SURFACE COURSES & PAVEMENTS
400	STRUCTURES
500	MISCELLANEOUS
600	LIGHTING, SIGNING, MARKINGS, & SIGNALS
700	MAINTENANCE

STANDARD SPECS ~ CONSTRUCTION

- Typical organization
  - Description
  - Materials
  - Construction
  - Measurement
  - Payment
- Look for cross references to other specs

Item 403

Temporary Special Shoring

1. DESCRIPTION

Furnish and install temporary shoring to hold the surrounding earth, water, or both out of the work area.

2. MATERIALS

Furnish new or used materials. Furnish materials that meet the requirements of Item 423, "Retaining Walls," when using temporary Mechanically Stabilized Earth (MSE) walls. Furnish materials that meet the requirements of Item 410, "Soil Nail Anchors," or Item 411, "Rock Nail Anchors," when using temporary nailed walls (rock or soil).

3. CONSTRUCTION

The Contractor is responsible for the temporary special shoring design unless complete details are included on the plans. Submit details and design calculations bearing the seal of a licensed professional engineer before constructing the shoring. The Department reserves the right to reject designs. Design the shoring to comply with OSHA Standards and Interpretations, 29 CFR Part 1926, Subpart P, "Excavations." Design structural systems to comply with AASHTO *Standard Specifications for Highway Bridges* or AASHTO LRFD *Bridge Design Specifications*. Design shoring subject to railroad loading to comply with the AREMA *Manual for Railway Engineering* and any additional requirements of the railway being supported.

Provide vertical or sloped cuts, benches, shields, support systems, or other systems to provide the necessary protection in accordance with the approved design. Construct temporary MSE walls, when used, in accordance with Item 423, "Retaining Walls." Construct temporary nailed walls (rock or soil), when used, in accordance with Item 410, "Soil Nail Anchors," or Item 411, "Rock Nail Anchors."

4. MEASUREMENT

This Item will be measured by the square foot of surface area of a vertical plane at the face of the shoring between the top of the ground being supported and the minimum protection grade line shown on the plans. If no minimum protection grade is shown on the plans, the lowest required excavated elevation will be used. Shoring projecting above the level of the ground being supported will not be measured. When excavation techniques (e.g., sloped cuts or benching) are used to provide the necessary protection, the surface area for payment will be calculated based on the area described by a vertical plane adjacent to the structure.

5. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Temporary Special Shoring." This price is full compensation for excavation and backfill; furnishing, placing and removing shoring, sheeting, or bracing; de-watering or diversion of water; jacking and jack removal; and equipment, labor, materials, tools, and incidentals.

No payment will be made for special shoring made necessary by the selection of an optional design or sequence of work that creates the need for shoring.

SPECIAL PROVISIONS

These contract requirements appear <u>only in the Proposal</u>

- Abbreviated format
- Provide deviations from the standard spec

Proposal Sheet
TxDOT
FORM 234-B I-61-5M

PROJECT NH 2017(784)
COUNTY HARRIS

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	104	6021		REMOVING CONC (CURB) DOLLARS and CENTS	LF	600.000	1
	316	6008		ASPH (A-R TYPE III) DOLLARS and CENTS	GAL	49,015.000	2
	316	6126		AGGR(TY-PB GR-4SAC-A) DOLLARS and CENTS	CY	892.000	3
	347	6001		TOM (ASPHALT) PG 76-22 DOLLARS and CENTS	TON	323.000	4
	347	6002		TOM-C (AGGREGATE) SAC-A DOLLARS and CENTS	TON	5,067.000	5
	506	6018	003	TEMP SEDMT CONT FENCE (INSTALL) DOLLARS and CENTS	LF	1,405.000	100

SPECIAL PROVISIONS

730-003

Special Provision to Item 730
Roadside Mowing

For this project, Item 730, "Roadside Mowing," of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Article 730.4., "Measurement," is voided and replaced by the following:

This Item will be measured by the cycle or the acre.

4.1. **Strip and Full-Width Mowing.** "Strip Mowing" and "Full-Width Mowing" will be measured by the cycle.

4.2. **Spot Mowing**. "Spot Mowing" will be measured by the acre mowed. The minimum quantity per callout is 3 acres, unless otherwise shown on the plans.

SPECIAL PROVISIONS

- Listing of special provisions applicable to the project are shown in the Proposal

```
SPECIAL PROVISIONS:  SPECIAL PROVISIONS WILL GOVERN AND TAKE
------------------   PRECEDENCE OVER THE SPECIFICATIONS ENUMERATED
                     HEREON WHEREVER IN CONFLICT THEREWITH.

REQUIRED CONTRACT PROVISIONS, FEDERAL-AID CONSTRUCTION CONTRACTS
                   (FORM FHWA 1273, MAY, 2012)
WAGE RATES
SPECIAL PROVISION "SCHEDULE OF LIQUIDATED DAMAGES" (000---001)
SPECIAL PROVISION "NONDISCRIMINATION" (000---002)
SPECIAL PROVISION "CERTIFICATION OF NONDISCRIMINATION IN EMPLOYMENT"
                   (000---003)
SPECIAL PROVISION "NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO
                   ENSURE EQUAL EMPLOYMENT OPPORTUNITY" (000---004)
SPECIAL PROVISION "STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY
                   CONSTRUCTION CONTRACT SPECIFICATIONS" (000---005)
SPECIAL PROVISION "ON-THE-JOB TRAINING PROGRAM" (000---006)
SPECIAL PROVISION "IMPORTANT NOTICE TO CONTRACTORS" (000---010)
                    (000---522)
SPECIAL PROVISION "CARGO PREFERENCE ACT REQUIREMENTS IN FEDERAL AID
                   CONTRACTS" (000---241)
SPECIAL PROVISION "CERTIFICATE OF INTERESTED PARTIES (FORM 1295)"
                   (000---384)
SPECIAL PROVISION "DISADVANTAGED BUSINESS ENTERPRISE IN FEDERAL AID
                   CONTRACTS" (000---394)
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SPECIAL PROVISION  TO ITEM     2  (002---011)
SPECIAL PROVISION  TO ITEM     6  (006---001)
SPECIAL PROVISIONS TO ITEM     7  (007---001)
                                  (007---008)
SPECIAL PROVISIONS TO ITEM     8  (008---002)
                                  (008---023)
SPECIAL PROVISION  TO ITEM   132  (132---001)
SPECIAL PROVISION  TO ITEM   300  (300---009)
SPECIAL PROVISION  TO ITEM   421  (421---002)
SPECIAL PROVISION  TO ITEM   506  (506---003)
```

SPECIAL SPECIFICATIONS

The purpose of a special specification is to deal with unique work related to a project.

- Item # is 4 digits
- Format follow standard specs
- Special specs are found only in the Proposal

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	7017	6051		MANHOLE (SAN SEWER) (4' DIA) DOLLARS and CENTS	EA	1.000	276
	7017	6055		ADJUSTING MANHOLE (SANITARY SEWER) DOLLARS and CENTS	EA	1.000	277

7017

Special Specification 7017
Sanitary Sewers

Texas Department of Transportation

1. DESCRIPTION

Furnish labor, materials, and equipment necessary to provide a complete sanitary sewer system in accordance and compliance with ANSI, AWWA, ASTM, ASA, SSPC, ACI, and NSF standards, the plans and specifications, and in compliance with the Department's Utility Accommodation Policy (Title 43. T.A.C., Sections 21.31-21.55).

The abbreviations ANSI, AWWA, ASTM, ASA, SSPC, ACI, and NSF in this specification refer to the following organizations:

- ANSI — American National Standards Institute
- AWWA — American Water Works Association
- ASTM — American Society for Testing and Materials
- ASA — American Standards Association
- SSPC — Steel Structures Painting Council
- ACI — American Concrete Institute
- NSF — National Sanitation Foundation

SPECIAL SPECIFICATIONS

- A listing of applicable special specs are provided in the Proposal

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SPECIAL SPECIFICATIONS:
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ITEM 3021 CONCRETE PAVEMENT WIDE FLANGE TERMINALS (360)<400>(421)
          <422>(440)(442)
ITEM 4006 SOUND WALLS <420><421>(424)<425><426><427>(429)<440><441>
          <442><445><446>(447)(448)<449>
ITEM 4008 TRENCH DRAIN <400><420><471>
ITEM 4099  ORNAMENTAL STEEL FENCE
ITEM 5080  VERTICAL BARRIER GATE
ITEM 6001 PORTABLE CHANGEABLE MESSAGE SIGN
ITEM 6002 VIDEO IMAGING VEHICLE DETECTION SYSTEM
ITEM 6007 FIBER OPTIC CABLE (618)(620)(625)
ITEM 6010 CCTV FIELD EQUIPMENT
ITEM 6016 MULTI-DUCT CONDUIT SYSTEM (400)(401)(402)(421)(445)(476)
          (618)(620)
```

GENERAL NOTES

- A complete listing of the Project General Notes are found in the Proposal AND in the Plans
- These are project specific requirements and must be followed
- Usually provides site specific info to clarify the intent of the Plans

Sheet

County: Harris **Control:** 0271-17-163

Highway: IH 610

General Notes:

General:

If fixed features require, the governing slopes shown may vary between the limits shown and to the extent determined by the Engineer.

Superelevate the curves to match the existing surface.

Notify the Engineer immediately if discrepancies are discovered in the horizontal control or the benchmark data.

The following standard detail sheets are modified:

Item 400: Excavation and Backfill for Structures

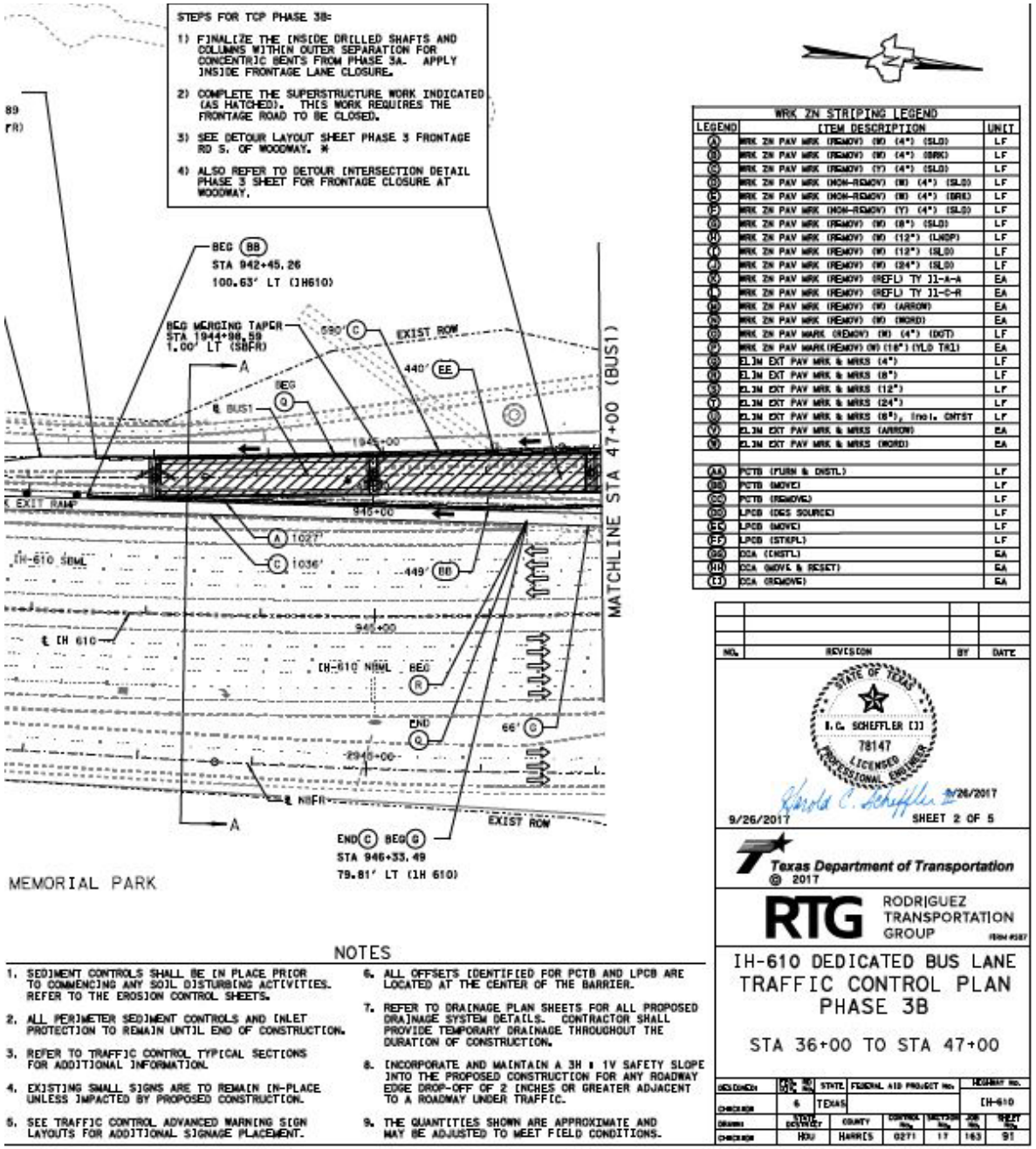
Plugging existing pipe culverts is subsidiary to the various bid items.

If Recycled Cement Treatment (Type D) is included in the plans, the following additional requirements apply:

1. Use only approved sand, crushed concrete, or salvaged base free from deleterious matter, as aggregate for cement-stabilized backfill.
2. Provide crushed concrete or salvaged base backfill material in accordance with the Item, "Cement Treatment (Plant-Mixed)(Type D)" (base or crushed concrete), except the recycled Type D material must not contain Reclaimed Asphalt Pavement (RAP).
3. For backfill material below the spring line of pipes, use cement-stabilized sand rather than Recycled Type D backfill material.

THE PLANS

- A reference to the bundle of drawings that detail all work related to the Project
- Illustrates field conditions
- Contains site specific notes
- Usually provides sequence of work and traffic management requirements
- Environmental requirements, if any, are provided



SPECIAL NOTICES

- Covers unique aspects of the Project
  - Sequence
  - ROW issues
  - Utility issues
- Also contains all federal requirements
- Are found only in the Proposal

Special Provision to Item 000

Important Notice to Contractors

QUESTIONS?

Bob Lanham
President

Williams Brothers Construction

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Email: blanham@wbctx.com