

NOTIFICATION OF ADDENDUM

ADDENDUM NO. 2

DATED 8/31/2015

Control	0048-08-049
Project	NH 2016(091)
Highway	IH 35E
County	ELLIS

Ladies/Gentlemen:

Attached please find an addendum on the above captioned project. Included in the attachment is an addendum notification which details the changes and the respective proposal pages which were added and/or changed.

Except for new bid insert pages, it is unnecessary to return any of the pages attached.

Bid insert pages must be returned with the bid proposal submitted to the Department, unless your firm is submitting a bid using a computer print out. The computer print out must be changed to reflect the new bid item information.

Contractors and material suppliers, etc. who have previously been furnished informational proposals are not being furnished a copy of the addendum. If you have a subcontractor on the above project, please advise them of this addendum. Acknowledgment of this addendum is not requested if your company has been issued a proposal stamped "This Proposal Issued for Informational Purposes."

You are required to acknowledge receipt of this addendum on the Addendum Acknowledgement form contained in your bid proposal by placing a mark in the box next to the respective addendum.

Failure to Acknowledge receipt of this addendum in your bid proposal will result in your bid not being read.

SUBJECT: PLANS AND PROPOSAL ADDENDUMS

PROJECT: NH 2016(091)

CONTROL: 0048-08-049

COUNTY: ELLIS

LETTING: 09/02/2015

REFERENCE NO: 0831

PROPOSAL ADDENDUMS

PROPOSAL COVER

BID INSERTS (SH. NO.: 2-10)

GENERAL NOTES (SH. NO.: A-T)

SPEC LIST (SH. NO.:)

SPECIAL PROVISIONS:

ADDED:

DELETED:

SPECIAL SPECIFICATIONS:

ADDED:

DELETED:

OTHER: SEE CHANGES OULINED BELOW

DESCRIPTION OF ABOVE CHANGES

(INCLUDING PLANS SHEET CHANGES)

IN ADDENDUM #1 SHEET N, ITEMS 512 AND 545 WERE REVISED.
THROUGH ADDENDUM #2 THE GENERAL NOTES ARE INCLUDED WITH ADDENDUM #1
CHANGES.

Bid Inserts:

Sheet 2-10: Item 432 6045 quantity is revised.

General Notes:

Sheet F: Note for Item 132 is revised.

Sheet G: Note for Item 310 is removed.

Plan Set:

The following sheets have been revised:

30, 31, 38 and 50

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	100	6002		PREPARING ROW DOLLARS and CENTS	STA	991.000	1
	104	6001		REMOVING CONC (PAV) DOLLARS and CENTS	SY	4,600.000	2
	105	6075		REMOV STAB BASE AND ASPH PAV (10"-18") DOLLARS and CENTS	SY	208,814.000	3
	110	6001		EXCAVATION (ROADWAY) DOLLARS and CENTS	CY	68,306.000	4
	132	6025		EMBANKMENT (FINAL) (DENS CONT) (TY C1) DOLLARS and CENTS	CY	77,844.000	5
	161	6017		COMPOST MANUF TOPSOIL (4") DOLLARS and CENTS	SY	268,320.000	6
	164	6035		DRILL SEEDING (PERM) (RURAL) (CLAY) DOLLARS and CENTS	SY	268,320.000	7
	168	6001		VEGETATIVE WATERING DOLLARS and CENTS	MG	39,980.000	8
	247	6313		FL BS (CMP IN PLC)(TY D GR1-2)(12") DOLLARS and CENTS	SY	210,147.000	9
	310	6009		PRIME COAT (MC-30) DOLLARS and CENTS	GAL	42,004.000	10
	341	6008		D-GR HMA TY-B PG64-22 DOLLARS and CENTS	TON	69,653.000	11

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	360	6007		CONC PVMT (CONT REINF - CRCP) (13") DOLLARS and CENTS	SY	174,008.000	12
	416	6002		DRILL SHAFT (24 IN) DOLLARS and CENTS	LF	2,143.000	13
	416	6018		DRILL SHAFT (SIGN MTS) (24 IN) DOLLARS and CENTS	LF	10.000	14
	416	6021		DRILL SHAFT (SIGN MTS) (42 IN) DOLLARS and CENTS	LF	255.000	15
	416	6023		DRILL SHAFT (SIGN MTS) (54 IN) DOLLARS and CENTS	LF	20.000	16
	416	6032		DRILL SHAFT (TRF SIG POLE) (36 IN) DOLLARS and CENTS	LF	110.000	17
	420	6066		CL C CONC (RAIL FOUNDATION) DOLLARS and CENTS	CY	20.000	18
	432	6001		RIPRAP (CONC)(4 IN) DOLLARS and CENTS	CY	20.000	19
	432	6045		RIPRAP (MOW STRIP)(4 IN) DOLLARS and CENTS	CY	822.600	20
	450	6071		RAIL (TY TR10SW) DOLLARS and CENTS	LF	491.800	21
	465	6127		INLET (COMPL)(PSL)(FG)(4FTX4FT-3FTX- 3FT) DOLLARS and CENTS	EA	1.000	22
	465	6130		INLET (COMPL)(PSL)(FG)(3FTX5FT-3FTX- 5FT) DOLLARS and CENTS	EA	1.000	23

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	496	6002		REMOV STR (INLET) DOLLARS and CENTS	EA	2.000	24
	496	6007		REMOV STR (PIPE) DOLLARS and CENTS	LF	9.000	25
	500	6001		MOBILIZATION DOLLARS and CENTS	LS	1.000	26
	502	6001		BARRICADES, SIGNS AND TRAFFIC HAN- DLING DOLLARS and CENTS	MO	22.000	27
	506	6002	001	ROCK FILTER DAMS (INSTALL) (TY 2) DOLLARS and CENTS	LF	6,080.000	28
	506	6011	001	ROCK FILTER DAMS (REMOVE) DOLLARS and CENTS	LF	6,080.000	29
	506	6020	001	CONSTRUCTION EXITS (INSTALL) (TY 1) DOLLARS and CENTS	SY	593.000	30
	506	6024	001	CONSTRUCTION EXITS (REMOVE) DOLLARS and CENTS	SY	593.000	31
	506	6038	001	TEMP SEDMT CONT FENCE (INSTALL) DOLLARS and CENTS	LF	31,073.000	32
	506	6039	001	TEMP SEDMT CONT FENCE (REMOVE) DOLLARS and CENTS	LF	31,073.000	33
	506	6041	001	BIODEG EROSN CONT LOGS (INSTL) (12") DOLLARS and CENTS	LF	6,844.000	34
	506	6043	001	BIODEG EROSN CONT LOGS (REMOVE) DOLLARS and CENTS	LF	6,844.000	35

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	512	6013		PORT CTB (DES SOURCE)(SGL SLP)(TY 1) DOLLARS and CENTS	LF	25,740.000	36
	512	6025		PORT CTB (MOVE)(SGL SLP)(TY 1) DOLLARS and CENTS	LF	22,080.000	37
	512	6037		PORT CTB (STKPL)(SGL SLP)(TY 1) DOLLARS and CENTS	LF	25,740.000	38
	512	6084		PTB (DES SOURCE)(TY P&P) DOLLARS and CENTS	LF	39,000.000	39
	512	6085		PTB (MOVE)(TY P&P) DOLLARS and CENTS	LF	75,030.000	40
	512	6086		PTB (STKPL)(TY P&P) DOLLARS and CENTS	LF	39,000.000	41
	533	6001		RUMBLE STRIPS (SHOULDER) DOLLARS and CENTS	LF	169,588.000	42
	540	6001		MTL W-BEAM GD FEN (TIM POST) DOLLARS and CENTS	LF	12,738.500	43
	540	6016		DOWNSTREAM ANCHOR TERMINAL SEC- TION DOLLARS and CENTS	EA	68.000	44
	542	6001		REMOVE METAL BEAM GUARD FENCE DOLLARS and CENTS	LF	3,755.000	45
	542	6002		REMOVE TERMINAL ANCHOR SECTION DOLLARS and CENTS	EA	17.000	46
	544	6001		GUARDRAIL END TREATMENT (INSTALL) DOLLARS and CENTS	EA	68.000	47

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	544	6002		GUARDRAIL END TREATMENT (MOVE & RESET) DOLLARS and CENTS	EA	1.000	48
	545	6001		CRASH CUSH ATTEN (INSTL) DOLLARS and CENTS	EA	16.000	49
	545	6003		CRASH CUSH ATTEN (MOVE & RESET) DOLLARS and CENTS	EA	17.000	50
	545	6005		CRASH CUSH ATTEN (REMOVE) DOLLARS and CENTS	EA	16.000	51
	618	6023		CONDT (PVC) (SCH 40) (2") DOLLARS and CENTS	LF	422.000	52
	618	6024		CONDT (PVC) (SCH 40) (2") (BORE) DOLLARS and CENTS	LF	165.000	53
	618	6029		CONDT (PVC) (SCH 40) (3") DOLLARS and CENTS	LF	2,377.000	54
	618	6030		CONDT (PVC) (SCH 40) (3") (BORE) DOLLARS and CENTS	LF	4,511.000	55
	618	6031		CONDT (PVC) (SCH 40) (3") (CONC ENCSE) DOLLARS and CENTS	LF	141,010.000	56
	618	6046		CONDT (PVC) (SCH 80) (2") DOLLARS and CENTS	LF	100.000	57
	618	6074		CONDT (RM) (3") DOLLARS and CENTS	LF	1,880.000	58
	620	6007		ELEC CONDR (NO.8) BARE DOLLARS and CENTS	LF	711.000	59

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	620	6008		ELEC CONDR (NO.8) INSULATED DOLLARS and CENTS	LF	71,835.000	60
	620	6009		ELEC CONDR (NO.6) BARE DOLLARS and CENTS	LF	1,758.000	61
	620	6010		ELEC CONDR (NO.6) INSULATED DOLLARS and CENTS	LF	6,397.000	62
	620	6011		ELEC CONDR (NO.4) BARE DOLLARS and CENTS	LF	1,571.000	63
	620	6012		ELEC CONDR (NO.4) INSULATED DOLLARS and CENTS	LF	5,898.000	64
	624	6019		GROUND BOX TY 1 (364860)W/APRON DOLLARS and CENTS	EA	73.000	65
	624	6023		GROUND BOX TY 2 (484860)W/APRON DOLLARS and CENTS	EA	7.000	66
	628	6249		ELC SRV TY D 120/240 100(NS)SS(N)PS(U) DOLLARS and CENTS	EA	3.000	67
	644	6001		IN SM RD SN SUP&AM TY10BWG(1)SA(P) DOLLARS and CENTS	EA	41.000	68
	644	6004		IN SM RD SN SUP&AM TY10BWG(1)SA(T) DOLLARS and CENTS	EA	14.000	69
	644	6030		IN SM RD SN SUP&AM TYS80(1)SA(T) DOLLARS and CENTS	EA	4.000	70
	644	6036		IN SM RD SN SUP&AM TYS80(1)SA(U-BM) DOLLARS and CENTS	EA	2.000	71

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	644	6051		IN SM RD SN SUP&AM TYS80(2)SA(P-EXAL) DOLLARS and CENTS	EA	1.000	72
	644	6068		RELOCATE SM RD SN SUP&AM TY 10BWG DOLLARS and CENTS	EA	31.000	73
	644	6070		RELOCATE SM RD SN SUP&AM TY S80 DOLLARS and CENTS	EA	18.000	74
	644	6076		REMOVE SM RD SN SUP&AM DOLLARS and CENTS	EA	61.000	75
	647	6001		INSTALL LRSS (STRUCT STEEL) DOLLARS and CENTS	LB	339.000	76
	647	6003		REMOVE LRSA DOLLARS and CENTS	EA	18.000	77
	647	6004		RELOCATE LRSS (SIGN ONLY) DOLLARS and CENTS	EA	18.000	78
	650	6032		INS OH SN SUP(30 FT CANT) DOLLARS and CENTS	EA	17.000	79
	662	6004		WK ZN PAV MRK NON-REMOV (W)4"(SLD) DOLLARS and CENTS	LF	1,680.000	80
	662	6063		WK ZN PAV MRK REMOV (W)4"(SLD) DOLLARS and CENTS	LF	840.000	81
	662	6095		WK ZN PAV MRK REMOV (Y)4"(SLD) DOLLARS and CENTS	LF	280.000	82
	666	6036		REFL PAV MRK TY I (W)8"(SLD)(100MIL) DOLLARS and CENTS	LF	9,854.000	83

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	666	6159		RE PV MRK TY I(BLACK)4"(SHADOW)(100MIL) DOLLARS CENTS and	LF	51,260.000	84
	666	6224		PAVEMENT SEALER 4" DOLLARS CENTS and	LF	417,311.000	85
	666	6225		PAVEMENT SEALER 6" DOLLARS CENTS and	LF	100,050.000	86
	666	6226		PAVEMENT SEALER 8" DOLLARS CENTS and	LF	9,854.000	87
	666	6303		RE PM W/RET REQ TY I (W)4"(SLD)(100MIL) DOLLARS CENTS and	LF	209,487.000	88
	666	6306		RE PM W/RET REQ TY I (W)6"(BRK)(100MIL) DOLLARS CENTS and	LF	100,050.000	89
	666	6315		RE PM W/RET REQ TY I (Y)4"(SLD)(100MIL) DOLLARS CENTS and	LF	207,824.000	90
	672	6010		REFL PAV MRKR TY II-C-R DOLLARS CENTS and	EA	5,501.000	91
	677	6001		ELIM EXT PAV MRK & MRKS (4") DOLLARS CENTS and	LF	280,915.000	92
	677	6002		ELIM EXT PAV MRK & MRKS (6") DOLLARS CENTS and	LF	211,820.000	93
	677	6003		ELIM EXT PAV MRK & MRKS (8") DOLLARS CENTS and	LF	16,175.000	94
	677	6007		ELIM EXT PAV MRK & MRKS (24") DOLLARS CENTS and	LF	3,630.000	95

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	678	6001		PAV SURF PREP FOR MRK (4") DOLLARS and CENTS	LF	417,311.000	96
	678	6002		PAV SURF PREP FOR MRK (6") DOLLARS and CENTS	LF	100,050.000	97
	678	6004		PAV SURF PREP FOR MRK (8") DOLLARS and CENTS	LF	9,854.000	98
	4041	6001		NOISE WALL DOLLARS and CENTS	SF	19,720.000	99
	6001	6002		PORTABLE CHANGEABLE MESSAGE SIGN DOLLARS and CENTS	EA	4.000	100
	6003	6001		ITS SYSTEM SUPPORT EQUIPMENT DOLLARS and CENTS	LS	1.000	101
	6007	6010		FIBER OPTIC CBL (SNGLE-MODE)(6 FIBER) DOLLARS and CENTS	LF	3,205.000	102
	6007	6013		FIBER OPTIC CBL (SNGLE-MODE)(36 FIBER) DOLLARS and CENTS	LF	140,644.000	103
	6010	6001		CCTV FIELD EQUIPMENT (ANALOG) DOLLARS and CENTS	EA	12.000	104
	6010	6013		REMOVE CCTV FIELD EQUIPMENT DOLLARS and CENTS	EA	9.000	105
	6014	6001		MULTIDUCT COND SYS (PVC)(SCHD 40) DOLLARS and CENTS	LF	70,505.000	106
	6014	6002		MULTIDCT COND SYS(PVC)(SCHD 40)4"(BORE) DOLLARS and CENTS	LF	2,218.000	107

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	6014	6004		MULTIDUCT CONDUIT SYS (RM)(4") DOLLARS and CENTS	LF	940.000	108
	6015	6001		FIBER OPTIC RS-232 DATA MODEM(S/M) DOLLARS and CENTS	EA	2.000	109
	6027	6003		CONDUIT (PREPARE) DOLLARS and CENTS	LF	2,025.000	110
	6027	6008		GROUND BOX (PREPARE) DOLLARS and CENTS	EA	20.000	111
	6029	6001	001	RADAR VEHICLE SENSING DEVICE DOLLARS and CENTS	EA	12.000	112
	6032	6001		SYSTEM INTEGRATION DOLLARS and CENTS	LS	1.000	113
	6062	6042		RELOCATE ITS RADIO DOLLARS and CENTS	EA	2.000	114
	6062	6043		REMOVE ITS RADIO DOLLARS and CENTS	EA	10.000	115
	6074	6001		COMMUNICATION CABINET DOLLARS and CENTS	EA	7.000	116
	6075	6001		REMOVE AND RELOCATE CAMERA POLE STRCTRE DOLLARS and CENTS	EA	6.000	117
	6087	6002		CAMERA POLE STRUC W/CABINET (60 FT) DOLLARS and CENTS	EA	3.000	118
	6151	6001		REMOVE AND RELOCATE DMS SYSTEM DOLLARS and CENTS	EA	1.000	119

County: Ellis

Highway: IH 35E

SW3P RESPONSIBILITIES

TxDOT Area of Responsibility

Responsible for the area defined by the limits of the subject project, except for those areas utilized and operated by the contractor. These areas include, though are not limited to, areas used for field offices, equipment and/or material storage, and concrete or asphalt plants.

TxDOT Operational Responsibility

Responsible for seeking coverage under the TPDES Construction General Permit (CGP) and operating the project within the requirements of the CGP for discharging storm water from the subject project and to notify MS4 permit holders of the intent to discharge storm water.

File a Notice of Termination with TCEQ upon completion of the project when the exposed areas have been stabilized with a vegetative cover of at least 70%.

Contractor Area of Responsibility

Responsible for all areas under their direct operational control which includes, though not limited to, areas used for field offices, equipment and/or material storage, and concrete or asphalt plants. These areas may be located on or off the subject project's R.O.W.

Contractor Operational Responsibility

Responsible for seeking coverage under the TPDES Construction General Permit (CGP) and adhering to all requirements of the permit for discharging storm water from the areas under their operational control. Perform regular inspections, prepare a written report of deficiencies, and repair deficiencies within the time frame set forth by the permit. File a Notice of Termination with TCEQ upon completion of the project when the exposed areas have been stabilized with a vegetative cover of at least 70%.

Responsible under contractual obligations to TxDOT to install, clean, repair, replace or remove sediment and erosion control devices as indicated on TxDOT's Inspection Reports, or as required by daily construction practices, within the time frame set forth by the permit.

Access will be provided to all business and residences at all times. Materials, labor and maintenance for these temporary accesses will not be paid for directly but will be considered subsidiary to the various bid items.

County: Ellis

Highway: IH 35E

SPECIFICATION DATA

Table 1: Basis of Estimate for Permanent Construction					
Item	Description	Thickness	Rate		Quantity
164	Drill Seed (Perm) (Rural) (Clay)	N/A			268,320 SY
166 *	Fertilizer (12-6-6)	N/A	500	Lb/Ac	14 Ton
168	Vegetative Watering (Warm)**	N/A	12	MG/Ac/Day	39,980 MG
310	Prime Coat (MC-30)	N/A	0.20	Gal/SY	41,976 Gal
341	Hot Mix Asphalt (Ty B)		110	Lbs/SY/In	69,606 Ton
* For contractor's information only					
**Adjust for actual field conditions/temperatures as necessary. See Vegetation Establishment Plan Sheet for estimated daily rates.					
Note: (1) Base material weight based on 1.50 Ton/CY (dry- compacted) (2) Asphalt weight based on 110 Lbs/SY/In (3) Subgrade weight based on <u>1.50</u> Ton/CY (dry-compacted)					

GENERAL

The construction, operation and maintenance of the proposed project will be consistent with the state implementation plan as prepared by the Texas Commission on Environmental Quality.

The disturbed area for this project, as shown on the plans is 89.22 acres. However, the Total Disturbed Area (TDA) will establish the required authorization for storm water discharges. The TDA of this project will be determined by the sum of the disturbed area in all project locations in the contract, and all disturbed area on all Project-Specific Locations (PSL) located in the project limits and/or within 1 mile of the project limits. The department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction site as shown on the plans, according to the TDA of the project. The contractor will obtain any required authorization from the TCEQ for the discharge of storm water from any PSL for construction support activities on or off of the project row according to the TDA of the project. When the TDA for the project exceeds 1 acre, provide a copy of the appropriate application of permit (NOI, or Construction Site Notice) to the engineer, for any PSL located in the project limits or within 1 mile of the project limits. Follow the directives and adhere to all requirements set forth in the TCEQ, Texas Pollution Discharge Elimination System, Construction General Permit (TPDES, CGP).

This project required formal consultation and permits with environmental resources agencies. There is a high probability that an environmentally sensitive area could be encountered on the contractor designated Project-Specific Locations (PSL) for this project (haul roads, equipment staging areas, borrow pits, disposal sites, field offices, storage areas, parking areas, etc.). Item 7.6 "Project-Specific Locations", provides a listing of regulatory agencies that may need to be contacted regarding this project.

County: Ellis

Highway: IH 35E

Prior to contract letting, bidders may request electronic earthwork information by email.

Email: Hal.Stanford@txdot.gov

Email: John.Kiser@txdot.gov

Earthwork files will be provided by email or by using TxDOT's Dropbox FTP Service.

Bidders may also obtain a free electronic copy that contains earthwork information from the engineer's office. Paper copies of cross-sections may be produced by using the provided free diskette at the bidders' expense and at copying companies. This data is for non-construction purposes only and it is the responsibility of the prospective bidder to validate the enclosed data with appropriate plans, specifications and estimate for the project(s).

Install traffic marking signs prior to sealcoat application and remove within three days after placement of traffic markings.

Leave all right of way areas undisturbed until actual construction is to be performed in said areas.

For the project to be deemed complete, permanently stabilize all unpaved disturbed areas of the project with a vegetative cover at a minimum of 70% density for the control of erosion.

Meet daily with the Engineer to notify him or her of planned work for the day and to provide 24 hour notice of lane closures for planned work for the next day. Do not close lanes for which this requirement is not met. No work is to be performed without prior coordination with the Engineer.

Provide as-built cable interconnection diagrams and communication network schematics at least 30 days prior to the start of data communications testing.

All materials and services not expressly called for in the specification or not shown in the plans, which may be necessary for complete and proper construction of the "ITS" Network, will be performed, furnished and installed at no cost to the Department

Contact the TxDOT Freeway Management Office (214-319-3631) at least 48 hours in advance of performing any work on this project that disconnects or reconnects existing TxDOT "ITS" fiber optic cable. TxDOT "ITS" personnel must be on-site while this work is performed.

To minimize "down time" to the Dallas District Traffic Management System, the fiber optic cable relocation and tracer wire installation shall be performed during a single weekend.

Item 2:

Submit pre-letting questions, by email only, to the attention of Area Engineer or Assistant Area Engineer.

Area Engineer's Email: Darwin.Myers@txdot.gov

Assistant Area Engineer's Email: John.Kiser@txdot.gov

Answers will be provided by email.

County: Ellis

Highway: IH 35E

In addition, an electronic file containing pre-letting questions and answers will be uploaded to the following site that can be downloaded by using the Login Name and Password as follows:

Website Address: <ftp://ftp.dot.state.tx.us>

Login Name: [DalWaxAO-ro](#)

Password: [33KL45](#)

Item 5:

Locate all utilities, both underground and above ground, in the project area prior to beginning work so that conflicts are avoided.

Underground utilities owned by the Texas Department of Transportation may be present within the Right-Of-Way on this project. For signal, illumination, surveillance, and communications & control maintained by TxDOT, call the TxDOT Traffic Signal Office (214-320-6682) for locates a minimum of 48 hours in advance of excavation. For irrigation systems, call TxDOT Landscape Office (214-320-6636) for locates a minimum of 48 hours in advance of excavation. If city or town owned irrigation facilities are present, call the appropriate department of the local city or town a minimum of 48 hours in advance of excavation. The Contractor is liable for all damages incurred to the above mentioned utilities when working without having the utilities located prior to excavation.

For the project to be deemed complete, permanently stabilize all unpaved disturbed areas of the project with a vegetative cover at a minimum of 70% density for the control of erosion.

Ensure a representative of the Prime Contractor is available on the project site at all times when work is being performed by the Prime Contractor or sub-contractor(s) to receive instructions from the Engineer or authorized Department representative.

Submit all shop drawings, working drawings, or other documents which require review sufficiently in advance of scheduled construction to allow no less than thirty (30) calendar days for review and response.

Provide to the Engineer, in addition to any submittals required by the specifications and elsewhere in the general notes, a list of pre-qualified material to be used on the project.

Item 7:

Repair or replace any structures and utilities that might have been damaged by negligence or a failure to have utility locates performed.

Perform all electrical work in accordance with the National Electrical Code and Texas Department of Transportation Specifications.

Consult with appropriate electric company representatives according to their respective area to coordinate electrical services installations.

County: Ellis

Highway: IH 35E

Item 8:

This Project will be a Five-Day Workweek in accordance with Article 8.3.1.1.

Nighttime work is allowed in accordance with Article 8.3.3.

Meet weekly with the engineer to notify him or her of planned work for the upcoming week.

Submit CPM schedule in P3 or P6 format.

Item 100:

Remove the existing roadway small signs, delineators and object markers as shown on the plans, or as directed, during construction within the right of way. Small sign, delineator and object marker removals are subsidiary to this Item.

The limits of preparing right of way will be measured from Sta. 100+00.00 to Sta. 1077+83.92 along the centerline of construction.

Item 104:

In those areas where the pavement is not to be overlaid, provide a smooth surface after the curb removal. Planing or grinding is considered an acceptable method at these locations. Measurement and payment is in accordance with this item.

Sawing of concrete is not paid for directly, but is considered subsidiary to this item.

Items 105, 251, 305, and 354:

Saw existing asphalt along neat lines where portions are to be left in place temporarily or permanently. Sawing is not paid for directly, but is subsidiary to this item.

Item 105:

Take possession of recycled asphalt pavement from the project and recycle the material.

Separate the asphalt pavement from the base material. Stockpile the asphalt pavement at US 287 Business and US 287, east of Waxahachie. Place the asphalt pavement material in a stockpile that meets the dimensions and requirements designated by the engineer.

Stockpile materials in uniform piles up to 15 feet in height unless otherwise instructed. Furnish adequate equipment at the stockpile to keep and leave the materials in a neat and orderly manner.

Properly dispose of unsalvageable material at your own expense.

County: Ellis

Highway: IH 35E

Item 110:

Excavated shale is not an acceptable material for embankment.

Items 110 and 132:

Scarify and loosen the excavated areas, unpaved surface areas, except rock, to a depth of at least 8 inches and compact in accordance with the specifications.

Excavation and embankment for driveways, sleeper slabs, alleys and intersections will not be paid for directly, but will be considered subsidiary to these items.

Item 132:

Excavated material from the project site has not been determined to be suitable for embankment. The bidder assumes all risk for the use of excavated materials for embankment and is expected to meet all material requirements for embankment regardless of the source.

Perform Tex-106-E (Plasticity Index) by an approved laboratory on excavated soils from sources outside right of way when used in roadway embankment. Provide the test results at no expense to the department. The engineer will sample and test soils produced by the construction project for specification requirements or material sources specified in the plans.

Earth embankment Type C1, is mainly composed of material other than shale. Furnish material that is free from vegetation or other objectionable material and that conforms to the following requirements: Max Plasticity Index=40. Min Plasticity Index=8. If necessary, treat material with lime slurry in accordance with Item 260, "Lime Treatment (Road-Mixed)" in order to meet these requirements. Use Tex-121-E, figure 1, page 4 to calculate the amount of lime required. When lime treated subgrade is specified, 3000 PPM is the maximum allowed sulfate content in the top 3 feet when material comes from borrow source. Follow recommendations of 260.4.4 for mixing and mellowing. The engineer will test material placed or excavated to a depth of one foot below and laterally to one foot outside the proposed treatment limit. Lime treatment of this material will not be paid for directly, but will be considered subsidiary to this item.

Do not use shaley clays in embankment unless approved in writing.

Item 160:

Sequence construction operations to salvage topsoil from one location and spread on areas ready to receive topsoil. Keep stockpiling of topsoil to a minimum.

Use fertile clay or loam from the project site not more than two feet below natural grade as topsoil.

Item 161:

Provide tickets representing quantity of compost delivered to site.

County: Ellis

Highway: IH 35E

Item 247:

Construct uniform layer thickness of 12 inches, or less with the required density and moisture content. Minimum PI is equal to three (3) for all grades.

Item 301:

Provide liquid antistripping agents unless otherwise directed. Add the minimum dosage determined by the manufacturer or higher dosage determined by design requirement and try subsequent trials at 0.25% increments.

Item 320:

Use a self-propelled wheel mounted MTV capable of receiving mix from the haul trucks, separate from the paver. It shall have a minimum storage capacity of approximately 25 tons. It shall be equipped with a pivoting discharge conveyor and shall completely and thoroughly remix the material prior to placement. The effectiveness of the MTV's remixing ability is subject to the approval of the Engineer. In addition, the paver shall have a surge storage insert with a minimum capacity of 20 tons.

The use of windrow pick-up equipment is allowed except on the first course of roadway material placed over the subgrade.

Item 341:

Tack Coat is required.

Design for a target Laboratory-molded density of 97.0% when using the Texas Gyratory Compactor (TGC) (Tex-204-F, Part I).

Use aggregate that meets the Surface Aggregate Classification (SAC) requirement of Class B.

Provide the engineer the opportunity to witness all mixture design tests. The engineer may require a retest if not given the opportunity to witness.

Dilution of tack is not allowed.

Provide PG binder 64-22 in Type B mixture.

Dense-Graded Hot-Mix Asphalt used as concrete pavement underlayment is deemed as "Exempt Production".

County: Ellis

Highway: IH 35E

Item 360:

Use of multiple piece tiebars will be required. Provide chairs for multiple piece tiebars, threaded connectors or other adequate devices, used in concrete paving, or tie them to the pavement reinforcing steel. If approved by the engineer for specific areas, in lieu of multiple piece tiebars, drill holes into the pavement and grout straight tiebars in place with epoxy. Use a non-impact, rotary core drill to prevent damage to the pavement unless otherwise directed. Clean the drill holes and then completely fill with epoxy before inserting the tiebar. Do not bend the tiebars or insert them into plastic concrete without the approval of the engineer.

Provide curbs monolithically constructed with the concrete pavement. If continuous monolithic curb has to be temporarily omitted for any reason, provide dowelled curbs in the proposed areas, as detailed in the plans, and apply an approved epoxy resin to the pavement to receive the curb as directed. This work and materials will not be paid for directly, but is considered subsidiary to this item.

If asphalt curing is used, cure the concrete pavement with MS-2.

Stockpile the concrete aggregates at the plant site.

Provide pavement widening joints, as detailed in the plans, at all locations where concrete pavement is placed adjacent to existing concrete pavement. Installation of these joints is not paid for directly, but is considered subsidiary to this item.

Payment for furnishing and installing the pre-molded expansion joint material between the retaining walls and concrete pavement is not paid for directly, but is considered subsidiary to this item.

Provide a curing machine equipped with rubber tires, or other acceptable arrangement, so that the machine will span the pavement.

Place construction, sawed and contraction joints in accordance with the pavement detail sheet and as directed. Joint locations, other than as shown on the plans, are subject to approval. Pavement leaveouts are required on this project as necessary to provide for traffic at driveways and side streets as shown in the plans or as directed. The cost of providing these leaveouts, including the construction of a suitable crossover connection at each site, is not paid for directly but is considered subsidiary to this item.

If a traveling form paver is used, provide one equipped with an electronically operated horizontal control device.

Use "mechanical steel placing equipment" at the discretion of the engineer.

Provide Class HES concrete at the locations shown on the plans. Design Class HES to meet the requirements of Class P and a minimum average flexural strength of 450 psi or minimum average compressive strength of 3200 psi in 24 hr.

Supply the Engineer with a list of certified personnel and copies of their current ACI certificates before beginning production and when personnel changes are made. Supply hard copies of calibration reports for testing equipment when required by the Engineer.

County: Ellis

Highway: IH 35E

If more than 30% of an area in any 1000-Ft section of roadway requires grinding, action will be taken by the Contractor to make that 1000-Ft full width section uniform without changing ride quality, compromising quality of pavement and decreasing skid resistance. Approved blasting method or other method approved by the Engineer will be performed at the Contractor's expense.

Item 400:

Structural Excavation is not paid for directly but is considered subsidiary to pertinent Items.

When placing concrete storm drain pipe on slopes of greater than 10 percent, provide cement stabilized backfill to a depth shown on the plans.

Item 416:

Drilled shaft foundations will extend a minimum of five feet into rock, at locations where rock is encountered, at a depth less than the drilled shaft lengths as shown on the plans or as directed.

Provide a formed smooth finish for all portions of drill shafts extending above proposed ground. Include cost for this work in the unit bid price for this item.

Pole foundations will be paid for once regardless of extra work caused by obstructions.

All drilled shaft foundations will be based on the lengths shown on the plans or those established in writing. Adequate calculations for measurements of foundations have been made in accordance with Item 9: Measurement and Payment, Article 9.1 of the Standard Specifications. Increases or decreases in the quantities required by change in design will be measured as specified and the revised quantities will be the basis for payment.

Concrete removal required for installation of drilled shafts will be subsidiary to Item 416.

Item 421:

Provide a commercial laboratory for concrete testing on this project. The commercial laboratory shall perform all sampling and testing of concrete as required by this item and the Engineer. Submit all sampling and testing results to the Engineer in a timely manner for approval. The commercial laboratory is responsible for all work performed, materials furnished, labor, tools, and incidentals required to complete the sampling and testing of concrete.

Furnish mix designs to the Engineer in a format compatible to the latest version of the Department's Construction Management System (SiteManager). Mix Design templates will be provided by the Engineer.

Provide sulfate resistant concrete for box culverts and all drilled shafts. At the contractor's option, a sulfate resistant high performance concrete may be used; however, high performance concrete is not considered sulfate resistant concrete when Class C fly ash and Type I cement is used in the mix design.

County: Ellis

Highway: IH 35E

Item 440:

Fiber Reinforced Concrete (FRC) can be used as a substitute for Non-Structural Class Reinforced Concrete in Mow-Strip and Rip Rap Items as approved. FRC may also be used for other Non-Structural Class Reinforced Concrete Items as approved.

Item 442:

Use temperature Zone 1 for CVN testing.

Item 449:

Use Crouse Hinds TL-2, OZ/Gedney Stl, Thomas & Betts Kopr-Shield or other approved electrically conducting lubricant compound.

Item 471:

Tackweld all inlet grates and manhole covers to the frame with two 1-inch welds. Supply unpainted cast iron inlet grate and frame and/or cast iron manhole frame and cover.

Item 496:

Concrete pavement removed as a result of removing the inlets will not be paid for directly but will be considered as subsidiary to Item 496.

Inlet grates and manhole covers become the property of the contractor for disposal.

Item 500:

Material On Hand (MOH) will not be used in calculating partial payments for Mobilization.

Item 502:

The Contractor Force Account "Safety Contingency" that has been established for this project is intended to be utilized for work zone enhancements, to improve the effectiveness of the Traffic Control Plan, that could not be foreseen in the project planning and design stage. These enhancements will be mutually agreed upon by the Engineer and the Contractor's Responsible Person based on weekly or more frequent traffic management reviews on the project. The Engineer may choose to use existing bid items if it does not slow the implementation of enhancement.

County: Ellis

Highway: IH 35E

Access will be provided to all business and residences at all times. Where turning radii are limited during phased construction at intersections, provide all weather surfaces such as RAP or base in turning movements to accommodate and to protect the traffic from edge drop-offs. Materials, labor, maintenance and removal for these temporary accesses and radii will not be paid for directly but will be considered subsidiary to the various bid items.

Provide written proposed lane closure information by 1:00 pm on the business day prior to the proposed closures. Do not close lanes when this requirement is not met.

When excavation is required next to a pavement lane carrying traffic and the widening is not completed by the end of the work day, backfill against the edge of the pavement with at least a 3:1 slope using an acceptable material to support vehicular traffic. Carefully remove and dispose of this material when work resumes. Backfilling pavement edges, and the materials required for the work will be subsidiary to this item.

Place barricades and signs in locations that do not obstruct the sight distance of drivers entering the highway from driveways or side streets.

Do not commence work on the road before sunrise. Do not operate or park any equipment/machinery closer than 30 feet from the traveled roadway after sunset unless authorized by the engineer.

When moving unlicensed equipment on or across any pavement or public highways, protect the pavement from all damage using an acceptable method.

Provide 2 shadow vehicles equipped with truck mounted attenuators as shown on the traffic control plan.

As approved by the Engineer, provide uniformed off duty police officers and squad cars during lane or ramp closures, night time work or other situations that indicate a need for additional traffic control to protect the traveling public or the construction workforce. Provide documentation such as payroll, log sheets with signatures and badge number, or invoices from the government entity providing the officers for reimbursement. Complete the weekly tracking form provided by the department and submit invoices that agree with the tracking form for payment at the end of each month approved services were provided. Reimbursement will not be made for coordination fees charged by the police department.

County: Ellis

Highway: IH 35E

Freeway Lane Closures				
Category of Work	Number of Rdwy Lanes per direction	Peak Times Monday-Friday 6:00 am - 9:00 am 3:30 pm - 7:00 pm Major Events and Major Holidays**	Off Peak Times Monday-Friday 9:00 am - 3:30pm 7:00 pm - 10:30 pm and Saturday	Lowest Volume Time Monday-Friday 10:30 pm to 6:00 am and Sunday
Placement of CTB & Bridge Beams, Pavement Markings, Full Depth Roadway Repair, Bridge or Similar Demolitions*	5	None	2	3
	4	None	2	3
	3	None	1	2
	2	None	1	2
Adjacent Construction, Lanes for Construction Traffic or Similar Operations	5	None	1	2
	4	None	1	2
	3	None	1	1
	2	None	None	1

* Provide a traffic control plan where bridge demolition cannot be accomplished with lane closures. Freeway closures will only be done during Lowest Volume Times.
 ** Major Holidays are defined under Item 1.82 and also include the Easter Weekend.
 *** The Table above is only to be used when traffic counts do not exceed 2000 Vehicles per Lane per Hour. (The capacity of all remaining open lanes must not exceed 2000 Vehicles per Lane per Hour). When traffic counts do or will exceed 2000 Vehicles per Lane per Hour, Director of Construction, Assistant District Engineer or District Engineer approval will be required for lane closures.

Additional lanes may be closed during Off Peak Times or Lowest Times with written permission of the Engineer. Lane Closures during Off Peak Times may be started earlier or be extended later with written permission of the Engineer.

Traffic Control Plans with Lane Closures causing backups of 20 minutes or greater in duration will be modified by the Engineer.

Work in other areas of the project is not restricted to this time frame.

County: Ellis

Highway: IH 35E

Item 504:

Furnish one Field Office and Laboratory (Type B) for this project.

Provide one local phone line to the field office. Supply one phone jack and one telephone per each room in the field office. The cost of the phone installation and various monthly phone service charges will be the contractor's responsibility.

Chain link fencing will be provided around the field office/laboratory and parking areas.

Provide an all in one printer/scanner/fax/copier with software that is compatible with TxDOT equipment, cost not in excess of \$300. This is subsidiary to the various bid items.

Item 506:

Take all practicable precautions to prevent debris from being discharged into the Waters of Texas or a designated wetland. Install Best Management Practices before demolition begins and maintain them during the demolition. Remove any debris or construction material that escapes containment devices and are discharged into the restricted areas, before the next rain event or within 24 hours of the discharge.

If temporary construction stream crossings are allowed under a Nationwide Permit, submit in writing for approval the type and location of each temporary stream crossing. Use temporary bridges, timber mats, or other structurally sound and non-eroding material for temporary stream crossings. A temporary culvert crossing will consist of storm sewer pipes and 4- to 8-inch nominal size rock. Temporary stream crossings must not cause more than minimal changes to the hydraulic flow characteristics of the stream, increase flooding, or cause more than minimal degradation of water quality. Remove the temporary stream crossings in their entirety and return the affected areas to their pre-existing elevation. All work and materials use for temporary construction stream crossings will not be paid for directly but are subsidiary to pertinent Items.

Provide SW3P Signs. Obtain from the Engineer a copy of the project's completed TPDES Storm Water Program Construction Site Notice and signed Contractor Certification Statement. Laminate the sheets and bond with adhesive to 36" X 36" plywood sign blanks. Ensure the sheets remain dry. Apply Type C Blue reflective sheeting as the background and add the text "SW3P" in 5" white lettering, centered at the top. Attach the signs to approved temporary mounts and locate at each of the project limits just inside the right of way line at a readable height or as directed by the Engineer. If the sign cannot be placed outside the clear zone, it must adhere to the TMUTCD. SW3P signs, maintenance, and reposting (for replacement or as needed to ensure readability) will be subsidiary to Item 502.

County: Ellis

Highway: IH 35E

Item 512:

The contractor shall pick up concrete barrier from the following designated source locations:

CBR Portable & Precast Barriers 39,000 LF

The intersection of US 287 and US-287R on the east side of Waxahachie.

Single-Slope Concrete Barrier 25,740 LF

4568 Bellmead Drive, Bellmead, Texas

Upon project completion, both the SSCB and CBR are to be stockpiled at:

The intersection of US 287 and BUS-287R on the east side of Waxahachie

Provide necessary hardware for connecting the portable concrete traffic barriers.

Upon completion of the project, all barrier will remain property of the Department and stockpiled at a TxDOT yard near the project location or other locations within fifty (50) miles of the project as directed. The Contractor will furnish equipment necessary to load and unload the units at the stockpile locations. When stockpiling, separate damaged barriers from salvaged barriers as directed.

Portable concrete traffic barrier that is determined unusable will become property of contractor and will not be returned to TxDOT stockpile location. This work will be considered subsidiary to this item.

All hardware will become the property of the Department and will be returned to the TxDOT Maintenance yard within fifty (50) miles of the project as directed. Place hardware in fifty-five (55) gallon barrels with holes in bottom to allow drainage.

Delineate barriers by a minimum of two (2) CLASS A reflectors per section. Reflectors mounted on the top and the traffic side of the barrier must match the color of the nearest edge line. These reflectors will not be paid for directly, but will be considered subsidiary to the various bid items.

Item 540:

Furnish one type of post throughout the project except as specifically noted in the plans.

Item 542:

Salvage metal beam guard fence removed from this project and haul to and stockpile 3,765 LF at 900 Jefferson Street in Waxahachie. The work involved in hauling this material will not be paid for directly, but will be considered subsidiary to this item.

Item 545:

Contractor shall use Test level 70 for all crash cushion attenuators.

Item 585:

Use Surface Test Type A on all intersections and driveways.

Use Surface Test Type B pay adjustment schedule 3 on the service roads.

Use Surface Test Type B pay adjustment schedule 2 on the ramps.

County: Ellis

Highway: IH 35E

Items 618, 6014:

The location of conduits and ground boxes are diagrammatic only and may be shifted to accommodate field conditions as directed.

Secure permission and approval from the proper authority prior to cutting into or removing any sidewalks or curbs for installation of this Item. After the work is completed, the Contractor shall restore any curbs or walkways, which have been removed, to their original condition and to the satisfaction of the engineer.

The Contractor shall request locates for any utilities that may interfere with the installation of "ITS" conduit and shall replace or repair any damage done to existing underground conduit or utilities. This work will be done at the expense of the Contractor and to the satisfaction of the Engineer.

"ITS" conduit shall be installed a minimum of 42 inches deep, when trenching methods are used, and a minimum of 60 inches deep when bored under existing pavement, unless shown otherwise in the plans.

When trenching through rocky soil, place non-concrete encased conduit on a two-inch sand cushion and backfill with a minimum of six inches of sand.

Where a trench is cut through the surfaced parking shoulder, median or driveways for laying conduit, the base and surfacing will be replaced with similar materials equal in appearance and quality to the original construction.

The minimum bending radius for all conduits supplied on this project shall be 18 inches, or as approved.

Use a colored cleaner-primer on all PVC to PVC joints before application of PVC cement.

Place conduit under existing pavement by an approved boring method. Do not place boring pits closer than 2 feet from the edge of the pavement unless otherwise directed. Do not use water jetting. When conduits are bored, do not exceed 18 inches in the vertical and horizontal tolerances as measured from the intended target point.

Do not use a pneumatically driven device for punching holes beneath the pavement (commonly known as a "missile").

When holes are drilled through concrete structures, use a coring device. Do not use masonry or concrete drills.

Install a permanent non-metallic pull cord, with a minimum tensile strength of 600 pounds, in all new "ITS" conduits. For conduits installed for future use, plug conduits using a mechanical conduit plug. Ensure that the mechanical plug creates a water and airtight seal. This work will not be paid for directly but will be subsidiary to this item.

County: Ellis

Highway: IH 35E

Existing conduit may be proposed for reuse in this project. Conduit prep will be paid for under Item 6027 or as directed by the Engineer. If the existing conduit cannot be used, repair or replace this conduit as directed.

If the Contractor chooses to combine multiple conduits into one bore, the Contractor will install a casing around the conduits. The casing will not be paid for directly, but will be considered subsidiary to this item.

Install "ITS" conduits in stages to accommodate phased construction. Cap the ends of conduits to prevent obstructions.

Secure PVC conduit permanently using solvent cement joint compounds, commonly known as solvent welding. Perform cementing of the joints in accordance with standard construction practices, as well as the manufacturer's recommendations for their particular product. Ensure that the resulting joints have sufficient strength and tightness to withstand the procedures required for concrete encasement, as shown on the plans, or as directed. Ensure that the resulting joints are secured without breakage, leakage, or permanent deformation.

Use a pre-manufactured duct spacing system, such as Carlon "Snap-N-Stack" spacers, Underground Devices "Wunpeece", or an approved equal, as a preferred method to secure and support conduit prior to encasement, as required in Item 618: Conduit, Article 618.3.

Mark all "ITS" conduit runs by means of a white delineator marker at 1/3 points between ground boxes, and at locations where the conduit makes directional changes, or as directed. The type of delineator must be approved. This work will not be paid for directly, but will be considered subsidiary to this item.

Supply "Underground Utility" and "Fiber" warning stickers as approved by the engineer. One sticker will be placed on each side of the delineator. The cost of the warning stickers and any work required will not be paid for directly, but will be considered subsidiary to this item.

Install, for each "ITS" conduit run, a metallic underground warning tape, as detailed in the plans. This warning tape will be imprinted with "CAUTION BURIED FIBER OPTIC CABLE." This will not be paid for directly, but will be considered subsidiary to Item 618: Conduit. The warning tape does not need to be installed when conduit is bored under a roadway section or landscaped area. At locations where the Contractor chooses to bore conduit underground, in areas where trenching methods can be used, the Contractor will install the metallic underground warning tape.

Items 620, 6007:

The equipment grounding conductor shall be a bare wire or identified with continuous green colored jacket insulation. Grounded conductors (Neutral) shall be identified by a continuous white colored jacket. Ungrounded conductors (Hot) in a 120/240v system shall be identified by each pole or leg. For 240-volt branch circuit fed from 120/240 source, ensure one leg is identified by a continuous black colored jacket and the other leg by a continuous red colored jacket. White phasing tape is not allowed to be used to signify a neutral on any conductor 6 AWG and smaller as per TxDOT specifications and the NEC.

County: Ellis

Highway: IH 35E

Extra cable length will be included in each run, to provide adequate slack, at each ground box, camera pole, communications hub, dynamic message sign, or radar vehicle sensing device, as determined.

All communication cables will be color-coded consistently, or permanently labeled, between all connections and splices, to ensure immediate identification. The Contractor will submit a chart or list identifying all cables, in a logical and sequential manner prior to installation, for the Engineer's approval.

The single mode fiber optic cable will be installed continuous, without splices, from the communications hub to hub, except at ground box shown on plans; No splicing of fiber optic cable will be permitted in ground boxes unless shown on the plans.

All fiber optic trunk cables and the insulated tracer wires will be installed in multiduct conduit. Electrical conductors will be installed in one three-inch conduit and any non-fiber communications cables are to be installed in the second three-inch conduit.

Insulated tracer wire shall have Orange colored insulation and shall be labeled as a "Tracer Wire" in each Satellite Building, Hub Cabinet, and CCTV Cabinet with one exception: CCTV Cabinets located near Hub Cabinets.

All fiber optic pigtails, patch cords, and patch panels shall have ST connectors and will not be paid for separately and shall be considered subsidiary to item 6007.

Item 624:

All "ITS" ground boxes will be constructed with aprons.

Submittal literature will be provided to the Engineer prior to installation.

Concrete removal required for installation of ground boxes will be subsidiary to Item 624.

Where existing Type 1 and Type 2 ground boxes have tack-welded lids, the Contractor shall break the weld and re-weld the lids in place at the completion of work in the ground box. This work will not be paid for separately, but will be considered subsidiary to this item.

Each Type A or D ground box shall be installed 12 inches below grade and covered with excavated material. The Contractor will be responsible for providing the latitude and longitude of each ground box. This work will not be paid for directly, but is subsidiary to this Item.

Each Type 1 or 2 ground box that contains non-tracer power conductors shall have its lid tack-welded shut at the completion of work in the ground box. Tack-welding shall be done in 2 inch strips (with 4 inch gaps) along the outer edge of the lid. This work will not be paid for directly, but is subsidiary to this Item.

County: Ellis

Highway: IH 35E

Item 628:

Contact the appropriate utility company during the first three weeks of the project lead-time period to allow adequate time for any necessary utility adjustments, transformer installation, etc.

Label the service enclosures indicating service address as well as all required information as shown on the Electrical Detail (ED) standard sheets. Labeling shall be silk screening or other acceptable method. This work will not be paid for directly, but is subsidiary to this Item.

A Licensed Master Electrician shall be required to install all electrical services.

When concrete for service pole foundations is required, use Class A in accordance with Item 421, "Hydraulic Cement Concrete", except consider the concrete subsidiary to Item 628 for payment purposes. When reinforcing steel for service pole foundations is required, it will be in accordance with Item 440, "Reinforcement for Concrete", except consider the steel subsidiary to Item 628 for payment purposes.

Bill the electrical service power usage to the Texas Department of Transportation.

Items 644, 647, and 650:

Prior to taking elevations to determine lengths for fabrication of sign posts and/or sign support towers, obtain verification of all proposed locations.

All sign mounts shall have a clamp base system for all small roadside sign assemblies.

The post lengths shown on the Summary of Large Signs are approximations only. After the "X" dimensions are determined, submit actual post lengths to the Engineer for approval. Post lengths and size shall be approved by the Engineer before fabrication.

Torque the anchor bolts for only the Exit Gore signs to 60 foot-pounds.

Item 650:

All towers and trusses will be match marked, by the fabricator, for erection. Use the tower heights shown in the sign summaries and on the plans for bidding purposes only. Prior to fabrication, take finished grade elevations at the tower locations and determine their exact heights for fabrication in accordance with the details shown on the plans.

Item 672:

Black adhesive will be used on asphalt pavements and white adhesive will be used on concrete pavements.

County: Ellis

Highway: IH 35E

Item 677:

A water blasting method approved by the Engineer will be the only method allowed for the removal of permanent and temporary pavement markings except on a sealcoat surface. A 2 foot wide sealcoat will be required on sealcoat surfaces to eliminate permanent and temporary pavement markings.

Item 6003: ITS System Support Equipment

The following items will be provided to TxDOT to be used as operational support equipment. This equipment will be the same make and model as the equipment installed in the field. These items will be paid for with the lump sum unit bid price for system support equipment.

(1 Ea) - CCTV Field Equipment (complete set to include camera, pressured camera housing, zoom lens, pan/tilt unit, camera control receiver, and camera control cable)

(1 Ea) – Radar Vehicle Sensing Device (complete system to include an RVSD unit, all mounting hardware and cabling necessary to provide communications and power from the pole mounted cabinet)

(1 Ea) – Communication Hub Cabinet

Item 6010: CCTV Field Equipment

The cables and harnesses will enter at the bottom of the CCTV housing. The CCTV will have gaskets, at entry points, to prevent moisture entry.

Item 6027: Preparation of Existing Conduits, Ground Boxes, or Manholes:

The Contractor is responsible for damage done to existing cable during the preparation of existing conduit. The Contractor will repair or replace damage done to existing cables. The repairing or replacing of damage to existing cables will be done at the expense of the Contractor, and to the satisfaction of the Engineer.

Item 6074: Communication Cabinet

The equipment cabinet shall be located as shown on the plans or as directed, and will contain the following subassemblies:

1. Three point latch and lock system
2. 19 inch rack

All terminal blocks will be low profile nickel plated copper alloy with stainless steel captive screws. Insulating material will be molded glass reinforced thermoplastic engineering resin. Jumper bars will be hard rolled copper plated to prevent corrosion and unable to be removed from terminal block. Current and voltage ratings will be 30 amps and 600 volts.

County: Ellis

Highway: IH 35E

Item 6087: Camera Pole Structure with Cabinet

Mount the CCTV equipment cabinet to the camera pole structure as shown on the plans.

RM conduit from the bottom of the equipment cabinet to the ground connection to PVC conduit is considered subsidiary to this item.