

NOTIFICATION OF ADDENDUM

ADDENDUM NO. 1

DATED 12/30/2010

Control	0353-02-060
Project	C 353-2-60
Highway	SH 114
County	DENTON

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: C 353-2-60

CONTROL: 0353-02-060

COUNTY: DENTON

LETTING: 01/05/2011

REFERENCE NO: 1231

PROPOSAL ADDENDUMS

- PROPOSAL COVER
- BID INSERTS (SH. NO.: 1-16 THRU 16-16)
- GENERAL NOTES (SH. NO.: A THRU Z, AA THRU BB)
- SPEC LIST (SH. NO.: 1-4 THRU 4-4)
- SPECIAL PROVISIONS:
- ADDED:

DELETED:

- SPECIAL SPECIFICATIONS:
- ADDED:

DELETED:

- OTHER: SEE CHANGES BELOW:

DESCRIPTION OF ABOVE CHANGES
(INCLUDING PLANS SHEET CHANGES)

BID INSERTS:

SHEETS 1-16 THRU 16-16: REVISED DUE TO NUMEROUS BID ITEM QUANTITY
CHANGES, DELETIONS AND ADDIDIONS.

SHEET 1-17: ADDED DUE TO ADDED ITEMS.

GENERAL NOTES:

SHEETS A THRU Z, AA: REPLACED DUE TO VARIOUS GENERAL NOTES CHANGES.

SHEET BB: DELETED.

PLAN SHEETS:

SHEET 2: REVISED INDEX OF SHEETS.

SHEETS 22A THRU 22M: REPLACED DUE TO GENERAL NOTES CHANGES.

SHEET 22N: DELETED.

SHEETS 22O THRU 22R: REPLACED DUE TO BID INSERT CHANGES.

SHEETS 10, 12, 14, 15, 17, 19, 20, 24, 34, 83, 84: REPLACED.

SHEETS 93A, 93B & 123A: ADDED.

SHEET 256: REVISED.

SHEETS 260, 276, 279, 282, 285, 288, 291, 302, 310, 322, 334, 341, 344,
347, 351, 355, 362, 365 & 407: REPLACED.

DESCRIPTION OF ABOVE CHANGES
(INCLUDING PLANS SHEET CHANGES)

(CONTINUED)

SPEC LIST:
SHEET 1-4: ADDED ITEM 426.

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	100	2002	002	PREPARING ROW DOLLARS and CENTS	STA	87.040	1
	104	2001		REMOVING CONC (PAV) DOLLARS and CENTS	SY	18,910.000	2
	104	2023		REMOVING CONC (CTB) DOLLARS and CENTS	LF	600.000	3
	105	2011		REMOVING STAB BASE AND ASPH PAV (2"- 6") DOLLARS and CENTS	SY	18,910.000	4
	105	2014		REMOVING STAB BASE & ASPH PAV (7"-12") DOLLARS and CENTS	SY	6,501.000	5
	110	2001		EXCAVATION (ROADWAY) DOLLARS and CENTS	CY	862,904.000	6
	132	2025		EMBANKMENT (FINAL) (DENS CONT) (TY C1) DOLLARS and CENTS	CY	81,570.000	7
	132	2026		EMBANKMENT (FINAL) (DENS CONT) (TY C2) DOLLARS and CENTS	CY	16,750.000	8
	161	2014	006	COMPOST MANUF TOPSOIL (BOS OR PB) (4") DOLLARS and CENTS	SY	224,328.000	9
	162	2002		BLOCK SODDING DOLLARS and CENTS	SY	224,328.000	10

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	164	2009	002	BROADCAST SEED (TEMP) (WARM) DOLLARS and CENTS	SY	224,328.000	11
	168	2001		VEGETATIVE WATERING DOLLARS and CENTS	MG	11,136.000	12
	260	2002	002	LIME (HYDRATED LIME (SLURRY)) DOLLARS and CENTS	TON	1,384.000	13
	260	2009	002	LIME TRT (EXST MATL)(10") DOLLARS and CENTS	SY	1,400.000	14
	260	2023	002	LIME TRT (EXIST MATL)(36") DOLLARS and CENTS	SY	5,512.000	15
	260	2027	002	LIME TRT (EXST MATL)(8") DOLLARS and CENTS	SY	60,743.000	16
	340	2011	003	D-GR HMA(METH) TY-B PG64-22 DOLLARS and CENTS	TON	50,206.000	17
	340	2066	003	D-GR HMA(METH) TY-C PG76-22 DOLLARS and CENTS	TON	1,255.000	18
	360	2003	003	CONC PVMT (CONT REINF-CRCP)(10") DOLLARS and CENTS	SY	45,118.000	19
	360	2004	003	CONC PVMT (CONT REINF-CRCP)(11") DOLLARS and CENTS	SY	71,999.000	20
	360	2018	003	CURB (TYPE II) DOLLARS and CENTS	LF	3,067.000	21

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	402	2001		TRENCH EXCAVATION PROTECTION DOLLARS and CENTS	LF	13,392.000	22
	403	2001		TEMPORARY SPL SHORING DOLLARS and CENTS	SF	9,563.000	23
	416	2001	001	DRILL SHAFT (18 IN) DOLLARS and CENTS	LF	634.000	24
	416	2004	001	DRILL SHAFT (36 IN) DOLLARS and CENTS	LF	3,433.000	25
	416	2006	001	DRILL SHAFT (48 IN) DOLLARS and CENTS	LF	250.000	26
	416	2007	001	DRILL SHAFT (54 IN) DOLLARS and CENTS	LF	443.000	27
	416	2010	001	DRILL SHAFT (72 IN) DOLLARS and CENTS	LF	36.000	28
	416	2019	001	DRILL SHAFT (SIGN MTS)(30 IN) DOLLARS and CENTS	LF	110.000	29
	416	2021	001	DRILL SHAFT (SIGN MTS)(42 IN) DOLLARS and CENTS	LF	31.000	30
	416	2022	001	DRILL SHAFT (SIGN MTS)(48 IN) DOLLARS and CENTS	LF	32.000	31
	416	2029	001	DRILL SHAFT (RDWY ILL POLE) (30 IN) DOLLARS and CENTS	LF	248.000	32

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	ITEM NO	DESC CODE	S.P. NO.				
	420	2017	002	CL C CONC (BENT)(MASS PLACEMENT) DOLLARS and CENTS	CY	58.600	33
	420	2018	002	CL C CONC (FOOTING)(MASS PLACEMENT) DOLLARS and CENTS	CY	320.400	34
	420	2041	002	CL C CONC (ABUT)(HPC) DOLLARS and CENTS	CY	615.400	35
	420	2042	002	CL C CONC (BENT)(HPC) DOLLARS and CENTS	CY	1,596.100	36
	420	2061	002	CL S CONC (HPC) BAS DOLLARS and CENTS	CY	531.900	37
	420	2072	002	CL H CONC (BENT)(MASS PLACEMENT) DOLLARS and CENTS	CY	112.200	38
	420	2092		CL C CONC (CAP)(MASS PLACEMENT)(HPC) DOLLARS and CENTS	CY	168.400	39
	420	2093	002	CL C CONC (COLUMN)(MASS PLACE)(HPC) DOLLARS and CENTS	CY	80.600	40
	420	2223		CL C CONC (COLUMN)(HPC) DOLLARS and CENTS	CY	158.900	41
	420	2223	002	CL C CONC (COLUMN)(HPC) DOLLARS and CENTS	CY	278.200	42
	420	2256	002	CL S CONC(APPR SLAB)(HPC) DOLLARS and CENTS	CY	636.400	43

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	ITEM NO	DESC CODE	S.P. NO.				
	422	2003		REINF CONC SLAB (HPC)(CL S) and DOLLARS CENTS	SF	224,490.000	44
	423	2001		RETAINING WALL (MSE) and DOLLARS CENTS	SF	6,122.000	45
	423	2009		RETAINING WALL (SOIL NAILED)(FACIA) and DOLLARS CENTS	SF	12,414.000	46
	423	2010		RETAINING WALL (ROCK NAILED)(FACIA) and DOLLARS CENTS	SF	5,018.000	47
	425	2004	001	PRESTR CONC BEAM (TY IV) and DOLLARS CENTS	LF	23,329.780	48
	426	2001		POST-TENSIONING (GROUTED) and DOLLARS CENTS	MKF	275.000	49
	428	2002	001	CONC SURF TREAT (CLASS II) and DOLLARS CENTS	SY	23,820.000	50
	432	2001		RIPRAP (CONC)(4 IN) and DOLLARS CENTS	CY	42.000	51
	432	2039		RIPRAP (MOW STRIP)(4 IN) and DOLLARS CENTS	CY	60.500	52
	432	2048		RIPRAP (CONC)(FLUME) and DOLLARS CENTS	CY	89.500	53
	432	2072		RIPRAP (CONC)(CL B)(RR8&RR9) and DOLLARS CENTS	CY	305.890	54

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	ITEM NO	DESC CODE	S.P. NO.				
	432	2084		RIPRAP (CONC) (CL B) (4") and DOLLARS CENTS	CY	117.000	55
	434	2072	003	ELASTOMERIC BEAR (F7) and DOLLARS CENTS	EA	5.000	56
	434	2073	003	ELASTOMERIC BEAR (F8) and DOLLARS CENTS	EA	5.000	57
	434	2079	003	SLIDING ELASTOMERIC BEAR (ES 7) and DOLLARS CENTS	EA	10.000	58
	434	2086	003	EALSTOMERIC BEAR (F6) and DOLLARS CENTS	EA	5.000	59
	434	2087	003	ELASTOMERIC BEAR (EE4) and DOLLARS CENTS	EA	20.000	60
	442	2002	016	STR STL (PLATE GIRDER) and DOLLARS CENTS	LB	3,326,350.00	61
	442	2048	016	STRUCTURAL STEEL(MISC NON-BRIDGE) and DOLLARS CENTS	LB	1,332.000	62
	450	2143	001	RAILING (TY T551) and DOLLARS CENTS	LF	536.400	63
	450	2161	001	RAIL (TY T223) and DOLLARS CENTS	LF	7,526.080	64
	454	2001		SEALED EXPANSION JOINT (4 IN)(SEJ-A) and DOLLARS CENTS	LF	1,576.000	65

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	ITEM NO	DESC CODE	S.P. NO.				
	454	2009		SEALED EXPANSION JOINT (5 IN)(SEJ-A) DOLLARS and CENTS	LF	81.000	66
	459	2011		GABION MATTRESSES (GALV)(12 IN) DOLLARS and CENTS	SY	531.000	67
	459	2014		GABIONS (3' X 3')(GALV) DOLLARS and CENTS	CY	148.000	68
	462	2004		CONC BOX CULV (4 FT X 3 FT) DOLLARS and CENTS	LF	320.000	69
	462	2005		CONC BOX CULV (4 FT X 4 FT) DOLLARS and CENTS	LF	486.000	70
	462	2010		CONC BOX CULV (6 FT X 3 FT) DOLLARS and CENTS	LF	366.000	71
	462	2011		CONC BOX CULV (6 FT X 4 FT) DOLLARS and CENTS	LF	272.000	72
	462	2019		CONC BOX CULV (8 FT X 4 FT) DOLLARS and CENTS	LF	1,824.000	73
	462	2020		CONC BOX CULV (8 FT X 5 FT) DOLLARS and CENTS	LF	1,822.000	74
	462	2024		CONC BOX CULV (9 FT X 5 FT) DOLLARS and CENTS	LF	4,422.000	75
	462	2029		CONC BOX CULV (10 FT X 5 FT) DOLLARS and CENTS	LF	1,042.000	76

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	ITEM NO	DESC CODE	S.P. NO.				
	464	2005	003	RC PIPE (CL III)(24 IN) and DOLLARS CENTS	LF	2,719.000	77
	464	2007	003	RC PIPE (CL III)(30 IN) and DOLLARS CENTS	LF	1,237.000	78
	464	2009	003	RC PIPE (CL III)(36 IN) and DOLLARS CENTS	LF	1,853.000	79
	464	2010	003	RC PIPE (CL III)(42 IN) and DOLLARS CENTS	LF	638.000	80
	464	2011	003	RC PIPE (CL III)(48 IN) and DOLLARS CENTS	LF	1,112.000	81
	464	2013	003	RC PIPE (CL III)(60 IN) and DOLLARS CENTS	LF	335.000	82
	465	2006	001	MANH (COMPL)(JUNCT BOX)(TY M) and DOLLARS CENTS	EA	4.000	83
	465	2104	001	INLET EXT and DOLLARS CENTS	EA	18.000	84
	465	2173	001	MANH (COMPL)(TY M)(PIPE RISER) and DOLLARS CENTS	EA	4.000	85
	465	2283	001	INLET (COMPL)(TY G 3-GRATE) and DOLLARS CENTS	EA	17.000	86
	465	2461	001	RAIL & GRATE INLET (TY II)(5') and DOLLARS CENTS	EA	9.000	87

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	ITEM NO	DESC CODE	S.P. NO.				
	465	2500	001	INLET(COMPL)(DROP)(TY C)(3-GRATE) DOLLARS and CENTS	EA	21.000	88
	466	2002		WINGWALL (FW-0) DOLLARS and CENTS	SF	896.000	89
	466	2004		WINGWALL (PW) DOLLARS and CENTS	SF	2,062.000	90
	466	2073		HEADWALL (CH-FW-0)(DIA= 60 IN) DOLLARS and CENTS	EA	1.000	91
	496	2002		REMOV STR (INLET) DOLLARS and CENTS	EA	5.000	92
	496	2003		REMOV STR (MANHOLE) DOLLARS and CENTS	EA	6.000	93
	496	2004		REMOV STR (SET) DOLLARS and CENTS	EA	7.000	94
	496	2006		REMOV STR (HEADWALL) DOLLARS and CENTS	EA	4.000	95
	496	2007		REMOV STR (PIPE) DOLLARS and CENTS	LF	3,853.000	96
	496	2008		REMOV STR (BOX CULVERT) DOLLARS and CENTS	LF	405.000	97
	500	2001	005	MOBILIZATION DOLLARS and CENTS	LS	1.000	98

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	ITEM NO	DESC CODE	S.P. NO.				
	502	2001	033	BARRICADES, SIGNS AND TRAFFIC HAN- DLING DOLLARS CENTS and	MO	31.000	99
	506	2003	010	ROCK FILTER DAMS (INSTALL) (TY 3) DOLLARS CENTS and	LF	90.000	100
	506	2009	010	ROCK FILTER DAMS (REMOVE) DOLLARS CENTS and	LF	90.000	101
	506	2016	010	CONSTRUCTION EXITS (INSTALL) (TY 1) DOLLARS CENTS and	SY	96.000	102
	506	2019	010	CONSTRUCTION EXITS (REMOVE) DOLLARS CENTS and	SY	96.000	103
	506	2034	010	TEMPORARY SEDIMENT CONTROL FENCE DOLLARS CENTS and	LF	4,425.000	104
	512	2002	002	PORT CTB (FUR & INST)(SAFETY SH)(TY 2) DOLLARS CENTS and	LF	3,000.000	105
	512	2020	002	PORT CTB (MOVE)(SAFETY SH)(TY 2) DOLLARS CENTS and	LF	5,000.000	106
	512	2038	002	PORT CTB (REMOVE)(SAFETY SH)(TY 2) DOLLARS CENTS and	LF	3,000.000	107
	514	2015	002	PERM CONC TRF BARR (F-SHAPE)(TY 1) DOLLARS CENTS and	LF	9,212.000	108

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	ITEM NO	DESC CODE	S.P. NO.				
	531	2015		CONC SIDEWALKS (4") DOLLARS and CENTS	SY	756.000	109
	536	2002		CONC MEDIAN DOLLARS and CENTS	SY	910.000	110
	540	2001	023	MTL W-BEAM GD FEN (TIM POST) DOLLARS and CENTS	LF	550.000	111
	540	2002	023	MTL W-BEAM GD FEN (STEEL POST) DOLLARS and CENTS	LF	1,575.000	112
	540	2005	023	TERMINAL ANCHOR SECTION DOLLARS and CENTS	EA	13.000	113
	540	2011	023	MTL BEAM GD FEN TRANS (THRIE-BEAM) DOLLARS and CENTS	EA	16.000	114
	540	2012	023	MTL BEAM GD FEN TRANS (TL2) DOLLARS and CENTS	EA	1.000	115
	544	2013		GDRAIL END TRT(INSTALL)(HBA POST) DOLLARS and CENTS	EA	13.000	116
	545	2001		CRASH CUSH ATTEN (INSTL) DOLLARS and CENTS	EA	2.000	117
	545	2022		CRASH CUSH ATTEN (INSTL)(REACT)(N) DOLLARS and CENTS	EA	3.000	118

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	ITEM NO	DESC CODE	S.P. NO.				
	545	2023		CRASH CUSH ATTEN (MOVE&RESET)(REACT)(N) DOLLARS CENTS and	EA	4.000	119
	545	2024		CRASH CUSH ATTEN (REMOVE)(REACT)(N) DOLLARS CENTS and	EA	3.000	120
	556	2016		PIPE UNDERDRAINS (TYPE 8) (8") DOLLARS CENTS and	LF	9,632.000	121
	610	2022	010	INS RD IL AM (TY SA) 40S-8 (.25 KW)S DOLLARS CENTS and	EA	8.000	122
	610	2025	010	INS RD IL AM (TY SA) 40T-8 (.25 KW)S DOLLARS CENTS and	EA	23.000	123
	610	2067	010	REMOVE RD IL ASM (SHOE-BASE) DOLLARS CENTS and	EA	1.000	124
	618	2018		CONDT (PVC) (SCHD 40) (2") DOLLARS CENTS and	LF	7,525.000	125
	618	2019		CONDT (PVC) (SCHD 40) (2") (BORE) DOLLARS CENTS and	LF	1,958.000	126
	620	2011	001	ELEC CONDR (NO. 8) BARE DOLLARS CENTS and	LF	9,483.000	127
	620	2012	001	ELEC CONDR (NO. 8) INSULATED DOLLARS CENTS and	LF	18,966.000	128

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	ITEM NO	DESC CODE	S.P. NO.				
	624	2008	014	GROUND BOX TY A (122311) W/APRON DOLLARS and CENTS	EA	20.000	129
	628	2014	001	ELC SRV TY A 240/480 060 (NS)SS(E)GC(O) DOLLARS and CENTS	EA	3.000	130
	636	2001	014	ALUMINUM SIGNS (TY A) DOLLARS and CENTS	SF	56.000	131
	636	2002	014	ALUMINUM SIGNS (TY G) DOLLARS and CENTS	SF	126.000	132
	636	2003	014	ALUMINUM SIGNS (TY O) DOLLARS and CENTS	SF	1,251.000	133
	644	2001		INS SM RD SN SUP&AM TY 10BWG(1) SA(P) DOLLARS and CENTS	EA	30.000	134
	644	2002		INS SM RD SN SUP&AM TY 10BWG(1)SA(P- BM) DOLLARS and CENTS	EA	4.000	135
	644	2004		INS SM RD SN SUP&AM TY 10BWG(1) SA(T) DOLLARS and CENTS	EA	23.000	136
	644	2006		INS SM RD SN SUP&AM TY 10BWG(1) SA(U) DOLLARS and CENTS	EA	2.000	137
	644	2013		INS SM RD SN SUP&AM TY 10BWG(2) SA(P) DOLLARS and CENTS	EA	6.000	138

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	ITEM NO	DESC CODE	S.P. NO.				
	644	2025		INS SM RD SN SUP&AM TY S80(1) SA(T) DOLLARS and CENTS	EA	4.000	139
	644	2060		REMOVE SM RD SN SUP & AM DOLLARS and CENTS	EA	6.000	140
	644	2063		INS SM RD SN SUP&AM (RAIL MOUNT) DOLLARS and CENTS	EA	1.000	141
	647	2003		REMOVE LRSA DOLLARS and CENTS	EA	3.000	142
	650	2028		INS OH SN SUP(30 FT CANT) DOLLARS and CENTS	EA	2.000	143
	650	2034		INS OH SN SUP(35 FT CANT) DOLLARS and CENTS	EA	2.000	144
	650	2093		INS OH SN SUP(90 FT BRDG) DOLLARS and CENTS	EA	1.000	145
	650	2098		INS OH SN SUP(95 FT BRDG) DOLLARS and CENTS	EA	1.000	146
	662	2056		WK ZN PAV MRK REMOV (REFL) TY II-C-R DOLLARS and CENTS	EA	126.000	147
	662	2064		WK ZN PAV MRK REMOV (W) 4" (BRK) DOLLARS and CENTS	LF	2,513.000	148
	662	2067		WK ZN PAV MRK REMOV (W) 4" (SLD) DOLLARS and CENTS	LF	11,553.000	149

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	ITEM NO	DESC CODE	S.P. NO.				
	662	2079		WK ZN PAV MRK REMOV (W) 24" (SLD) DOLLARS and CENTS	LF	87.000	150
	662	2099		WK ZN PAV MRK REMOV (Y) 4" (SLD) DOLLARS and CENTS	LF	9,918.000	151
	666	2003		REFL PAV MRK TY I (W) 4" (BRK)(100MIL) DOLLARS and CENTS	LF	1,815.000	152
	666	2012		REFL PAV MRK TY I (W) 4" (SLD)(100MIL) DOLLARS and CENTS	LF	36,339.000	153
	666	2015		REFL PAV MRK TY I (W) 6" (BRK)(100MIL) DOLLARS and CENTS	LF	6,360.000	154
	666	2036		REFL PAV MRK TY I (W) 8" (SLD)(100MIL) DOLLARS and CENTS	LF	4,582.000	155
	666	2048		REFL PAV MRK TY I (W) 24"(SLD)(100MIL) DOLLARS and CENTS	LF	60.000	156
	666	2105		REFL PAV MRK TY I (Y) 4" (BRK)(100MIL) DOLLARS and CENTS	LF	85.000	157
	666	2111		REFL PAV MRK TY I (Y) 4" (SLD)(100MIL) DOLLARS and CENTS	LF	37,280.000	158
	666	2142		REF PAV MRK TY II (W) 4" (BRK) DOLLARS and CENTS	LF	1,815.000	159
	666	2145		REF PAV MRK TY II (W) 4" (SLD) DOLLARS and CENTS	LF	36,339.000	160

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	ITEM NO	DESC CODE	S.P. NO.				
	666	2146		REF PAV MRK TY II (W) 6" (BRK) DOLLARS and CENTS	LF	6,360.000	161
	666	2153		REF PAV MRK TY II (W) 8" (SLD) DOLLARS and CENTS	LF	4,582.000	162
	666	2157		REF PAV MRK TY II (W) 24" (SLD) DOLLARS and CENTS	LF	60.000	163
	666	2176		REF PAV MRK TY II (Y) 4" (BRK) DOLLARS and CENTS	LF	85.000	164
	666	2178		REF PAV MRK TY II (Y) 4" (SLD) DOLLARS and CENTS	LF	37,280.000	165
	672	2017	034	REFL PAV MRKR TY II-C-R DOLLARS and CENTS	EA	503.000	166
	678	2001		PAV SURF PREP FOR MRK (4") DOLLARS and CENTS	LF	75,438.000	167
	678	2002		PAV SURF PREP FOR MRK (6") DOLLARS and CENTS	LF	6,360.000	168
	678	2003		PAV SURF PREP FOR MRK (8") DOLLARS and CENTS	LF	4,582.000	169
	678	2006		PAV SURF PREP FOR MRK (24") DOLLARS and CENTS	LF	60.000	170
	681	2001		TEMP TRAF SIGNALS DOLLARS and CENTS	EA	2.000	171

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	4116	2001		SOIL NAIL ANCHORS DOLLARS and CENTS	LF	10,734.000	172
	4118	2001		ROCK NAIL ANCHORS DOLLARS and CENTS	LF	4,106.000	173
	6007	2001		REMOVING TRAFFIC SIGNALS DOLLARS and CENTS	EA	2.000	174
	6008	2002		REMOVE OVERHEAD SIGN PANELS DOLLARS and CENTS	EA	2.000	175

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.

SPECIFICATION DATA

Table 1: Soil Constants Requirements				
Item	Description	Plasticity Index		Note
		Max	Min	
132	Embk (DC) (Type C1)	40	8	1
132	Embk (DC) (Type C2)	25	10	2

Note 1: Material excavated from the project must meet the PI requirements when used in the top 10 feet of embankment that supports the pavement structure or other locations shown in the plans. Do not use shale and obtain approval to incorporate shaley clay produced by the construction project.

Note 2: Use as a non-select embankment backfill as defined under Item 423.2.C.1. Use as an embankment to backfill behind abutments to the extent of the approach slab or to backfill areas enclosed by an abutment and / or retaining walls or other locations as shown in the plans.

Table 2: Basis of Estimate for Permanent Construction						
Item	Description	Thickness	Rate		Quantity	
162	Block Sod	N/A			22432	SY
					8	
168	Vegetative Watering	N/A	124	Mg/Ac	11136	Mg
260	Hydrated Lime (slurry)		111	4% by wt	1384	Ton
341	Hot Mix Asphalt (Ty B)		110	Lbs/SY/In	50206	Ton
341	Hot Mix Asphalt (Ty C)		110	Lbs/SY/In	.0	Ton
					1255.	
					0	

Note: Asphalt weight based on 110 Lbs/SY/inch

Table 3: Basis of Estimate for Temporary Erosion Control Items

Item	Description	Rate		Quantity	
168	Vegetative Watering	124	Mg/Ac	11,136	Mg

Table 4: Hamburg Wheel Test Requirements

High-Temperature Binder Grade	Test Method	Laboratory Mixture Design or Trial Batch	Production and Placement Test ¹
PG 64-22 or lower	Tex-242-F	Minimum # of Passes @ 0.5" Rut Depth, Tested @122°F 7,000	Minimum # of Passes @ 0.5" Rut Depth, Tested @122°F 7,000

1. The Engineer may accept if no more than 1 of the 5 most recent Hamburg Wheel tests is below the specified number of passes and the failing test is no more than 2000 passes

below the specified number of passes.

GENERAL

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.

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 46 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 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 7.19.F, "Project-Specific Locations", will provide a listing of regulatory agencies that may need to be contacted regarding this project.

Prior to contract letting, bidders may obtain a free computer diskette or electronic files (from the engineer's office) that contains the earthwork information. If copies of the actual cross-sections, in addition to or instead of the diskette, are requested, they will be available at the engineer's office for borrowing by copying companies for the purpose of making copies for the bidder at the bidders expense. 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)

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

Place survey monuments, provided by the department, at points indicated and as detailed in the plans or as directed. Furnish surface coordinates and the elevation of the set monument and an azimuth from the monument to some prominent physical feature, preferably another survey

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monument on the project. This work will not be paid for directly, but will be considered subsidiary to the various bid items.

Use established industry and utility safety practices to erect poles, luminaries, signs or structures near any overhead or underground utility. Consult with the appropriate utility company prior to beginning such work.

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.

Fulfillment of the requirements stated above is subsidiary to the various bid items.

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 communication & control, call 1-800-DIG-TESS (1-800-344-8377) and the TxDOT Traffic Signal Office (214-320-6682) for locates a minimum of 48 hours in advance of excavation. For irrigation systems, call TxDOT Maintenance Landscape Office (214-320-6205) 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.

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.

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.

Special consideration shall be given to Texas Motor Speedway, see Traffic Control Plan for details.

Submit pre-letting questions by e-mail or fax as follows:

e-mail: cbehnke@dot.state.tx.us

fax: (940) 383-2267

The answers will be submitted in the same format in which they are received. A file containing these questions and answers will be available for review at the area engineer's office located at 2624 W. Prairie, Denton Texas, 76201.

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

Provide the Engineer with a copy of all DBE subcontractor agreements prior to commencing work.

The following standard detail sheet has been modified:
BAS-C, IBTS, SBTS, SEJ-A and SGMD

Item 8:

This Project will be a Five-Day Workweek in accordance with Article 8.3.A.1.

To expedite intersection construction; the contractor may utilize hot mix asphalt concrete (HMAC) at a depth of one-half the plan thickness for lime treated subgrade in-lieu of the lime treated subgrade. The additional excavation and the HMAC will be calculated for payment using the appropriate bid items. Overruns due to excess excavation for the added HMAC will not be paid for directly but is subsidiary to the HMAC. HMAC will be considered "small placements".

Intersection		Free Intersection Impact Days (days)	Daily Intersection Rental Charge (\$)
Bus114 & K Ramp	Stage I	10	2000
	Stage II	10	2000
	Stage III	10	2000
Bus114 & Ramp L	Stage I	10	2000
	Stage II	10	2000
	Stage III	10	2000
	Stage IV	10	2000
A170 & Ramp L	Stage I	10	2000
	Stage II	10	2000
	Stage III	10	2000
	Stage IV	10	2000

Item 100:

Remove and replace the existing roadway signs as shown on the plans, or as directed, during construction within the right of way.

The limits of preparing right of way will be measured from Sta. 315+00 to Sta. 402+04 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 104 and 496:

Removal of all concrete and structures of the types specified in the plans will be paid for under the pertinent bid item. The removal of other types of obstructions encountered will be paid for under Item 100, if applicable.

Items 105:

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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.

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

Properly dispose of unsalvageable material at your own expense.

Items 110, and 132:

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

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.

Use an approved laboratory to perform tests for sulfate and plasticity index and provide results on sources outside the right of way at no additional expense to the department. Test soil for sulfate levels in accordance with Tex-145-E. Contact the engineer for a list of approved laboratories. Notify the engineer 72 hours before sampling and testing material. Perform split-sample verification testing with the engineer when directed. The engineer will sample and test material produced by the construction project for specification requirements or material sources specified in the plans.

When lime treatment is allowed to reduce Plasticity Index, apply lime slurry in accordance with Item 260, "Lime Treatment (Road-Mixed)." Furnish material containing sulfate at or below the threshold of 5000 parts per million (ppm). For material with sulfate levels greater than 3000 ppm, allow the mixture to mellow for at least three days, or as directed. 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. Notify the engineer 48 hours before lime treatment of the material.

Shale is not an acceptable material for embankment. Do not use shaley clays in embankment unless approved in writing.

Perform vertical tracking on slopes to temporarily stabilize soil. Provide equipment with a track undercarriage capable of producing a linear soil impression measuring at least 12 inches in length by 2 to 4 inches in width by ½ to 2 inches in depth. Do not exceed 12 inches between track cleats. Install continuous linear track impressions where the minimum 12 inches in length impressions is perpendicular to the direction of water flow. This will not be paid for directly but considered subsidiary to this item.

Item 132:

Earth embankment Types C1 and C2 are mainly composed of material other than shale. Furnish materials that are free from vegetation or other objectionable material and conform to the requirements of Table 1 (Sheet B). If necessary, add lime slurry in accordance with Item 260, "Lime Treatment (Road-Mixed)" in order to meet these requirements. Use Tex-121-E, figure 1, page 5 to calculate the amount of lime required. Furnish materials containing sulfate at or below the threshold of 5000 parts per million (ppm). For materials with sulfate levels greater than 3000 ppm, allow the mixtures to mellow for at least three days, or as directed. Test soils for sulfate levels in accordance with Tex-145-E. Use an approved laboratory to perform

tests for sulfate and plasticity index and provide results on sources outside the right of way to the department. Contact the engineer for a list of approved laboratories. Notify the engineer 48 hours before sampling and testing materials. Perform split-sample verification testing with the engineer when directed. The engineer will sample and test materials produced by the construction project for specification requirements or material sources specified in the plans. The engineer will test materials placed or excavated to a depth of one foot below and laterally to one foot outside the proposed treatment limit. Lime treatment and testing of these materials 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.

Use embankment material Type C2 described in Table 1 "Soil Constants Requirements" for embankments behind bridge abutments to the extent of the bridge approach slabs, and other embankments enclosed by an abutment and / or retaining walls.

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.

Item 260:

Furnish and distribute MS-2 smoothly and evenly at the rate of 0.20 gallons per square yard to cure lime, as directed.

Provide Hydrated Lime Slurry and apply lime by slurry placement method.

Item 320:

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

Item 340:

Design for a target Laboratory-molded density of 97.0% when using the 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.

Provide PG binder 76-22 in Type C mixture.

Hamburg Wheel test requirements for mixes with PG 64-22 shall meet Table 4. The use of RAP is permitted to meet these requirements.

Item 360:

Provide dowel support assemblies in concrete pavement (CPCD) constructed of No. 1/0 (0.306" diameter) wire in the main vertical members. Rigidly support the dowels in parallel positions and weld them on one end to the support frame. Provide weld attachments alternately on opposite ends of successive dowels. The support assembly is subject to approval.

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.

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 and monolithic curb.

Curb transition is paid for as Type II curb.

The installation of curb openings is not paid for directly, but is considered subsidiary to this item.

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.

Provide tiebars in longitudinal joints but do not place them within 15 inches of transverse joints.

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

Contractor personnel performing job-control testing on concrete must be ACI- Certified. Provide a copy of certification paper to the Engineer upon arrival and before testing at job site. Furnish hard copies of calibration reports for testing equipment when non-TxDOT approved equipment is used to test concrete.

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. The aggregate shall conform to the requirements of Article 421.2.E.2.

Items 416 and 420:

Form columns to a point a minimum of one foot below the proposed future or existing bottom of channel elevation indicated on the bridge layouts by an acceptable method. This form work is not paid for directly, but is considered subsidiary to this item.

Item 416:

Extend drilled shaft foundations for overhead sign structures five feet into rock at locations where rock is encountered at a depth less than the drilled shaft lengths shown in the plans.

Form the above-grade portion of drill shafts, or the top two inches if flush with the grade, and provide a 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.

Base all drilled shaft foundations for overhead sign structures on the lengths shown on the plans or as approved in writing. Make calculations for measurement of foundations in accordance with Article 9.1 of the standard specifications. Measure increase or decreases in the quantities required by change in design as specified and the revised quantities will be the basis for payment.

Use concrete classified as "miscellaneous concrete" for ground mounted sign foundations, with the exception of large roadside signs and overhead sign structures.

Do not install PVC and/or rigid metal conduit in sign foundations for sign structures without sign lights.

Payment will be made only once for drilling the shaft regardless of the extra work caused by obstructions.

Provide a 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.

Provide a minimum of one core per bent, regardless of placement method.

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

Item 420:

Apply an ordinary surface finish to all concrete surfaces within 30 days after form removal.

NATIONAL BRIDGE INVENTORY NUMBERS:

Provide National Bridge Inventory (NBI) numbers on all bridge structures and bridge class culverts.

Where beam types allow access to the face of abutment backwall, place NBI numbers on the face of each abutment backwall using 3" block numbers. Locate NBI numbers between the outside beams at opposite corners of the bridge.

Where beam types do not allow access to the face of abutment backwall, place NBI numbers on the face of each abutment cap using 3" block numbers. Locate NBI numbers below the outside beams at opposite corners of the bridge.

Where a bridge begins, ends or contains a bent common to multiple structures, place NBI numbers on both faces near both ends of the common bent cap. The number placed at each of the four locations will correspond to the NBI number assigned to the bridge immediately above the number. Locate NBI numbers below the outside beam. Place using 3" Block Numbers.

For Bridge Class Culverts, place National Bridge Inventory numbers at the middle of the downstream headwall using 3" block letters.

For all conditions, use appropriate die cut stencils and black paint for placement. All materials, labor and incidentals associated with placing NBI numbers are subsidiary to the various bid items.

Items 420, 422, 440 and 450:

Provide reinforcing steel with epoxy coating as shown in the plans complying with Item 440 requirements.

R-bars (I-beams, U-beams and TX Girders), Z-bars (boxes), H-bars (Slab beams), and C-bars (DT beams) are not required to be epoxy coated.

Item 421:

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

Provide sulfate resistant concrete for box culverts and drill shafts. High performance concrete meets the requirement for sulfate resistant concrete when Class C fly ash and Type I cement is not used in the mix design.

Strength evaluation using maturity testing, Tex-426-A, may be used for all concrete elements except drill shafts.

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Provide a digital hydraulic compression testing Machine and accessories. The machine shall have a minimum testing range of 2500 pounds force to 250,000 pounds force with a hydraulic switching valve to allow for rapid advancing, hold, controlled advancing and rapid retracting. The machine shall have a load cell to measure compressive forces within the testing range and shall be calibrated and verified in accordance with ASTM latest version. The Machine can meet or exceed the following when approved by the Engineer:

ELE International ACCU-TEK250 Digital Compression Tester including accessories or Forney F-250EX Standard Compression Machine including accessories or TxDOT approved equal.

Air-entrain all concrete except for Class "B" and concrete used in drilled shafts. For structural concrete, if the air content is more than 1.5% below the required air, follow manufacturer recommendations to add the necessary approved air bags to increase the air content at the job site. Limit the adding of air bags in the field to one trial. For structural concrete in abutments, bents and columns do not reject the load of concrete due to low air content; accept concrete based on strength tests. Structural concrete in approach slabs, slabs and rails shall meet the provisions of the specification.

Item 423:

For Mechanically Stabilized Earth (MSE) walls, provide a system from one of the following approved suppliers:

Reinforced Earth Walls	The Reinforced Earth Company 1331 Airport Freeway, Suite 302 Eules, TX 76040-4150	(817) 283-5503
Reinforced Soil Embankment Walls	Texas Welded Wire, Inc. 645 W. Hurst Blvd. Hurst, TX 76053	(817) 282-4560
Retained Earth Walls	Foster Geotechnical 901 North Highway 77 Hillsboro, TX 76645	(254) 580-9100
Stabilized Earth Wall	T&B Structural Systems 6800 Manhattan Blvd. Fort Worth, TX 76120	(888) 280-9858
Strengthened Earth Walls	Hanson Concrete Products 3500 Maple Ave. Dallas, TX 75219	(214) 525-5877
Strengthened Soil Walls	Shaw Technologies Inc. PO Box 271448 Flower Mound, TX 75027	(817) 490-1924
Structural Embankment Systems	Robertson Engineering Inc. 327 N. Denton St., Suite 100 Weatherford, TX 76086	(817) 596-7500
Tensor Retaining Wall System	Tensor Earth Technologies, Inc. 5883 Glenridge Dr. Atlanta, GA 30328	(888) 828-5126
Tricon Retained Soil Walls	Tricast Precast, Ltd. 15055 Henry Road	(281) 931-9832

	Houston, TX 77060	
VP Wall System	Valley Prestress Products, Inc. PO Box 1367 Mission, TX 78573	(956) 584-5701

Will have a uniform texture and appearance.

Unless otherwise noted in the plans, the top of the leveling pad is located 2 feet below the proposed ground.

Square foot surface area of retaining wall is measured from the top of retaining wall to the top of the leveling pad. Footing adjustments made to accommodate the available optional retaining walls are not measured.

Unless otherwise shown on the plans, provide Type A backfill as defined under this item for permanent MSE walls not subject to inundation. Unless otherwise shown on the plans, provide type D backfill as defined under this item for walls subject to inundation.

Supply drainage aggregate meeting the requirements of this item for use as filter material with the retaining wall.

Cement-Stabilized Backfill (CSB) is not permitted.

RAP is not acceptable as backfill for MSE retaining walls.

Unless otherwise noted on the plans, provide flowable backfill meeting the requirements of Item 401 between the back of panels and inlets or drainage pipes where the required compaction can not be achieved. Flowable backfill used for this purpose is subsidiary to this item.

Provide earth reinforcements with a length greater than or equal to 70 percent of the wall height or 8 feet whichever is greater. Earth reinforcement length is measured perpendicular to the wall. Adjust skewed earth reinforcements as necessary of obtain required length.

Submit design calculations supporting the details necessary to incorporate coping, railing, inlets, drainage, electrical conduits and any additional necessary features.

The contractor has the option of constructing any of the types of retaining walls for which details and specifications are included in the plans. Footing adjustments made to accommodate the available optional retaining walls are not measured. Regardless of option or options chosen, use the same fascia pattern throughout the entire project, including cast in place full height retaining walls or retaining wall type abutments.

Submit detailed drawings depicting the patterns and matching of precast with cast-in-place for approval.

Form the map of Texas emblem into a wall panel next to each bridge abutment. Engineer approval of the exact location of each emblem is required. The cost of forming emblems is

considered subsidiary to this item. Inset the map of Texas a minimum of $\frac{3}{4}$ inch into the face of the panel, and provide a smooth finish with an engineer approved contrasting color.

At contractor's expense, repair all damage to the precast units (such as chips) as required to match the fascia pattern.

Use Embankment Type C2 as non-select embankment backfill as defined under Item 423.2.C.1.

For non-select embankment fill behind retaining walls provide and install fill in accordance with Item 132, Type C2.

For fill walls in cut situations, the backfill between the select fill zone and the existing ground shall be either select material as required for the select fill zone or backfill meeting or exceeding the requirements of Item 132, type C2. Place material in accordance with Item 132, Type C2 requirements. If existing ground is laid back (i.e. not vertical), the lay back shall be done as a series of equal height benches so as to prevent the formation of a smooth surface at the material interface.

Items 423 and 427:

For retaining wall colors, see table under "Items 427 and 446".

Item 427:

Finish concrete structures surface area I with an opaque sealer of the color(s) shown elsewhere in the plans in accordance Item 427.

Apply a 4-SF sample of each color on the project surfaces for approval. Adjust color as required by Engineer to compensate for surroundings and natural lighting conditions on the project site.

Ensure that surfaces are free of weak surface material, curing compounds and other surface contaminants prior to coating.

FORM LINER FINISHES: The surface finish of all retaining wall is fractured fin/ribs/striations. Placement is subsidiary to this item.

Where used, provide fractured fin/ribs/striations that are continuous with no apparent curves or discontinuities. Variations of the fractured ribs from true vertical exceeding $\frac{1}{4}$ " for each 4'-0" of panel height are not acceptable.

Provide form liners that release without leaving pieces of liner material on the concrete and without pulling or breaking concrete from the textured surface. Provide form release agents as recommended by the manufacturer. Replace form liners as directed that have become damaged or worn. Replacement of form liners is considered incidental to the work and no additional compensation is provided.

No horizontal splices in the form liner are permitted. Vertical splices may occur only in valleys between fractured ribs.

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Provide sample panels a minimum of ten days in advance of starting construction of the textured concrete surfaces. Construct sample panel(s) in accordance with Item 427.4.B.2.d "Form Liner Finish" using each type of approved form liner. Sample panels must meet the requirements of the plans and specifications and be approved before any construction form liners may be ordered, obtained or used. Provide panels having a textured portion at least 5'-0" by 5'-0" with a representative un-textured surrounding surface. If directed, construct and finish additional test panels until a satisfactory concrete surface texture is obtained.

The approved sample panel is the standard of comparison for the production concrete surface texture. If directed, build a new test panel to demonstrate acceptability of any proposed change in construction method.

Tool or replace areas requiring surface treatment that do not match their associated sample panels. Upon completion, tooled or replaced panels must match the associated sample panel. Tooling or replacement is at the contractor's expense.

For proper placement of the expansion joint behind the rail, omit surface finish from the top of T501 (RW) (DAL) rail to bottom of panel as directed.

Joint reveal details and location may vary slightly from what is shown to match the adjacent MSE walls as directed. No additional compensation will be allowed.

Items 427 and 446:

Unless otherwise noted, it is the intent of these plans that all exposed surfaces (concrete or steel) of bridges, retaining walls, concrete traffic railing and concrete traffic barrier be given a tinted coating as shown or as directed. Such coating shall meet the applicable provisions of Item 427 or Item 446.

Use Federal Standard 595b colors with individual elements receiving the colors shown in the following table:

Element	Color	Specification Number
CTB	Light beige	23717
Columns	Light beige	23717
Bent caps	Light beige	23717
Striated retaining wall surfaces	Dark beige	20450
Retaining wall coping and other components except striated surfaces.	Light beige	23717
Abutments (all parts)	Dark beige	20450
Prestressed concrete girders and structural steel	Dark beige	20450
Bottom of slab overhang & slab edge	Dark beige	20450
Concrete rail parts except	Light beige	23717

outside lower 18"		
Lower outside 18" of concrete rails	Light beige	23717

Item 428:

Provide a Class II surface treatment.

Apply concrete surface treatment to the widened portions of bridge structures only.

Do not treat the inside face of concrete rails.

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.

Items 450, 420 and 440:

Provide epoxy coated rail reinforcing steel for all bridge rail reinforcing.

Provide High Performance Concrete (HPC) of the type specified for all railing on bridges, wingwalls or bridge approach slabs.

Item 464:

The concrete collars and the connections of pipes to existing or proposed concrete boxes or pipe will not be paid for directly but will be considered subsidiary to the various bid items.

At locations where storm drains dead-end, plug with a concrete plug of a thickness equal to 1 ½ inches per foot of diameter of pipe with a minimum thickness of 3 inches. The cost of the plugs shall be included in the unit price bid per foot of the various storm drain pipes.

Item 496:

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

Items 496 and 506:

When demolishing a structure/s that span the Waters of Texas or a designated wetland, take all practicable precautions to prevent debris from being discharged into the water or within the boundaries of the 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.

Item 502:

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.

County: Denton

Control: 0353-02-060

Highway: SH 114

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 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.

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.

Parking shall be provided for 10 vehicles, chain link fencing will be provided around the field office 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:

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.

SW3P Maintenance Reports are made every seven calendar days. Make corrections as soon as possible before the next anticipated rain event or within seven calendar days after being able to enter the site to work for each BMP. A BMP site being "Too Wet to Work" is the only acceptable reason for not accomplishing the corrections with the seven calendar day time limit and should be thoroughly documented on Form 2118. If maintenance corrections are not made within this time frame then all work will cease, time charges will continue until SW3P is brought into compliance and is documented on Form 2118 after TxDOT review.

This in no way releases the contractor of liability for noncompliance.

Obtain from the Engineer a copy of the project's TPDES Storm Water Program and Notice of Intent or Construction Site Notice. Laminate the sheets and bond with adhesive to 36" X 48" 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 or as directed by the Engineer. SW3P Signs, maintenance, and repostings will be subsidiary to Item 502.

Item 529:

Provide grooved joints at 10-foot intervals and $\frac{3}{4}$ inch expansion joint material for doweled curb at the same locations as on the existing pavement.

For Curb and Gutter sections, provide grooved joints at 10-foot intervals and $\frac{3}{4}$ inch expansion joint material at a maximum of 50-foot centers and at all radius points and inlets.

Curb and Gutter transitions will be paid for by the foot at the unit price for the corresponding curb or curb and gutter section.

Saw joints at the same location as on the existing pavement.

Item 530:

Provide Class "HES" concrete for concrete intersections and driveways listed or shown on the plans.

Item 536:

Use Class "B" concrete for concrete medians and directional islands.

Item 540:

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

Item 545:

Contact Keith Nabors at (940) 387-1414 to pick-up and return crash cushion attenuators from the storage area located south of IH35 and FM 1515 intersection off of Bonnie Brae St. in Denton. The work involved in hauling and handling this material will not be paid for directly, but will be considered subsidiary to this item.

Item 556:

The unit price bid per linear foot of "pipe underdrain" shall include the cost of making connections to storm sewer lines.

Place bell and spigot type pipe with an open joint of approximately $\frac{3}{4}$ inch.

In the event that Type 5 Underdrain Pipe is bid, make the connection as shown in the plans. The cost of making the connection will be considered subsidiary to this item.

The requirements for decantation of filter material are deleted for this project.

Item 585:

Use Surface Test Type A on all intersections and driveways.

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

Item 610:

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.

Complete lighting in the initial stages of construction. Make every effort to keep the jobsite lit for the duration of the project. Do not de-energize existing lighting before new lighting is operation without prior approval.

Use luminaire ballasts rated for operation at 480 volts.

Fabricate steel roadway illumination poles in accordance with TxDOT standards RIP-07 (Roadway Illumination Poles -2007). Poles fabricated according to RIP-07 require no shop drawings. Alternate designs to RIP-07 or the use of aluminum to fabricate poles will require the submission of shop drawings electronically.

For instructions on submitting shop drawings electronically go to TxDOT home page, Business with TxDOT, Bridge information, Shop drawings.
File is titled: Guide to Electronic Shop Drawing Submittal.

Item 618:

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

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 boring is used for under pavement conduit installations, the maximum allowable over-cut is 1" in diameter. 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").

Where PVC, duct cable, and HDPE conduit 1" and larger is allowed and installed as per TxDOT standards, provide a PVC elbow in place of the galvanized rigid metal elbow required by the Electrical Detail standards. Ensure the PVC elbow is of the same schedule rating as the conduit to which it is connected. Ensure only a flat, high tensile strength polyester fiber pull tape is used for pulling conductors through the PVC conduit system.

Furnish and install a non-metallic pull rope in conduit runs in excess of 50 feet.

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

Seal all conduit ends with a permanently soft, non-toxic duct seal. Use a duct seal that does not adversely affect other plastic materials or corrode metals.

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

Structurally mount junction boxes as shown on the plans. When used for traffic signal installations, use boxes 12"x12"x8", or as approved. The boxes shall not be paid for directly, but are subsidiary to this Item.

Use conduit hangers for 3 inch and larger conduit when hanging conduit from structures.

Item 620:

For both transformer and shoe-base type illumination poles, provide double-pole breakaway fuse holder as shown on the Texas Department of Transportation (TxDOT) - Construction Division's (CST) materials producers list. Category is "Roadway Illumination and Electrical Supplies." Fuse holder is shown on list under Items 610 & 620. Provide 10 amp time delay fuses.

Item 624:

Ground all junction boxes mounted on bridges and underpasses with a ground rod.

Item 627:

Use the timber pole heights, as shown on the plans and in the material summary, for bidding purposes only. Coordinate pole locations, and make field measurements before construction to ensure a vertical clearance of 17 to 19 feet from the highest point on the roadway surface to the span. In addition, place the signal heads a minimum of 40 feet and a maximum of 180 feet from the stop line. If the nearest signal must be more than 180 feet from the stop line, place a supplemental near-side signal head. Determine the field measurements and elevations from the actual field location of the poles, considering all above and below ground utilities and existing roadway elevations.

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.

Blast clean service pole pedestals with Class "A" blast cleaning as defined in Item 446. This work will not be paid for directly, but is subsidiary to this Item.

Granite concrete service pole embedment depth shall be 10'.

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.

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, "Reinforcing Steel", except consider the steel subsidiary to Item 628 for payment purposes.

Use only white insulated wire for neutral wire.

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

Item 636:

Leave the advance guide sign and/or the exit direction sign for an interchange in place at all times unless prior written approval is given. Replace signs removed by the Contractor before the end of the work day.

Manufacture all white legends using Clearview font on overhead and large ground-mounted guide signs. This includes destinations, cardinal directions, exit information and exit numbers. Use the font shown on the current standard sheets for all route markers (including interstate shields) and "Exit Only" panel information.

Provide six (6) sets of shop drawings for signs. The shop drawings shall conform to the details shown on the plans. The shop drawings shall show the details of the panels, wind beams, stiffeners, joint backing plates, splices, joint backing plates, splices, fasteners, brackets, and sign support connections. The shop drawings shall show letter types and sizes, interline spacing and message arrangements.

Affix a sign identification decal to the back of all signs in accordance with Item 643.

Attach sheeting applied to extruded aluminum panels to each individual extrusion.

Install new overhead signs tilted "down" at 3°. Furnish and obtain approval of all shop drawings detailing the method to accomplish this installation. All material and labor required for this special installation is considered subsidiary to Item 636.

Place new guide signs on existing overhead sign structures and bridge rail supports. Existing attachment hardware may be reused as permitted. Sign support brackets may be cut or removed as directed; however do not extend or lengthen existing brackets. Furnish any additional sign attachment hardware, support brackets, etc. as required. Payment will not be made for the additional brackets, but is considered subsidiary to this Item.

Ensure the minimum vertical clearance, as shown in the plans, at the highpoint of the roadway after the installation of all overhead signs. Mount new overhead signs with 46% of the sign height positioned below the centerline of the truss, or obtain approval for any exceptions.

Disconnect and isolate any existing electrical power supply prior to removal of the sign lights. Disconnect all sign lighting fixtures on overhead sign structures at the service poles and remove the service poles where indicated on the plans. Abandon associated conduit as directed at these locations. Contact the appropriate power company and close the accounts at these locations. Notify the TxDOT signal shop at (214)320-6682 when the accounts have been closed and remove the meters at these locations and deliver them to the TxDOT signal shop. Remove existing sign lights and walkways on all sign structures and bridge mounted signs within the project limits.

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.

Provide field galvanizing and metallizing equipment, as per Item 445, at all times and make repairs to galvanized surfaces according to the above specification item at intervals as directed.

Base all sign support quantities for pipe and structural steel on the dimensions shown on the approved shop drawings or as approved in writing. Make calculations for measurement of the sign support quantities from the approved shop drawings in accordance with Article 9.1 of the standard specifications. Measure increases or decreases in quantities caused by changes in design after the shop drawings are approved as specified and revised quantities will be the basis for payment.

After sign supports with signs attached have been erected, wash individual units requiring cleaning with an approved cleaning solution to remove all grease, oil, dirt, smears, streaks, and other foreign particles.

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 681:

Requirements for this Item include the following work, all of which are subsidiary to this Item:

1. Re-guy signal heads and re-strap the cable after making adjustments to head locations. Accomplish relocation of signal heads for a phase change during the same day.
2. Bottom tether cable for signal heads and signs will be required.
3. Provide submittal literature for all traffic signal equipment before installation.
4. Furnish and install a new eight-phase NEMA controller, meeting the requirements of Departmental Materials Specifications DMS-11170, in a pole-mounted cabinet. Provide a pole-mounted cabinet that is 38 inches wide, 54 inches high, 26 inches deep, and that has three brackets for pole mounting.
5. Operation and maintenance of the temporary signal includes repair of Contractor-supplied equipment, providing of telephone number to the District for trouble calls, adjustment of timing, and the generation and implementation of traffic signal timing during all phases of the project. Make traffic turning movement volume counts on weekdays between 6 AM and 9 AM, between 11 AM and 1 PM, and between 4 PM and 7 PM and on Saturday and Sunday between 10 AM and 4 PM to generate the signal timing. Signal may be required to operate fixed-time. Use the timing plan generation software known as "Synchro" to generate the timing cycle lengths and splits. Prepare the timing plan under the supervision of a registered Traffic Engineer, and submit for approval. Load the approved timing plan into the controller and fine-tune the timing with field observations. Make timing adjustments for capacity and roadway alignment changes.

6. Integrate the proposed temporary traffic signal(s) with the existing closed-loop system to make one system linked by hardwire (or wireless (spread spectrum radio)) communication as shown on the plans. Signal monitor communications are part of the closed-loop system. Provide communication between the existing Econolite master controller and any controller linked by either hardwire or radio that is transparent to the communication media. The existing closed-loop system consists of Econolite controllers. Ensure that all proposed temporary controllers incorporated into the existing closed-loop system are compatible with the existing system to allow for proper closed-loop operation. The existing Econolite master controller is located at the Roanoke water tower at Lois St @ Dorman Rd. The existing controller units on the closed-loop system are located at:
1. SH 114 @ Bus 114
 2. SH 114 @ SH 170
 3. SH 114 EB @ Trophy Club Dr
 4. SH 114 WB @ Trophy Club Dr
 5. SH 114 EB @ Trophy Lake Dr
 6. SH 114 WB @ Trophy Lake Dr
 7. Bus 114 @ N Oak St (Loop 118)
 8. US 377 @ Henrietta Creek Rd.
 9. US 377 @ Marshall Creek Rd
 10. US 377 @ SH 114
 11. SH 114 @ Litsy Rd
 12. SH 114 @ Cleveland Gibbs Rd
 13. SH 114 @ IH 35 W
 14. SH 114 @ FM 156 Connector
 15. FM 156 @ SH 114 Connector
 16. FM 156 @ E FM 407
 17. FM 156 @ W FM 407
 18. US 377 @ Liberty Christian School Rd

Item 682:

Install signal head attachments so that the wiring to each signal head passes from the mast arm through the attachment hardware to the signal head. Do not leave cable or wiring exposed.

Provide signal head attachments that allow for adjustment about the horizontal and vertical axis.

Provide aluminum signal heads and aluminum tubing in the following color: Federal Yellow #13538 of Federal Standard 595. Provide back plates, louvers, and the inside of visors with a flat black finish. Provide polycarbonate back plates for all traffic signal heads.

Turn down signal heads or cover with burlap or other material, as approved, until traffic signal is placed in operation.

Mount signal heads level and plumb and aimed as directed.

Item 684:

Provide stranded 14 AWG Type A signal cables.

Identify each cable as shown on the plans (cable 1, etc.) with permanent marking labels (Panduit Type PLM standard single marker tie, Thomas&Betts Type 548M, or equal) at each ground box, pole base, and controller.

Item 6006:

Install the coaxial cable so that it is not exposed to the outdoor environment.

Provide the latest version of the applicable SSR diagnostic software to the District on CD-ROMs, and ensure that it will operate under Windows 2000 and XP operating systems.

Integrate the proposed traffic signal(s) with the existing closed-loop system to make one system linked by hardwire (or wireless (spread spectrum radio)) communication as shown on the plans. Signal monitor communications are part of the closed-loop system. Provide communication between the master controller unit and any controller linked by either hardwire or radio that is transparent to the communication media. The existing closed-loop system consists of Type Encom spread spectrum radios. Ensure that all spread spectrum radios on the proposed closed-loop system are compatible to allow for proper closed-loop operation and communication. The existing master spread spectrum radio on the existing system is located at: the Roanoke water tower at Lois St @ Dorman Rd.

Item 6007:

Salvage the existing traffic signals at SH 114 @ Bus 114, and SH 114 @ SH 170 as shown on the plans. Salvage the controller cabinet, house, and accessories as well as the antennas, radios, and granite concrete service pole and equipment. This equipment remains the property of the Texas Department of Transportation, and is to be delivered to the TxDOT Dallas District Signal Shop. All other material removed in this project will become the property of the Contractor. Dispose of material off the right of way in accordance with federal, state, and local regulations. Maintain the operation of the existing traffic signal until directed to remove it.

Completely remove timber poles not set in concrete without cutting off the pole. Timber poles set in concrete are considered unsalvageable.

Item 6266:

Provide a Video Processor System (VPS) that can provide up to twenty-four (24) detector outputs to the controller from up to eight (8) camera/video processor units (C/VPU). Route the detector outputs through the detector panel and the detector test switches. For each C/VPU, provide a field of view with a minimum of twenty-four (24) virtual detection zones for vehicle detection.

(Note: Use one processor system per intersection)

If not terminated through the backplane of the card rack, wire the outputs as follows:

Output	Detector	Output	Detector
1	1-1	13	Spare
2	6-1	14	Spare
3	6-2	15	Spare
4	5-1	16	Spare
5	2-1	17	Spare
6	2-2	18	Spare

Highway: SH 114

7	3-1	19	Spare
8	8-1	20	Spare
9	8-2	21	Spare
10	7-1	22	Spare
11	4-1	23	Spare
12	4-2	24	Spare

Provide 6 cameras for this project.

Central control will be located at the District Signal Shop. The District will provide a workstation computer (IBM 300PL), telephone line and modem at the central location. Provide all software and other necessary equipment.

Provide a set-up system. Load required set-up software onto all of the District Signal Shop's notebook computers and provide all necessary licensing. The Contractor does not provide computers as part of the set-up system.

Provide phase red and green load switch outputs from up to eight (8) phases of a NEMA TS2 Type 2 controller as inputs to the VPU for use with internal detector extend/delay timing functions. Ensure the C/VPU is able to condition the detector outputs and detection zones based on the state of the associated phase number and color.

Supply a package that will operate with Windows 98, NT and Vista and provide the functionality defined in both sections 7.0 and 9.0 in both a direct connect and remote communications mode. Ensure the software resident in the C/VPU and the personal computer is capable of transmitting and receiving all information needed for zone set up, monitoring vehicle detection by viewing flashing detection zone overlays, and uploading/downloading and interrogating all stored data within the C/VPU. Ensure remote communications with the C/VPU is possible with the addition of external communication devices (modem, Codec, etc.) using the RS-232 and video output ports on the front of the VPU.

Ensure the C/VPU operational software is stored internally in flash memory and capable of being updated without the removal and replacement of memory devices.

Provide a camera interface panel mounted to the wall of the cabinet for protecting the camera video and power inputs/outputs. The panel shall contain as a minimum; an EDCO ACP-340 for the camera and VIVDS Processor unit power, with an on/off switch, a convenience outlet protected by the ACP-340, a 10-amp circuit breaker, and a terminal strip with a minimum of six (6) 8-32 binder head screws. The AC connections shall be protected using a piece of 1/8-inch plexi-glass.

Install the VIVDS detection zones as directed. Have qualified personnel on site at the time of the signal turn-on to assist with the installation of detection zones.

If the camera locations shown in the plans do not allow for proper sight of the proposed detection zones, relocate the cameras as needed and as directed. This labor and material cost will not be paid separately, but is subsidiary to this item.

The Video Processor Unit (VPU) may reside inside the camera housing. Use video output from the C/VPU in color or black/white with active detection zones overlaid on full motion video.

Provide Field Communications Link required by the manufacturer of the video detection system. These cables will be paid for as the type shown in the plans regardless of actual type of cable.

The list of material below is for the Contractor's information only.
It is the responsibility of the Contractor to verify
all items and quantities listed below.

**LIST OF MATERIAL/LABOR
SUBSIDIARY TO ITEM 681**

SH 114 @ Bus 114:

DESCRIPTION	UNIT	QUANTITY
CONDUIT (PVC)(SCHD 40)(2 ")	LF	358
CONDUIT (RM)(2 ")	LF	33
CONDUIT (RM)(3 ")	LF	23
ELEC CONDUCTOR (NO. 6) BARE	LF	327
ELEC CONDUCTOR (NO. 6) INSULATED	LF	654
ELEC CONDUCTOR (NO. 8) BARE	LF	87
ELEC CONDUCTOR (NO. 8) INSULATED	LF	1072
GROUND BOX TY C (162911) W/APRON	EA	1
ZINC-COAT STL WIRE STRAND (1/4 IN)	LF	278
ZINC-COAT STL WIRE STRAND (3/8 IN)	LF	1034
TIMBER POLE (CL 2) 40 FT	EA	3
ELC SRV TY D 120 / 240 070 (NS) SS (E) TP (O)	EA	1
BACK PLATE (3 SEC)(12 IN)	EA	4
VEH SIG SEC (12 IN) LED (GRN)	EA	4
VEH SIG SEC (12 IN) LED (YEL)	EA	4
VEH SIG SEC (12 IN) LED (RED)	EA	4
TRAF SIG CBL (TY A)(7 CONDR)(14 AWG)	LF	369
SPREAD SPECTRUM RADIO	EA	1
SSR COAXIAL CABLE	LF	23

ANTENNA (UNI - DIRECTIONAL)	EA	1
REMOVING TEMP TRAFFIC SIGNALS	EA	1
VIVDS PROCESSOR SYSTEM	EA	1
VIVDS CAMERA ASSEMBLY	EA	3
VIVDS SET - UP SYSTEM	EA	1
VIVDS COMMUNICATION CABLE (COAXIAL)	LF	241
8 FT LUMINAIRE MAST ARM FOR WOOD POLE MOUNTING W/ 250W HPS LUMINAIRE	EA	2
CABLE STRAPS	EA	333
GROUND ANCHORS	EA	4
YELLOW PLASTIC GUY GUARD	EA	4
DOUBLE EYE ANCHOR ROD	EA	4
2 INCH WEATHERHEAD	EA	3
3 INCH WEATHERHEAD	EA	1
INSTALL PHONE LINE AND MODEM	EA	1
8 PHASE NEMA CONTROLLER, POLE MOUNTED CABINET W/ ACCESS.	LS	1
CONCRETE PAD (5' X 5' X 4", CLASS B) (for pole mounted cabinets)	SF	25

SH 114 @ SH 170:

DESCRIPTION	UNIT	QUANTITY
CONDUIT (PVC)(SCHD 40)(2 ")	LF	55
CONDUIT (RM)(2 ")	LF	33
CONDUIT (RM)(3 ")	LF	23
ELEC CONDUCTOR (NO. 6) BARE	LF	39
ELEC CONDUCTOR (NO. 6) INSULATED	LF	78
ELEC CONDUCTOR (NO. 8) BARE	LF	72
ELEC CONDUCTOR (NO. 8) INSULATED	LF	390
GROUND BOX TY C (162911) W/APRON	EA	1
ZINC-COAT STL WIRE STRAND (1/4 IN)	LF	226
ZINC-COAT STL WIRE STRAND (3/8 IN)	LF	878

TIMBER POLE (CL 2) 40 FT	EA	2
TIMBER POLE (CL 2) 50 FT	EA	1
ELC SRV TY D 120 / 240 070 (NS) SS (E) TP (O)	EA	1
BACK PLATE (3 SEC)(12 IN)	EA	4
VEH SIG SEC (12 IN) LED (GRN)	EA	4
VEH SIG SEC (12 IN) LED (YEL)	EA	4
VEH SIG SEC (12 IN) LED (RED)	EA	4
TRAF SIG CBL (TY A)(7 CONDR)(14 AWG)	LF	311
SPREAD SPECTRUM RADIO	EA	1
SSR COAXIAL CABLE	LF	23
ANTENNA (UNI - DIRECTIONAL)	EA	1
REMOVING TEMP TRAFFIC SIGNALS	EA	1
VIVDS PROCESSOR SYSTEM	EA	1
VIVDS CAMERA ASSEMBLY	EA	3
VIVDS SET - UP SYSTEM	EA	1
VIVDS COMMUNICATION CABLE (COAXIAL)	LF	188
8 FT LUMINAIRE MAST ARM FOR WOOD POLE MOUNTING W/ 250W HPS LUMINAIRE	EA	2
CABLE STRAPS	EA	276
GROUND ANCHORS	EA	4
YELLOW PLASTIC GUY GUARD	EA	4
DOUBLE EYE ANCHOR ROD	EA	4
2 INCH WEATHERHEAD	EA	3
3 INCH WEATHERHEAD	EA	1
INSTALL PHONE LINE AND MODEM	EA	1
8 PHASE NEMA CONTROLLER, POLE MOUNTED CABINET W/ ACCESS.	LS	1
CONCRETE PAD (5' X 5' X 4", CLASS B) (for pole mounted cabinets)	SF	25

CONTROL : 0353-02-060
PROJECT : C 353-2-60
HIGHWAY : SH 114
COUNTY : DENTON

TEXAS DEPARTMENT OF TRANSPORTATION

GOVERNING SPECIFICATIONS AND SPECIAL PROVISIONS

ALL SPECIFICATIONS AND SPECIAL PROVISIONS APPLICABLE TO THIS PROJECT ARE IDENTIFIED AS FOLLOWS:

STANDARD SPECIFICATIONS: ADOPTED BY THE TEXAS DEPARTMENT OF
----- TRANSPORTATION JUNE 1, 2004.
STANDARD SPECIFICATIONS ARE INCORPORATED
INTO THE CONTRACT BY REFERENCE.

ITEMS 1 TO 9 INCL., GENERAL REQUIREMENTS AND COVENANTS
ITEM 100 PREPARING RIGHT OF WAY (103)
ITEM 104 REMOVING CONCRETE
ITEM 105 REMOVING STABILIZED BASE AND ASPHALT PAVEMENT
ITEM 110 EXCAVATION (132)
ITEM 132 EMBANKMENT (100)(204)(210)(216)(400)
ITEM 161 COMPOST (160)
ITEM 162 SODDING FOR EROSION CONTROL (166)(168)
ITEM 164 SEEDING FOR EROSION CONTROL (162)(166)(168)
ITEM 168 VEGETATIVE WATERING
ITEM 260 LIME TREATMENT (ROAD-MIXED) (105)(132)(204)(210)(216)
(300)(310)(520)
ITEM 340 DENSE-GRADED HOT-MIX ASPHALT (METHOD) (210)(300)(301)
(320)(520)(585)
ITEM 360 CONCRETE PAVEMENT (300)(420)(421)(438)(440)(529)(585)
ITEM 402 TRENCH EXCAVATION PROTECTION
ITEM 403 TEMPORARY SPECIAL SHORING (423)
ITEM 416 DRILLED SHAFT FOUNDATIONS (420)(421)(440)(448)
ITEM 420 CONCRETE STRUCTURES (400)(404)(421)(426)(427)(438)(440)
(441)(448)
ITEM 422 REINFORCED CONCRETE SLAB (420)(421)(424)(426)(430)(440)
ITEM 423 RETAINING WALLS (110)(132)(400)(420)(421)(424)(440)(445)
(458)(556)
ITEM 425 PRECAST PRESTRESSED CONCRETE STRUCTURAL MEMBERS (420)
(421)(424)(426)(427)(434)(440)(442)
ITEM 426 PRESTRESSING (420)(421)(434)(440)(442)(445)
ITEM 428 CONCRETE SURFACE TREATMENT (427)
ITEM 432 RIPRAP (247)(420)(421)(427)(431)(440)
ITEM 434 ELASTOMERIC BRIDGE BEARINGS (420)(441)
ITEM 442 METAL FOR STRUCTURES (441)(445)(446)(447)(448)(449)

- ITEM 450 RAILING (420)(421)(424)(440)(441)(442)(445)(446)(448)
(540)
- ITEM 454 BRIDGE EXPANSION JOINTS (429)(442)
- ITEM 459 GABIONS AND GABION MATTRESSES
- ITEM 462 CONCRETE BOX CULVERTS AND STORM DRAINS (400)(420)(421)
(424)(440)(464)(476)
- ITEM 464 REINFORCED CONCRETE PIPE (400)(476)
- ITEM 465 MANHOLES AND INLETS (400)(420)(421)(440)(471)
- ITEM 466 HEADWALLS AND WINGWALLS (400)(420)(421)(430)(440)(464)
- ITEM 496 REMOVING STRUCTURES (430)
- ITEM 500 MOBILIZATION
- ITEM 502 BARRICADES, SIGNS, AND TRAFFIC HANDLING
- ITEM 504 FIELD OFFICE AND LABORATORY
- ITEM 506 TEMPORARY EROSION, SEDIMENTATION, AND ENVIRONMENTAL
CONTROLS (432)(556)
- ITEM 512 PORTABLE CONCRETE TRAFFIC BARRIER (420)(421)(424)(440)
(442)
- ITEM 514 PERMANENT CONCRETE TRAFFIC BARRIER (400)(416)(420)(421)
(424)(440)(442)(448)
- ITEM 531 SIDEWALKS (104)(360)(420)(421)(440)(530)
- ITEM 536 CONCRETE MEDIANS AND DIRECTIONAL ISLANDS (420)(421)(427)
(440)(529)
- ITEM 540 METAL BEAM GUARD FENCE (421)(441)(445)(529)(542)(544)
- ITEM 544 GUARDRAIL END TREATMENTS
- ITEM 545 CRASH CUSHION ATTENUATORS (421)
- ITEM 556 PIPE UNDERDRAINS (402)(432)
- ITEM 610 ROADWAY ILLUMINATION ASSEMBLIES (421)(441)(442)(445)(446)
(449)(616)(620)
- ITEM 618 CONDUIT (400)(445)(476)(622)
- ITEM 620 ELECTRICAL CONDUCTORS
- ITEM 624 GROUND BOXES (421)(440)
- ITEM 628 ELECTRICAL SERVICES (441)(445)(449)(618)(620)(627)(656)
- ITEM 636 ALUMINUM SIGNS (643)
- ITEM 644 SMALL ROADSIDE SIGN SUPPORTS AND ASSEMBLIES (421)(440)
(441)(442)(445)(634)(636)(643)(656)
- ITEM 647 LARGE ROADSIDE SIGN SUPPORTS AND ASSEMBLIES (421)(440)
(441)(442)(445)(643)
- ITEM 650 OVERHEAD SIGN SUPPORTS (416)(420)(421)(441)(442)(445)
(449)(618)
- ITEM 662 WORK ZONE PAVEMENT MARKINGS (666)(668)(672)(677)
- ITEM 666 REFLECTORIZED PAVEMENT MARKINGS (316)(318)(662)(677)(678)
- ITEM 672 RAISED PAVEMENT MARKERS (677)(678)
- ITEM 678 PAVEMENT SURFACE PREPARATION FOR MARKINGS (677)
- ITEM 681 TEMPORARY TRAFFIC SIGNALS (628)(680)(682)(684)(6006)
(6266)

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

SPECIAL LABOR PROVISIONS FOR STATE PROJECTS (000---007)
 WAGE RATES

SPECIAL PROVISION "PARTNERING" (000---002)
 SPECIAL PROVISION "SMALL BUSINESS ENTERPRISE IN STATE FUNDED
 CONSTRUCTION" (000---010)
 SPECIAL PROVISION "SCHEDULE OF LIQUIDATED DAMAGES" (000--1493)
 SPECIAL PROVISION "DEPARTMENT DIVISION MAILING AND PHYSICAL ADDRESS"
 (000---011)
 SPECIAL PROVISION TO ITEM 1 (001---015)
 SPECIAL PROVISION TO ITEM 2 (002---017)
 SPECIAL PROVISION TO ITEM 3 (003---033)
 SPECIAL PROVISION TO ITEM 4 (004---017)
 SPECIAL PROVISION TO ITEM 5 (005---004)
 SPECIAL PROVISION TO ITEM 6 (006---030)
 SPECIAL PROVISION TO ITEM 7 (007---740)
 SPECIAL PROVISIONS TO ITEM 8 (008---007)(008---123)
 SPECIAL PROVISIONS TO ITEM 9 (009---012)(009---015)
 SPECIAL PROVISION TO ITEM 100 (100---002)
 SPECIAL PROVISION TO ITEM 161 (161---006)
 SPECIAL PROVISION TO ITEM 164 (164---002)
 SPECIAL PROVISION TO ITEM 166 (166---001)
 SPECIAL PROVISION TO ITEM 247 (247---033)
 SPECIAL PROVISION TO ITEM 260 (260---002)
 SPECIAL PROVISION TO ITEM 300 (300---032)
 SPECIAL PROVISION TO ITEM 316 (316---016)
 SPECIAL PROVISION TO ITEM 318 (318---010)
 SPECIAL PROVISION TO ITEM 340 (340---003)
 SPECIAL PROVISION TO ITEM 360 (360---003)
 SPECIAL PROVISION TO ITEM 416 (416---001)
 SPECIAL PROVISION TO ITEM 420 (420---002)
 SPECIAL PROVISION TO ITEM 421 (421---035)
 SPECIAL PROVISION TO ITEM 424 (424---002)
 SPECIAL PROVISION TO ITEM 425 (425---001)
 SPECIAL PROVISION TO ITEM 428 (428---001)
 SPECIAL PROVISION TO ITEM 429 (429---008)
 SPECIAL PROVISION TO ITEM 431 (431---001)
 SPECIAL PROVISION TO ITEM 434 (434---003)
 SPECIAL PROVISION TO ITEM 440 (440---003)
 SPECIAL PROVISION TO ITEM 441 (441---006)
 SPECIAL PROVISION TO ITEM 442 (442---016)
 SPECIAL PROVISION TO ITEM 447 (447---002)
 SPECIAL PROVISION TO ITEM 448 (448---002)
 SPECIAL PROVISION TO ITEM 450 (450---001)
 SPECIAL PROVISION TO ITEM 464 (464---003)
 SPECIAL PROVISION TO ITEM 465 (465---001)
 SPECIAL PROVISION TO ITEM 500 (500---005)
 SPECIAL PROVISION TO ITEM 502 (502---033)
 SPECIAL PROVISION TO ITEM 506 (506---010)
 SPECIAL PROVISION TO ITEM 512 (512---002)
 SPECIAL PROVISION TO ITEM 514 (514---002)
 SPECIAL PROVISION TO ITEM 540 (540---023)
 SPECIAL PROVISION TO ITEM 610 (610---010)
 SPECIAL PROVISION TO ITEM 620 (620---001)
 SPECIAL PROVISION TO ITEM 624 (624---014)
 SPECIAL PROVISION TO ITEM 628 (628---001)
 SPECIAL PROVISION TO ITEM 636 (636---014)

SPECIAL PROVISION TO ITEM 643 (643---001)
SPECIAL PROVISION TO ITEM 672 (672---034)
SPECIAL PROVISION TO ITEM 682 (682---001)
SPECIAL PROVISION TO SPECIAL SPECIFICATION ITEM 6266 (6266--017)

SPECIAL SPECIFICATIONS:

- ITEM 4116 SOIL NAIL ANCHORS (421)(440)
- ITEM 4118 ROCK NAIL ANCHORS (421)(440)
- ITEM 6006 SPREAD SPECTRUM RADIOS FOR TRAFFIC SIGNALS
- ITEM 6007 REMOVING TRAFFIC SIGNALS
- ITEM 6008 SHIFTING OR REMOVING EXISTING OVERHEAD SIGNS (634)(636)
(652)(654)
- ITEM 6266 VIDEO IMAGING VEHICLE DETECTION SYSTEM

GENERAL: THE ABOVE-LISTED SPECIFICATION ITEMS ARE THOSE UNDER WHICH
----- PAYMENT IS TO BE MADE. THESE, TOGETHER WITH SUCH OTHER
PERTINENT ITEMS, IF ANY, AS MAY BE REFERRED TO IN THE ABOVE-
LISTED SPECIFICATION ITEMS, AND INCLUDING THE SPECIAL
PROVISIONS LISTED ABOVE, CONSTITUTE THE COMPLETE SPECIFI-
CATIONS FOR THIS PROJECT.

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