NOTIFICATION OF ADDENDUM

ADDENDUM NO. 1

DATED 4/01/2015

Control	**0062-06-054**
Project	**NH 2015(995)**
Highway	**US 59**
County	**MARION**

Ladies/Gentlemen:

Attached please find an addendum on the above captioned project. Included in the attachment is an adendum 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.

04/99

SUBJECT: PLANS AND PROPOSAL ADDENDUMS

PROJECT: NH 2015(995) CONTROL: 0062-06-054

COUNTY: MARION

LETTING: 04/07/2015

REFERENCE NO: 0327

PROPOSAL ADDENDUMS

_ PROPOSAL COVER

X BID INSERTS (SH. NO.: Sheets 11-12 to 12-12)

_ GENERAL NOTES (SH. NO.:)

X SPEC LIST (SH. NO.: Sheets 2-3 and 3-3)

_ SPECIAL PROVISIONS:

ADDED:

DELETED:

X SPECIAL SPECIFICATIONS:

ADDED: 7030

DELETED:

X OTHER: Plan Sheets 10B and 15

DESCRIPTION OF ABOVE CHANGES
(INCLUDING PLANS SHEET CHANGES)

Bid Inserts

Sheet 11-12: Deleted Items 677-6001, 677-6002, 677-6003, 677-6007 677-6008, 677-6012

Sheet 12-12: Added Items 7030-6001, 7030-6002, 7030-6009, 7030-6005 7030-6006, 7030-6007

Spec List

Sheet 2-3: Deleted Standard Specification 677

Sheet 3-3: Added Special Specification 7030

Plan Sheets

Sheet 10B: Deleted all 677 Bid Items and replaced with Bid Item 7030

Sheet 15: Changed all 677 Bid Items to Bid Item 7030 in "Summary of Eliminate Pavement Marking Items."

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	104	6009		REMOVING CONC (RIPRAP) DOLLARS and CENTS	SY	33.000	1
	104	6017		REMOVING CONC (DRIVEWAYS) DOLLARS and CENTS	SY	194.000	2
	104	6022		REMOVING CONC (CURB AND GUTTER) DOLLARS and CENTS	LF	907.000	3
	104	6028		REMOVING CONC (MISC) DOLLARS and CENTS	SY	26.000	4
	105	6023		REMOVING STAB BASE AND ASPH PAV (5") DOLLARS and CENTS	SY	179.000	5
	110	6001		EXCAVATION (ROADWAY) DOLLARS and CENTS	CY	901.000	6
	132	6006		EMBANKMENT (FINAL)(DENS CONT)(TY C) DOLLARS and CENTS	CY	2,370.000	7
	150	6001		BLADING DOLLARS and CENTS	STA	2.000	8
	160	6003		FURNISHING AND PLACING TOPSOIL (4") DOLLARS and CENTS	SY	9,080.000	9
	164	6009		BROADCAST SEED (TEMP) (WARM) DOLLARS and CENTS	SY	4,500.000	10
	164	6011		BROADCAST SEED (TEMP) (COOL) DOLLARS and CENTS	SY	4,500.000	11

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	164	6054		BOND FBR MTRX SEED (PERM)(RURAL)(SAND) DOLLARS and CENTS	SY	9,080.000	12
	168	6001		VEGETATIVE WATERING DOLLARS and CENTS	MG	147.000	13
	169	6002		SOIL RETENTION BLANKETS (CL 1) (TY B) DOLLARS and CENTS	SY	100.000	14
	169	6006		SOIL RETENTION BLANKETS (CL 2) (TY F) DOLLARS and CENTS	SY	100.000	15
	275	6001		CEMENT DOLLARS and CENTS	TON	53.000	16
	275	6010		CEMENT TREAT (SUBGRADE) (8") DOLLARS and CENTS	SY	3,844.000	17
	310	6009		PRIME COAT (MC-30) DOLLARS and CENTS	GAL	979.000	18
	316	6004		ASPH (TIER I) DOLLARS and CENTS	GAL	10,403.000	19
	316	6126		AGGR(TY-PB GR-4 SAC-A) DOLLARS and CENTS	CY	297.000	20
	340	6106		D-GR HMA(SQ) TY-D PG64-22 DOLLARS and CENTS	TON	2,049.000	21

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	344	6063		SUPERPAVE MIXTURES SP-C SAC-A PG76-22 DOLLARS and CENTS	TON	754.000	22
	354	6100		PLANE ASPH CONC PAV (5") DOLLARS and CENTS	SY	8,342.000	23
	360	6018		CONC PVMT (JOINTED - CPCD) (8") DOLLARS and CENTS	SY	1,526.000	24
	360	6023		CONC PVMT (JOINTED - CPCD) (13") DOLLARS and CENTS	SY	9,329.000	25
	420	6005		CL A CONC (CURB OUTLET)(TY I) DOLLARS and CENTS	EA	3.000	26
	420	6006		CL A CONC (CURB OUTLET)(TY II) DOLLARS and CENTS	EA	2.000	27
	432	6006		RIPRAP (CONC)(CL B) DOLLARS and CENTS	CY	6.000	28
	454	6003		ARMOR JOINT DOLLARS and CENTS	LF	154.000	29
	464	6003		RC PIPE (CL III)(18 IN) DOLLARS and CENTS	LF	102.000	30
	464	6005		RC PIPE (CL III)(24 IN) DOLLARS and CENTS	LF	72.000	31
	464	6007		RC PIPE (CL III)(30 IN) DOLLARS and CENTS	LF	24.000	32

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	467	6363		SET (TY II) (18 IN) (RCP) (6: 1) (P) DOLLARS and CENTS	EA	4.000	33
	467	6390		SET (TY II) (24 IN) (RCP) (4: 1) (C) DOLLARS and CENTS	EA	1.000	34
	467	6394		SET (TY II) (24 IN) (RCP) (6: 1) (C) DOLLARS and CENTS	EA	4.000	35
	467	6419		SET (TY II) (30 IN) (RCP) (4: 1) (C) DOLLARS and CENTS	EA	1.000	36
	467	6422		SET (TY II) (30 IN) (RCP) (6: 1) (C) DOLLARS and CENTS	EA	1.000	37
	496	6007		REMOV STR (PIPE) DOLLARS and CENTS	LF	102.000	38
	500	6001		MOBILIZATION DOLLARS and CENTS	LS	1.000	39
	502	6001		BARRICADES, SIGNS AND TRAFFIC HAN-DLING DOLLARS and CENTS	MO	11.000	40
	506	6001	001	ROCK FILTER DAMS (INSTALL) (TY 1) DOLLARS and CENTS	LF	50.000	41
	506	6002	001	ROCK FILTER DAMS (INSTALL) (TY 2) DOLLARS and CENTS	LF	145.000	42

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	506	6011	001	ROCK FILTER DAMS (REMOVE) DOLLARS and CENTS	LF	195.000	43
	506	6038	001	TEMP SEDMT CONT FENCE (INSTALL) DOLLARS and CENTS	LF	1,400.000	44
	506	6039	001	TEMP SEDMT CONT FENCE (REMOVE) DOLLARS and CENTS	LF	1,400.000	45
	529	6007		CONC CURB & GUTTER (TY I) DOLLARS and CENTS	LF	403.000	46
	530	6004		DRIVEWAYS (CONC) DOLLARS and CENTS	SY	1,166.000	47
	530	6005		DRIVEWAYS (ACP) DOLLARS and CENTS	SY	307.000	48
	530	6008		TURNOUTS (ACP) DOLLARS and CENTS	SY	55.000	49
	536	6004		CONC DIRECTIONAL ISLAND DOLLARS and CENTS	SY	118.000	50
	560	6011		MAILBOX INSTALL-S (TWW-POST) TY 4 DOLLARS and CENTS	EA	1.000	51
	618	6023		CONDT (PVC) (SCH 40) (2") DOLLARS and CENTS	LF	45.000	52
	618	6024		CONDT (PVC) (SCH 40) (2") (BORE) DOLLARS and CENTS	LF	90.000	53

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	465.000	54
	620	6009		ELEC CONDR (NO.6) BARE DOLLARS and CENTS	LF	200.000	55
	624	6010		GROUND BOX TY D (162922)W/APRON DOLLARS and CENTS	EA	2.000	56
	644	6068		RELOCATE SM RD SN SUP&AM TY 10BWG DOLLARS and CENTS	EA	6.000	57
	644	6070		RELOCATE SM RD SN SUP&AM TY S80 DOLLARS and CENTS	EA	4.000	58
	644	6076		REMOVE SM RD SN SUP&AM DOLLARS and CENTS	EA	2.000	59
	658	6048		INSTL OM ASSM (OM-2Z)(FLX)GND DOLLARS and CENTS	EA	8.000	60
	662	6004		WK ZN PAV MRK NON-REMOV (W)4"(SLD) DOLLARS and CENTS	LF	3,878.000	61
	662	6008		WK ZN PAV MRK NON-REMOV (W)6"(SLD) DOLLARS and CENTS	LF	11,880.000	62
	662	6012		WK ZN PAV MRK NON-REMOV (W)8"(SLD) DOLLARS and CENTS	LF	200.000	63
	662	6016		WK ZN PAV MRK NON-REMOV (W)24"(SLD) DOLLARS and CENTS	LF	80.000	64

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	662	6034		WK ZN PAV MRK NON-REMOV (Y)4"(SLD) DOLLARS and CENTS	LF	3,878.000	65
	662	6037		WK ZN PAV MRK NON-REMOV (Y)6"(SLD) DOLLARS and CENTS	LF	22,684.000	66
	662	6048		WK ZN PAV MRK REMOV (REFL) TY I-C DOLLARS and CENTS	EA	20.000	67
	662	6050		WK ZN PAV MRK REMOV (REFL) TY II-A-A DOLLARS and CENTS	EA	464.000	68
	662	6063		WK ZN PAV MRK REMOV (W)4"(SLD) DOLLARS and CENTS	LF	401.000	69
	662	6067		WK ZN PAV MRK REMOV (W)6"(SLD) DOLLARS and CENTS	LF	1,062.000	70
	662	6071		WK ZN PAV MRK REMOV (W)8"(SLD) DOLLARS and CENTS	LF	200.000	71
	662	6075		WK ZN PAV MRK REMOV (W)24"(SLD) DOLLARS and CENTS	LF	111.000	72
	662	6095		WK ZN PAV MRK REMOV (Y)4"(SLD) DOLLARS and CENTS	LF	416.000	73
	662	6098		WK ZN PAV MRK REMOV (Y)6"(SLD) DOLLARS and CENTS	LF	3,200.000	74
	662	6109		WK ZN PAV MRK SHT TERM (TAB)TY W DOLLARS and CENTS	EA	300.000	75

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	662	6111		WK ZN PAV MRK SHT TERM (TAB)TY Y-2 DOLLARS and CENTS	EA	350.000	76
	662	6112		WK ZN PAV MRK SHT TERM RMV (W)(4") DOLLARS and CENTS	LF	1,450.000	77
	662	6113		WK ZN PAV MRK SHT TERM RMV (Y)(4") DOLLARS and CENTS	LF	1,100.000	78
	666	6005		REFL PAV MRK TY I (W)4"(DOT)(090MIL) DOLLARS and CENTS	LF	154.000	79
	666	6029		REFL PAV MRK TY I (W)8"(DOT)(090MIL) DOLLARS and CENTS	LF	296.000	80
	666	6035		REFL PAV MRK TY I (W)8"(SLD)(090MIL) DOLLARS and CENTS	LF	924.000	81
	666	6168		REFL PAV MRK TY II (W) 4" (DOT) DOLLARS and CENTS	LF	154.000	82
	666	6170		REFL PAV MRK TY II (W) 4" (SLD) DOLLARS and CENTS	LF	1,108.000	83
	666	6171		REFL PAV MRK TY II (W) 6" (BRK) DOLLARS and CENTS	LF	2,560.000	84
	666	6174		REFL PAV MRK TY II (W) 6" (SLD) DOLLARS and CENTS	LF	10,188.000	85
	666	6176		REFL PAV MRK TY II (W) 8" (DOT) DOLLARS and CENTS	LF	296.000	86

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	666	6178		REFL PAV MRK TY II (W) 8" (SLD) DOLLARS and CENTS	LF	924.000	87
	666	6207		REFL PAV MRK TY II (Y) 4" (SLD) DOLLARS and CENTS	LF	1,306.000	88
	666	6208		REFL PAV MRK TY II (Y) 6" (BRK) DOLLARS and CENTS	LF	2,400.000	89
	666	6210		REFL PAV MRK TY II (Y) 6" (SLD) DOLLARS and CENTS	LF	9,548.000	90
	666	6302		RE PM W/RET REQ TY I (W)4"(SLD)(090MIL) DOLLARS and CENTS	LF	1,108.000	91
	666	6305		RE PM W/RET REQ TY I (W)6"(BRK)(090MIL) DOLLARS and CENTS	LF	2,560.000	92
	666	6308		RE PM W/RET REQ TY I (W)6"(SLD)(090MIL) DOLLARS and CENTS	LF	10,188.000	93
	666	6314		RE PM W/RET REQ TY I (Y)4"(SLD)(090MIL) DOLLARS and CENTS	LF	1,306.000	94
	666	6317		RE PM W/RET REQ TY I (Y)6"(BRK)(090MIL) DOLLARS and CENTS	LF	2,400.000	95
	666	6320		RE PM W/RET REQ TY I (Y)6"(SLD)(090MIL) DOLLARS and CENTS	LF	9,548.000	96
	668	6010		PREFAB PAV MRK TY B (W)(6")(BRK)CNTST DOLLARS and CENTS	LF	400.000	97

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	668	6064		PREFAB PAV MRK TY C (W) (4") (SLD) DOLLARS and CENTS	LF	148.000	98
	668	6068		PREFAB PAV MRK TY C (W) (6") (SLD) DOLLARS and CENTS	LF	1,367.000	99
	668	6072		PREFAB PAV MRK TY C (W) (8") (SLD) DOLLARS and CENTS	LF	2,910.000	100
	668	6076		PREFAB PAV MRK TY C (W) (24") (SLD) DOLLARS and CENTS	LF	104.000	101
	668	6077		PREFAB PAV MRK TY C (W) (ARROW) DOLLARS and CENTS	EA	9.000	102
	668	6084		PREFAB PAV MRK TY C (W) (NUMBER) DOLLARS and CENTS	EA	4.000	103
	668	6085		PREFAB PAV MRK TY C (W) (WORD) DOLLARS and CENTS	EA	21.000	104
	668	6101		PREFAB PAV MRK TY C (Y) (4") (SLD) DOLLARS and CENTS	LF	812.000	105
	668	6102		PREFAB PAV MRK TY C (Y) (6") (BRK) DOLLARS and CENTS	LF	100.000	106
	668	6104		PREFAB PAV MRK TY C (Y) (6") (SLD) DOLLARS and CENTS	LF	2,757.000	107
	668	6108		PREFAB PAV MRK TY C (Y) (24") (SLD) DOLLARS and CENTS	LF	226.000	108

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	672	6007		REFL PAV MRKR TY I-C DOLLARS and CENTS	EA	129.000	109
	672	6009		REFL PAV MRKR TY II-A-A DOLLARS and CENTS	EA	465.000	110
	678	6001		PAV SURF PREP FOR MRK (4") DOLLARS and CENTS	LF	148.000	111
	678	6002		PAV SURF PREP FOR MRK (6") DOLLARS and CENTS	LF	4,624.000	112
	678	6004		PAV SURF PREP FOR MRK (8") DOLLARS and CENTS	LF	2,910.000	113
	678	6008		PAV SURF PREP FOR MRK (24") DOLLARS and CENTS	LF	330.000	114
	678	6009		PAV SURF PREP FOR MRK (ARROW) DOLLARS and CENTS	EA	9.000	115
	678	6015		PAV SURF PREP FOR MRK (NUMBER) DOLLARS and CENTS	EA	4.000	116
	678	6016		PAV SURF PREP FOR MRK (WORD) DOLLARS and CENTS	EA	21.000	117
	681	6001		TEMP TRAF SIGNALS DOLLARS and CENTS	EA	1.000	118
	684	6010		TRF SIG CBL (TY A)(12 AWG)(5 CONDR) DOLLARS and CENTS	LF	415.000	119

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	684	6012		TRF SIG CBL (TY A)(12 AWG)(7 CONDR) DOLLARS and CENTS	LF	200.000	120
	6001	6002		PORTABLE CHANGEABLE MESSAGE SIGN DOLLARS and CENTS	EA	4.000	121
	6002	6005		VIVDS COMMUNICATION CABLE (COAXIAL) DOLLARS and CENTS	LF	409.000	122
	6056	6001		PREFORMED IN-LANE(TRANS) RUMBLE STRIP DOLLARS and CENTS	LF	160.000	123
	7030	6001		HIGH PRESSURE WATER BLASTING SYSTEM 4" DOLLARS and CENTS	LF	4,006.000	124
	7030	6002		HIGH PRESSURE WATER BLASTING SYSTEM 6" DOLLARS and CENTS	LF	17,196.000	125
	7030	6005		HIGH PRESSURE WATER BLASTING SYSTEM 24" DOLLARS and CENTS	LF	102.000	126
	7030	6006		HIGH PRESSURE WATER BLASTING SYS(ARROW) DOLLARS and CENTS	EA	4.000	127
	7030	6007		HIGH PRESSURE WATER BLASTING SYS (WORD) DOLLARS and CENTS	EA	2.000	128

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	7030	6009		HIGH PRESSURE WATER BLASTING SYSTEM 8" DOLLARS and CENTS	LF	1,405.000	129

CONTROL : 0062-06-054
PROJECT : NH 2015(995)
HIGHWAY : US 59
COUNTY : MARION

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 NOVEMBER 1, 2014. STANDARD SPECIFICATIONS ARE INCORPORATED INTO THE CONTRACT BY REFERENCE.

ITEMS 1 TO 9 INCL., GENERAL REQUIREMENTS AND COVENANTS
ITEM 104 REMOVING CONCRETE
ITEM 105 REMOVING TREATED AND UNTREATED BASE AND ASPHALT PAVEMENT
ITEM 110 EXCAVATION (132)
ITEM 132 EMBANKMENT (100)(160)(204)(210)(216)(260)(400)
ITEM 150 BLADING
ITEM 160 TOPSOIL (168)
ITEM 164 SEEDING FOR EROSION CONTROL (162)(166)(168)(730)
ITEM 168 VEGETATIVE WATERING
ITEM 169 SOIL RETENTION BLANKETS
ITEM 275 CEMENT TREATMENT (ROAD-MIXED) (132)(204)(210)(216)(247)(260)(300)(310)(520)
ITEM 310 PRIME COAT (300)(316)
ITEM 316 SEAL COAT (210)(300)(302)
ITEM 340 DENSE-GRADED HOT-MIX ASPHALT (SMALL QUANTITY) (300)(301)(320)(520)(585)
ITEM 344 SUPERPAVE MIXTURES (300)(301)(320)(520)(585)
ITEM 354 PLANING AND TEXTURING PAVEMENT
ITEM 360 CONCRETE PAVEMENT (421)(422)(438)(440)(529)(585)
ITEM 420 CONCRETE SUBSTRUCTURES (400)(404)(421)(422)(426)(427)(440)(441)(448)
ITEM 432 RIPRAP (247)(420)(421)(431)(440)
ITEM 454 BRIDGE EXPANSION JOINTS (429)(442)(785)
ITEM 464 REINFORCED CONCRETE PIPE (132)(400)(402)(403)(467)(476)
ITEM 467 SAFETY END TREATMENT (400)(420)(421)(432)(440)(442)(445)(460)(464)
ITEM 496 REMOVING STRUCTURES
ITEM 500 MOBILIZATION
ITEM 502 BARRICADES, SIGNS, AND TRAFFIC HANDLING
ITEM 506 TEMPORARY EROSION, SEDIMENTATION, AND ENVIRONMENTAL

CONTROLS (161)(204)(432)(556)
ITEM 529 CONCRETE CURB, GUTTER, AND COMBINED CURB AND GUTTER (360) (420)(421)(440)
ITEM 530 INTERSECTIONS, DRIVEWAYS, AND TURNOUTS (110)(132)(247) (260)(263)(275)(276)(292)(316)(330)(334)(340)(360)(421) (440)
ITEM 536 CONCRETE MEDIANS AND DIRECTIONIONAL ISLANDS (420)(421) (427)(440)(529)
ITEM 560 MAILBOX ASSEMBLIES
ITEM 618 CONDUIT (400)(476)
ITEM 620 ELECTRICAL CONDUCTORS (610)(628)
ITEM 624 GROUND BOXES (420)(421)(432)(440)(618)(620)
ITEM 644 SMALL ROADSIDE SIGN ASSEMBLIES (421)(440)(441)(442)(445) (636)(643)(656)
ITEM 658 DELINEATOR AND OBJECT MARKER ASSEMBLIES (445)
ITEM 662 WORK ZONE PAVEMENT MARKINGS (666)(668)(672)(677)
ITEM 666 RETROREFLECTORIZED PAVEMENT MARKINGS (316)(318)(502)(662) (677)(678)
ITEM 668 PREFABRICATED PAVEMENT MARKINGS (678)
ITEM 672 RAISED PAVEMENT MARKERS (677)(678)
ITEM 678 PAVEMENT SURFACE PREPARATION FOR MARKINGS (677)
ITEM 681 TEMPORARY TRAFFIC SIGNALS (416)(610)(618)(620)(621)(622) (624)(625)(627)(628)(636)(644)(656)(680)(682)(684)(686) (687)(688)(690)
ITEM 684 TRAFFIC SIGNAL CABLES

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

REQUIRED CONTRACT PROVISIONS, FEDERAL-AID CONSTRUCTION CONTRACTS (FORM FHWA 1273, MAY, 2012)
WAGE RATES
SPECIAL PROVISION "SCHEDULE OF LIQUIDATED DAMAGES" (000---001)
SPECIAL PROVISION "NONDISCRIMINATION" (000---002)
SPECIAL PROVISION "CERTIFICATION OF NONDISCRIMINATION IN EMPLOYMENT" (000---003)
SPECIAL PROVISION "NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY" (000---004)
SPECIAL PROVISION "STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS" (000---005)
SPECIAL PROVISION "ON-THE-JOB TRAINING PROGRAM" (000---006)
SPECIAL PROVISION "DISADVANTAGED BUSINESS ENTERPRISE IN FEDERAL AID CONTRACTS" (000---007)
SPECIAL PROVISION "IMPORTANT NOTICE TO CONTRACTORS" (000---010)
SPECIAL PROVISION TO ITEM 6 (006---001)
SPECIAL PROVISION TO ITEM 7 (007---001)
SPECIAL PROVISION TO ITEM 8 (008---002)
SPECIAL PROVISION TO ITEM 506 (506---001)

SPECIAL SPECIFICATIONS:

ITEM 6001 PORTABLE CHANGEABLE MESSAGE SIGN
ITEM 6002 VIDEO IMAGING VEHICLE DETECTION SYSTEM
ITEM 6056 PREFORMED IN-LANE (TRANSVERSE)/CENTERLINE RUMBLE STRIPS
ITEM 7030 HIGH PRESSURE WATERBLASTING 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 SPECIFICATIONS FOR THIS PROJECT.

Special Specification 7030
High Pressure Waterblasting System

1. DESCRIPTION OF WORK

Furnish a high pressure waterblasting system for removing paint, thermoplastic, epoxy and preformed tape materials from the following surfaces without causing any grooves or trenching of that surface, including asphalt, concrete, friction coarse asphalt, grooved asphalt, and grooved concrete.

2. MATERIALS

Furnish surface treatment materials in accordance with Item 300, "Asphalts, Oils, and Emulsions"; Item 302, "Aggregates for Surface Treatment"; and Item 316, "Seal Coat." Use approved patching materials for repairing damaged surfaces. Use potable water when water is required.

3. EQUIPMENT

Provide a high pressure water blasting system that conforms to the following:

3.1.1. Variable Drive System. The truck will be equipped with a secondary, variable speed drive system for full control of the forward and reverse movement of the unit while in work mode operation. While in work mode operation, the forward/reverse speed will be infinitely adjustable from 0 to 5 miles per hour. This auxiliary drive system will be easily controlled from both right and left hand steering positions. This alternate drive system will also accommodate easily and safely shifting from forward to reverse without bringing the vehicle to a stop. A single switch will accommodate this function there by making small mistakes on the road very easy to correct by instantly reversing your direction whether moving forward or reverse. When using the vehicles variable drive system, there will be a warning backup alarm similar to the chassis manufacturer's original equipment. This backup alarm will serve to warn bystanders or other vehicles that the subject vehicle is reversing its forward movement.

3.2. Overall System Requirements

3.2.1. The engineering and construction of the vehicle will be completed such that the chassis engine will be used to power all necessary components of the vehicle. No external engines, generators or other power sources will be necessary to adequately perform all functions.

3.2.2. The performance of the vacuum recovery system must provide for a nearly dry surface eliminating the possibility of uncontained run-off blasting water and or debris, or the need for any secondary clean-up vehicles or operations. The equipment will be capable of removing markings from grooved asphalt or concrete surfaces without causing any significant damage to the integrity of the grooves or the pavement surface. It likewise will remove all forms of durable pavement markings (epoxy, thermoplastic, temporary tape, paint, concrete curing agents, etc.) from asphalt and concrete surfaces.

3.2.3. All components required for the complete operation of the waterblasting system – Ultra High Pressure (UHP) pump, vacuum system, clean water supply, vacuum recovery storage, primary truck mounted and optional secondary tractor mounted blasting components – will be mounted and transported on a single, fully self-contained and supporting single truck chassis, thereby eliminating the need for any additional water, vacuum, or other transport vehicles.

3.2.4. The waterblasting system will incorporate features providing for maximum maneuverability in highly congested traffic areas, ease of operating, and maintenance with optimal environmental considerations having been made.

3.3. System Controls/Operation

3.3.1. The truck mounted blasting components will be attached to the front of the truck chassis and will be entirely hydraulically controlled, maintain 180 degree flexibility in its positing, and be fully operable from both the left and right side of the cab. The blasting component will have the capability of being remotely moved in a single action, from the far left blasting position to the far right blasting position, and all points in between. Controls for the operation of the system will be in the truck cab and designed for access from both sides of the cab. The positioning of the truck mounted blasting component will be manageable by a single, full-function joystick controller.

3.3.2. The tractor mounted blasting optional equipment component will likewise be attached to the front of the tractor or mobile blasting device and controlled by a joystick controller positioned next to the operator of the tractor. The blasting component will have the capability of being moved in a single action from the far left blasting position to the far right blasting position, and all points in between.

3.4. High-Pressure Removal System

3.4.1. The removal system will include a 40,000 psi high pressure water pump.

3.4.2. This pump will produce a minimum of 11 US gallons per minute and a maximum of 12 US gallons per minute.

3.4.3. The fluid manifold of the pumping system will not require any specialty tools such as torque wrenches to perform the maintenance and repairs that may be necessary from time to time. To reduce the aforementioned maintenance, the pump must not exceed 520 rpm's when at maximum working level.

3.4.4. The UHP pump will have the ability to be easily converted from 12 gpm (49.5 liter) at 40,000 psi to a 24 gpm system operating at 20,000 psi for other maintenance operations that may be necessary from time to time. The high pressure pump will be of such design to allow these changes to be completed in under a one hour time frame by 2 mechanics.

3.4.5. The operating system will have low inlet pressure shutdown that disables the units operation when inlet pressure drops below 20 psi.

3.4.6. There must be 2 filtering chambers that filter inlet water prior to entering the high pressure pump. The final filter must meet a one micron absolute rating for the filter element being used.

3.5. Removal Heads

3.5.1. The removal process will take place via high pressure nozzles attached to a fully enclosed, hydraulically controlled, blasting compartment. When in operation, this blasting component will travel along the surface, providing a safe, fully contained blasting and vacuum environment. This captive environment will ensure that the resulting debris and water are simultaneously contained and recovered without the necessity of secondary clean-up operations.

3.5.2. The removal heads must be easily and quickly changeable to include the following common widths of road markings: 6", 8", 10", and 14" heads. The heads will be changeable in less than 5 minutes by a single operator.

3.5.3. The removal apparatus must have 2 blasting heads. The heads may be attached together but must be controllable so as to run them in an inline pattern or a side by side pattern. The minimum maximum width must be 27" or greater.

3.5.4. For rubber removal application the manufacturer must supply blasting heads that contain a minimum of 46 nozzles per 27" configuration. (23 nozzles per 14" spray bar)

3.5.5. The complete operation of the blasting process will be controlled by the operator from within the cab of the truck. The blasting components will be mounted to the truck frame at the front of the chassis in a manner that allows the operator to monitor the entire process from the driver's seat. When not in use, the blasting components will have the capability of being raised into a fully retracted, upright and locked position for safe travel between work sites.

3.6. Vacuum Recovery System

3.6.1. The vehicle will be equipped with a vacuum recovery system fully integrated with the blasting component. The vacuum pump will be adequately sized to immediately remove both spent blasting water and pulverized debris, leaving a nearly dry surface. The accepted recovery system will eliminate the need for any secondary clean-up operations. It will be plumbed in a manner that provides for the safe collection of the recovered water and debris in a truck mounted, stainless steel storage tank with a capacity of no less than 1,600 gallons. The recovery system will be designed in a manner to provide for the separation of recovered water from the recovered solid debris while yet contained in the recovery storage tank. The recovery system will be capable of retaining in some form, and providing for the convenient disposal of the recovered solid debris in a nearly dry state.

This process will eliminate the need for any secondary disposal operations requiring the use of flocculates, containment areas or any similarly complicated processes to complete this separation. The system will have a safety shutdown system that prevents the blower from sucking water and debris into the filter chamber or directly into the blower itself upon filling of the vacuum cavity.

The system will have a minimum hose size of 4" leading from the vacuum cavity to the blasting heads and a 6" diameter leading from the vacuum chamber to the final filter.

3.6.2. The recovered wastewater will be easily dumped via gravity and will not require the use of external pumping systems to offload. Such wastewater will be filtered to a 100 micron nominal rating and will be dumped from a full port ball valve not under 4 in diameter.

3.6.3. Dumping the solid debris will be accomplished via a hydraulic actuator to tilt the tank. Other than opening the rear door, an operator's physical assistance will not be necessary to remove the solid debris from the tank. The construction will allow for the solids to fall out by gravity alone.

3.6.4. The vacuum system will have a canister style, cyclonic action, multiple filter system to positively prohibit debris from entering into the vacuum pump.

3.7. Water/Debris Tank

3.7.1. The fully self-contained design will incorporate stainless steel tanks for both the clean water supply and vacuum storage on the same chassis. No additional vehicles or equipment will be necessary for supply or storage of said materials.

3.7.2. The system will include an on-board clean water supply with a capacity no less than 2,700 gallons or an amount capable of providing 4 hours of continuous run time. The interior of the clean water tank, will be stainless steel and fully accessible via a 21" manway. The tank must provide a pressure relief valve to prevent over-pressurization. A system will be provided for quick external indication of water levels for both the clean water tank and the debris storage tank.

3.8. Secondary Tractor Mounted Blasting Unit

The high-pressure blasting system will be easily adaptable to incorporate a compact diesel powered mobile blasting unit, requiring only one additional operator and no additional trucks or trailers. This mobile unit will feature a near zero-degree turning radius offering maximum maneuverability. It will likewise feature a low profile for access to areas not serviceable by large trucks. The tractor unit will be able to operate successfully, including simultaneous vacuum recovery, at a distance of no less than 300 feet from the truck

with additional hoses. The blasting component will be attached to the tractor and be fully controlled by a multi-function joystick control mounted next to the operator.

When in operation, this blasting component will also travel along the surface, providing maximum safety for employees and ensuring that the resulting debris and water are simultaneously contained and recovered without secondary clean-up operations. When not in use, the blasting component will be stored in a raised, locked position. This tractor unit will have a designated area on the truck chassis for both storage and transport. The ability to load and off-load with optimum convenience will likewise be provided.

3.9. Traffic Control Lighting

3.9.1. Four (4) 12 volt LED floodlights will be provided on the unit for night time removal operations. Two (2) lights will be located on front of the chassis cab near the top of the cab and 2 at the bumper area to completely illuminate the work area.

3.9.2. 4 high intensity strobe lights will be installed at a high point on the tank or truck body so they are plainly visible from 360 degrees around the vehicle at a distance of 100 feet.

3.9.3. Sequential flashing signboard. The striping unit will have a directional sequential signboard capable of flashing a directional arrow to either the left of right side, mounted on the rear area of the equipment platform.

3.9.4. The signboard will have minimum of 15 hooded, LED amber lamps, with a dimension of approximately 48 inches by 96 inches. It will be 12 volt with solid state circuitry and a minimum flash rate of 30 flashers per minute.

3.9.5. The board will be pivoted from a horizontal storage position to a vertical position for operation. Two 12 volt electric linear actuators will be provided to raise and lower the arrowboard from the vertical to the horizontal position. All operator controls for the board will be at the operator's fingertips in the cab.

3.10. Control Center

3.10.1. The in cab control center will at a minimum include the following indication and controls immediately available and visible to the operator:

3.10.1.1. Both indication and control of the systems operating pressure in PSI.

3.10.1.2. Both indication and control of the vehicles operating forward speed.

3.10.1.3. Indication of "Road Mode" or "Work Mode".

3.10.1.4. Indication of the systems inlet pressure.

3.10.1.5. ON/OFF control of the blasting system.

3.10.1.6. Hydrostatic forward/reverse control.

3.10.1.7. Work lights ON/OFF.

3.10.1.8. Any and all controls necessary to operate the vehicle without exiting the cab.

4. CONSTRUCTION

Eliminate existing pavement markings on both concrete and asphaltic surfaces in such a manner that color and texture contrast of the pavement surface will be held to a minimum. Repair damage to asphaltic surfaces, such as spalling, shelling, etc., greater than ¼ in. in depth resulting from the removal of pavement

markings. Dispose of markings in accordance with federal, state, and local regulations. Use High Pressure Water Blasting method for pavement marking removal.

5. MEASUREMENT

This Item will be measured by the foot of marking eliminated; or by any other unit shown on the plans. This is a plans quantity measurement item. The quantity to be paid is the quantity shown in the proposal unless modified by Article 9.2 “Plans Quantity Measurement.” Additional measurements or calculations will be made if adjustments of quantities are required.

6. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under “Measurement” will be paid for at the unit price bid for “High Pressure Waterblasting System” of the type and width as applicable. This price is full compensation for the elimination method used and equipment, materials, tools, labor, and incidentals.

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