AIRPORT FUEL TRUCK ROADWAY Forkway



Texas Standard Construction, L.L.C.

Sam Dalton

Executive Vice President

P.O. Box 210768 Dallas, Texas 75211

Office: (214) 330-5229

Fax: (214) 330-5254

Cell: (214) 502-6058

Pager: (214) 214-910-4163

DATE SUBMITTED: March 31, 2005 FOR COUNCIL MEETING: April 12, 2005

Council	Agend	a Item	*
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SUMMARY: This item is for the award of a bid to Jeske Construction Co. in the amount of \$103,562,00 for the Airport Vehicle Access Road Paving Improvements.

FINANCIAL IMPACT:

Budgeted Amount: \$141,500

Cost: Construction Cost \$103,562.00

DISTING IN

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CONDITION

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d to this project with the remainder coming from the

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TA Funding Source: \$30,000 of TxDOT'Routine Airport Maintenance Project (RAMP) funds (a yearly grant) will be applied to this project with the remainder coming from the Airport Fund.

BACKGROUND:

Several years ago the Airport built a vehicle access road that runs parallel, and just east of Taxiway A for the purpose of keeping airport operations vehicles off of Taxiway A. A. portion of this roadway was repaired last year to include drainage improvements. This project is a continuation of the repairs needed on this roadway.

Seven bids were received on March 22, 2005. A copy of the bid tab is attached. The project was bid as an A+B bid where the A part of the bid is the contractor's price to do the work, and the B part of the bid is the contractor's estimated time to complete the work multiplied by the "time value" of a day, in this case set at \$500.00 per day. The A and B parts of the bids are added together to get a total A+B amount. The A+B bid amounts are compared and the bid is awarded to the bidder with the lowest A+B total. The contract awarded is an incentive/disincentive type contract whereby if the contractor finishes early he is awarded a \$500.00 per day bonus.) Likewise, if he finishes late, \$500.00 per day is subtracted from his amount bid. (10 TO 10 DAYS

Jeske Construction Co. was the low A+B bidder and bid 50 days to complete the work. It is estimated he may be able to finish the work 10 days early, so an incentive payment of \$5,000.00 could be expected. Jeske Construction Co. has worked for the Town in the past and has performed in a very satisfactory manner.

RECOMMENDATION:

Staff recommends Council pass a resolution awarding a contract to Jeske Construction Company in the amount of \$103,562.00 for the Airport Vehicle Access Road Paving Improvements Project, and authorize the City Manager to enter into a contract with Jeske Construction Company for the same amount. Staff further recommends Council authorize a budget of \$78,562.00 in Airport Funds and \$30,000.00 in RAMP funds for this project, which includes \$5,000.00 as a possible incentive bonus.

PID

STEVE -RICK N.

Construction Signi Placement -

TOWN OF ADDISON AIRPORT FUND LONG-TERM FINANCIAL PLAN Updated March 31, 2005

	Actual 2003-2004	Revised Budget *2004-2005	Year 1 Projected 2005-2006	Year 2 Projected 2008-2007	Year 3 Projected 2007-2008	Year 4 Projected 2008-2009
BEGINNING WORKING CAPITAL		(8)/(570(840)	***************************************	\$ 2,446,430	\$ 1,273,050	\$ 984,780
NET INCOME						
Operating revenues:					,,44	
Operating grants	60,117	30,000	30,000	30,000	30,000	30,000
Fuel flowage fees	1,030,378	1,000,000	1,030,000	1,060,900	1,092,730	1,125,510
Rental	2,981,906	3,070,000	3,162,100	3,256,960	3,354,670	3,455,310
User fees Total operating revenues	41,979 4,114,380	35,000 4,135,000	36,050 4,258,150	37,130 4,384,990	38,240 4,515,640	39,390 4,650,210
Occasion assessed						·····
Operating expenses: Town - Personal services	238,270	284,070	298,270	313,180	328,840	345,280
Town - Supplies	24,759	15,000	15.450	15,910	16,390	16,880
Town - Maintenance		293/250	24,410	25,830	26,910	28,260
Town - Contractual services	495,037	407,520	415,670	423,980	432,460	441,110
Grant - Operations & Maintenance		## 14650D		60,000		60,000
Operator - Operations & Maintenance	1,439,523	1,248,740	1,036,150	1,108,680	1,186,290	1,269,330
Operator - Service Contract	1,039,646	1,041,000	1,093,050	1,147,700	1,205,090	1,265,340
Total operating expenses Net operating income	3,341,632 772,748	3,431,080 703,920	2,943,000 1,315,150	3,095,080 1,289,910	3,255,980 1,259,660	3,426,200 1,224,010
Non-Operating revenues (expenses):	112,140	700,920	1,010,100	1,200,010	1,500,600	1,22,4,010
interest earnings and other	34,585	35,000	36,050	37,130	38,240	39,390
Interest earnings and other		(345)(128:010)				
Net Non-Operating revenues (expenses)	34,565	(93,010)	(130,870)	(122,090)	(112,930)	(111,780)
Net income (excluding depreciation)	807.313	610,910	1,184,280	1,167,820	1,146,730	1,112,230
					.,,	
Sources (uses) of working capital: Bond proceeds	_	724,400,000		_		
Retirement of long-term debt	-		503/245 AMA	F=E(225(000)	27 <i>21</i> 23500013	\$3.72451000Y
Net additions to fixed assets with grants	(88,794)	(70,000)	(425,000)	(1,116,200)	(200,000)	
Other net additions to fixed assets	(924,994)		(2,396,500)	(1,000,000)	(000,000,1)	
Net sources (uses) of working capital	(1,013,788)	2,113,900	(3,036,500)	(2,341,200)	(1,435,000)	(745.000)
ENDING WORKING CAPITAL	\$ 1,573,835	\$ 4,298,650	\$ 2,446,430	\$ 1,273,050	\$ 984,780	\$ 1,352,010
PROJECTS						
Grant Projects:						
Capital (Town's Share):	40 704					
Apron / Taxiway Construction	88,794	G-5 (50000)				•
Antioniatic Weather Observation Sys. 5		40.000	360,000			
Runway 15/33 Overlay and Enhancemen	t	704208	40,000	513,000		
Airport lighting upgrade	•		25,000			
Taxiway rehabilitation				177,200		
Runway 15/33 Extension				426,000		
Overlay Taxiway Alpha	* *****		4 (0= 050	* * * * * * * * * * * * * * * * * * * *	200,000	
Total Other Projects:	\$ 88,794	\$ 70,000	\$ 425,000	\$ 1,116,200	\$ 200,000	\$ -
Capital:						
Operating & Maintenance Equipment	58,910	是 187,600				>
Land Acquisition	3,472					
Economic Development Program	516,320					
Airport Parkway Extension	346,292	enterioria de la companioria de la comp	namentale esterno estendas			
W. New Euer Farmers 1994 Removal of Old Euer Farm 1994		4, 2,013,200, 7				
Englishment of the control of the co		200 300 S	#463361500;	1,000,000	a diament	
Maintenance building		15,000	110,000		*	
Hangar Redevelopment	A 604				21-03-12-30-17-24	
Total _	\$ 924,994	\$ 2,216,100	\$ 2,396,500	\$ 1,000,000	\$ 1,000,000	\$ 500,000



To: Ron Whitehead, City Manager

From: Randy Moravec, Finance Director

Re: Revised Airport Fund Long-Term Plan

Date: March 31, 2005

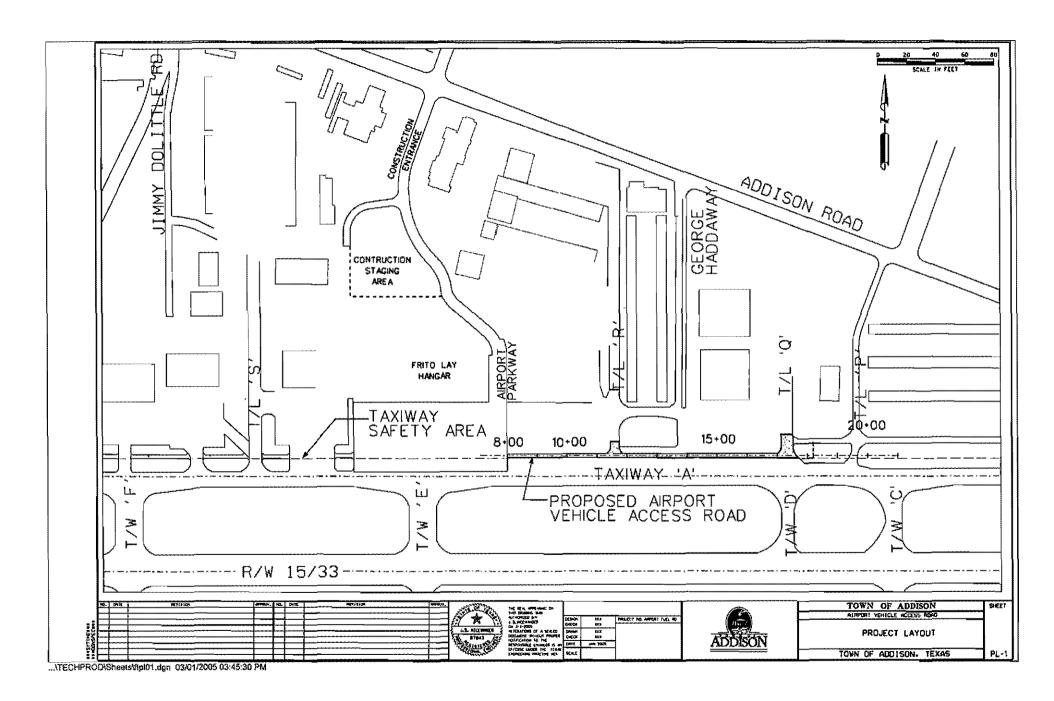


MEMO

The award of a bid for construction of a new fuel farm at the airport that was significantly higher than estimated required a reexamination of the Airport fund long-term financial plan to ensure the fund would be capable of supporting needed capital projects in addition to anticipated operation and maintenance expenses. The finance department reviewed the financial plan with Airport Manager Lisa Pyles and General Services Director Mark Acevedo and developed a modified plan that is included with this memorandum.

All modifications to the plan are highlighted on the plan statement and are described below:

- The original plan did not include the "sources" and "uses" of the \$4.4 million in certificates of obligation (CO). The modified plan shows the \$4.4 million proceeds coming in fiscal year 2005 and being spent in 2005 and 2006 for the new fuel farm (\$3,963,200), removal of the equipment associated with the old fuel farm (\$336,500). The remaining \$100,300 is allocated to design of drainage improvements during the 2005 fiscal year.
- The construction of drainage improvements that were to be funded with a portion of the CO proceeds have been allocated for the 2006 and 2007 fiscal years for a total of \$2 million coming from accumulated fund balance. To support this project, the \$2 million projected for hangar redevelopment during fiscal years 2008 and 2009 has been reduced to \$500,000.
- The debt service associated with the CO issue has been changed to reflect the actual amount to be paid. Over the five-year period of the financial plan, the repayment of principal and interest totals \$1,676,490 instead of the \$2,097,850 budgeted.
- Several other projects have been added to the 2005 fiscal year budget;
 - Second phase for rehabilitating distressed pavement on the airport's west side (\$270,000).
 - Repair of vehicle access road (\$141,500).
 - Maintenance vehicles and machinery (\$87,600).
 - Town's portion of an automatic weather observation system (\$30,000).
- With the above modifications ending fund balance at the end of the five-year horizon is projected to be \$1,352,010, or \$363,890 less than included in the original financial plan. At no time during the plan does fund balance drop below the 25% floor established by the Town's financial policies.



5910 W. Phono Parkway Snite 200 Plano, Texas *\$093 (972) 661-5626 FAX (972) 661-5610 www.bnth.com

August 10, 2004

Town of Addison 16801 Westgrove Drive P.O. Box 9010 Addison, Texas 75001-9010

Attn: Mr. Jim Pierce, P.E.

PAVING AND STORM SEWER MODIFICATIONS FOR THE FUEL TRUCK ROADWAY

Dear Jim:

We have reviewed the bids for the referenced project, and find that the low bidder is Texas Standard Construction, Ltd., provided that all four additive alternates are accepted. From previous conversations with you, it is our understanding that all four additive alternates will be awarded for this project. All contractors attended the mandatory pre-bid conference with the exception of Gibson & Associates, who attended the pre-bid conference for the first bidding in July. No mathematical errors were found in the bids, which are detailed in the attached bid tabulation.

In addition, we have contacted references provided by Texas Standard Construction, and have found sufficient favorable recommendations from the individuals we contacted. Thank you for the opportunity to work with you and your staff on this project. As always, please let us know how else we can help.

Very truly yours,

HNTB CORPORATION

Michael A. Hutchison, P.E.

Michael A. Witchison

Project Manager

enclosure

BID TABULATION PAVING REPAR AND STORM SEWER MODIFICATIONS FOR THE FUEL TRUCK ROADWAY

Texas Standard Construction, Ltd.

	Bas	e Bid		Alteri	nate 1	Α	ltern	ate 2	1	Alteri	nate 3	Alternate 4		Total		
C1	\$	21,600	A1	\$	11,400	D2	\$	5,200	B1	\$	2,100	C2	\$	30,520	\$	70,820
D4	\$	17,200						***	B2	\$	3,570	***************************************			\$	20,770
									В3	\$	2,625				\$	2,625
									D1	\$	7,210				\$	7,210
									D3	\$	4,200				\$	4,200
									D5	\$	2,940				\$	2,940
	\$	38,800		\$	11,400		\$	5,200		\$	22,645		\$	30,520	\$	108,565

Pioneer Scale Company, Inc.

	Bas	e Bid	7	Alterr	nate 1	Α	ltern	ate 2	1	∖lteri	nate 3	Alternate 4		Total		
C1	\$	15,333	A1	\$	15,400	D2	\$	4,767	B1	\$	2,889	C2	\$	37,688	\$	76,077
D4	\$	12,444							B2	\$	4,911				\$	17,356
									В3	\$	3,611				\$	3,611
									D1	\$	9,533				\$	9,533
									D3	\$	5,778				\$	5,778
									D5	\$	4,044				\$	4,044
	\$	27,778		\$	15,400		\$	4,767		\$	30,767		\$	37,688	\$	116,399

Jim Bowman Construction Co., L. P.

	Bas	e Bid	,	Alterr	nate 1	Α	lterr	nate 2	Alternate 3 Alternate 4			Tota	ıl		
C1	\$	21,000	A1	\$	16,400	D2	\$	12,300	B1	\$	3,400	C2	\$ 33,400	\$	86,500
D4	\$	18,200							B2	\$	5,300			\$	23,500
									B3	\$	4,100			\$\$	4,100
									D1	\$	10,300			\$ \$	10,300
									D3	\$	13,400			\$	13,400
									D5	\$	12,000			(3)	12,000
	\$	39,200		\$	16,400		\$	12,300		\$	48,500		\$ 33,400	\$	149,800

Gibson & Associates, Inc.

	Bas	e Bid	<i></i>	Alterr	nate 1	Α	lterr	nate 2	P	\lteri	nate 3	1	Alternate 4		Tota	al
C1	\$	37,000	A1	\$	24,800	D2	\$	15,000	B1	\$	4,600	C2	\$	55,300	\$	136,700
D4	\$	20,200							B2	\$	6,700				\$	26,900
									В3	\$	5,300				\$	5,300
									D1	\$	20,000				\$	20,000
									D3	\$	15,000				\$	15,000
									D5	\$	10,600				\$	10,600
	\$	57,200		\$	24,800		\$	15,000		\$	62,200		\$	55,300	\$	214,500

Covenant Construction Group, Unlimited

	Base Bid	Aiterna	e 1 Alterna	te 2 Alte	rnate 3	Alternate 4 To	otal
C1	\$ 187,668	3 A1	D2	B1	C2	\$	187,668
D4				B2		\$	-
				B3		\$	-
				D1		\$	٠
				D3		\$	-
				D5		\$	-
	\$ 187,668	NO E	ID NO	BID N	O BID	NO BID \$	187,668

Prepared by: Michael Hutchison

Print Date: 8/23/2004

TEXAS STANDARD CONSTRUCTION LTD.

INVOICE

P.O. BOX 210768 DALLAS, TX. 75211 (214) 330-5229 Office (214) 330-5254 Fax

Number:

083104

Date:

August 31, 2004

Bill To:	Job:
Dave Foster Jim Pierce, P.E.	Bid 04-27 Paving Repair & Storm Sewer Modification for the Fuel Truck Roadway
Town of Addison P.O. Box 9010 Addison, TX 75001	

	Terms
Pay Request #1	Net 30

Item No.	Description	Amount
Ī.	Work completed this pay period. a. Areas 100% completed, B-1, B-2, B-3, & C-1 b. Sawcut & removed existing paving A-1, D-3, & D-4	\$ 40,000.00
	Mnalf Modeling powers in Total	al \$ 40,000.00

Thank you for your business! Please pay from this invoice. No others will be sent.

ENGINEER'S OPINION OF PROBABLE COST PAVING REPAIR AND STORM SEWER MODIFICATION FOR THE FUEL TRUCK ROADWAY

PREPARED BY: Michael A. Hutchison

CHECKED BY: Gabe Favre

DATE: 05/27/04

DESCRIPTION	QTY	UNIT	UI	NIT PRICE	1	AMOUNT	
REPAIR AREA A1							PRIORITY 2
10" THICK 5000 PSI REINF, CONC. PVMT.	132	SY	\$	55.00	\$	7,260	
REMOVE EXIST PAVEMENT		SY	\$	12.00		1,584	
UNCL. EXCAVATION		CY	\$	6.00	\$	528	
CAP EXIST, JUNCTION BOX	1		\$	500.00	\$	500	×
18" RCP, C76, CLASS III, INCL EMBEDMENT	18		\$	30.00	\$	540	
GRATE INLET	1			2,000.00	\$	2,000	
BLOCK SOD	1980		\$	0.65	\$	1,287	e e
SUBTOTAL		<u> </u>		V.00	\$	13,699	- ×
REPAIR AREA B1							-
10" THICK 5000 PSI REINF, CONC. PVMT,		SY	\$	55.00		1,485	
REMOVE EXIST PAVEMENT	27		\$	12.00		324	
UNCL. EXCAVATION		CY	\$	6.00		108	
CAP EXIST. JUNCTION BOX	0		\$	500.00		-	
18" RCP, C76, CLASS III, INCL EMBEDMENT	0		\$	30.00	\$	**	
GRATE INLET	0		-	2,000.00	\$		
BLOCK SOD	400	SF	\$	0.65	\$	260	
SUBTOTAL					\$	2,177	
REPAIR AREA B2							
10" THICK 5000 PSI REINF, CONC. PVMT.	46	SY	\$	55.00	\$	2,530	•
REMOVE EXIST PAVEMENT	46		\$	12.00		552	
UNCL. EXCAVATION	31	CY	\$	6.00	\$	186	
CAP EXIST, JUNCTION BOX	0	EA	\$	500.00		••	
18" RCP, C76, CLASS III, INCL EMBEDMENT	0		\$	30.00	\$		
GRATE INLET	0			2,000.00	\$		
BLOCK SOD	680		\$	0.65	\$	442	
SUBTOTAL		 ,	·····	****	\$	3,710	•
REPAIR AREA B3							
10" THICK 5000 PSI REINF, CONC. PVMT.	24	SY	\$	55.00	•	1,870	_
REMOVE EXIST PAVEMENT		SY	\$	12.00	\$	408	
UNCL. EXCAVATION		CY	\$	6.00	\$	138	
CAP EXIST. JUNCTION BOX	23 0		\$	500.00	\$	100	
18" RCP, C76, CLASS III, INCL EMBEDMENT	0		\$	30.00	\$	-	
GRATE INLET	0		\$	2,000.00	\$	- -	
BLOCK SOD		SF	\$	2,000.00	\$	325	
SUBTOTAL	300	<u> </u>	<u> </u>	0.00	\$	2,741	•
REPAIR AREA C1							PRIORITY 1
12" THICK 5000 PSI REINF, CONC. PVMT, AREA A		SY	\$	60.00	•	7,500	•
10" THICK 5000 PSI REINF, CONC. PVMT, AREA B		SY	\$	55.00		2,090	
REMOVE EXIST PAVEMENT	163		\$	12.00		1,956	• ,
UNCL. EXCAVATION		CY	\$	6.00	\$	498	•
CAP EXIST, JUNCTION BOX	0		\$	500.00	\$	•	•
18" RCP, C76, CLASS III, INCL EMBEDMENT	0		\$	30.00	\$	•	
GRATE INLET	0		\$	2,000.00	\$	•	
BLOCK SOD	1200	SF	\$	0.65	\$	780	<u>.</u>
SUBTOTAL					\$	12,824	

PAGE 1 OF 3 PRINT DATE: 7/8/2004

ENGINEER'S OPINION OF PROBABLE COST PAVING REPAIR AND STORM SEWER MODIFICATION FOR THE FUEL TRUCK ROADWAY

DESCRIPTION REPAIR AREA C2	QTY	UNIT	U	NIT PRICE	ı	AMOUNT	
12" THICK 5000 PSI REINF, CONC. PVMT, AREA A	221	SY	\$	60.00	\$	13,260	-
10" THICK 5000 PSI REINF, CONC. PVMT, AREA B		SY	\$	55.00		5,280	
REMOVE EXIST PAVEMENT	317	SY	\$	12.00		3,804	
UNCL, EXCAVATION	106		\$	6.00	\$	636	
CAP EXIST. JUNCTION BOX	0		\$	500.00	\$		
18" RCP, C76, CLASS III, INCL EMBEDMENT	Ō		\$	30.00	\$	**	
GRATE INLET	0		\$		\$	***	
BLOCK SOD	1200		\$	0.65	\$	780	
SUBTOTAL	1200				\$	23,760	-
					Ψ.		
REPAIR AREA D1							
10" THICK 5000 PSI REINF, CONC. PVMT.	88	SY	\$	55.00	\$	4,840	-
REMOVE EXIST PAVEMENT	88	SY	\$	12.00	\$	1,056	
UNCL. EXCAVATION	5 9	CY	\$	6.00	\$	354	
CAP EXIST. JUNCTION BOX	1	EΑ	\$	500.00	\$	500	
18" RCP, C76, CLASS III, INCL EMBEDMENT	28	LF	\$	30.00	\$	840	
GRATE INLET	2	EΑ	\$	2,000.00	\$	4,000	
BLOCK SOD	1320		\$	0.65	\$	858	
SUBTOTAL		******			\$	12,448	
REPAIR AREA D2							PRIORITY 3
10" THICK 5000 PSI REINF, CONC. PVMT.		SY	\$	55.00	\$	2,420	
REMOVE EXIST PAVEMENT	44	SY	\$	12.00	\$	528	÷
UNCL. EXCAVATION	30	CY	\$	6.00	\$	180	
CAP EXIST. JUNCTION BOX	1		\$	500.00	\$	500	
18" RCP, C76, CLASS III, INCL EMBEDMENT	28	LF	\$	30.00	\$	840	*
GRATE INLET	2	EA	\$	2,000.00	\$	4,000	
BLOCK SOD	660	SF	\$	0.65	\$	429	_
SUBTOTAL					\$	8,897	
REPAIR AREA D3							-
10" THICK 5000 PSI REINF, CONC. PVMT.	54		\$	55.00	\$	2,970	
REMOVE EXIST PAVEMENT	54	SY	\$	12.00	\$	648	
UNCL. EXCAVATION	36		\$	6.00	\$	216	
CAP EXIST. JUNCTION BOX	1	EA	\$	500.00	\$	500	
18" RCP, C76, CLASS III, INCL EMBEDMENT	28		\$	30.00	\$	840	
GRATE INLET		EΑ	\$	2,000.00	\$	4,000	
BLOCK SOD	800	SF	\$	0.65	\$_	520	_
SUBTOTAL					Ş	9,694	
REPAIR AREA D4							
10' THICK 5000 PSI REINF, CONC. PVMT.	110	SY	\$	55.00	<u>e</u>	AON 3	PRIORITY 1
REMOVE EXIST PAVEMENT		SY	\$	12.00	\$	1,416	rnionii i
UNCL. EXCAVATION		CY			\$	474	
	1		\$	6.00 500.00		500	
CAP EXIST. JUNCTION BOX			\$		\$		
18" RCP, C76, CLASS III, INCL EMBEDMENT	28		\$	30.00	\$ \$	840	-
GRATE INLET	1700			-	э \$	4,000	
BLOCK SOD SUBTOTAL	1760	SF	\$	0.65	\$	1,144	•
SUBTOTAL					Þ	14,864	
REPAIR AREA D5							
10" THICK 5000 PSI REINF, CONC. PVMT.	38	SY	\$	55.00	\$	2,090	-
REMOVE EXIST PAVEMENT	38		\$	12.00	\$	456	
UNCL. EXCAVATION		CY	\$	6.00	\$	150	
CAP EXIST. JUNCTION BOX	1	ĒΑ	\$	500.00	\$	500	
18" RCP, C76, CLASS III, INCL EMBEDMENT	14		\$	30.00	\$	420	-
GRATE INLET	1	EA		2,000.00	\$	2,000	
BLOCK SOD	560		\$	0.65	\$	364	
SUBTOTAL					\$	5,980	-
					4.	-,	

PAGE 2 OF 3 PRINT DATE: 7/8/2004

ENGINEER'S OPINION OF PROBABLE COST PAVING REPAIR AND STORM SEWER MODIFICATION FOR THE FUEL TRUCK ROADWAY

DESCRIPTION	QTY	<i>f</i> (UNIT	UNIT	PRICE	AMOUNT
MOBILIZATION (10%) SIGNS, BARRICADES, TRAFFIC CONTROL			LS LS	\$	11,079 2,000	11,100.00 2,000.00
TOTAL						\$123,894.00
				Say:		\$124,000.00
BASE BID (C1, D4): ADDITIVE ALTERNATE 1 (A1): ADDITIVE ALTERNATE 2 (D2): ADDITIVE ALTERNATE 3 (B1, B2, B3, D1, D3, D5): ADDITIVE ALTERNATE 4 (C2):						35,000.00 15,000.00 10,000.00 39,000.00 25,000.00
TOTAL:		~				124,000.00

PAGE 3 OF 3 PRINT DATE: 7/8/2004



LETTER OF TRANSMITTAL

Re:

Job No.	
	39959
Date	
	07/07/04

Town of Addison Attn:Jim Pierce, P.E. Assistant Public Works Director 16801 Westgorve Drive Addison, TX 75001

SHEET NO.

LAST DATED

July 7, 2004

July 5/27/04 Engineer's Estimate

Plans and Specifications for the Re-bid of	f the
Fuel Truck Roadway project	

DESCRIPTION

PS&E Documents for the Fuel Truck Roadway Project

WE ARE FORWARDING TO

NO. OF

COPIES

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THESE ARE TRA	ANGMITTED					
TO HENDER SAME TON	A VOIVIII ILD.					
For appr	oval	For your use		As requested		For review & comment
		-		•		
					٠	
PLEASE NOT	E .					
I have atta	ched your copy	of the documents	for the re-bi	d of the Fuel Tr	uck Roadway	project. The addendum
from the pro	evious letting ha	as been incorporat	ted into this s	et. If you have	any question	s, please contact me at
972-628-31	74.					
**************************************	ANY THE STATE OF T		. K (***********************************	/ 20070740		- 3-4-4-A

COPY TO:

Dave Foster w/attachment

By: Michael W. Nutchison

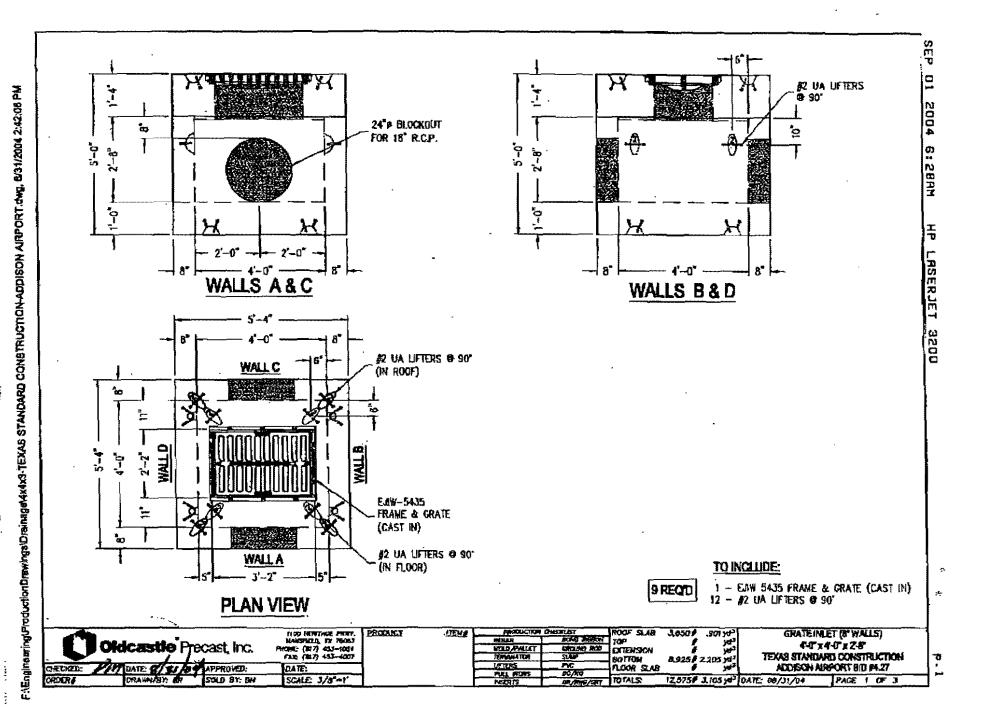
Michael A. Hutchison, P.E. Project Manager

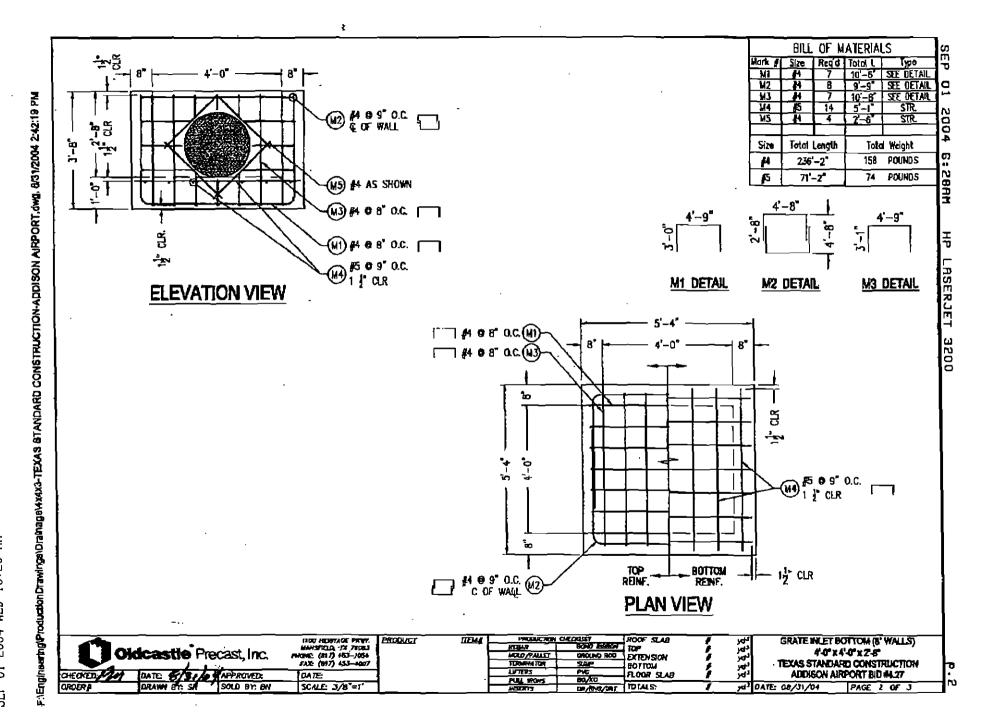


Texas Standard Construction , Ltv.

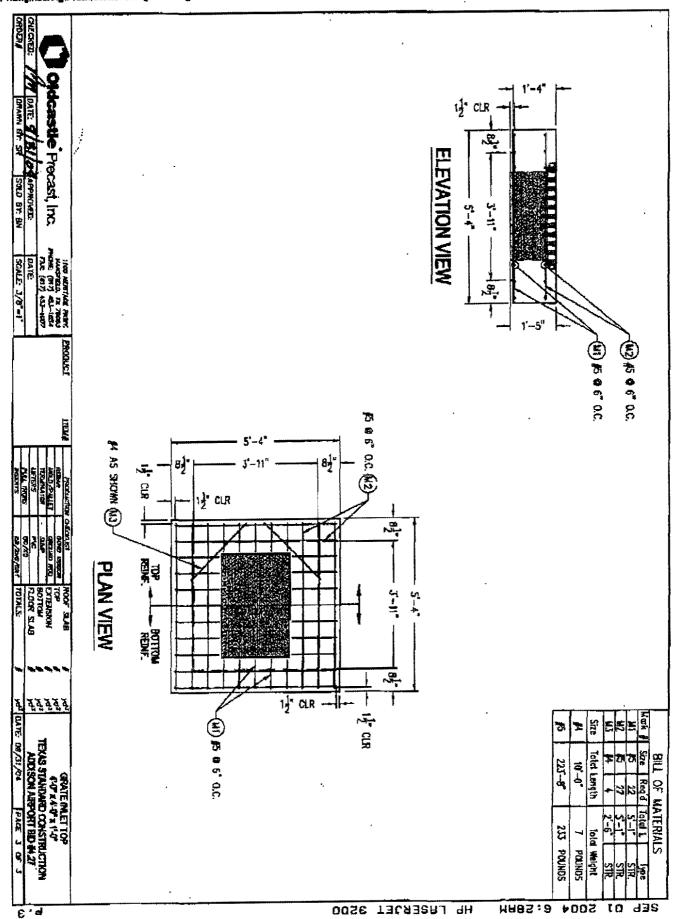
FACSIMILE TRANSMISSION SHEET

To:	Citt of Apoison	Date:	9-1-04
Atin:	Jim PIERCE	Re:	ADDISON AIRPINT
			404-27 INLED
Fax No.	9-450-2837	From:	SHERMAN GRIFFITH
	74~	Total of	pages: 4
		(nietodiili	j cover sneety
Messag	e:		
	THIS DESIG.	n For	17té (9)
	INLETS SHOW	10° Ex	cees THE PLAN
	REQUIRE ME	ts.	
	THESE H	ave A	12" THICK BASE
	And A IU	a" 107	Sine to carry
	the Aircr	wer lo	140 of 225 ps/.
	LET ME KNOW.	IF 18th	36 Win work!
(Jenny- all my		Dlaves
,	The state of the s		
•	Struff on the	www.	
	Enel Freek Road		
ς	ant find the		
	etual bid Set & .		
		ice: (214) 33(9-5229 • Fax: (214) 330-5254
P	lans & spees.		





F:\Engineering\ProductionDrawings\Drainage\4x4x3-TEXAS STANDARD CONSTRUCTION-ADDISON AIRFORT.dwg, 8/31/2004 2:42:26 PM



Ful Truck Rd Flotting
Get aflunders for contractor?
Test fat for put up cylinlers
Hi (24h harek
Early 28 day break
Rey 57 day 2 pt day
2 po day
Who capts cylinder. Must be ACT certified.
J-Stewart Dwings - ECS main contact
972-392-3222 2012-14-458-2482 (at foll)
10 Am Sat 40 yds Samuel Doll 7 Am Tille
7 AM Tuesday 80 gd
The first that the second and the se

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TEXAS STANDARD CONSTRUCTION LTD.

INVOICE

P.O. BOX 210768 DALLAS, TX. 75211 (214) 330-5229 Office (214) 330-5254 Fax

Number:

083104

Date:

August 31, 2004

Bill To:	Job:
Dave Foster Jim Pierce, P.E. Town of Addison P.O. Box 9010 Addison, TX 75001	Bid 04-27 Paving Repair & Storm Sewer Modification for the Fuel Truck Roadway

	Terms
Psy Request #1	Net 30

Item No.	Description	Amoun
I.	Work completed this pay period.	\$ 40,000.00
	a. Areas 100% completed, B-1, B-2, B-3, & C-1 b. Sawcut & removed existing paving A-1, D-3, & D-4	
	OK to fait	
	Japan 8/31/04	
	n 0.10.1%	

Thank you for your business! Please pay from this invoice. No others will be sent.

PAGE 1/2 P. 01

FAX NO.

SEP-01-2004 WED 08:32 AM



Texas Standard Construction

FACSIMILE TRANSMISSION SHEET

To: Atin: Fax No.	Town of Addison Mr. Jim Pierce, P.E. 972,450-7096 283	Date: August 31, 2004 Re: Bid No. 04-27 From: Ronald H. Dalton, President Total # of Pages: 2 (miheling sever sheet)
Messag	e altached.	-
Thank You	1,	



Texas Standard Construction, Lap.

FACSIMILE TRANSMISSION SHEET

To:	CITT of Appusan	Date:	B130-04
Attn:	Jim PIENCE	Re:	Anguson Areport
			04-27 ans-K
Fax No	9-450 - 2837	From:	SHERMAN GRIFFITH
		Total of (including	pages: 3
Message:			
	HERE'S A "	CLASS K	Come-
	Design to meet	- YOUR	CLASS 'P'moo.
	Spee.		
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	e 200.	_	
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approve	d vertally 8/30/0	4 4	:15 pm

PAGE 03/84

28-Day =

09/30/2004 13:52 9722437913

ULDCASTLE APG TEXAS

Custom-Crete, Inc. 2824 Joe Field Rd Dallas, Texas 75229 972-243-4466

CONCRETE MIX DESIGN DESIGN NO. TX7075A

TxDot Class K

DATE:

DATE: 8/30/2004

Cilent: Texas Standard Project: Addison Airport

Required: 255 PSI Flexive - to open to traffic - 500 PSI Flexive in 24 Hrs

3 inch max slump, 8.0 % Air +- 1.5 %

Désign Average Strengths: 24 Hour = 3703 7-Day = 6417
Summary: 7.5 Sacks Per Cubic Yard
C.A. 63.3 Percent Course Appreciate

C.A. 83.3 Percent Course Aggregate F. A. 38.7 Percent Fine Aggregate

Water 33.01 Gallons / Yard 0,390 Lbs / Lbs
Additives: EuclidAir30 (Air Entrainment) 0,5 Oz/Sack
Euclid NW (Water Reducer) 4.2 Oz /Sack
Euclid Acn200 Non-Chloride Accel 60 Oz /Cwt

Calculated Unit Weight: (PCF) 145.7
Measured Unit Weight: (PCF) 145.5
Measured Siump: 3.0
Measured Air Content: 6.0

Materials:

Cement: TXI Type III Midlothian, Texas

Flyash: N/A

C.A. Texas Industries Grade 3 Mill Creek, Oklahoma
F.A. Trinity Materials Seagoville, Texas
Additives: Euclid Air30 (Air Entrainment) ASTM C-260
Euclid NW (Water Reducer) ASTM C-494

Euclid NW (Water Reducer)
Euclid Acn200 (Non-Chloride Acel

Batch Proportions (one cubic yard)

Materials:	Weight: (lbs)		Absolute Volume
Cement	705		3,5807
Fly Ash	Ò		.0000
C.A.	1970	SSD 631	% 10.7810
F. A.	1084	SSD 379	% 6.6052
Water	275	33.01 gal	4.4071
Air	4.5 oz	6	1.6200
W. Reducer	31,5 oz		.0000
Accelerator	50 oz		.0000
	3934 Lbs	TOTAL	27.0000 Cu Ft

CONFIRMATION TEST Compressive Strength (PSI)

	24 Hour	7-Day	28-Day
	3640	6300	6980
	3760	8450	7050
	3710	6500	6890
Avg.	3703	6417	6973

PAGE 84/84

08/30/2004 13:52 9

9722437913

Design No. TX7075A

SUMMARY OF RESULTS

Sleve Analysis Fine Aggregates Trinity Materials - Seagoville

Passing Sleve Size	Percent Passing	Specifications
min A CL manne		
3/8	100	100
#4	99.5	95-100
#8	85.1	80-100
#16	66.5	50-85
#30	47.8	25-60
#S0	15,1	10-30
#100	2.5	0-10
Finer Than No. 200 Sleve	1.50	Max 3.0
Fineness Modulus:	2.83	2,3-3.1
Specific Gravity:	2.64	
Absorption:	1.1	
Acid Insoluble:	76.0	
Dry Rodded Wt:	109.2	

COURSE AGGREGATE

TXI Aggregates - Mill Creek Crushed Limestone

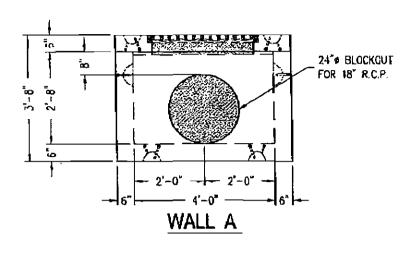
	Crusned Umesigne	
Passing	Percent Passing	Specifications
Sieve Size		,
1-1/2"	0.0	0
	3.7	0-5
3/4"	17.9	
1/2"	66.3	40-75
3/8"	66.0	
No. 4	97.7	95-100
No. 8	99.4	
Finer Than No. 200 Sieve:	0,50	Max 1.0
Specific Gravity:	2.75	•
Absorbtion:	0.07	
L.A. Abrasion, % loss	23,00	Max 45
Sodium Soundness	1.0	
Dry Rodded Walght:	103,26	

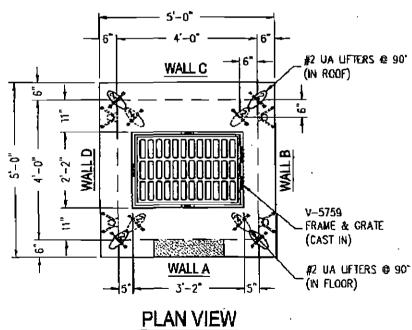


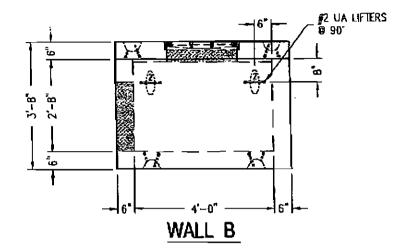
To Mike Hutchinson / HNTB 972-661-5614 Texas Standard Construction, LTD.

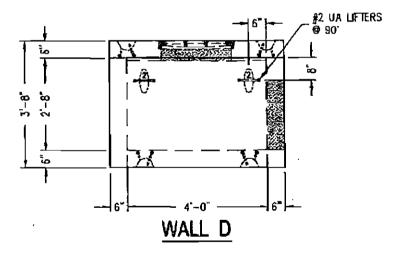
FACSIMILE TRANSMISSION SHEET

To:	CITT OF ADDISON	Date:	8-26-04	
Attn:	Jim PIERCE	Re:	ADDISON AIR	DOET #04.27
Fax No	9-450-2837	From:	SHERMAN	GRIFFITH
		Total of (including	pages: cover sheel)	<u> </u>
Messa	ge:			
	HERE ARE THE	INLET	SUB MITTAL.	5
	FOR THE ADDISON AIRE	mat Pa	e076ct 04-27	7
	THESE PAECAST IN	LETS TI	9KE 1-12 W	EEFS
	TO FABRICATE, SO F	LEASE	CAU THE O	FILE
	W/ VERBAL APPROVA	, to 5	PART SOONER	÷
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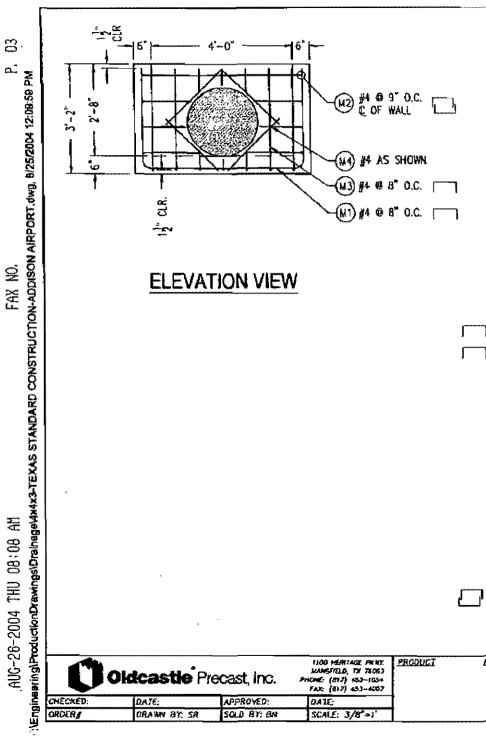


TO INCLUDE:

1 - V-5759 FRAME & GRATE (CAST IN) 12 - #2 UA LIFTERS @ 90"

			_		•	
Objectio Propert Inc.	1100 HERITAGE PROM. MANSPIELD, DX 76063	PRODUCI	ΩE√I#	PRODUCTION CHECKLIST REBAR BOND RAIBON	1,425 # .352 yd ³	GRA

0	Oldcastle Pr	recast, Inc.	1100 HERITAGE PKWY. HANSPIELD, TX 76063 PHONE (817) 433-1054 FAI: (817) 453-4007	PRODUCI	Œ4₽	PRODUCTION REBAR MOLO/PALLET TERMINATOR	BOND RAIBON GROUND ROD	ROOF SLAB TOP EXTENSION BOTTON	1,425 # # E 250#	ג'יין ג'ייטן ג'ייטן ג'ייטן 1,294	TEXAS ST	TE BILET (6 G-0" x 4"-0") 'ANDARD ()	(2-8° ONSTI	RUCTION
CHECKED:	DATE:	APPROVED:	DATE:	1		AFTERS PULL MIGHS		FLOOR SLAB	3,2502	7d ³	ADDIS	ON AIRPOR	T8ID	04-7
ORDER#	ORAWN BY: SR	SOLD BY: BN	SCALE: 3/8"=1"			MSERIS_	DR/RHG/CRT	TOTALS:	6,575	1.646 yd ³	DATE: 08/24/0	4 PA	.GE 1	OF J



Mark (1)	Size	Read	Total L	Type
MI	₫ 4	7	10'-2"	SEE DETAIL
M2	*4	8	9-7	SEE DETAIL
M3	¥ ‡	7	10'-4	SEE DETAIL
<u>N4</u>	#4	1 4	2'-6"	TRIM BARS
		<u> </u>	<u> </u>	
Size	oloi	Length	lot	of Weight
84	230	Y-2°	153	POUNDS

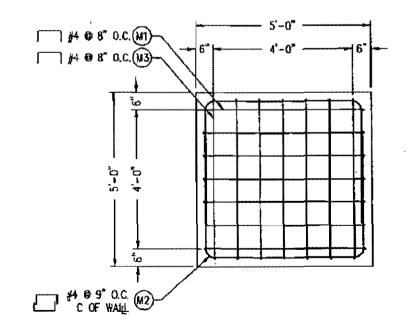
4-6

M1 DETAIL

M2 DETAIL

M3 DETAIL

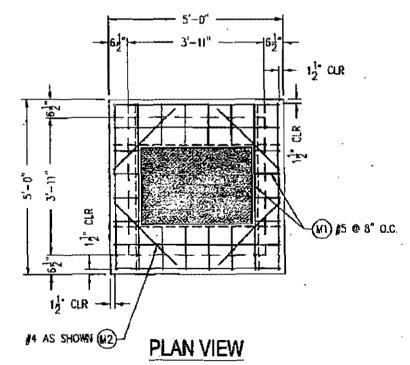
ELEVATION VIEW



apring\Pro	Ó	Oldcastle Pre	ecast, Inc.	1100 HEMITAGE PHINY: LANSFIZED, TX 78063 PHONE: (817) 163-163+ FAX: (817) 453-4007	PRODUCI ITEM!	PRODUCTION REBAR WOLD/PALLEY TERMINATION	BONG RASON CHILAND ACID		; ; ;	202 202 203 203	4.0	BOTTOM (6" WALLS) (4-0" x 2-5" ARD CONSTRUCTION	
<u>ĕ</u>	CHECKED: ORDER#	DAJE:	APPROVED:	DATE		HIFTERS PULL ROAS		FLOOR SLAB	Ī	yd ³	ADDISON A	URPORT BID #0 4 -7	27
E	ORDER#	ORAWN BY: SA	SOLD BY: BN	SCALE: 3/8"*)"		#SERTS -		TOTALS:	1	pos DATE	08/24/04	PAGE 2 OF J	

WI #5 0 8" O.C.
2' 11" 61
10 Z 10Z 1 10Z
5'-0"
ELEVATION VIEW
•

_ ,	BILL	OF M	ATERIAL	.S
Mark #	Size	Ken d	Total L	Type
N1	j j	20_	4'-9"	STR.
N2	#4	4	2'-6"	SIR.
Size	Total	Length	· Tota	Weight
#4	10	-0"	7	POLINDS
Þ	95	-0"	99	POUNDS

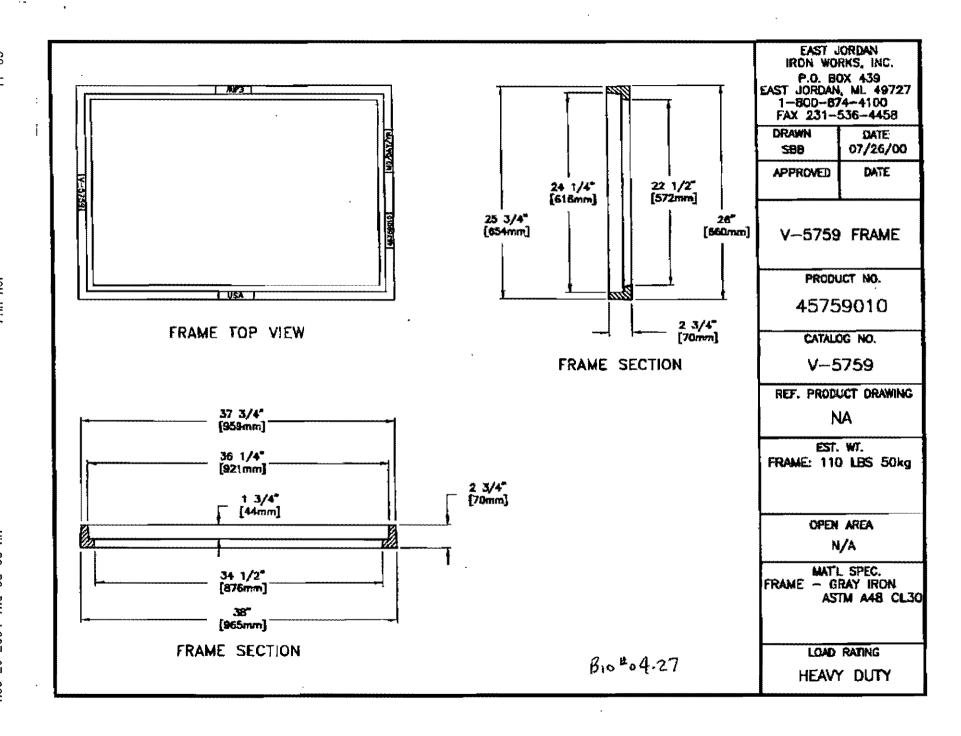


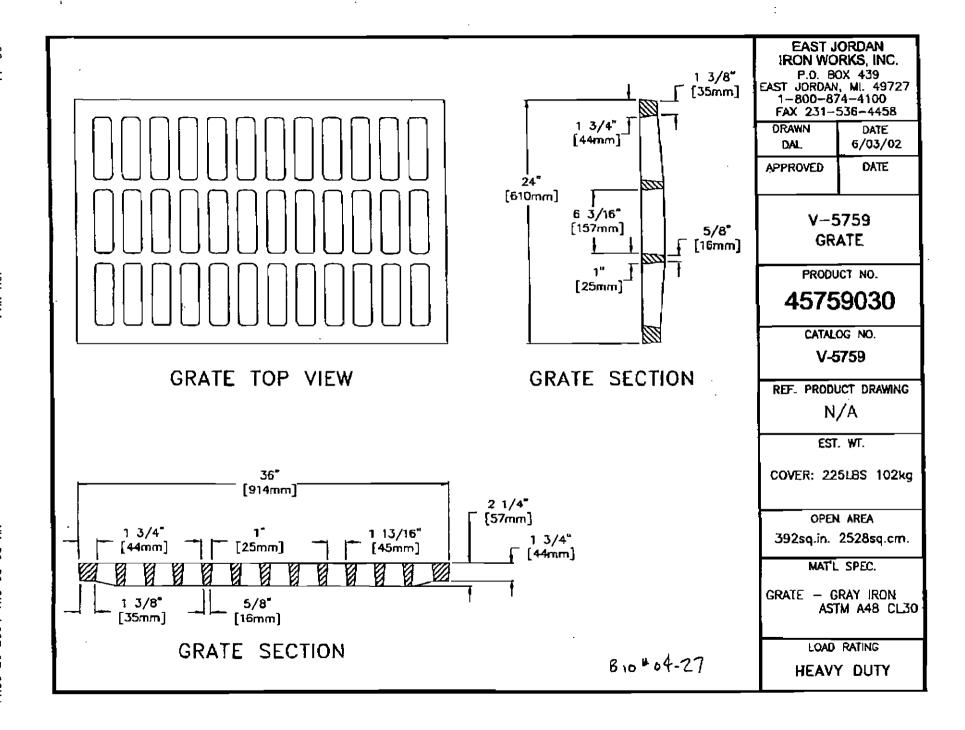
Oldcastle Precast, Inc. Harring (617) 455-1054	WARRED, TX 76063
	CHECKED: DATE: APPROVED: DATE:

1	ARCOUGHEN	CHIECHOLIST	IROOF SLAB		
1	ACEAR	MORES CHOS	TOP	7	- 42
1	HELD/FALLET	CROWN MOD	EXTENSION	7	~~
1	PERMINATOR	27.775p	BOTTOM	,	ű
	· LITTENS	PWC	FLOOR SLAB	4	-
	PLUI LIKONIS	80/KO			
	#KD275	DR/Fixes/1091	TOTALS:		. ,
J	#KD275	DR/Fetts/ISB1	IOIACS:		

TEM#

yd GR yd H yd TEXAS STAI yd ADDISOI yd Date: 08/24/04 GRATE INLET TOP
4'0' x 4'0' x 6'
TEXAS STANDARD CONSTRUCTION
ADDISON AIRPORT BID # 04-27 PAGE 3 OF 3





Fax to Sherman Griffith 214-330-5254

Jim Pierce

From: Mike Hutchison [MHutchison@HNTB.com]

Friday, August 27, 2004 3:54 PM Sent:

To: Jim Pierce

Subject: Fuel Truck Roadway -TXI and Custom Crete Mix Designs and Grate Inlet Detail review

Jim:

I have reviewed the additional TXI concrete mix design submitted by Texas Standard Construction for the above project dated August 25, 2004. I find it to conform to the specifications, provided that the same aggregate gradation sheets that were submitted for previously are used with this design.

I have also reviewed the re-submitted Custom Crete Mix designs. The design for Class "P" meets the requirements of the specifications. However, the design for NCTCOG Class "M" (referred to by Custom Crete as Class "K" modified) states a flexural strength of 300 psi in 24 hours. The plans call for 3600 psi compressive strength in 24 hours, which corresponds to 600 psi flexural strength. Therefore, the contractor should resubmit the Class "M" (Class "K" modified) design to show a compressive strength of 3600 psi in 24 hours, or a flexural strength of 600 psi in 24 hours.

Lastly, I have reviewed the precast grate inlet detail submitted by Texas Standard Construction dated 8/24/04. The inlet detail provided in the plans calls for 8-inch walls with #5 bars on 6-inc centers. The precast inlet detail submitted by Texas Standard shows 6-inch walls with #4 bars on 8 inch centers. I would recommend that the contractor resubmit with a design equivalent to that which is shown in the plans.

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HP LaserJet 3200se

HP LASERJET 3200

AUG-27-2004 5:11PM



Fax Call Report

Job Date Time Identification Duration Type Pages Result 5:10:23PM 801 8/27/2004 92143305254 Send 0:34 0K

Fuel Track Kondway -121 and Custom Crele Mix Designs and Grate trief Detail review

Fax to Sherman Griffith 214-330-5254

Jim Pierce

From: Mike Hutchison [MHutchison@HNTB.com]

Sent: Friday, August 27, 2004 3:54 PM

Subject: Fuel Truck Roadway -TKi and Custom Crate Mix Designs and Grate Inlet Data? review

I have reviewed the additional TXI concrete mix design submitted by Texas Standard Construction for the above project detect August 25, 2004. I find it to conform to the specifications, provided that the same aggregate gradation sheets that were authorities for previously are used with titla design.

I have also reviewed the re-submitted Custom Croto Mix designs. The design for Class "P" meets the requirements of the specifications. However, the design for NCTCOG Class "M" (referred to by Custom Creto as Class "N" modified) states a flexural strength of 300 pai in 24 hours. The plans call for 3000 psi congressive strength in 24 hours, which corresponds to 600 psi flexural strength. Threefore, the contractor should respect to \$100 psi m 14 hours.

Lastly, I have reviewed the precess grate inlet detail submitted by Taxas Standard Construction detail 6/24/04. The falst detail prended in the plans calls for 8-inch waits with \$5 bars on 8-inc centers. The precest inlet detail submitted by Taxas Standard shyers 8-inch waits with \$4 bars on 8 inch centers. I would recommend that the contractor resultmit with a design equivalent to that which is shown in the plans.

This e-mail and any files transmitted with it are confidential and are intended solely for the use of the ladividual or entity to whom they are addressed. If you are NOT the Intended recipient or the person responsible for delivering the s-mail to the intended recipient, be advised that you have received this c-mail in error and that any use, dissemination, forwarding, printing, o copying of this s-mail is strictly prohibited.

8/27/2004

HP LaserJet 3200se

TOWN OF

HP LASERJET 3200

AUG-27-2004 5:17PM



Fax Call Report							
Job	Date	Time	Туре	Identification	Duration	Pages	Result
802	8/27/2004	5:15:34PM	Send	99726615614	1:26	2	OK

ADDISON	Public Works
To: Muke Hutchinson Company: HNTB FAX #: 972-661 - 5'614 Date: 8/27/04 # of pages (including cover):	From: Jim Pierce, P.E. Asst. Public Wks. Dir. Phone: 972/450-2879 FAX: 972/450-2837 jpierce@claddison.tr.us 16801 Westgrove P.O.Box 9010 Addison, TX 75001-9010
Re: Compressive Strength	V9 Flex Francis
Original in mail Per your request	☐ FYI ☐ Call me
This is the g lorbing for acro 3600 psi is eque fley.	raph I was or king for this el for about 540 psi



Texas Standard Construction , Lno.

FACSIMILE TRANSMISSION SHEET

To:	CITY of Addison	Date:	6.27.04
Attn:	Jun PIERCE	Re:	ADDISON AIRPORT
		•	F04-27
Fax No	9-450-2837	From:	SHERMAN GRIFFITH
	- 79	intai or	pages: ()
Messag	e:		
	HERE 15	ANOTHER	Custom Conc.
	BASEH DESIG	N FOR TH	E CLASS K-MOD. AND
4500 psi	Pinto USE THIS	SAT. Am	
•	PLEME CA	ic w/APP.	norms A.S.A.P.
		THAN	IM
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Sherman)		
all-	214-460-216		
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PAGE 02/11

Custom-Crete, Inc. 2524 Joe Field Rd Dallas, Texas 75229 972-243-4488

CONCRETE MIX DESIGN DESIGN NO. TX7065A-Mod Class K - Modified DATE: 8/28/2004

Cilent: Texas Standard
Project: Addison Airport
Required: 300 PSI Flex in 24 Hrs

3 inch mex slump, 6.0 % Air +- 1,5 %

Dasign Average Strengths: 24 Hour Flex 328

Summary: 6.5 Sacks Per Cubic Yard

C.A. 59.3 Percent Course Aggregate F. A. 40.7 Percent Fine Aggregate

Water 28.81 Gallons / Yard 0.393 Lbs / Lbs
Additives: Boral Air30 (Air Entrainment) 0.52 Oz/Sack
Boral LR (Water Reducer) 4.2 Oz / Sack
Boral Acn200 Non-Chloride Accel 80 Oz / Cwt

Calculated Unit Weight: (PCF) 149.6
Measured Unit Weight: (PCF) 149.0
Measured Slump: 3.5
Measured Air Content: 5.0

Materials:

Cement: TXI Type III Midlothian, Texas

Flyash: N/A

Avg.

C.A. Texas Industries Grade 3 Mill Creek, Oklahoma
F.A. Trinity Materials Seagoville, Texas
Additives: Boral Air30 (Air Entrainment) ASTM C-260
Boral LR (Water Reducer) ASTM C-494

Borat Acn200 (Non-Chloride Acel)

Batch Proportions (one cubic yard)

Materials:	Weight: (lbs)		,	Absolute Volume
Cement	611			3.1085
Fly Ash	0			.0000
C.A.	1889	SSD	59%	10.8894
F.A.	1299	SSD	41%	7. 0 455
Water	240	28.81 gal		3.8462
Air	3.38 oz	- 4	.5	1.2150
W. Reducer	27.3 oz			.0000
Accelerator	60 oz			.0000.
	4039 Lbs	TOT	AL.	27,0045 Cu Ft

CONFIRMATION TEST Flexural Strenght

24 Hour Flex 325 330 328 328

PAGE 04/11

Custom-Crete, Inc. 2624 Joe Field Rd Dallas, Texas 75229 972-243-4466

CONCRETE MIX DESIGN

DESIGN NO. CC1085A DATE: 8/28/2004

Client: Texas Standard
Project: Addison Airport

Required: 4500 PSI @ 28days Class P

4 Inch max slump, 6.0 % - 1.0% air

Design Average Strengths: 7-Day = 3530 28-Day = 6167

Summary: 8.5

Sacks Per Cubic Yend

C.A. 60.0 Parcent Course Aggregate F. A. 40.0 Percent Fine Aggregate

Water 30.97 Gallons / Yard 0.422 Lbs / Lbs Additives: Boral Air30 (Air Entrainment) 0.53 Oz/Sack Boral LR (Water Reducer) 4.2 Oz / Sack

Calculated Unit Weight: (PCF) 145.6
Measured Unit Weight: (PCF) 144.0
Measured Slump: 4.0
Measured Air Content: 4.5

Materials:

Cemant: TXI Type I Midlothian, Texas
C.A. TXI Materials Grade 3 Mill Creek, Oklahoma
F.A. Trinity Meterials Seagoville, texas
Additives: Boral Air30 (Air Entrainment) ASTM C-280
Boral LR (Water Reducer) ASTM C-494

Batch Proportions (one cubic yard)

Materials:	Weight: (lbs)			Absolute Volume
Cement	611			9.1085
Fly Ash	0			.0000
C.A.	1838	60%		10,6993
F. A.	1225	40%		7,4422
Water	258	30.97		4.1948
Air	3.45 oz		6	1,6200
W. Reducer	27.30 oz			.0000

3931 Lbs TOTAL 27,0046 Cu Ft

CONFIRMATION TEST Compressive Strength (PSI)

	7-Day	28-Day
	9500	5250
	3550	5100
	3540	5150
Ava.	3530	5167

PAGE 03/11

Design No. 17

TX7066A-Mod

SUMMARY OF RESULTS

Sleve Analysis Fine Aggregates Trinity Materials - Seagoville

Pasaing Sieve Size	Percent Passing	Specifications
3/8	100	100
#4	99.5	95-100
#8	85.1	80-100
#18	66.5	50- 65
#30	47.8	25-60
#5D	15.1	10-30
#100	2.5	0-10
Finer Than No. 200 Slove:	1,50	Max 3.0
Finaness Modulus:	2.83	2.5-3.1
Specific Gravity:	2.64	
Absorption:	1.1	
Acid Insuluble:	78.0	
Dry Rodded Wt:	107.5	

COURSE AGGREGATE

TXI Aggregates - Mill Creek

Crushed Limestone							
Passing	Percent Passing	Specifications					
Sieva Size		,					
1-1/2"	0.0	0					
1*	3.7	0-5					
1/2"	68.3	40-78					
3/8*	95 .0						
No. 4	97.7	95-100					
No. 8	99.4						
Finer Then No. 200 Sleve:	0.50	Max 1.0					
Specific Gravity:	2.75						
Absorbtion:	0.70						
L.A. Abrasion, % loss	23.00	Max 45					
Sodium Soundness	0.3						
Dry Radded Weight:	108.00						

SUMMARY OF RESULTS Sieve Analysis

Fine Aggregates Trinity Materials

Pagaing Sieva Size	Percent Passi	Ye .	Specifications
3/8	100		100
#4	99.5		95-100
#0	85.1		80-100
#18	66.5		50-85
#30	47.8		25-65
#50	15.1		10-30
#100	2.5		0-10
Finer Than No. 200 Sk	ive:	1.10	Max 9.0
Fineness Modulus:	,	2.83	2.3-3.1
Specific Gravity:		2.84	
Absorption:		1.1	
Acid insoluble:		76.0	
Dry Rodded Wt:		107.5	

COURSE AGGREGATE

Texas Industries - Mili Creek Crushed Limestone

Pessing Sleve Size	Specifications	
1-1/2"	0	0
1"	9.7	0-8
3/4*	17.9	
1/2"	68.4	40-75
No. 4	97.7	95-100
No. 6	99.4	44 147
Finer Than No. 200 Sieve:	0.6	Mex 1.0
Specific Gravity:	2.75	
Absorbtion:	0.70	i
L.A. Abrasion, % loss	23.00	Max 45
Sodium Soundness	1.0	_
Dry Rodded Weight:	108.0	



TXI corp. MILL CREEK STONE

Mill Creek Oklahoma

DATE July 29 2004

COMPANY / NAME C.C.I. / Chip Conrad

MATERIAL TXDOT #421 Grade 9

TEST RESULTS

SEVE SIZE	WT. RETAINED	* RETAINED	SPECK	CATION
U. S .				
1 1/2"	0	0.0%		0
40	1.8	3.7%	0	5
3/4"	7.8	17.9%	10	40
1/2"	29.8	68.3%	40	75
3/8"	37.5	88.0%	·	•
#4	42.5	27.7%	95	100
#8	43.33	39.4%	•••	***

TOTAL WEIGHT

43,6

SPECIFIC TEST RESULTS

BPECIFIC GRAVITY

ABSORPTION

1.7

LA ABRASION

23

GODIUM SOUNDNESS

1

MAGNESIUM SOUNDNESS

6

Rendy Hinkle

PAGE 87/11

SUMMARY OF RESULTS

DATE: 8/18/2004 FINE AGGREGATES

PLANT #206 Valley Farms

Sleve Size	Parcent Passing	Specifications
3/9	100	100
#4	2,69	95-100
#8	85,1	80-100
#18	55,5	50-85
#30	47.8	26-00
#50	15,1	, 6-3 0
#100	2.5	0.10

% Passing #200 by Decentation:

1.10% Max: 8.0

Finass Module: 2.83

2.30 - 3.10

Inaciubie Residue: 76

MIn: 60.0

Specific Gravity: 2.84
Absorption: 1.10%
Unit Weight: 107.5

Producer Code: 1817508

I heroby cartify that the above information is correct.

Mati Chembers - Quelity Cantrol Mgr.

Trinity Materials, Inc.

State of Texas, County of Ellis, Subscribed and Swom to before me by the above-named <u>Dock Chambers</u> on this the <u>19-1</u> day of

Stacy Williams
Notery Fublic of greature





BALCONES PLANT
2560 Wald Road
New Brauniaia, TX 78132
(210) 250-4100 Fax (210) 250-4044
Customer Service
1-800-492-9004 Fax (210) 250-4153



CEMENT MILL TEST REPORT

Date Shipped			Plant	MALCONES		
Quanty			Coment Type	TYPE I/II		
Car/Truck No.	•		810			
PHYSICAL D	ATA		CHEMICAL DA	(A		
Specifio Surfac	0		Composition			
Compressive 3 Time of Set (VICTAINS of Set (CR)	1 day (psi) 9 day (psi) 7 day (psi) 28 day (psi) AT min.)	395 207 2440 3930 4900 6320 115	Silicon Diocide (SIO Aluminum Oxide (Al Ferric Oxide (PegOd Calcium Oxide (Cal Magnesium Oxide (Cal Magnesium Oxide (SO a Loss on Ignition Insoluble Residue Free Lime Tricatolum Silicate (I	(2O ₃) 4.7) 3.5) 64.7 MgO) 1.3 2.4 2.5 (0.29 1.8		
Air Entrainment		_	Tricelclum Aluminal	6 (C,A) 6		
Boundness	Percent by volume Autoclave Expension	0,03	Sodium Equivalent (PS US (C) 1 0.04		

WE HEREBY CERTIFY THAT THIS CENERT COMPLIES WITH CURRENT ASTN C-466 SPECIFICATIONS.
THIS CENERT CONTAINS PROCESSING ADDITIONS WHICH MEET THE REQUIREMENTS OF ASTN C-464.
COMPLIANCE DOCUMENTS FOR THESE PROCESSING ADDITIONS ARE AVAILABLE UPON REQUEST.
THE AROVE DATA REPRESENTS THE AVERAGE OF REPRESENTATIVE SAMPLES FROM PRODUCTION.

We do cently that all manufacturing processes used in the production of this sement occurred.

In the United Status of America and in the State of Taxon.

04/15/2004

Quality Control Manager

r. U9 PAGE 09/11

0002

05/17/2004 NON 12:43 PAN 2154617072

EUCLID CHENICAL



The Linclid Chemical Company • 19218 (Rodycout Boad • Clercland, Ohio 44110-2799 216-531-9222 • 800-321-7628 • Fax: 216-531-9696 • www.euclidohemical.com

May 17, 2004

Custom-Crete Inc.

Attn: Josh

Fex: 972,243,7354

Re: Admixture Cartification

To Whom It May Concern:

The Euclid Chemical Company hereby certifies that its liquid air-entraining admixture, Eucon Air.30, meets or exceeds the requirements of ASTM C-260. Furthermore, it is also certified that Eucon Air 30 does not contain calcium chloride nor added chloride ions other than those normally present in water.

Sinceraly.

Barb Sample

Manager, Marketing & Technical Service

STATE OF OHIO COUNTY OF CUYAHOGA

Sworn to and subscribed before me, a Notary Public for the State of Ohio, this seventeenth day of May, 2004 at Claveland, Ohio.

Daureia Klyfuldo Notary

BARBARA REVNOLDS
Newly Public, State of Calo
illy Committeen Expires 3/09/08
Recorded in Lake County

MRPM

PAGE 10/11

08/17/2004 NON 12:45 PAX 2164617079

EUCLID CHEMICAL

@001



216-531-9222 • 600-921-7626 • Fax: 216-531-9696 • www.eucildohemical.com

May 17, 2004

Custom-Crete inc.

Attn: Josh

Fax: 972,243.7354

Certification for Eucon NW Re:

To Whom It May Concern:

The Euclid Chemical Company hareby certifies that its admixture, Eucon NW, is a liquid, water-reducing admixture for concrete and meets or exceeds the requirements of ASTM C-494, Type A. Furthermore, it is also certified that Eucon NW does not contain calcium chloride or added chloride lons other than those normally present in water.

Sincerely

Sean Fallon

Product Manager

STATE OF OHIO COUNTY OF CUYAHOGA

Swom to and subscribed before me, a Notary Public for the State of Ohio, this seventeenth day of May, 2004, at Cleveland, Ohio.

BARBARA REYNOLDS Notary Public, Mate of Chi My Communion Expires 3/09/08 Recorded in Lake County

08/27/2004 FRI 09:42 FAR 2164817072

BUCLID CHRMICAL

218-531-9222 • 800-321-7628 • Fax: 216-531-9596 • www.suelidehemical.com

August 27, 2004

Custom Crate

Attn: Chip Conrad Fax: 972.243.7354

Re: Admixture Certification

To Whom It May Concern:

The Euclid Chemical Company hereby certifies that its liquid admixture, Eucon AcN200, is an accelerating, water-reducing admixture for concrete and meets or exceeds the requirements of ASTM C-494, Types C and E. Furthermore, it is also certified that Eucon AcN200 does not contain calcium chloride or added chloride ions other than those normally present in water.

Sincerely,

Barb Sample

Manager, Marketing & Technical Support

STATE OF OHIO COUNTY OF CUYAHOGA

Sworn to and subscribed before me, a Notary Public for the State of Ohlo, this twenty-seventh day of August 2004, at Cleveland OH,

PARBARA REYNOLDS

Notary Public, State of Obla

My Commission Explires \$200.018

Recorded in Lake General

HP LaserJet 3200se

HP LASERJET 3200

AUG-26-2004 4:10PM



Fax Call Report

Job Date Time Type

Identification

Duration

Pages

Result

8/26/2004 751

4:09:29PM

92143305254

0:34

1

0K

Concrete Mix Designs for Fuel Truck Roadway Project

rage rot.

Fax to- Sherman Griffith 214-330-5254

Jim Pierce

From: Mike Hutchbern [MHutchison@HNTB.com]

Sent: Thursday, August 28, 2004 11:32 AM

To: Jim Pieros

Jamy Holder Cas

Send

Bublect: Concrete Mix Designs for Fuel Teack Roadway Project

Per your request, I have reviewed the concrete mix designs for the three suppliers provided by Texas Standard Construction. The TXI and LMC designs are ok for both the Class P2 and Class M requirements. However, I have the following observations regarding the Custom Crete design:

- Sieve analysis and admixture spec, sheets should be provided for review. The admixture spec, sheets should provide information showing that they meet the applicable ASTM standards for the given admixture (i.e., air entrainment or water.
- There is not a 24 hour compressive alrength provided for the Class M design. It appears that the Class M design is called
 out as Class K, which is the TXDOT designation for a modified mix design. Please have Custom Crete resubmit both mix
 designs, providing the following information;
 - o Design Requirements and Design Summan

 - o Dry weight of coment/cu. yd. and type o Dry weight of fly astricu. yd. and type, if used
 - o Saturated surface dry weight of the and operas aggregatewics, yo
 - o Design waterfou, yd.

 - Quantities, type, and nearie of admixtures with manufacturer's data sheets
 Current strength trais or strength tests in accordance with ACI 318
 Current Sleve Analysis and -200 Decandation of fine and coarse egympates and date of tests. o. Finenasa modulus of fine aggregate

 - Specific Gravity and Absorption Values of fine and course aggregates
 - L.A. Abrasion of coarse aggregates

The above requirements are listed in NCTCOG Standard Specification from 303.3.3 as being required for review and approved by the Engineer.

Please let ms know if you have any more questions.

Michael A. Hutchison, P.E. Project Manager HMTB Corporation 6910 Wast Plano Parkway, Sulte 200 Plano, Texas 75093 ph: 972-628-3174 fax: 972-681-6814

E/26/2004

Fax to Sherman Griffith 214-330-525x

Jim Pierce

From: Mike Hutchison [MHutchison@HNTB.com]

Sent: Thursday, August 26, 2004 11:32 AM

To: Jim Pierce
Cc: Jerry Holder

Subject: Concrete Mix Designs for Fuel Truck Roadway Project

Jim:

Per your request, I have reviewed the concrete mix designs for the three suppliers provided by Texas Standard Construction. The TXI and LMC designs are ok for both the Class P2 and Class M requirements. However, I have the following observations regarding the Custom Crete design:

- Sieve analysis and admixture spec. sheets should be provided for review. The admixture spec. sheets should provide
 information showing that they meet the applicable ASTM standards for the given admixture (i.e., air entrainment or water
 reducer).
- There is not a 24 hour compressive strength provided for the Class M design. It appears that the Class M design is called
 out as Class K, which is the TxDOT designation for a modified mix design. Please have Custom Crete resubmit both mix
 designs, providing the following information:
 - o Design Requirements and Design Summary
 - o Material source
 - o Dry weight of cement/cu. yd. and type
 - o Dry weight of fly ash/cu. yd. and type, if used
 - o Saturated surface dry weight of fine and coarse aggregates/cu. yd.
 - o Design water/cu. yd.
 - Quantities, type, and name of admixtures with manufacturer's data sheets
 - Current strength tests or strength tests in accordance with ACI 318
 - o Current Sieve Analysis and -200 Decantation of fine and coarse aggregates and date of tests
 - o Fineness modulus of fine aggregate
 - o Specific Gravity and Absorption Values of fine and coarse aggregates
 - o L.A. Abrasion of coarse aggregates

The above requirements are listed in NCTCOG Standard Specification item 303.3.3 as being required for review and approval by the Engineer.

Please let me know if you have any more questions.

Thanks,

Michael A. Hutchison, P.E. Project Manager HNTB Corporation 5910 West Plano Parkway, Suite 200 Plano, Texas 75093

ph: 972-628-3174 fax: 972-661-5614

HP LaserJet 3200se

HP LASERJET 3200

AUG-25-2004 2:36PM



Fax Call Report							
Job	Date	Time	Туре	Identification	Duration	Pages	Result
726	8/25/2004	2:26:57PM	Send	99726615614	9:20	33	OK

TOWN OF	
ADDISON	PUBLIC WORKS
To: Mike Hatchirison Company: HUTB FAX #: 972-661-5614 Date: 8/25/04 # of pages (including cover): Many Re: Fuel Farm Rd Mix	
☐ Original in mail ☐ Per your request	
Comments: Clean review	
	Sam-
VIIIIA	
	<u></u>
	A CONTRACTOR OF THE CONTRACTOR





August 23, 2004

Texas Standard Construction P.O. Box 210768 Dallas, TX 75211

Attn: Mr. Sherman Griffith

RE: Paving Repair Addison Airport

8225 9669 CL-P J CL-M

The attached concrete mix designs utilizing the appropriate ASTM C-33 or ASTM C-330 aggregate are proposed for use on the above referenced project for ready-mixed concrete to be furnished by TXI.

TXI certifies that the above mix designs, when ordered by specified design identity, and delivered by TXI, will meet or exceed the indicated design strength at the designated age when tested in accordance with the applicable and current ASTM Standards C 31, C 39, C 78, C 172, C 293, applicable provisions of C 94, and evaluated in accordance with applicable provisions of the ACI Building Code.

TXI would like to be included on your mailing list to receive all test reports. ASTM C 94 entitles a manufacturer to receive copies of all test reports when strength of concrete is used as a basis for acceptance.

Contact us if you have any questions or require any additional information. Please notify TXI of approval of the proposed mix design prior to its use. Failure to notify us prior to first placement shall constitute acceptance. To ensure that the proper mix design is ordered, please send a copy of this letter, after approval, to the above referenced project to be used by the person ordering the concrete for this job.

The information contained in this submittal is confidential and the exclusive property of TXI. It cannot be copied, duplicated or disclosed to third parties without the expressed written consent of TXI.

Sincerely,

TXI Operations, LP

Victor H. Villarreal Manager - Q.A./Q.C.

GENERAL NOTES

Pumping Notes:

- 1. 5" minimum diameter lines with no reduction to smaller lines.
- 2. Keep rubber hose to absolute minimum length and plan pipe with as few 90 degree angles as possible.
- 3. Samples for slump and strength tests should be taken at discharge end of hose for strength guarantee to be valid.
- 4. To prime pump lines, a minimum of 8.0 sack grout is recommended for lubrication. In the case of strength concrete, equivalent strength grout should be used if the grout remains in the placement.
- 5. Pump mixes are based on minimum cement content pumped at ground level. As pump line increases in length or height and/or layout configuration changes, mix design modifications may be required to assure strength and pumpability at additional cost to the contractor.
- 6. TXI cannot control, and is therefore not responsible for excessive loss of entrained air content when loss occurs as a result of boom configuration or free fall discharge from hose. To ensure minimum air loss when pumping, maintain a continuous flow of concrete through the entire length of pipe and do not subject concrete to free fall.
- 7. The term "pumpable concrete" refers to concrete which is capable of being transported through an apparatus which forces concrete to the placing position through a pipeline or hose as long as the recommendations indicated above are followed. The term "pumpable concrete" does not relate to concrete proportioned in a particular manner or containing a specific type of product.

Strength of lightweight mix designs valid provided strength specimens are air cured in accordance with ASTM Test Method C 567-01, as referenced in section 8.1 of ASTM Specification C 330.

Unless otherwise indicated, when the concrete temperature at point of placement exceeds 90 degrees Fahrenheit, TXI will guarantee the strength performance of the mix design(s) herein submitted up to a maximum placement temperature of 100 degrees Fahrenheit using an ASTM C 494 Type D retarding water-reducer, as long as the concrete is placed within 75 minutes from batch time. Unless otherwise indicated, strength of plain concrete guaranteed up to a maximum placement temperature of 85 degrees Fahrenheit.

We are enclosing all available back up data for the referenced mix design(s). If the strength information is not available, or is insufficient, confirmation tests may have to be conducted by your laboratory.

TXI PROPRIETARY AND CONFIDENTIAL

Paving Repair Addison Airport

Mix #: 8225 CLASS - P

ok

Description: 611# ADMIX/AEA 1.5"CS

Strength: 4500 psi @ 28 Days

HAND PLACED PAVING (CLASS P-2) (NON-PUMP)

Maximum Size Coarse Aggregate: 1 1/2 - 3/4" CRUSHED STONE

Maximum Water/Cement Ratio: 0.422 lbs/lb

Cement/Cementitious Content: 611 lbs (per cubic yard)

Design Slump: 3.00 inches
Air Entraining Agent: ASTM C-260

Admixture: ASTM C-494 Type A or D

MATERIAL QUANTITIES PER 1.0 CUBIC YARD AT S.S.D.

489 lbs. ASTM C 150 TYPE I/II CEMENT

122 lbs. ASTM C 618 FLY ASH

800 lbs. 1 1/2 - 3/4" CRUSHED STONE

1200 lbs. 1" - #4 CRUSHED STONE

1053 lbs. CONCRETE SAND

258 lbs. or 31.0 Gallons of Water

2.0 to 4.0 oz/cwt of ASTM C-494 Type D

Specified Air Content: 3.0% - 6.0% Placement Slump: 3.00 + or - 1.00 inches

Mix Design Proportions and specifications are confidential and proprietary trade secrets of TXI. Any Use or dissemination without permission is a violation of federal criminal law.

TXI PROPRIETARY AND CONFIDENTIAL

Paving Repair Addison Airport

Mix #:

9669

class m

Description: 8.00SK NCA/ADMIX/AEA 1.5"CS

3600 psi in 24 hours

PAVING - EARLY STRENGTH AS REQUIRED

Maximum Size Coarse Aggregate: 1 1/2 - 3/4" CRUSHED STONE

Maximum Water/Cement Ratio: 0.355 lbs/lb

Cement/Cementitious Content: 752 lbs (per cubic yard)

Design Slump: 3.00 inches Air Entraining Agent: **ASTM C-260**

Admixture: ASTM C-494 Type A or D

MATERIAL QUANTITIES PER 1.0 CUBIC YARD AT S.S.D.

752 lbs. ASTM C 150 TYPE I/II CEMENT

730 lbs. 1 1/2 - 3/4" CRUSHED STONE

1097 lbs. 1" - #4 CRUSHED STONE

1126 lbs. CONCRETE SAND

267 lbs. or 32.0 Gallons of Water

20.0 to 60.0 oz/cwt of ASTM C-494 Type C

4.0 oz/cwt of ASTM C-494 Type A 2.0 to

Specified Air Content: 3.0% - 5.0%

Placement Slump: 3.00 + or - 1.00 inches

HIGH-EARLY STRENGTH NOTES:

- 1) Obtain ALL strength specimens at the point of placement.
- 2) Test specimens used for in-place early strength determination should be cured in a manner as close as possible to the in-place concrete. Utilization of insulated blankets or an insulated curing box is highly recommended. Hydration of portland cement is a temperature sensitive chemical reaction. In-place concrete generally develops and maintains substantially more heat than 6"x12" test cylinders. The difference in magnitude between in-place strength and the measured strength of 6"x12" cylinders increases as ambient temperatures decrease. Standard test cylinders used for 7 and 28 day evaluation should still be cured in strict accordance with ASTM C 31.

Mix Design Proportions and specifications are confidential and proprietary trade secrets of TXI. Any Use or dissemination without permission is a violation of federal criminal law.

TEXAS INDUSTRIES

CONCRETE DESIGN EVALUATION

Date: 08/23/04 ** Statistics Compiled From Independent Laboratory Test Specimens **

Mix Number: 8225

Strength: 4500 psi @ 28 Days

28 Day Test Data Test Type: COMPRESSIVE

Description:ASTM C 39 Compressive Strength

®o str		D) made		rature nheit)	Mi samasi	Francis	was over one was that gift with 1991	28 Day	<i></i>	Cumul médum	Movina	
Test Number	Date	Plant Number		Concrete	Placement Slump(in)	Percent of Air	PSI 1	PS1 2	PS1 AVG	Cumulative Average	Avg of 3	Range
1	01/23/04	47	65	68	2.50	N/A	6190	6190	6190	6190		0
2	01/23/04	38	55	64	5.00	5.94	5660	5730	5695	5943		70
3	01/29/04	38	50	56	6.00	8.5%	5120	4930	5025	5637	5637	190
4	01/30/04	38	30	49	4.50	4.5%	5630	5700	5665	5644	54 62	70
5	02/10/04	38	46	56	5.75	8.0%	5660	5360	5510	5617	5400	300
6	02/18/04	44	43	59	6.00	N/A	4690	4630	4655	5457	5277	50
7	02/19/04	47	70	68	3.50	6.0%	6050	5960	6005	5535	5390	90
8	02/19/04	46	73	67	5.00	8.0%	4790	4940	4865	5451	5175	150
9	02/20/04	47	50	66	2.50	5.2%	6060	5970	6015	5514	5628	90
10	02/20/04	47	64	72	2.50	5.5%	6810	6790	6800	5643	5893	20
11	02/23/04	43	62	68	2.50	5.0%	7420	7200	7310	5794	6708	220
12	02/26/04	40	53	67	3.00	4.2%	6300	6000	6190	5827	6767	220
13	02/27/04	40	70	68	3.25	5.4%	5300	5500	5400	5794	6300	200
14	02/28/04			64	5.50	N/A	4730	4670	4700	5716	5430	60
15	02/20/04	13	45	58	5.00	N/A	5370	5320	5345	5691	5148	50
16	02/28/04	13	63	69	5.25	N/A	5030	5130	5080	5653	5042	100
17	03/01/04	43	67	64	5.00	5.5%	6870	6800	6835	5723	5753	70
18	03/02/04	42	71	69	3.00	5.9%	6660	6290	6475	5764	6130	370
19	03/05/04	40	81	75	2.50	5.5%	5850	5790	5820	5767	6377	60
20	03/08/04	47	71	74	3.50	4.5%	5250	5430	5340	5746	5878	180
21	03/16/04	38	72	4	4.60	N/A	5840	5650	5745	5746	5635	190
22	04/01/04		67	66	3.75	5.5%	5260	5460	5360	5729	5482	200
23	04/07/04	38	75	77	3.75	4.8%	5680	5730	5705	5727	\$603	50
24	04/15/04			78	4,00	5.3%	5030	5100	5065	5700	5377	70
25	04/15/04			72	3.25	5.7%	4900	4830	4865	5666	5212	70
26	04/20/04		66	76	3.00	6.0%	5540	5500	5520	5661	5150	40
27	04/30/04	42	90	94	3.00	5.2%	6250	6220	6235	5682	5540	30
28	05/03/04	40	76	82	3.20	4.0%	4720	4810	4765	5649	5507	90
29	05/04/04	42	80	80	2.50	5.5%	5940	5890	5915	5658	5638	50
30	05/25/04	38	73	77	4.00	N/A	6540	6590	6565	5689	5748	50
*** Ave	rages ***		64	67	3.89	5.6%						

Mix Num: 8225 Strength: 4500 psi @ 28 Days

Paragraph 5.5 of ACI 318-02 provides that as data becomes available during construction, the amount by which (F'cr) must exceed the specified value of (F'c) may be reduced, provided:

- (a) 30 or more test results are available and average of test results exceeds that required by Section 5.3.2.1, using a standard deviation calculated in accordance with Section 5.3.1.1, or
- (b) 15 to 29 test results are available and average of test results exceeds that required by Section 5.3.2.1, using a standard deviation calculated in accordance with Section 5.3.1.2.

The required average strength has been calculated using a standard deviation calculated in accordance with ACI 318-02 Section 5.3.1.1 or Section 5.3.1.2 and is the larger value of these calculations:

SUMMARY OF STATISTICAL ANALYSIS 28 Day Test Data

Minimum Value	4655	psi psi psi psi psi
ACI 318-02 Section 5.3.2.1	5595 94	



MIDLOTHIAN CEMENT • 245 Ward Road • Midlothian, Texas 76065 • www.txi.com

SPECIFICATIONS Portland Cement Type I/II (Low Alkali) A.S.T.M. C150-02a

Bin Number					PHILLIPPIN TO THE PROPERTY OF	
Car Number					***************************************	
Tons					,	
Date of Sampling	June-2004 Monti	hly Average				
				TM		EST
OTTERNA ST. DE	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		SPEUIT	<u>ICATION</u>	rc.	SULTS
CHEMICAL REC	MIKEMEN 12	1	- -			04.0
Silica Oxide, Minimum Percent				0.0	***	21.0
Alumina Oxide, Maximum Percent				.0		4.2
Iron Oxide, Maximum Percent		<u> </u>		.0	*****	3.7
Magnesia Oxide, Maximum Percent			······	.0		1.1
SO ₃ (C ₃ A less than 8%), Maximum Per			*	. 3.0		
Loss on Ignition, Maximum Percent		3	.0	1.1		
Insoluble Residue, Maximum Percent				7 5		0.18
Tricalcium Aluminate, Maximum Percent				.0		5
OPTIONAL CHEMICA	L REQUIREMENTS					
Total Alkalies, Max. % (Na₂O equiv.)			0.60			0.48
PHYSICAL REG	UIREMENTS					
Specific surface, Blaine Minimum (m²/k	g)		2	80	359	
Gillmore, Initial Set, Minimum (Minutes			6	i0	176	
Gillmore, Final Set, Maximum (Minutes			600		284	
Vicat, Minimum (Min			4	5		
Initial Set Maximum (Mi	nutes)		3.	75		96
Air Content, Volume, Maximum Percen			1	2		7
Autoclave Expansion, Maximum Percent			0.0	ВО	-0.01	
Minimum Compressive Strengths		***************************************	MPa	psi	MPa	psi
3 Day			12.0	1740	25.2	3661
7 Day			19.0	2760	30.8	4474

STATE OF TEXAS

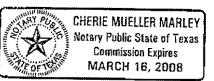
Jeff Wende[, being duly sworn deposes and says: that he is Quality Services
Manager of TXI Midlothian	Cement Plant, who prepared the above report of tests and that the same
is true and correct.	

Subscribed and sworn to before me on this date:

07/13/04

Notary Public

* See ASTM C150 Table 1, Footnote D.



Quality Services Manager

NSF

Certified to NSF/ANSI 61



ISG Resources, Inc. certifies that, to the best of its knowledge, the test data listed herein was generated by applicable ASTM methods and meets requirements of ASTM C-618 and AASHTO M-295 and TX, DOT DMS-8900

Report of Fly Ash Welsh Plant, Cason, Texas Unit #1

DATE: February 16, 2004

LABORATORY NUMBER: WELSH-1-12/26/03

MTRF #91 CA

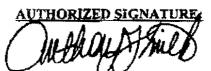
COMPOSITE DATE

	11/27/03	- 12/26/03			
CHEMICAL ANALYSIS		ASTM C- SPECIFIC	618-03 CATIONS	TX. DOT I	DMS-8900 CATIONS
Chemical Analigh		CLASS C	CLASS F	TYPE C	TYPEF
Silicon Dioxide (SiO ₂)	33,95	CLASS	CDAGG	IIIEC	X X X Z Z
Aluminum Oxide (Al ₂ O ₃)	18.66				
Iron Oxide (FE ₂ O ₃)	5.84				
Sum of SiO ₂ , Al ₂ O ₃ , & Fe ₂ O ₃	58.45	50 Min.	70 Min.	50 Min	70 Min.
Magnesium Oxide (MgO)	6.19				
Sulfur Trioxide (SO ₃)	2.51	5.0 Max.	5.0 Max.	5,0 Max.	5.0 Max.
Moisture Content	0.08	3.0 Max.	3.0 Max.	2.0 Max.	2.0 Max.
Loss On Ignition	0.13	6.0 Max.	6.0 Max,	3.0 Max.	3.0 Max.
Available Alkalies as Na ₂ O	1.59			A 1.5Max.	A1.5Max.
Calcium Oxide (CaO)	27.67				
PHYSICAL ANALYSIS					
Fineness: Amount retained					
on 325 sieve %	17.17	34% Max.	34% Max.	30%Max.	30%Max.
Water Requirement, % Control	96%	105%Max	105%Max	100%Max	100%Max
Specific Gravity	2.76				
Autoclave Expansion, %	+ 0.09	0.8% Max	0.8% Max	0.8% Max	0.8% Max
Strength Activity Index					
With Portland Cement, 7 Day	97%	75% Min.	75% Min.	75% Min.	75% Min.

Applicable only when required by purchaser.

A HILADWATERE Company

RO. Box 38, Thompsons, TX 77481-0038 Phone: (281) 343-0079 Fax: (281) 343-0872





Grace Construction Products W.R. Grace & Co. – Conn. 4323 Crites Street Houston, TX 77003

713-223-8353 www.graceconstruction.com

1/19/2004

Victor H. Villarreal TXI Operations, LP 1341 W. Mockingbird Lane Dallas, Texas 75247

Project Name: All Projects Product Selected: MIRA® 85

This is to certify that the MIRA® 85, a(n) Mid-Range Water Reducer, as manufactured and supplied by Grace Construction Products, W.R. Grace & Co. – Conn., is formulated to comply with the Specifications for Chemical Admixtures for Concrete, ASTM: C494, Type A, F AASHTO: M194, Type A, F.

MIRA® 85 does not contain calcium chloride or chloride containing compounds as a functional ingredient. Chloride ions may be present in trace amounts contributed from the process water used in manufacturing.

The foregoing is in addition to and not in substitution for our standard Conditions of Sale attached.

Fred E. Hightower

Fred E. Hightown

South Western Region Technical Services Manager



Grace Construction Products W.R. Grace & Co. – Conn. 4323 Crites Street Houston, TX 77003

713-223-8353 www.graceconstruction.com

1/19/2004

Victor H. Villarreal TXI Operations, LP 1341 W. Mockingbird Lane Dallas, Texas 75247

Project Name: All Projects

Product Selected: WRDA® with Hycol®

This is to certify that the WRDA® with Hycol®, a(n) Water Reducer, as manufactured and supplied by Grace Construction Products, W.R. Grace & Co. – Conn., is formulated to comply with the Specifications for Chemical Admixtures for Concrete, ASTM: C494, Type A, D AASHTO: M194, Type A, D.

WRDA® with Hycol® does not contain calcium chloride or chloride containing compounds as a functional ingredient. Chloride ions may be present in trace amounts contributed from the process water used in manufacturing.

The foregoing is in addition to and not in substitution for our standard Conditions of Sale attached.

Fred E. Hightower

Fred & Highton

South Western Region Technical Services Manager



Grace Construction Products W.R. Grace & Co. – Conn. 4323 Crites Street Houston, TX 77003

713-223-8353 www.graceconstruction.com

1/19/2004

Victor H. Villarreal TXI Operations, LP 1341 W. Mockingbird Lane Dallas, Texas 75247

Project Name: All Projects

Product Selected: Daravair® 1000

This is to certify that the Daravair® 1000, a(n) Air-Entraining Agent, as manufactured and supplied by Grace Construction Products, W.R. Grace & Co. - Conn., is formulated to comply with the Specifications for Chemical Admixtures for Concrete, ASTM: C260 AASHTO: M154.

Daravair® 1000 does not contain calcium chloride or chloride containing compounds as a functional ingredient. Chloride ions may be present in trace amounts contributed from the process water used in manufacturing.

The foregoing is in addition to and not in substitution for our standard Conditions of Sale attached.

Fred E. Hightower

And E Hydin

South Western Region Technical Services Manager

GRACE

Grace Construction Products

W.R. Grace & Co.-Conn. 4323 Crites Street P.O. Box 2585-77252 Houston, TX 77003

713-223-8353 http://www.gcp-grace.com

March 3, 2003

TXI 1341 West Mockingbird Lane Dallas, TX 75247

To Whom It May Concern:

This is to certify that **POLARSET**[®], a non-corrosive, non-chloride, set-accelerating admixture, as manufactured and supplied by Grace Construction Products, W. R. Grace & Co.-Conn., is formulated to comply with the Specification for Chemical Admixtures for Concrete, ASTM: C 494, Type C, (AASHTO M 194, Type C).

POLARSET[®] does not contain calcium chloride or chloride containing compounds as a functional ingredient. Chloride ions may be present in trace amounts contributed from the process water used in the manufacturing.

The foregoing is in addition to and not in substitution for our standard Conditions of Sale printed on the reverse side hereof.

Sincerely,

Fred Hightower Technical Services

Fred E. Hightown

Subscribed and sworn to, before me, this 3rd day of March, 2003.

Notary Public

My commission expires:

OLIVER E. MONTEITH
Notary Public, State of Texas
My Commission Expires 10-12-2003



TEXAS INDUSTRIES QUALITY CONTROL DEPT. AGGREGATE SIEVE ANALYSIS

Date:

<u>4/15/2004</u>

Production Facility:

TXI - BRIDGEPORT, TEXAS

Designation:

C 33 (No. 467)

Grading Designation:

ASTM C-33 1.5" - #4

Project:

*****ALL TESTS*****

Sample Location:

SIEVE SIZE	CUMULATIVE WT. RETAINED	CUMULATIVE % RETAINED	CUMULATIVE % PASSING	REQUIRED % RETAINED	SPECIFICATION % PASSING
2.0"	_				
1.5"		4.65	95.35	0 - 5	95 ~ 100
1.0"		97.02	2.98		
3/4"		63.00	37.00	30 - 65	35 - 70
1/2"		99.64	0.36		
3/8"		71.80	28.20	70 - 90	10 - 30
#4		99.98	0.02	95 - 100	0 - 5
#8					
#10					
#16					
#30					
#40					
#50					
#100					
#200					
PAN WT.					

DECANT

100% of tests: 1

Size: 467 PLANT: BRIDGEPORT

Job: ******ALL JOBS*******

TEXAS INDUSTRIES QUALITY CONTROL DEPT. AGGREGATE SIEVE ANALYSIS

Date:

08/12/2004

Production Facility:

TXI MILL CREEK

Designation:

<u>C57</u>

Grading Designation:

ASTM C-33 1" - #4

Project:

*****ALL TESTS*****

Sample Location:

SIEVE SIZE	CUMULATIVE WT. RETAINED	CUMULATIVE % RETAINED	CUMULATIVE % PASSING	REQUIRED % RETAINED	SPECIFICATION % PASSING
2.0"					
1.5"		0	100	0	100
1.0"		3.40	96.60	0-5	95 - 100
3/4"		24.87	75.13		
1/2"		61.00	39.00	40 - 75	25 - 60
3/8"		79.06	20.94		
#4		95.66	4.34	90 – 100	0 – 10
#8		98.73	1.27	95 – 100	0-5
#10					
#16				<u></u>	
#30					
#40					
#50					
#100					
#200					
PAN WT.		Fineness Modules	s: 1.9		

Decant:

0.85%

100% of 6 tests:

Size: 57

PLANT: TXI MILL CREEK

Job: ********ALL JOBS*******

TEXAS INDUSTRIES QUALITY CONTROL DEPT. AGGREGATE SIEVE ANALYSIS

Date:

07/07/2004

Production Facility:

TXI BELL SAVOY (WADE)

Designation:

<u>C 33</u>

Grading Designation:

ASTM C-33 FINE AGG.

Project:

*****ALL TESTS*****

Sample Location:

SIEVE SIZE	CUMULATIVE WT. RETAINED	CUMULATIVE % RETAINED	CUMULATIVE % PASSING	REQUIRED % RETAINED	SPECIFICATION % PASSING
2.0"					
1.5"					
1.0"					
3/4"					
1/2"					
3/8"		0.00	100.00	0	100
#4		2.19	97.81	0-5	95 - 100
#8		10.87	89.13	0 - 20	80 - 100
#10					
#16		20.64	79.36	15 - 50	50 - 85
#30		41.41	58.59	40 - 75	25 - 60
#40					
#50		77.77	22.23	70 - 90	10 - 30
#100		96.23	3.77	90 - 98	2 - 10
#200		99.56	1.44		
PAN WT.		Fineness M	odulus: 2.5		

M. C. Decant S. E.

100% of tests: 26

Size: 33 PLANT: TXI BELL SAVOY

Job: *******ALL JOBS*******



Dater 20-Aug-04

Cilent:

Texas Standard Construction

Project:

Addison Airport - Fuel Truck Payement Repair

Addison, Texas

Materials:

Cement:

ASTM C-160, Type I/II ASTM C-618, Class F

Flyash: Coarse Agg.: ASTM C 33, 1"- #4 Crushed Stone

#N/A

Fine Agg.:

ASTM C-33, Concrete Sand

Admixtures: ASTM C 494, Type A or D

ASTM C-250

1 Cubic Yard By Weight - 88D

Use	Paving
Mix No.	9994 (CLASS P7 SK FA, WR, AI
Strength @ 28 Days	4500 psi
	Air
Cement	526 lbs
Fly Ash	110 lbs
Coarse Aggregate	2001 lbs
Fine Aggregate	974 lbs
Water	280 lbs
Admixture Water Reducer	25 ozs
AEA	4.1 <u>928</u>
Total Weight	3891 ibs
Unit Weight	144.12 pof
W/Cm Ratio	0.44
Fly Ash Replacement	17%
Maximum Temperature	95 ° F
Slump	3-5 inches
Entrained Air	3-6%

Lattimore Materials Company guarantees the above mix design will achieve the specified strength when tested and evaluated in accordance with ASTM C172, C31, C38 and C94, and when the recommended procedures for placement and suring outlined in ACI 305 and ACI 306 are followed.

in accordance with ASTM C94, Lattimere Materials Company shall receive all copies of testing reports, and they should be forwarded to our Quality Control Department (fax 972-221-9647) as soon as available. Failure to forward reports in a timely fashion can delay response time in dealing with concrete concerns as well as future project submittals.

This mix design submittal, price quote, or material apacific information (aggregate properties, grading, material composition, or other information regarding materials manufactured by Lattimore Materials Company) is proprietary and confidential and not to be shared or transmitted in any form to any person or organization that is not expressly authorized in writing by a designated official of Lattimore Materials Company. Any unauthorized person or entity in possession of this information will be presecuted to the fullest extent of the law.

BR



Date: 2

20-Aug-04

Client:

Texas Standard Construction

Project:

Addison Airport - Fuel Truck Pavement Repair

Addison, Texas

Materials:

Cement:

ASTM C-160, Type I/II
ASTM C-618, Class F

Flyash: ASTM C-

Coarse Agg.: ASTM C 33, 11 #4 Crushed Stone

Fine Agg.:

ASTM C-33, Concrete Sand

Admixtures: ASTM C 494, Type F

ASTM C-260

1 Cubic Yard By Weight - \$SD

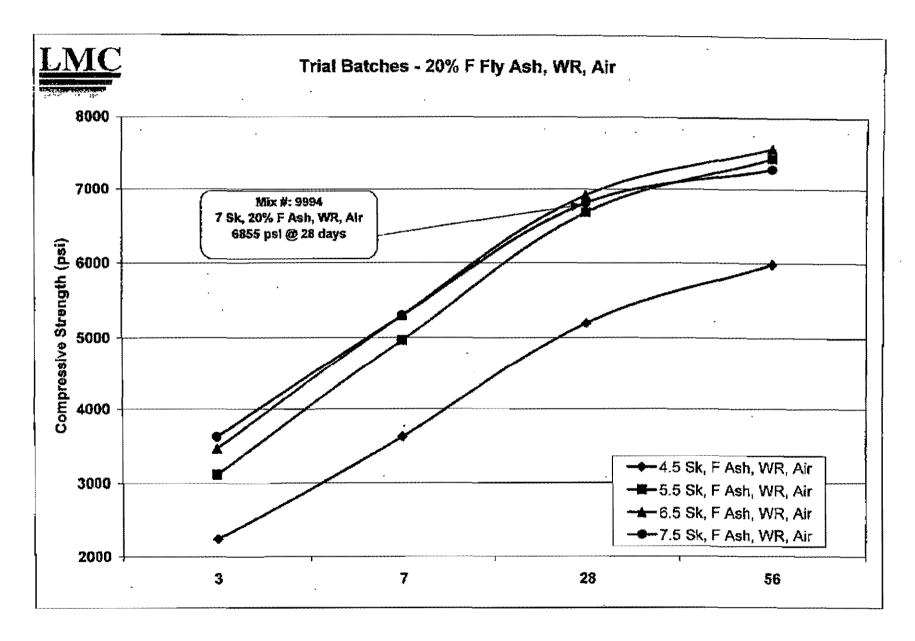
Use	Paving
Mix No,	9139 (8 SK,SP,AIR)
Strength @ 24 Hours	3600 psl
^	Aĭr ————————————————————————————————————
Cement	752 lbs
On annual Americans	Q lbs
Coarse Aggregate	1850 lbs
Wine Areman water	4400 #
Fine Aggregate Water	1120 lbs
•	250 lbs
Admixture Superplasticizer	90 ozs
AEA	4.9 028
Total Weight	3972 lba
Unit Weight	147.10 pcf
W/Cm Ratio	0.33
Fly Ash Replacement	0%
Maximum Temperature	95 ° F
Stump	6-8 Inches
Entralned Air	3 -8 %

Lattimore Materials Company guarantees the above mix design will achieve the specified atrength when tested and evaluated in accordance with ASTM C172, C31, C39 and C34, and when the recommended procedures for placement and suring outlined in ACI 305 and ACI 306 are followed.

In accordance with ASTM C94, Lattimore Materials Company shell receive all copies of testing reports, and they should be forwarded to our Quality Control Department (fax 972-221-9647) as soon as available. Failure to forward reports in a timely fashion can delay response time in dealing with concrete concerns as well as future project submittals.

This mix design submittal, price quote, or material specific information (aggregate properties, grading, material composition, or other information regarding materials manufactured by Lattimore Materials Company) is proprietary and confidential and not to be shared or transmitted in any form to any person or organization that is not expressly authorized in writing by a designated official of Lattimore Materials Company. Any unauthorized person or onlity in possession of this information will be prosecuted to the fullest extent of the law.

BR

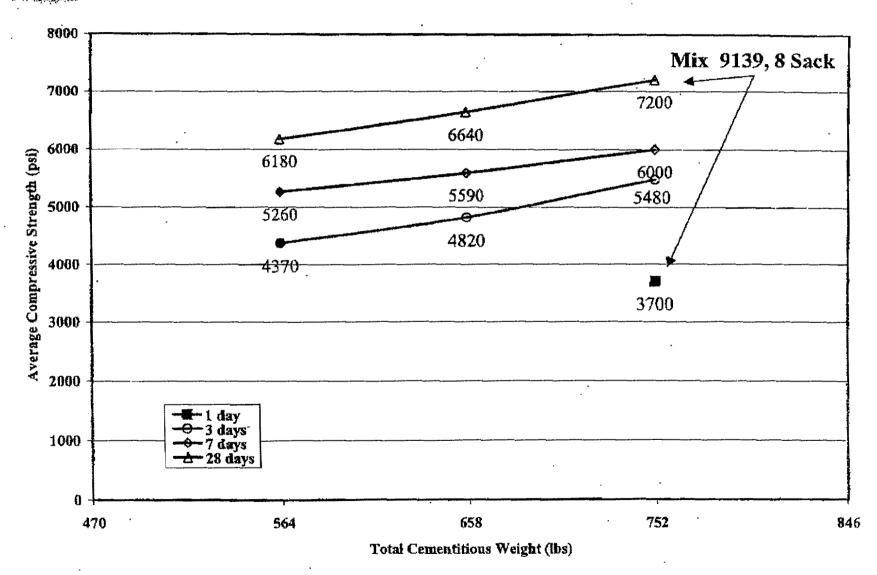


LMC			17		18		19		20	
ويستره بدء	মূল মূল					<u></u>				
	Mix	20% ISG WAIR 6077			20% (86 WIAIR		G WAIR		20% ISC WAIR	
Holnem	Cement - Type I/II	338		414	277	488.0	507	564	725	
Holnam	Cement - Type I	0	423	Ö	- 6	0	- <u> </u>	0	705	
	XI - Type I	0	····	0		O				
1	Martin Lake	85	S X	103	26%	122	20	141	20%	
	dgeport Stone leman Buckshot	1950		1860		1850		1850		
	Concrete Sand	1404	***	1802	***	1197	•••	1094	****	
	own Mfg. Sand	1 0			- §		g g		- %	
	sign Water	240		248		 0 257	<u> </u>	285	<u> </u>	
	Water Used	240	Atter Dosing Admixture	248	` }	257	- }	265	- }	
Water/Ge	ementitious Retlo Water Reduction	0.57	- # - 0	0.48	- E	0.42	- 異 - O	0.38	- g	
W/C+F	Ratio (Actual)	0.57	_ ଛୁି.	0,48	After Dosing Admixture	0,42	After Dasing Admixture->	0.38	After Dosing Admixture	
181	Dose, oz / cwl	4	- 45 . >>	4	~ gັ ≽		– ੬ੁੱ >>	4	- ď	
	Dose, ox / yo	17	<u> </u>	21	. 8	24	- 5	26	- §	
2nd Admix	Dose, oz / cvł	0.0	- Ĕ	0,0	· 🖺	0.0	- <u>¥</u>	0.0	- <u>E</u>	
Des	igned Air%	4.5%	- Î	4.5%	- 7	4.6%	- 7	4,5%	- 7	
	Dose/yd	2.7	· *	3,4	. Y	4.0	* Y	4.6	¥.	
	e Batched	8;39 AM		9:43 AM		10:06 AM		10:41 AM		
	eight (Bucket)	4,50		5,25		5.00		5.50		
	Velght (PCF)	0.2516 36.35	144,48	0.2516	140 00	0.2516	446.06	0.2616	144.40	
	Grav. Air (%)	30.33	144.40	36.90	146,66	36.90	146,66	36.35	144.48	
	31 Air (%)	5.6%		5.0%		4.8%		5.6%		
C137 \	field - Actual	27.11		26.71		28.69		27.09		
	crete Temp. (F)	53	62	53	62	54	62	54	62	
	y) - Theoretical	145.09	27.00	145,38	27,00	145.72	27.00	146,01	27.00	
Time of Set (hrs)	500 PSI		8:39		B:43		10:08		10:41	
5 E	4000 PS1	Hours	6:39 Time	Hours	9:43 Time	Hours	10:06 Time	Hours	16:41 Time	
⊏ ß					**************************************			i i		
	1/16/2004				Strate Little	driving the			* ****	
	1/17/2004	12924	1030	19762	1570	24263	1930	26406	2100	
	1/17/2004	6.5 PA 383 35-31		Caller Composite	'3:' A D'- B	CASACAS	AREK'	_	TENENS IN COLUMN	
	1,138y AVg. 1 1/18/2004	- TKAKA 34	S 110.00-3	333 A LOUSE	@ (-10(V) 11	24260	1930,	12 40 MV	252100aj	
~	1/18/2004	<u></u>		<u> </u>			···	<u> </u>	<u></u>	
(psi)	Z Dawayo	1980	3. 200	08.78550 GR	TOWN MAN			STRENGS OF		
	1/19/2004	26025	2230	39132	3110	43153	3430	45725	3640	
aft de	1/19/2004	26314	2250			43867	3490	45097	3590	
5	3 Day Avg.	28170	2240	39130	3110	43510	3460	45410	3620	
ਲੋ	1/23/2004	44601	3550	62908	5010	68516	5290	70054	5570	
8	1/23/2004 1/23/2004	46415	3690	61534	4900	66555	530D	63224	5030	
Compressive Strengths	7 Day Avo	is 45510	i√ ve5h?	62220	/ /Bek	00840	· · · · · · · · · · · · · · · · · · ·	1186640 B	7550 FV	
<u>ي</u> 1	02/13/04	65316	5200	80357	490U.	84620	6730	88901	7070	
Ē	02/13/04	66720	5310	87130	6930	90403	7190	84631	6730	
ပိ	02/13/04	63877	· 6080	84040	6690	85400	6800	83109	6610	
	28 Dáy Avg.	65300	5200	83840	6670	86310	6910		6800	
	03/12/04	7,5696	6020	91948	7320	98187	7810	92468	7360	
	03/12/04	, 14514°.,	5930	94565	7530	82023	7320	90522	7200	
	56 Qaŷ Áŷģ		5980		7430		,7570 烷		7280	
ļ	PSI/LB (c+p)	107.6	8.6	120,3	9.6	108,9	8.7	94.5	7,5	
	Slump Life	Time	Slump	Time	Slump	7lme	\$lump	Time	\$lump_	
	Initial Time/Slump							<u> </u>		
ļ	2									
ł	3	<u> </u>		,						
1	v 1	ı İ	3							

5617 20% F Ash Qirale



Laboratory Trial Batches - No Ash, HRWR, Air





Field Test Data

9139 Mix No. (748)05/16/03

Basis for Selection

Contractor: Project:

McMahon Contracting

Henrietta Creek Roznoke, Texas

Data Updated: Design Strength C.: Data Represents:

3000 psi

ACI 318, Table 5.3.2.2 Med. Standard Deviation:

1200 psi 4200 psi

1

Tests 8

Required Strength P., c Average Strength: 7720 psi

Lab	oratory:	HBC/T	erracon				Avg. Slump:	5.42	Avg. Air9	6 4.30		Average	Strength:	7720	psi
			Conc.	**************************************		7]	Day Data	28]	Day Compre	esalve Stre	ngth Da	ta.	28 Day	28 Day	
#	Date	Slump	Temp	Air%	3 Day	Cyl.1	7Avg.	Cyl.1	Cyl.2	SetAyg	Avg./3	Range	St.Dev.	Run Avg.	_
1	12/16/02	6.75	70	3.50	4520	5470	5470	8320	8180	8250	(140		8250	
2	12/16/02	7.00	71	3.70	5740	5950	5950	8680	8560	8620		120	262	8440	
3	12/16/02	5.75	70	4.20	5540	6650	6650	8290	7990	8140	8340	300	251	8340	
4	12/17/02	5,25	74	3.00		5410	5410	8500	7910	8210	8320	590	215	8310	
5	02/11/03	4.00	67	5.50	5110	6060	6060	7350	7410	7380	7910	60	454	8120	
б	02/13/03	5.00	69	5.00	5470	5690	5690	6800	7090	6950	7510	290	627	7930	
7	02/13/03	5.00	69	5,50	5640	5840	5840	6780	6870	6830	7050	90	706	7770	
8	03/25/03	4.00	74	4.20	5110	6410	6410	7330	7410	7370	7050	80	669	7720	



Lattimore Materials Company

1700 Redbud Blvd, Sutie 200 McKinney, Texas 75069 972-221-4646 (main) 972-221-9647 (fax) www.lattimorematerials.com

Gradation Analysis for #57 Coarse Aggregate

ASTM C29, C33, C117, C127 & D75

Date Sampled: 15-Jul-2004

Sample:

1" x #4

Date ran: 20-Jul-2004 Source:

Bridgeport

Total dry wt:

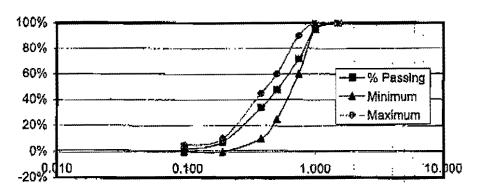
61.36

lbs.

Location:

Current

						TRACE THEORY
1-1/2"	1.500	0.00	0.0%	100.0%	100%	95% to 100%
1"	1.000	3.04	5.0%	95.0%	95% to 100%	*
3/4"	0.750	17.48	28.5%	71.5%	•	60% to 90%
1/2"	0.500	32.06	52.2%	47.8%	25% to 60%	25% to 60%
3/8"	0.375	40.70	66.3%	33.7%	**	•
#4	0.188	56.80	92.6%	7.4%	0% to 10%	0% to 5%
#8	0.094	60,56	98.7%	1.3%	0% to 5%	
PAN					-	-



Sieve Size (In.)

Absorbtion:

0.86%

Decant:

0.44%

Specific Gravity:

2.68

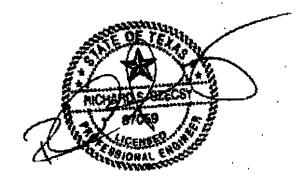
Dry Unit Wt:

103.43

lb/ft³

L.A. Abrasion:

26





Lattimore Materials Company

1700 Redbud Bivd, Sutie 200 McKinney, Texas 75069 972-221-4646 (main) 972-221-9647 (fax) www.lattimorematerials.com

Gradation Analysis for Fine Aggregates ASTM C29, C33, C117, C128 & D75

Date Sampled: 19-Jul-2004 Sampled: 19-Jul-2004

Sample: Spec

Date ran: 21-Jul-2004

Source: Denton Blend

Total dry wt: 746.3 grams Location: Current

MA 3.5		ر الله الله الله الله الله الله الله الل			一种的人的人们是是不是	Washington in the first
		ling to the second	A (1.3)		100%	
3/8"	0.375	0.0	0.0%	100.0%	100%	0%
1/4"	0.250	4,5	0.6%	99.4%	-	-
#4	0.188	19.4	2.6%	97.4%	95% to 100%	0% to 5%
#8	0.094	143.1	19.2%	80.8%	80% to 100%	0% to 20%
#10	0.079	190.0	25.5%	74.5%	-	-
#16	0.047	292.2	39.2%	60.8%	50% to 85%	15% to 50%
#20	0.033	345.4	46.3%	53.7%		-
#30	0.023	408.5	54.7%	45.3%	25% to 60%	35% to 75%
#40	0.017	505.8	67.8%	32.2%		-
#50	0.012	607.2	81.4%	18,6%	10% to 30%	65% to 90%
#80	0.007	685.4	91.8%	8.2%		
#100	0.006	722.5	96.8%	3.2%	2% to 10%	90% to 100%
#200	0.003	737.2	98.8%	1.2%	0% to 3%	97% to 100%
PAN					<u> </u>	-

Sand Eq.: 2.94

Sand Eq.: 88.1

Specific Gravity: 2.64

Dry Unit Wt: 108.42 lb/ft³

Absorbtion: 1.20%



SIKE A PATE

Air Entraining Admixture

DESCRIPTION

Sika AEA-15 admixture is a liquid solution of concentrated organic materials, it has been formulated and manufactured specifically to provide stable and predictable air contents in concrete, with uniform air bubble spacing throughout the concrete matrix.

Sika AEA-15 meets the requirements of ASTM C-260 for air entraining admixtures and AASHTO M-154

APPLICATIONS

Sika AEA-15 can be used whenever air entrained concrete is desired. Readymix, precast and block producers can all achieve optimum entrained air contents, even where harsh mixes are used or fly-ash is added to the mix.

ADVANTAGES

Air entrainment is recognized as the most effective prevention against concrete scaling in exposed environments. Air entrained concrete delivers particular benefits in the form of increased concrete durability. This is important in colder climates where frost and freeze-thaw cycles can cause scaling and damage to the concrete surface.

Air entraining agents help to prevent scaling by creating millions of microscopic air volds, allowing water trapped in the concrete to expand when the concrete treezes, thus preventing crecks caused by natural expansion. Entrained air volds in the concrete will also increase durability in harsh environments where concrete is exposed to deloing salts, marine salts and sulfates.

Workability and placeability are also improved by the lubricating action of the microscopic bubbles in the concrete. Concrete will flow batter, and bleeding and shrinkage will be reduced because less water is needed to obtain the desired workability.

HOW TO USE

DOSAGE

Addition rates will vary depending on the air content required for a particular project. Typically air contents will be specified in the range of 4 to 8 percent by volume. Other factors that may affect the amount of air entrained into the concrete include, but are not limited to, coment content and type, sand gradation, temperature and water content Sika recommends that trial mixes be tested whenever material or any other changes are made that may affect the amount of entrained air.

Dosage rates for Sika AEA-15 will typically fall between 1/4 and 1 fl. oz./100 lbs. (15 - 65 ml/100 kg) of cement to entrain between 4 and 6 percent air. Higher air contents may be obtained by increasing the dosage rate.

Combination with other admixtures, particularly water reducers and retarders, will tend to increase the amount of entrainad air in the mix. Air contents should be checked with an air-meter after batching and dosage adjustments made at the concrete plant.

MIXING

Measure the required quantity per batch manually or with automatic dispenser equipment, Add Sika AEA-15 to mixing water or sand. Do not mix with dry cement. When used in combination with other

admixtures; care must be taken to dispense each admixture separately into the mix.

PACKAGING

Sika AEA-15 is supplied in 55 gallon (208 liter) drums and bulk delivery.

STORAGE AND SHELFLIFE

Sika AEA-15 should be stored at above 35°F (2°C). If frozen, thaw and agitate thoroughly to return to its normal state before use.

Shelf life when stored in dry warehouse conditions between 50°F and 80°F (10°C-27°C) is 1 year minimum.

CAUTION

Skin and sye irritant; avoid contact. The use of NIOSH/MSHA approved respirator, safety goggles and rubber gloves is recommended. Avoid breathing product. Use with adequate ventilation. Remove contaminated clothing.

FIRST AID

Wash skin with soap and water, in case of eye contact, flush with water for 15 minutes; contacts physician. Wash clothing before re-use.

CLEAN UP

Contain and collect with absorbent material. Dispose of in accordance with local, state and federal regulations.

TYPICAL DATA FOR SIKA AEA-15						
ASTM CERTIFICATION	C-260 Alr Entraining Admixtures					
COLOR	Brown					
SPECIFIC GRAVITY g/ml	1.02 ± 0.02					
pH	>8					
CHLORIDES%	< 0.1					



Plastocrete® 161

Water Reducing Admixture (Type A)

DESCRIPTION

Plastocrete 161 is a polymer-type waterreducing admixture. Plastocrete 161 contains no chlorides.

Plastocrete 161 meets the requirements of ASTMC-494 Type A and AASHTO M194 Type A.

APPLICATIONS

Plastocrete 161 is recommended for use in all applications where high quality concrete with superior workability and normal setting times is required.

HOW IT WORKS

Plastocrete 161 water reducing admixture provides an economical and highly effective means of reducing the amount of mixing water required to produce concrete of a certain slump by acting as a dispersant for the cement particles in the mix.

Through this dispersing action more of the surface area of the cement particles is available for early hydration. The more cement particles hydrated by contact with the mixing water, the greater the compressive strength of the concrete.

ADVANTAGES

Plastocrete 161 is formulated as a Type A water reducer to allow 7 - 10% water reduction and maximize the benefits of increased hydration in both the hardened and plastic states.

BENEFITS

- A Reduced water content required to achieve desired slump, increases compressive and flexural strengths and allows the use of more economical mixes.
- ▲ Improved paste quality makes concrete easier to pump and finish.

- Consistent normal setting times throughout the recommended dosage,
- Lower water cement ratios provide decreased permeability and increased durability.

Combination with other Admixtures:

Plastocrete 161 works effectively as a single admixture or in combination with other admixtures in the Sika System. When air entrained concrete is specified, Sika recommends the use of Sika eir entraining agents.

HOW TO USE

DOSAGE

Addition rates of 3 - 6 ft, oz./100 lbs. (195 - 390 ml/100 kg) of cement are recommended for general concrete applications where normal setting characteristics are desired.

MIXING

Plastocrete 161 is added at the concrete plant. Measure required quantity manually or by automated dispenser. Add into the sand at the weigh hopper or into the water line at the batch plant.

When used in combination with other admixtures, care must be taken to dispense each admixture separately into the mix. Do not mix with dry cement.

PACKAGING

Plastocrete 161 is supplied in 55 gallon (208 liter) drums and bulk delivery.

STORAGE AND SHELF-LIFE

Plastocrete 161 should be stored at above 35°F (2°C). If frozen, thaw and a gitate thoroughly to return to normal state before use.

Shetf life when stored in dry warehouse conditions between 50°F and 80°F (10°C-27°C) is one year minimum.

CAUTION

Skin and eye irritant; avoid contact. The use of NIOSH/MSHA approved respirator, eafety goggles and rubber gloves is recommended. Avoid breathing product. Use with adequate ventilation. Remove contaminated clothing.

FIRST AID

Washskin with soap and water. In case of eye contact, flush with water for 15 minutes; contact a physician. Wash clothing before re-use.

CLEAN UP

Contain and collect with absorbent material. Dispose of in accordance with local, state and federal regulations.

TYPICAL DATA FOR PLASTOCRETE 161		
ASTM CERTIFICATION	ASTM C-494 Type A	
GOLOR	Brown	
SPECIFIC GRAVITY g/ml	1.17 ± 0.05	
рĤ	>8	
CHLORIDES %	<0.1	





Plastiment

Water Reducing and Retarding Admixture (Types B & D)

DESCRIPTION

Plastiment is a water-reducing and retarding admixture. Plastiment contains no calcium chloride or any other intentionally added chlorides.

Plastiment meets the requirements of ASTMC-494 Types B and D and AASHTO M194 Types B and D.

APPLICATIONS

Plastiment is recommended for use whenever high quality concrete with predictable and controlled set times is desired. Use in flatwork and horizontal or vertical slipform placements where a superior surface finish is required.

ADVANTAGES

Plastiment is highly affective in hot weather concreting to offset the accelerating effects of high ambient temperatures by controlling the heat of hydration. Concrete workebility is enhanced and a superior surface finish is obtained.

BENEFITS

- In mass concrete pours Plastiment controls temperature rise and reduces the risk of thermal cracking.
- Initial set times are delayed, allowing time for proper placement and finishing without cold joints in hot weather conditions.
- Plastiment increases concrete density and delivers increased early and ultimate, compressive and flexural strengths.

- For flatwork applications Plastiment acts as a finishing aid, workability is improved, bleeding is controlled and a superior surface finish is obtained.
- Lower water cement ratios provide decreased permeability and increased durability.

Combination with other Admixtures: Plastiment works effectively as a single admixture or in combination with other admixtures in the Sika System.

HOW TO USE

DOSAGE

Addition rates of 2 - 4 ff. oz./100 lbs. (130-260 ml/100 kg) cement are recommended for general concrete applications. Where extended retardation is required dosage may be increased. Please contact your local Sika Representative for Information and assistance.

MIXING

Add Plastiment at the concrete plant. Measure required quantity manually or by automated dispenser. Add into the sand at the weigh hopper or into the water line at the batch plant.

Whon used in combination with other admixtures, care must be taken to dispense each admixture separately into the mix. Do not mix with dry cement.

PACKAGING .

Plastiment is supplied in 55 gailon (208 liter) drums and bulk delivery.

STORAGE AND SHELF-LIFE

Plastiment should be stored at above 30°F (-1°C). If frozen, thaw and agitate thoroughly to return to normal state before use.

Shelf life when stored in dry warehouse conditions between 50°F and 80°F (10°C-27°C) is one year minimum.

CAUTION

Skin and eye Irritant; avoid contact. The use of NIOSH/MSHA approved respirator, safety goggles and rubber gloves is recommended. Avoid breathing product. Use with adequate ventilation. Remove contaminated clothing,

FIRST AID

Wash skin with soap and water, in case of eye contact, flush with water for 15 minutes; contact a physician. Wash clothing before re-use.

CLEANUP

Contain and collact with absorbent material. Dispose of in accordance with local, state and federal regulations.

TYPICAL DATA FOR PLASTIMENT							
ASTM CERTIFICATION ASTM C-494 Types B and D							
COLOR	Yellow/Green						
SPECIFIC GRAVITY g/mi	1.18 ± 0.5						
рH	> 8						
CHLORIDES %	<0.1						





Sikament® 10 ESI

Extended Slump Life High Range Water Reducer (Types A & F)

DESCRIPTION

Sikament 10 ESL is a high range water reducer and superplasticizer formulated to provide extended slump file.

Sikament 10 ESL is a unique formaldehyde-free product based on a vinyl copolymer. It is a non air-entraining admixture that does not interfere with the air-vold system in the concrete matrix.

Sikament 10 ESL does not contain formaldehyde, calcium chloride or any other intentionelly added chlorides and will not initiate or promote the corrosion of steel present in the concrete.

Sikament 10 ESL meets the requirements for ASTMC-494 Types A and F and AASHTO M-194 Types A and F.

APPLICATIONS

Sikament 10 ESL may be used as a plant added, ready mix or precast, high range water reducer to obtain desired plasticity and maintain slump for up to two hours. Controlled set times make Sikament 10 ESL ideal for horizontal and vertical slipform applications.

ADVANTAGES

Water Reduction:

When used as a high range water reducer up to 30% water reduction can be obtained with Sikement 10 ESL because of the polymer improved cement hydration efficiency.

High Plasticity:

The superplasticizing action of Sikament10 ESL provides high-slump flowing concrete with excellent workshillity that may be placed with minimal vibration even at very low water cement ratio's.

Sikament 10 ESL plasticized concrete is highly fluid while maintaining complete cohesion within the concrete matrix to eliminate excessive bleeding or segregation.

Extended Slump Life and Set Control: Sikament 10 ESL has been formulated to provide controlled and predictable extended slump life for periods of 60 to 120 minutes with normal set times.

BENEFITS

The combined high range water reduction and superplasticizing action of Sikament 10 ESL provide the following benefits in hardened concrete:

A Higher early compressive strengths for earlier removal of forms and structural use of concrete.

- A Higher ultimate strengths allow for greater engineering design flexibility and structural economies.
- Reduced water cement ratios produce more durable, dense concrete with reduced permeability.
- Highly effective plasticizer reduces surface defects in concrete elements and improves aesthetic appearance.

Combination with other admixtures; Sikament 10 ESt, is highly effective as single admixture or in combination with other admixtures in the Sika System.

Combination with microsilica:

Sikament 10 ESL is particularly well suited for use with microsilica because of its water reduction capability and superior slump control.

HOW TO USE

ADDITION HATES

Dosage rates will very according to materials used, ambient conditions and the requirements of a specific project. Sika recommends dosage at 6-20 fl. oz. per 100 fbs. (380-1300 ml/100 kg) of cement for general concrete applications.

Dosage rates outside the recommended range may be used where specialized materials such as micro-silioa are specified, extreme ambient conditions are countered or unusual project conditions require special consideration. Please contact your Sika representative for more information and assistance.

MIXING

For best superplasticizing results, add Sikament 10 ESL directly to freshly mixed concrete in the concrete mixer at the end of the batching cycle. Sikament 10 ESL may also be dispensed as an integral material during the regular admixture batching cycle, or into freshly mixed concrete in a Ready-Mix truck at the concrete plant or at the jobsite.

To optimize the superplasticizing effect, after the addition Sikament 10 ESt. Sika recommends that the combined materials be mixed for 80-100 revolutions or approximately 6 minutes, either in the concrete mixer or in the Ready-Mix truck.

PACKAGING

Sikament 10 ESL is available in 55 gallon (208 liter) drums and bulk delivery.

STORAGE AND SHELF-LIFE

Sikament 10 ESL should be stored at above 35°F (2°C). If frozen, thaw and agitate thoroughly to return to normal state.

Shelf life when stored in dry warehouse conditions between 50°F and 80°F (10°C - 27°C) is one year minimum.

CAUTION

Skin and eye irritant; avoid contact. The use of NIOSH/ MSHA approved respirator, safety goggles and rubber gloves is recommended. Avoid breathing product. Use with adequate ventiletion. Remove contaminated clothing.

FIRSTAID

Wash skin with soap and water, in case of eye contact, flush with water for 15 minutes; contact a physician. Wash clothing before re-use.

CLEANUP

Contain and collect with absorbent material. Dispose of in accordance with local, state and federal regulations.

TYPICAL DATA FOR SIKAMENT 10 ESL ASTM CERTIFICATION ASTM C-494 Types A and F COLOR Brown SPECIFIC GRAVITY 1.11±0.05 PH > 6 CHLORIDES% < 0.1



Accepted by: Purchaser:_

Custom Crefe 2624 Joe Field Rd Dallas, Texas 75229 972-488-8131 972-243-7913 Fax

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Admix: Euclid Air 30 LR Admix: Euclid NW Air 30 ACN200 Prices per Yard: \$76.90 \$130.00 Note: Prices are F.O.B. job site, less taxes and applicable charges listed below. Comments: All Conditions of Sale listed below apply. Price valid through: January 19, 2005 Price increase of \$2.00 per yard on: Jenuary 1, 2005 Conditions of Sale ***PRICE INCREASE: There will be a \$2.00 per yard price increase on January 1, 2005. MINIMUM CHARGE: 1-1/2 Yards DELIVERY FEE: \$75.00 for quantities under four yards. This delivery fee will also apply when the concrete required for the job is under ordered and an additional delivery is required. STANDING TIME: Purchaser will be allowed ten minutes for each yard with a maximum of one hour per load. Delays caused by the customer over this time will be charged at the rate of \$120.00 per hour (or \$2.00 per minute). Standing time is prorated. SPECIAL ORDERS: Due to the fact that all special mixes require additional time for loading and unloading, these orders will be charged for the amount of concrete ordered. EVENINGS (S PM or later) and WEEKEND CALL ORTS: \$125.00 per hour starting with the time our Concrete-Mobile leaves our plant until it returns, plus narmal charges as listed. 3 Hours minimum (\$375.00) per call out. CANCELLATION NOTICE & CRARGES: Special orders and call out orders require 24-hour cancellation notice. Cancellation within 24 hours of pour will result in a cancellation fee of \$200.00 per truck.		**************************************		<u> </u>	***************************************		Χ	
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SHOW-UP FEE: \$100.00 - If a Concrete-Mobile arrives at the jobsite and cannot pour concrete (for any reason), a show-up fee will be charged.	SHOW-UP FEE: \$100.00 -	If a Concrete-Mobile arriv	res at the jobsite and carm	ot pour concrete (for an	y reason), a show-t	ıp fee wi	II be charged.	

Date:__



Contractor;	Texas Standard
County;	Dallas
Project	Addison Airport
Control #	
Location	
Date;	8/29/2004
Dosign អ៊ី:	TX7065A
Class:	CLASS "K" Madified
Plant	Custom-Crete

aaliba#

	\$SD Unit Wt.					
AGGREGATE CHARACTERISTICS:	Sp. Gr.	Lbs/Qu,Ft,	% Solids			
Fine Aggregate (FA)	2.64	108.7	65.9			
Coeres Aggregate (CA)	2.75	103.5	60.0			

SOURCE						
FA	Trinity Materials - 1805710					
CA	TXI Aggregates -0050445					
Water:	City of Dellas					
Cement	TXI - Type I - 89321 Midiothian					
Fly Ash:	0%					
Admixture:	Euclid ACN200 - 109877					
Dosage:	40 oz/sk					
	Euclid Air 30 - 109877					
Dosage:	0.52 oz / sk					
	Euclid NW - 109877					
Dosage:	4 oz/sk					

BATCH FACTOR

≝ 5.5

DESIGN FACTORS:

Cement Factor (CF) eacks per cubic yard of concrete Coarse Aggregate Factor (CAF) 0.69

Water Cement Ratio (WCR) 4.8 gal, per sack of cement Air Factor:

Percent Fly Ash: 0% Sp. Gr.(Fly Ash) 0,00 Batch Size 27 MelY 4.154

1 CY. WEIGHTS FACTOR 1 \$K. WTS. BATCH DESIGN VOLUME: 1 SK, BATCH (CU. FT.) VOLUME TO WT. (LBS.) SSD 1. Concrete Yield = 4.154 27 = CuFl.per Cu. Yd. 6,5 ĊP. 1914 2. Volume CA ≂ 1.707 294.50 6.5 4.154 x 62.5 x 2.76 Kg/M3 = 1136 Yield x CAF x Solids 0,685 60.0 9. Volume Mortar = Yield - Voi CA= 2.447 Yield - Vol. CA 4. Volume Water = 4.0 260 WF 7,5 40.00 6,5 0.640 × 62.5 x 1.00 Gal Water per C.F. Kg/M3 = 154 0 485 x 25% Fly Ash = 5. Volume Fly Ash 0.000 x 82.5 x 0.00 0.00 6.5 Kalma = 0 5. Volume Cement 611 485 - Vol. Ash .485 -0,000 0,485 x 52,5 x 3.10 94 Kg/M3 = 362 7. Volume Entrained Air Yield x Air Factor 4,154 0.248 8. Volume Pasto = Weter + 465 + Cement + Fly Ash + Air 0,640 D.249 1.374 1150 9, Volume FA = 2/47 1,374 1.072 x 82.5 x 2.64 176,94 8.5 Mortar - Paste Kg/M3 = 682 10, Yield Summation 4,154 # 5 2,4,5,6,7,& 9 <u> 3935</u> TOTAL WEIGHT = Kg/M3 = 2335 11. Fire Aggregate Factor= 1.072 0.665 Theo. Unit Weight Ibs/cf= 145.7 0.659 2.447



Contractor	Texas Slandard
County;	Dallas
Project:	Addison Airport
Date:	08/23/2004
Deeign #:	TX7065A-P
Class;	CLASS "F"
Plant:	Custom-Crete

SSD Unit Wt					
Sp. Gr.	Lba/Cu.Ft.	% Solids			
2.54	105.9	64.2			
2.76	103.3	59,9			
•	Sp. Gr. 2.64	Sp. Gr. Lba/Cu.Ft. 2.64 105.9			

Trinity Materials - 1805710

TXI Grade #3 - 0050446

Water: City of Dallas

Cement: TXI Type I 99321

Fly Ash: N/A

Admixture: Euclid NW - 109877

Admixture: Euclid Air30 - 109877

SOURCE

DESIGN FACTORS:

Gement Factor (CF) 6.5 sacks per cubic yard of concrete Coarse Aggregate Factor (CAF) 0.69 Water Cement Relio (WCR) Max. WCR (gal./C,Y,) 6.0 gal. por sack of coment Air Factor: 5,0% BATCH FACTOR Percent Fly Ash: Batch Size 27 9% Sp. Gr.(Fly Ash)_ 0.00 **= 6,5**

: V. W			•	- p	71031/	<u> </u>	Yleld	4.154	
BATCH DESIGN	YOLUME: 1	SK. BATCH (cu, FT.)	VOLUM	E TO WT. (LE	S.)	1 SK, WT\$.	FACTOR	1 CY, WEIGHTS
1. Concrete Yield = Cu.Et.per Cu. Yd. CF		4,154							SSD
Z. Volume CA = Yield x CAF x Solids	4.154 0.688		1,713	x 62.5	z 2.76		295,53	8,5 <u>Kg/M3</u> =	1921 1140
3, Yolume Monter # Yield - Yol, GA	Yield . Vol CA=	2.441							
4. Volume Water = WF Gal Water per C.F.	<u>6.0</u> 7.5	*	0.800	x 62.5	x 1.00	a	50,00	8.5 L/M3 □	325 193
5. Volume Fly Ash	495× 25%	Fly Ash =	0.000	x 62.5	× 0.06		0,00	6,6 Ko/M3 =	0
.485 - Val. Ash	.485 -	0.000	0.485	x 62.5	x 3.10	i=	94	6.5 <u>Kn/M3</u> ≘	611 362
7. Volume Entrained Air Yiold x Air Factor	4.154	6.00	0.208						
8, Volume Paete = Water + Cement + Fly Ash + Air	.485 + 0.850	0.208	1,493						
9. Volumo FA = Morter - Pacto	2,441	1.423	0,946	x 82.5	× 2.54		155,41	6. 5 Kp/ <u>M3</u> =	1017 603
10. Yiold Summation #n 2,4,6,6,7,8, 9			4.154			ı	TOTAL W		3673 143.5
11. Fine Aggregate Fautor	<u>0.948</u> 0,642	2,441	0,605			***************************************		_	

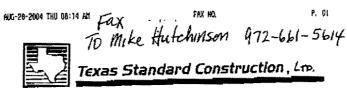
HP LaserJet 3200se

HP LASERJET 3200

AUG-26-2004 4:21PM



Fax	Fax Call Report									
Job	Date	Time	Туре	Identification	Duration	Pages	Result			
757	8/26/2004	4:19:57PM	Send	99726615614	1:05	3	OK			



FACSIMILE TRANSMISSION SHEET 0.26-04 CITT OF ADDITION Date: TKE COME. DESITA Jim PIERLE 8.0 · 04-27 SHERMAN GRIFFITH 9-450-2837 From: Total of pages: (including covar sheet) Message: TXI HAS ADDED AN ADDITIONAL CONC. DESIGN FOR THE CLASS I'M CONCRETE. THIS MIX WILL ALLOW EMDURY TIME to WAKE AND FINISH THE CONTROL BETWEE IT 1515 Tro Haro I'm any senous the 2 pages, since the BALANCE OF SHEETS ARE the SAME SOME PAEVICH.

P.O. Ben 210768 - Dellas, Tenza 75211 - Offices (214) 330-5225 - Past (244) 330-5254



AM Fax FAX NO. P. 01 TO Mike Hutchinson 972-661-5614

Texas Standard Construction , Lap.

FACSIMILE TRANSMISSION SHEET

To:	CITT OF ADDISON	Date:	0-26-04
Attn:	Jim PIERLE	Re:	TKI CONC. DESIGN
Fax No.	9-450-2837	From:	SHERMAN GRIFFITH
		Total of (including	pages: 3
Messa	ge:		
	TXI HAS ADO	60 A	N ADDITIONAL
	Conc. DESIGN FOR TH	E CLAS	5 -m' concrette.
	THIS MIX WILL ALLOW	ENOU	24 TIME to WORK
	AND FINISH TE CO,	renere	BEFORE IT 26TS
	too Itara		
	I'ma only sewong	the 2	PAZES, SINCE THE
	BALANCE OF SHEETS	ARE to	le same Som
	PREVIOLS.		
		rout	
		4	



1341 West Mockingbird Lane - Dallas, Texas 75247 - 972.647.6700 - www.txi.com

August 25, 2004

Texas Standard Construction P.O. Box 210768 Dallas, TX 75211

Attn: Mr. Sherman Griffith

RE: Paving Repair Addison Airport

ADD THIS DESIGN to get 3600,001 IN 24 HES

8225 9669 9761 CL-M

The attached concrete mix designs utilizing the appropriate ASTM C-33 or ASTM C-330 aggregate are proposed for use on the above referenced project for ready-mixed concrete to be furnished by TXI.

TXI certifies that the above mix designs, when ordered by specified design identity, and delivered by TXI, will meet or exceed the indicated design strength at the designated age when tested in accordance with the applicable and current ASTM Standards C 31, C 39, C 78, C 172, C 293, applicable provisions of C 94, and evaluated in accordance with applicable provisions of the ACI Building Code.

TXI would like to be included on your mailing list to receive all test reports. ASTM C 94 entitles a manufacturer to receive copies of all test reports when strength of concrete is used as a basis for acceptance.

Contact us if you have any questions or require any additional information. Please notify TXI of approval of the proposed mix design prior to its use. Failure to notify us prior to first placement shall constitute acceptance. To ensure that the proper mix design is ordered, please send a copy of this letter, after approval, to the above referenced project to be used by the person ordering the concrete for this job.

The information contained in this submittal is confidential and the exclusive property of TXI. It cannot be copied, duplicated or disclosed to third parties without the expressed written consent of TXI.

Sincerely.

Victor H. Villarreal

Manager - Q.A./Q.C.

TXI PROPRIETARY AND CONFIDENTIAL

Paving Repair Addison Airport

Mix #: 9761

Description: 729# HRWR/AEA 1"CS

PAVING, EARLY STRENGTH AS REQUIRED

Maximum Size Coarse Aggregate: 1" - #4 CRUSHED STONE

Maximum Water/Cement Ratio: 0.354 lbs/lb

Coment/Cementitious Content: 729 lbs (per cubic yard)

Design Slump: 8.00 inches
Air Entraining Agent: ASTM C-260

Admixture: ASTM C-494 Type F or G
Admixture: ASTM C-494 Type A or D

MATERIAL QUANTITIES PER 1.0 CUBIC YARD AT S.S.D.

583 lbs. ASTM C 150 TYPE I/II CEMENT

146 lbs. ASTM C 618 FLY ASH

1860 lbs. 1" - #4 CRUSHED STONE

1112 lbs. CONCRETE SAND

258 lbs. or 31.0 Gallons of Water

8.0 to 16.0 oz/cwt of ASTM C-494 Type F

0.0 to 4.0 oz/cwt of ASTM C-494 Type A

Specified Air Content: 3.0% - 5.0%

Placement Slump: 8.00 + or - 2.00 inches

Mix Design Proportions and specifications are confidential and proprietary trade secrets of TXI. Any Use or dissemination without permission is a violation of federal criminal law.



Texas Standard Construction, L.L.C.

Sherman Griffith

Project Manager

P.O. Box 210768 Dallas, Texas 75211

Office: (214) 330-5229 Fax: (214) 330-5254 Cell: (214) 460-2167 Pager: (817) 425-9958

TO	P.O. Box 21 Dallas, Text Office: 214	0768 is 75211 -330-5229 -330-5254	RD CONSTRUCTION C	DATE 8-24-00 ATTENTION JAMES RE: ADDISON AIR	FTRANSMITTAL JOBNO. FILE NO. CODE NO. PORT FUEL TRUCK PAIRS 0-4-27
	ENDING YOU Shop drawings Copies of letter	Prir			the following items:
COPIES	UMIE	NO.		Description	
4	e-23-04		Custom Conc.	BATCH DESIGN	
4	B-2004		LATTIMORE CO	NE BATCH DESI	7~
4	e,23-06		TXI CONC B	ATZH DEKIGN	
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				-	
X	TRANSMITTED For approval For your use As requested For review and co	App App Rete	roved as submitted [] s	Resubmit copies for a copies for a copies for a corrected p	distribution
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REMARKS_		•	-		
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COPY TO_				11 X IL	
			SIGNED:	1 Janto	

If enclosures are not as noted, kindly notify us at once.



Custom Crete 2624 Joe Field Rd Dellas, Texas 75229 972-488-8131 972-249-7913 Fax

Price Quotation

Quote #: JQ804 - 19

				Date:	August 23, 2004
Customer Name:	Texas Standard	Phone:	214-502-8058	. ,	
	5524 Ledbetter Rd.	Fax:	214-330-5254		
	Dunsanville, Texas	Person Quoted:	Sherman	* ,	
Project Name:	Atidison Airport	Owner:			
Address:		Banding Co:			
City:	Addison	Bid Date:			
County:	Dalles	Start Date:			

Yards	200	160		
Mix Design:	:TX7065A - P	; " .TX7085A" .		; ' ' ,
Concrete Class:	Class P	ClassK Mod		
28 day PSI	4500	255 Flex		
Sack Mix	8	6.5		
Соціве Адд:	1 1/2" Limestone	1º Limestone		
Source:	Texas Industries	Texas industries		
Fine Agg:	Concrete Sand	Concrete Send		
Source:	Trinity Materiale	Trinity Materials		
Admix:	Euclid Air 30	LR		
Admix:	Euclid NW	Air 30		
Admix:		ACN200		
Price per Yard:	\$78,90	\$130,00		

Note: Prices are F.O.B. job site, less taxes and applicable charges listed below.

Comments: /	III Conditions of Sale II	sted below apply.		
Price valid through:	January 19, 2005	Price increase of \$2.00 per yard	on; January 1, 2005	

Conditions of Sale

**PRICE INCREASE: There will be a \$2.00 per yard price increase on January 1, 2005.

MINIMUM CHARGE: 1-1/Z Yards

DELIVERY FEE: \$75.00 for quantities under four yards. This delivery fee will also apply when the concrete required for the job is under ordered and an additional delivery is required.

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EVENINGS (5 PM or later) and WEEKEND CALL OUTS: \$125.00 per hour starting with the time our Concrete-Mobile leaves our plant until it returns, plus normal charges as listed.3 Hours minimum (\$375.00) per call out.

CANCELLATION NOTICE & CHARGES: Special orders and call out orders require 24-hour cancellation notice. Cancellation within 24 hours of pour will result in a cancellation for of \$200.00 per truck.

SHOW-UP FEE: \$100.00 - If a Concrete-Mobile arrives at the jobsite and cannot pour concrete (for any reason), a show-up fee will be charged.

Accepted by:	
Purchaser:	Date:
	SAPRIE NOTA



Contractor;	Texas Standard
County:	Dallas
Project	Addison Airport
Control#	
Location	
Dale:	8/23/2004
Design #:	TX7065A
Class:	CLASS "K" Madified
Plant	Custom-Crete

	SSD Unit Wt.					
AGGREGATE CHARACTERISTICS:	Sp. Gr.	Lbs/Cu,Ft,	% Solids			
Fine Aggregate (FA)	2,64	108.7	65.9			
Coarsa Aggregate (CA)	2,76	103.5	60.0			

SOURCE
Trinity Materials - 1805710
TXI Aggregates -0050445
City of Dalles
TXI - Type 1 - 99321 Midjothian
0%
Euclid ACN200 - 109877
40 oz./sk
Eudld Air 30 - 109877
0.52 oz/sk
Euclid NW - 109877
4 oz/sk

DESIGN FACTORS:

Water Cement Ratio (WCR)

4.8 gal. per sack of coment

 Air Fector:
 6 %

 Percent Fly Ash:
 0%
 Sp. Gr.(Fly Ash)
 0.00

BATCH FACTOR
Batch Size 27. ≅ 6.5
Yield 4 154

1							Yleki	4.154	
BATCH DESIGN	VOLUME: 1 S	K. BATCH (C	u. fT.)	VOLUM	E TO WT. (LB	S.)	1 SK. WTS.	FACTOR	1 CY. WEIGHTS
1. Concrete Yield = Cu,Ft.per Cu, Yd. CF	<u>27_ </u>	4.154							SSD
2. Volume CA = Yield x CAF x Solids	4.154 0.885	60.0	1.707	x 62 ,5	x 2.78		294.50	6.5 Kg/M3 =	1914 1138
S. Volume Morter # Yleid - Vol. CA	Yield - Voi CA=	2.447							
4. Voluma Water = WF Gal Water per C.F.	<u>4.5</u> 7.5	25.	0.940	× 62.5	x 1.00	•	40,00	6,5 Kg/M3 =	260 154
5. Volume Fly Ash	.486 x 25 % F	PyAsh =	0.000	x 62.5	x 0.00		00.0	6.5 Kg/M3 =	<u>o</u>
6. Volume Cement .485 - Vol. Ash	.485 -	0.000	0,486	× 62,5	x 3.10	æ	94	8,5 Kg/M3.≃	611 362
7. Volumo Entrained Air Yield x Air Fastor	4.154	v	0,249						
5. Volumo Pasto = Wetor + Cement + Ply Ash + Afr	.485 + 0,640	D.249	1.374						
9, Volume FA = Morter - Pasta	2.447	1.374	1.972	* 82.6	x 2.54		178.94	6.5 Kg/M3 =	1150 682
10, Yield Summation #5 2,4,5,8,7,& 9			4.154				ТФТА	L WEIGHT = Kg/M3 =	<u>3935</u> 2335
11. Pira Aggregate Factor	<u>1.072</u> 0,859	2,447	0.665			1	iheo, Unit Wei	· -	145.7



Contractor.	Texas Standard
County:	Dallas
Project:	Addison Airport
Date:	08/23/2004
Deeign #;	TX7065A-P
Class;	CLASS "F"
Plant:	Custom-Creto

	SSD Unit Wt.				
AGGREGATE CHARACTERISTICS:	Sp. Gr. Lbe/Cu.Ft. % Solids				
Fine Aggregate (FA)	2.64	185.9	64,2		
Coarse Aggregate (CA)	2.76	103.3	59,9		

TXI Grade #3 - 0050445

Water: City of Dallas

Cament; TXI Type I 99321

Fly Ash: N/A

Admbdure: Euclid NW - 109877

Admixture: Euclid Alr30 - 109877

SOURCE Trinity Materials - 1805710

DESIGN FACTORS:

Cement Factor (CF) 6.5 sacks per cubic yard of concrete Course Aggregate Factor (CAF) 93,0 gal. per sack of cement Max. WCR (gel./C,Y,) Water Coment Ratio (WCR) 6,0 BATCH FACTOR Air Factor: 5.0% Percent Fly Ash: Batch Size 27 D% Sp. Gr.(Fly Ash) 0.00 Yteld 4.154

		*,					Yield	4.154	
BATCH DESIGN	VOLUME: 1.5	K. BATCH (GU, FT.)	VOLUM	E TO WT. (LB	S.)	1 SK, WTS,	FACTOR	1 CY. WEIGHTS
1. Concrete Yield =		4,154							និទីព
CHEL PAT CU. Ye.	5,5								
2. Volume CA =	4.154		1,713	x 62.5	x 2.76		295,5\$	5. 5	1921
Yfeld x CAF x Solids	0.889	59,\$						Kg/M3 =	1140
3. Volume Morter ≠	Yold - Vol CA=	2,441		1					
Yield - Vol. CA									
4. Volume Water ≔	6.0			l					
WF.	7.5	**	0.800	x 62.5	x 1,00	=	50,00	6.5	325
Gal Water per C.F.								L/M3 ≘	193
5. Volume Fly Ash		Fly Ash =	0,000	x 62.5	x 0.00		0.00	6,6	0
6. Vojume Cement	100							Kg/M3 E	0
485 - Vol. Ash	485.	0,000	0.485	x 62.5	x 3.10	=	94	6.6	611
		*1***	*****		A 0		**	Kn/M3 s	
7. Volume Entrained Air									
Yield x Air Factor	4.154	9.00	0.208						
0, Yolume Peste = Water +	.485 +			1					
Cement + Fly Ash + Air	0.800	0.208	1.493						
9. Volume FA =	2,441	1.493	0.948	x 62.5	× 2,64	1	155,41	6.5	1017
Morter - Pasto						ı		<u>Kp/M3</u> =	603
10. Yield Summation		'	4.154	ĺ					
#> 2,4,6,6,7,& 9							TOTAL WI		3873
14 Elec Japanes de F	0.04**					'	Theo. Unit Wel	gHt lbs/cf=	143.5
11. Fine Aggregate Factor	<u>0.948</u> 0.642	2,441	0.605						
	******	~~~)							



Custom Crete 2624 Joe Fleid Rd Dellas, Texas 75229 972-488-8131 972-243-7913 Fex

Price Quotation

Quote #: JQ804 - 19

			Date:	August 23, 2004
Customer Name:	Texas Standard	Phone: 214-502-5058		
Address:	5524 Ledbetter Rd,	Fax: 214-330-5254	,11	
City, State:	Duncanville, Texas	Person Quoted: Sherman		
Project Name:	Addison Airport	Owner:		
Address:		Bonding Co:		
City:	Addison	Bid Date:		
County:	Dailes	Start Date:		

Yards:	200	180			
Mix Design:	::TX7065A:4-P	TX7065A		215 :	,
Concrete Class:	Class P	ClassK Mod			
28 day PSI	4500	265 Flex			
Sack Mix:	<u> </u>	6.6			
Course Agg:	1 1/2" Limestone	1" Limestone			
Source:	Texas Industries	Texas Industries			
Fine Agg:	Concrete Sand	Concrete Sand			
Source:	Tripity Materials	Trinity Materials			
Admlx:	Euclid Air 30	LR	.,		
Admix:	Euclid NW	Air 30			
Admix:		ACN200			
Price per Yard:	\$76.90	\$130.00			

Note: Prices are F.O.B. job site, less taxes and applicable charges listed below.

Comments: Al	l Conditions of Sale II:	sted below apply.	***************************************	1
Price valid through:	January 19, 2005	Price increase of: \$2.00 per yard	on: January 1, 2005	

Conditions of Sale

**PRICE INCREASE: There will be a \$2.00 per yard price increase on January 1, 2005.

MINIMUM CHARGE: 1-1/2 Yards

DELIVERY FEE: \$75.00 for quantities under four yards. This delivery fee will also apply when the concrete required for the job is under ordered and an additional delivery is required.

STANDING TIME: Purchaser will be allowed ton minutes for each yard with a maximum of one hour per load. Delays caused by the customer over this time will be charged at the rate of \$120.00 per hour (or \$2.00 per minute). Standing time is prorated.

SPECIAL ORDERS: Due to the fact that all special mixes require additional time for loading and unloading, these orders will be charged for the amount of concrete ordered.

EVENINGS (5 PM or later) and WEEKEND CALL OUTS: \$125.00 per hour starting with the time our Concrete-Mobile leaves our plant until it returns, plus normal charges as listed.3 Hours minimum (\$375.00) per call out.

CANCELLATION NOTICE & CHARGES: Special orders and call out orders require 24-hour cancellation notice. Cancellation within 24 hours of pour will result in a cancellation fee of \$200.00 per truck.

SHOW-UP FEE: \$100.00 - If a Concrete-Mobile arrives at the jobsite and carmet pour concrete (for any reason), a show-up fee will be charged.

Accepted by:	
Purchaser:	Date:



Texas Standard	
Dellas	
Addison Airport	
8/23/2004	
TX7065A	
CLASS "K" Modified	
Cuetom-Crete	
	Dallas Addison Airport 8/23/2004 TX7065A CLASS "K" Modified

	SSD Unit Wt.				
AGGREGATE CHARACTERISTICS:	Sp. Gr.	Lbs/Cu,Ft,	% Solids		
Fine Aggregate (FA)	2.64	108.7	65.9		
Coarse Aggregate (CA)	2.76	103.5	60.0		

30	URCE

FA	Trinity Materials - 1805710	
CA	TXI Aggregates -0050445	
Water:	City of Dallas	
Cement	TXI - Type I - 99321 Midiothian	
Fly Ash:	0%	
Admixture:	Euclid ACN200 - 109877	
Dosage:	40 oz/sk]
, í	Eudid Air 30 - 109877	1
Dosage:	0.52 oz/sk	
	Eucild NW - 109877	1
Dosage:	4 oz/sk	1

DESIGN FACTORS:

Cement Factor (CF) _eacks per cubic yard of concrete 6.5 0.69 Coerse Aggregate Factor (CAF) gal. per sack of cement Water Cement Rato (WCR) 4.5

Air Factor. 6 % Percent Fly Ash: 0% Sp. Gr.(Fly Ash) 0,00

BATCH FACTOR Batch Size 27. = 6.5 Yleki

1							Ylekt	4.154	
BATCH DESIGN	VOLUME: 1 SI	C. BATCH (C	:U. FT.)	VOLUM	E TO WT. (LE	35.)	1 SK. WTS.	FACTOR	1 CY, WEIGHTS
1. Conserve Yield = Cu.Ft.per Cu. Yd. CF	<u>27 =</u> 6,5	4.154							SSD
2. Volume CA = Yield x CAF x Solids	4.154 0.885	60.0	1.707	× 62.5	× 2.76		294.50	6.5 Kg/M/3 ≈	1914 1138
3. Volume Morter = Yield • Vol. CA	Yield - Vol CA=	2.447							
4. Volume Water = WF Gai Water per C.F.	4.8 7.5	729	0.840	× 62.5	x 1.00	**	40.06	6,5 Kg/M3 =	260 154
5. Volume Fly Ash	.485 x 25 % F	ly Ash =	0,000	x 62.5	x 0.00		00.0	6.5 Kg/M3 =	0
6. Volume Cament A85 - Vol. Ash	.485 -	9,000	0,485	× 62.5	x 3.10		94	6,5 Kg/#3 =	611 362
7. Volume Entrained Air Yield x Air Factor	4,154	6	0.249						
8. Volume Posto = Weler + Cament + Fly Ash + Air	0,640	0.249	1.374				To Anna Anna Anna Anna Anna Anna Anna Ann		
9, Volume FA = Morter - Pasta	2,447	1,374	1.072	x 62.5	× 2.54		176.94	6.5 Kg/M3 =	1150 682
10, Yield Summation #'s 2,4,5,6,7,& 9		•	4,154				тоти	AL WEIGHT = Kg/M3 =	<u>3935</u> 2335
11. Fine Aggregate Factor=	1.072 0,859	2.447	0.665			,	Thao. Unit Wei	ight lbs/cf=	145.7



Contractor.	Texas Slandard
County:	Oaliss
Project:	Addison Airport
Date:	08/23/2004
Design #;	TX7065A-P
Class:	CLASS "P"
Plant:	Custom-Crete

	SSD Unit Wt.					
AGGREGATE CHARACTERISTICS:	Sp. Gr.	Lbe/Cu,Ft,	% Solids			
Fine Aggregate (FA)	2.64	105.9	64.2			
Coatse Aggregate (CA)	2.76	108.3	59,9			

TXI Grade #3 - 0050445

Water: City of Dallas

Cament: TXI Type I 99321

Fly Ach: N/A

Admixture: Euclid NW - 109877

Admixture: Euclid Air30 - 109877

SOURCE Trinity Materials - 1805710

DESIGN FACTORS:

Cement Fector (CF) 6.5 sacks per cubic yard of concrete Course Aggregate Factor (CAF) 0.69 Water Cement Rallo (WCR) 6.0 gal, per sack of cement Max. WCR (gel/C,Y,) BATCH FACTOR Air Factor: 5.0% Percent Fly Ash: 0% Sp. Gr.(Fly Ash) 0.00 Batch Size 27 = 6,5 4,154 Yleid

BATCH DESIGN	VOLUME: 1	SK. BATCH (CU, FT.)	VOLUM	E TO WT. (LE	35.)	1 SK, WT\$.	FACTOR	1 CY, WEIGHTS
1. Concrete Yield = Cuft.par.pv. Yd. CF 2. Volume CA = Yield x CAF x Solids 3. Volume Morter = Yield - Vol. OA	27 = 5,5 4,154 0,889 Yield - Vol CA=	4,154 59,5 2,441	1,713	× 62.5	x 2.76		295,53	6.5 Ka/M3 =	850 1921 1140
4. Volume Water = WF Gal Water per C.F.	<u>6.0</u> 7.5	1	0.800	x 62.6	x 1.00	1	50,00	9.5 L/M3.0	325 193 0
5. Volume Fly Ash 5. Volume Cement 485 - Vol. Ash	100 485 -	Fly Ash = 0,000	0,485	x 62.5	x 0.00	11	9.00 94	8,6 <u>Kg/M3 =</u> 5.5 Kg/M3 =	o 611
7. Volume Entrained Air Yield x Air Fector 8. Volume Peste = Weter + Cement + Fly Ash + Air	4.154 .485 + 0.800	5.00 0.268	Q.205 1.493					NGING -	302
9. Volumo FA = Morter - Pasto	2,441	1.483	0,948	× 82.5	x 2,84	W	158,41	6.5 <u>Kg/M3</u> =	1017 603
10. Yield Summstien #s 2,4,5,6,7,& 9 11. Fine Aggregate Fector=	0,948	İ	4.154 0.605	And the state of t		•	TOTAL W		3673 143.5
	0,642	2,441							



2824 JOE FIELD RD DALLAS TX 75228 972-459-8131

August 23, 2004

TO:

Sherman

COMPANY:

Texas Standard

FAX #:

214-330-5254

FROM:

Chip Conrad

TELEPHONE: 972-243-4466 Ext. 106

FAX:

972-243-7354

Ref:

Submittal

Thanks for the business.

TOTAL PAGES 4 (INCLUDING COVER SHEET)



Custom Crete 2624 Joe Field Rd Dallas, Texas 75229 972-488-8131 972-243-7913 Fax

Price Quotation

Quote #: JQ804 - 19

			Date:	August 23, 2004
Customer Name:	Texas Standard	Phone: 214-50Z-8058	, , ,	,
Address:	5624 Ledbetter Rd.	Fax: 214-330-5254		
City, State	Duncanville, Texas	Person Quoted: Sherman	, , .	
Project Name:	Addison Airport	Owner		
Address:		Bonding Co:		
City:	Addison	Bid Date:		
County:	Dalles	Start Date:		

Yards:	200	180		
Mix Design:	TX7065A - P	TX7085A	カー カー カー カー 大	* .
Concrete Class;	Class P	ClassK Mod		
28 day PSI	4500	255 Flex		
Sack Mix:	8	6.5		
Социяе Agg:	1 1/2" Limestone	1" Umestone		
Source:	Texas Industries	Texas Industrias		
Fine Agg:	Concrete Sand	Concrete Sand		
Source:	Trinity Materials	Trinity Materials		
Admix:	Eucild Air 30	ĹR		
Admix:	Euclid NW	Air 30		
Admix:		ACN200		
Price per Yard:	\$76.90	\$130.00		

Note: Prices are F.O.B. job site, less taxes and applicable charges listed below.

Comments:	All Conditions of Sale I	isted below apply.	
Price valid through:	January 19, 2005	Price increase of: \$2.00 per yard	on: January 1, 2005

Conditions of Sale

**PRICE INCREASE: There will be a \$2.00 per yard price increase on January 1, 2005.

MINIMUM CHARGE: 1-1/2 Yards

DELIVERY FEE: \$75.00 for quantities under four yards. This delivery fee will also apply when the concrete required for the job is under ordered and an additional delivery is required.

STANDING TIME: Purchaser will be allowed ten minutes for each yard with a maximum of one hour per load. Delays caused by the customer over this time will be charged at the rate of \$120,00 per hour (or \$2,00 per minute). Standing time is prorated.

SPECIAL ORDERS: Due to the fact that all special mixes require additional time for loading and unloading, these orders will be charged for the amount of concrete ordered.

EVENINGS (5 PM or later) and WEEKEND CALL OUTS: \$125.00 per hour starting with the time our Concrete-Mobile leaves our plant until it returns, plus normal charges as listed.3 Hours mithinum (\$375.00) per cell out.

CANCELLATION NOTICE & CRARGES: Special orders and call out orders require 24-hour cancellation notice. Cancellation within 24 hours of pour will result in a cancellation foc of \$200.00 per truck.

SHOW-UP FEE: \$100.00 - If a Concrete-Mobile arrives at the jobsite and cannot pour concrete (for any reason), a show-up fee will be charged.

Accepted by.	
Purchaser:	Date:



Contractor;	Texas Standard	
County:	Dallas	
Project	Addison Airport	
Control#		
Location		
Date:	8/23/2004	
Design#:	TX7065A	
Class:	CLASS "K" Madified	
Plant	Custom-Crete	

	SSD Unit Wt.					
AGGREGATE CHARACTERISTICS:	Sp. Gr,	Lbs/Cu.Ft.	% Solids			
Fine Aggregate (FA)	2.64	108.7	65.9			
Coarse Aggregate (CA)	2.76	103.5	60.0			

SOU	RCE

FA	Trinity Materials - 1805710
CA	TXI Aggregates -0050445
Water:	City of Dallas
Cement	TXI - Type I - 99321 Midlothlan
Fly Ash:	0%
Admixture:	Euclid AGN200 - 109877
Dosege:	40 oz/sk
······································	Eudid Air 30 - 109877
Dosage:	0,52 oz/sk
	Eudid NW - 109877
Dosage:	4 oz/sk

DESIGN FACTORS:

Percent Fly Ash:

Cement Factor (CF) 6.5 sacks per cubic yard of concrete

Coarse Aggregate Factor (CAF) 0.69

Water Cement Ratio (WCR) 4.8 gel. per sack of cement

Air Factor: 6 %

 Sp. Gr.(Fly Ash)
 0.00
 Batch Size
 27_ ≤ 6.5

 Yield
 4.154

BATCH DESIGN	VOLUME: 1 s	K. BATCH (C	:U. Fť.)	ValuM	E TO WT. (LE	(5.)	1 SK. WTS.	FACTOR	1 CY. WEIGHTS
1. Concrete Yield = Cu.Ft.per Cu. Yd. CF		4.154							35D
2. Volume CA = Yield x CAF x Selids	4.154 0.885	5 0.0	1.707	x 62.5	x 2.76		294.50	6.5 Kg/M3 □	1914 1138
S. Volume Morrar = Yield = Vol., CA	Yield - Vol CA=	2,447		***************************************					
4. Yoluma Water =	4.8								
WF Gel Water per C.F.	7.5	5	0.640	x 82.5	x 1.00	•	40.00	6,5 Kg/M3 =	260 154
5. Volume Fly Ash	.485 × 25 %	Fly Ash =	900.9	× 62.5	× 0.00		0 0,0	6.5 KwM3 =	0
6. Volume Cament								(**)	<u> </u>
,485 - Vol. Ash	.485 -	0,000	0,465	x 62.5	x 3.10	=	94	6,5 Kg/M3 =	611 362
7. Volume Entreined Air									
Yield x Air Factor	4,154	6	0.248]					
8. Volume Pasto = Waler + Coment + Fly Ash + Air	,485 + 0.640	D. 249	1.374						
9, Volume FA = Morter - Peste	2,447	1,374	1.072	x 82.6	x 2.64		176.94	8.5 Kg/M3 =	1150 682
10, Yield Summation #5 2,4,5,8,7,& 9		ļ.	4,154			L			
يعين يعد أسداء يالاسلام والاستهادة ويهي							TOTA	\L WEIGHT = Ko/M3 = :	<u>3935</u>
l I. Fino Aggregate Factor=	1.072	77 4477	0.665	_			Theo, Unit Wai	-	145. <u>7</u>
	0,659	2,447							



Contractor	Texas Standard
County:	Dallas
Project.	Addison Airport
Data:	08/23/2004
Design #;	TX7065A-P
Cless:	CLASS "P"
Plant:	Custom-Crete

	SSD Unit Wt.					
AGGREGATE CHARACTERISTICS:	Sp. Gr.	Lbs/Cu.Ft.	% Solids			
Fine Aggregate (FA)	2.64	105.9	64.2			
Coarse Aggregate (CA)	2.76	108.3	59,9			

	TXI Grade #3 - 0050445
Water:	City of Dallas
Cament:	TXI Type 99321
Fly Ash:	N/A
Admixture:	Euclid NW - 109877
Admixture:	Euclid Air30 - 109877

SOURCE Trinity Materials - 1805710

Max. WCR (gal./C,Y.)

DESIGN FACTORS:

Coment Factor (CF) 6.5 sacks per cubic yard of concrete

Coarse Aggregate Factor (CAF) 0.68

Water Cernent Ratio (WCR) 6.0 gal. por sack of cernent

Air Factor: 5,0%

BATCH FACTOR

Fercent Fiv Ash: 0% Sn Gr (Fiv Ash) 0.00 Batch Size 27 F

Fercent Fly Ash: 0% Sp. Gr.(Fly Ash) 0.00 Batch Size 27 = 6.5
Yold 4.154

BATCH DESIGN	VOLUME: 1	SK. BATCH (CU, FT.)	VOLUM	E TO WT. (LB	S.)	1 sk, WTs,	FACTOR	1 CY, WEIGHTS
1. Concrete Yield = <u>Gu.Ft.per.CuYd.</u> CF	<u>27. =</u> 6,5	4,154							ssp
2. Volume CA = Yleid x OAF x Solids	4.154 0.989	59,9		x 62.5	x 2.76		295,53	6,5 <u>Ka/M3</u> =	1921 1140
3. Volume Morier = Yiold - Vol. CA	Yield - Vol CA=	2,441							
4. Volume Water = WF Cal Water per C.F.	<u>8.0</u> 7.5	æ	0.800	x 62.5	x 1.00	**	50,00	8.5 L/M2 =	325 193
5. Volume Fly Ash	.495 x 25 %	Fly Ash =	0,000	× 62.5	x 0.00		00.0	6,5 Kg/M3 =	0
6. Volume Cement .485 - Vol. Ash	.485	0,000	0.485	x 52,5	x 3.10	F	\$4	5.5 Kg/M3 =	811 362
7. Volumo Entrained Air Ylold x Air Factor	4,154	6,00	0,205						
8, Volume Paate = Water + Cament + Fly Ash + Air	.485 + 0.800	0,208	1,493						
9. Volume FA = Moder - Paste	744,5	1.493	0,948	x 62.5	× 2.64		155,41	6.5 <u>Kp/M3 =</u>	1017 603
io. Yield Summation #a 2,4,5,6.7,& 9			4.154				TOTAL W		3673 143.5
11. Fine Aggregate Factors	0.949 0,642	2.441	0,605				CONTRACTOR STA	Base smalled.	170.0



Date: 20-Aug-04

Client:

Texas Standard Construction

Project:

Addison Aliport - Fuel Truck Peyement Repair

Addison, Texas

Materials:

Cement: ASTM 0-160, Type I/II

Flyash; ASTM C-618, Class F

Coarse Agg.: ASTM C 33, 1"- #4 Crushed Stone

#N/A

Fine Agg.:

ASTM C-33, Concrete Sand

Admixtures: ASTM C 494, Type A or D

ASTM C-260

1 Cubic Yard By Weight . SSD

Use	Paving	
Mix No.	9994 (CLASS P7 SK FA, WR, AIF	ŧ)
Strength @ 28 Days	4500 psi Air	
Cement	526 lbs	
Fly Ash	110 lbs	
Coarse Aggregate	2001 lbs	
Fine Aggregate	974 lbs	
Water	280 lbs	
Admixture Water Reducer	25 g2ş	
<u>aea</u>	4.1 <u>025</u>	
Total Weight	3891 lbs	
Unit Weight	144,12 pci	
W/Cm Ratio	0.44	
Fly Ash Replacement	17%	
Maximum Temperature	95 ° F	
Slump	3-5 inches	
Entrained Air	3-6%	

Lattimore Materials Company guarantees the above mix deelgn will ashieve the specified strength when tested and evaluated in accordance with ASTM 0172, 031, 039 and 094, and when the recommended procedures for piscement and ouring outlined in ACI 305 and ACI 306 are followed.

In accordance with ASTM C94, Lettimore Materials Company shall receive all copies of testing reports, and they should be forwarded to our Quality Control Department (fex 972-221-9647) as econ as available. Failure to forward reports in a timely feehion can delay response time in dealing with concrete concerns as well as future project submittals.

This mix design submittal, price quote, or material specific information (aggregate properties, grading, material composition, or other information regarding materials manufactured by Lattimore Materials Company) is proprietary and confidential and not to be shared or transmitted in any form to any person or organization that is not expressly authorized in writing by a designated official of Lattimore Materials Company. Any unauthorized parson or entity in possession of this information will be prosecuted to the fullest extent of the law.

BR



Date:

20-Aug-04

Client:

Texas Standard Construction

Project:

Addison Airport - Fuel Truck Pavement Repair

Addison, Texas

Materials:

Cement:

ASTM C-150, Type I/II

Flyash; ASTM C-618, Class F

Coarse Agg.: ASTM C 33, 1% #4 Crushed Stone

Fine Agg.:

ASTM C-33, Concrete Sand

Admixtures: ASTM C 494, Type F

ASTM C-260

1 Cubic Yard By Weight - \$SD

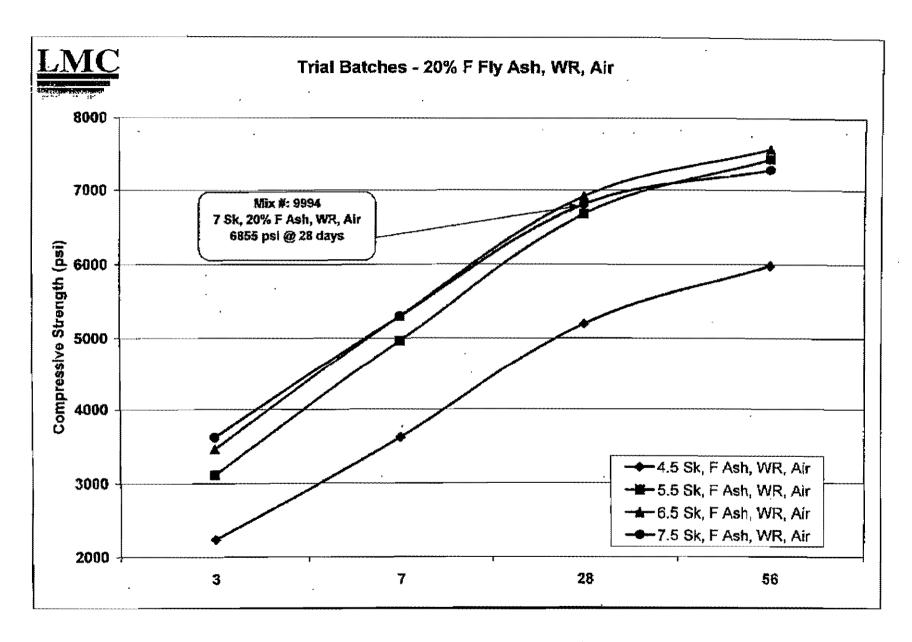
Uso	Paving	
Mix No.	9139	(RIA, SE, XE 8)
Strangth @ 24 Hours	3600	pel
	Air	•
Cement	752	lbs
	0	los
Coarse Aggregate	1850	ibs
Tina Assurata	4406	ilea
Fine Aggregate	1120	
Water	250	
Admixture Superplasticiz	er 90	OZS
AEA	4.9	QZB
Total Weight	3972)bs
Unit Weight	147.10	pcf
W/Cm Ratio	0.33	
Fly Ash Replacement	0%	
Maximum Temperature	95	° F
Slump	9- 8	Inches
Entrained Air	3-8%	
• •	T	

Lattimore Materials Company guarantees the above mix design will achieve the specified strength when tested and evaluated in accordance with ASTM C172, C31, C39 and C34, and when the recommended procedures for placement and curing outlined in ACI 305 and ACI 306 are followed.

In accordance with ASTM C94, Lattimore Materials Company shall receive all copies of testing reports, and they should be forwarded to our Quality Control Department (fax 972-221-9547) as soon as available. Failure to forward reports in a timely fashion can delay response time in dealing with concrete concerns as well as future project submittals.

This mix design submittal, price quote, or material specific information (aggregate properties, grading, material composition, or other information regarding materials manufactured by Lattimore Materials Company) is proprietary and confidential and not to be shared or transmitted in any term to any person or organization that is not expressly authorized in writing by a designated official of Lattimore Materials Company. Any unauthorized person or entity in possession of this information will be prosecuted to the fullest extent of the law.

BR

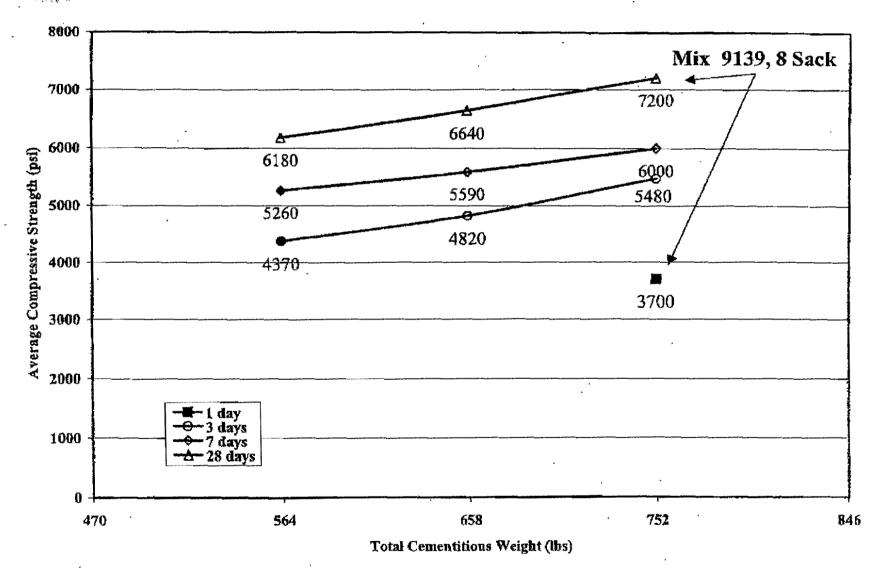


LMC			17		18		19	20		
2.4.4.4.4	.		G WAIR	20% 15	G WAIR		G WAIR	20% (\$	G WAIR	
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Holpam	Cament - Type I	0	- 43	414	517	488.8 0	- <u>\$</u>	564	705	
T	KI - Type I	٥	4	0		Ů.		Ō	- VI	
	Martin Lake	85	25%	103	2	122	20%	141	20%	
	dgeport Stone eman Buckshot	1850	•	1850		1850		1850	-	
LMC C	oncrete Sand	1404	•••	1302	-	1197	-	0 1034	-	
Stringte	own Mig, Sand	0	. %	D	0%	0	0%	0	· 3	
	sign Water	240	- Kandana Antonia	248		257		285		
	l Water Used mentitious Ratio	240 0.57	After Onsing Admbdure-	0.48	After Dosing Admixture>	257	After Cosing Admixture->	265	After Dosing Admixture->	
Percent \	Valer Reduction	1 0.27	~ Q	<u> </u>	- ĝ	0.42	- <u>ĝ</u>	0.38	- 👼	
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161	Dose, oz / cwt	 	· È	1 21	- È	24	- ≧	28	- 2	
2nd Admix	Dose, oz / cwt	0.0	- <u>\$</u>	0.0	. mbc	0,0		0,0	i i	
	Dose, oz / yd gried Air%	0.0	- 9	0.0		0.0	- 5	0.0	. §	
	Dose/yd	4.5% 2.7	•	4.5% 3,4	. ¥	4,5% ·	. ¥	4.6%	Š.	
	e Balched	8:39 AM		9:43 AM		10:06 AM	,	10:41 AM		
	as Batched	4,50	······································	5.25		5,00		5.50		
	sight (Bucket) Veight (PCF)	0.2516 36.35	144.48	0.2515 36.90	146.66	0.2516 36.90	146.66	0.2616 36,35	144.48	
	Grav. Air (%)		144,40	30.30	340.00	90.00	140,00	30,30	144.40	
	31 AIr (%)	5,6%		5.0%		4.8%		5.6%		
	ield - Actual	27.11		26	26.71		26,69		.08	
	crete Temp. (F)	53	62	53	62	54	62	54	62	
	y) - Theoretical 500 PSI	145.09	27.00 8:39	145.38	27.00 9:43	145.72	27.00 10:08	146,01	27.00 10:41	
9 E	4000 PSI		0;39 0;39		9:43		10:00		10:41	
Time of Set (brs)		Hours	Time	Hours	Tinia	ervoH	Time	Hours	Time	
24	1/16/2004	1 8 ****** *	* Noide	Principal Follows	Shirt helm	described the		Maria .		
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_	1/18/2004 1/18/2004						<u> </u>			
(isd)	Z Dav Moje	19 (\$1 (\$1 P)		Name of the	NY WES				10/52/2012	
un un	1/19/2004	28025	2230	39132	3110	43153	3430	45725	3640	
5	1/19/2004	28314	2250			43867	3490	45097	3590	
<u> </u>	3 Day Avg. 1/23/2004	28170	2240	39130	3110	43510	3460	45410	3620 5570	
ळ	1/23/2004	44601 46415	3550 3690	62908 61534	5010 4900	66516 66555	5290 5300	70054 63224	5030	
,š	1/23/2004				1777					
Compressive Strength	7 Day Avg	u 46510	3620	62220	4960	egraq.	5200	765640	* \$300 °C	
효	02/13/04	65316	5200	B0357	6390	84620	6730	88901	7070	
ূ ব	02/13/04	66720	5310	87130	6930	90403	7190	84631	6730	
_	02/13/04	63877 66300	5080 5 200	84040	6690 66%0.%	85400 86810	0080 0103	83109 83550	6610 6800	
	28 Dé¥Avg. 03/12/04	75696	6020	.83840 91948	7320	48187	7810	92488	7360	
	03/12/04	74514	5930	04665	7530	92023	7320	90622	7200	
ĺ	S6 Day Avg	3	5980		7430		7570		7280	
	PSI/LB (c+p)	107.6	8.6	120,3	9.6	108.9	8.7	94,5	7,5	
	Slump Life	Time	Slump	Time	Slump	Time	Slump	Time	\$lump_	
ļ	Initial Time/Slump			,						
I		_			1	l	1	1		
Ţ	2									

5517 20% F Ash-alr.xix



Laboratory Trial Batches - No Ash, HRWR, Air



Field Test Data

Mix No.

9139 (748)

Basis for Selection

Contractor: Project:

McMahon Contracting

Henrietta Creek

Roanoke, Texas

Design Strength Co: Data Represents:

3000 psi

05/16/03

Mod. Standard Deviation:

ACI 318, Table 5.3.2.2 1200 psi

Laboratory:

Data Updated:

8 Tests Required Strength f'est

4200 psi

HBC/Terracon

Avg. Slump: 5.42

Avg. Air% 4.30

Average Strength:

7720 psi

			Conc.			7 Da	y Datz	28 I	ay Compr	essive Stre	ngth Da	ita	28 Day	28 Day
#	Date	Slump	Temp	Air%	3 Day	Cyl.1	7Avg.	Cyl.1	Cyl.2	SetAvg	Avg./3	Range	St.Dev.	Ron.Avg.
1	12/16/02	6.75	70	3.50	4520	5470	5470	8320	8180	8250	24	140		8250
2	12/16/02	7.00	71	3.70	5740	5950	5950	8680	8560	8620		120	262	8440
3	12/16/02	5.75	70	4.20	5540	6650	6650	8290	7990	8140	8340	300	251	8340
4	12/17/02	5.25	74	3.00		5410	5410	8500	7910	8210	8320	590	215	8310
5	02/11/03	4.00	67	5.50	5110	6060	6060	7350	7410	7380	7910	60	454	8120
6	02/13/03	5.00	69	5.00	5470	5690	5690	6800	7090	6950	7510	290	627	7930
7	02/13/03	5.00	69	5,50	5640	5840	5840	6780	6870	6830	7050	90	706	7770
8	03/25/03	4.00	74	4.20	5110	6410	6410	7330	7410	7370	7050	80	669	7720



Lattimore Materials Company

1700 Redbud Blvd, Sutle 200 McKinney, Texas 75069 972-221-4646 (main) 972-221-9647 (fax) www.lattimorematerials.com

1" x #4

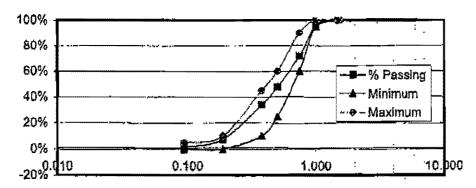
Gradation	Analysis	for #57	Coarse	Aggregate
ΔSTI	VI C29 C	33 C117	£ 127 £	L D75

Date Sampled: 15-Jul-2004 Sample:

20-Jul-2004 Date ran: **Bridgeport** Source:

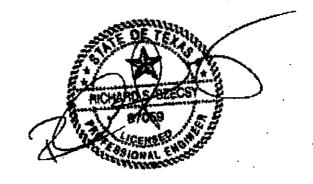
Total dry wt: 61.36 lbs. Location: Current

		5 2 3 3 3 4		A 3 NO 10 %	YAN MARKANA	e is income burne
1-1/2"	1,500	0.00	0.0%	100.0%	100%	95% to 100%
1"	1.000	3.04	5.0%	95.0%	95% to 100%	_
3/4"	0.750	17.48	2B.5%	71.5%		60% to 90%
1/2"	0.500	32.06	52.2%	47.8%	25% to 60%	25% to 60%
3/8"	0.375	40.70	66.3%	33,7%	100	•
#4	0.188	56.80	92.6%	7.4%	0% to 10%	0% to 5%
#8	0.094	60.56	98.7%	1,3%	0% to 5%	
PAN					*	



Sieve Size (In.)

Absorbtion: 0.86% 0.44% Decant: Specific Gravity: 2.68 lb/ft³ Dry Unit Wt: 103.43 L.A. Abrasion: 26





Lattimore Materials Company

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Gradation A	nalysis	for F	ine f	\ggre	gates
ASTM C29					

Date Sampled: 19-Jul-2004 Sample: Spec

Date ran: 21-Jul-2004 Source: Denton Blend

Total dry wt: 746.3 grams Location: Current

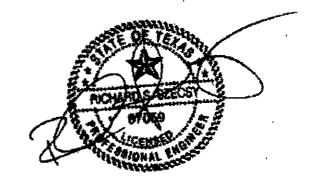
W. C.		Mark of the state			国国际国际管理	Market Black from the state of
NO.		3 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	* 50%			
3/8"	0.375	0.0	0.0%	100.0%	100%	0%
1/4"	0.250	4.5	0.6%	99.4%		~
#4	0.188	19.4	2.6%	97.4%	95% to 100%	· 0% to 5%
#8	0.094	143.1	19.2%	80.8%	80% to 100%	0% to 20%
#10	0.079	190.0	25.5%	74.5%	-	
#16	0.047	292.2	39.2%	60.8%	50% to 85%	15% to 50%
#20	0.033	345.4	46.3%	53.7%	*	***
#30	0.023	408.5	54.7%	45.3%	25% to 60%	35% to 75%
#40	0.017	505.8	67.8%	32.2%	**	* **
#50	0.012	607.2	81.4%	18.6%	10% to 30%	65% to 90%
#80	0.007	685.4	91.8%	8.2%	=	•
#100	0.006	722.5	96.8%	3.2%	2% to 10%	90% to 100%
#200	0.003	737.2	98.8%	1.2%	0% to 3%	97% to 100%
PAN		, ,			F	•••

Sand Eq.: 88.1

Specific Gravity: 2.64

Dry Unit Wt: 108.42 lb/ft³

Absorbtion: 1.20%





Sika! AEA F

Air Entraining Admixture

DESCRIPTION

Sika AEA-15 admixture is a liquid solution of concentrated organic materials. It has been formulated and manufactured specifically to provide stable and predictable air contents in concrete, with uniform air bubble spacing throughout the concrete matrix.

Sika AEA-15 meets the requirements of ASTMC-260 for air entraining admixtures and AASHTO M-154

APPLICATIONS

Sika AEA-15 can be used whenever air entrained concrete is desired. Readymix, precast and block producers can all achieve optimum entrained air contents, even where harsh mixes are used or fly-ash is added to the mix.

ADVANTAGES

Air entrainment is recognized as the most effective prevention against concrete scaling in exposed environments. Air entrained concrete delivers particular benefits in the form of increased concrete durability. This is important in colder climates where frost and freezethawcycles can cause scaling and damage to the concrete surface.

Air entraining agents help to prevent scaling by creating millions of microscopic air volds, allowing water trapped in the concrete to expand when the concrete treezes, thus preventing cracks caused by natural expansion. Entrained air volds in the concrete will also increase durability in harsh environments where concrete is exposed to deicing salts, marine salts and sulfates.

Workability and placeability are also improved by the lubricating action of the microscopic bubbles in the concrete. Concrete will flow batter, and bleeding and shrinkage will be reduced because less water is needed to obtain the desired workability.

HOW TO USE

DOSAGE

Addition rates will vary depending on the air content required for a particular project. Typically air contents will be specified in the range of 4 to 8 percent by volume. Other factors that may affect the amount of air entrained into the concrete include, but are not limited to, cament content and type, sand gradation, temperature and water content. Sika recommends that trial mixes be tested whenever material or any other changes are made that may affect the amount of entrained air.

Dosage rates for Sika AEA-15 will typically fail between 1/4 and 1 fl. oz. /100 lbs. (16 - 65 ml/100 kg) of cement to entrain between 4 and 6 percent air. Higher air contents may be obtained by increasing the dosage rate.

Combination with other admixtures, particularly water reducers and retarders, will tend to increase the amount of entrained air in the mix. Air contents should be checked with an air-meter after batching and dosage adjustments made at the concrete plant.

MIXING

Measure the required quantity per batch manually or with automatic dispenser equipment. Add Sika AEA-15 to mixing water or sand. Do not mix with dry cement. When used in combination with other admixtures, care must be taken to dispense each admixture separately into the mix.

PACKAGING

Sika AEA-15 is supplied in 55 gallon (208 liter) drums and bulk delivery.

STORAGE AND SHELFLIFE

Sika AEA-15 should be stored at above 35°F (2°C). If frozen, thaw and agitate thoroughly to return to its normal state before use.

Shelf life when stored in dry warehouse conditions between 50°F and 80°F (10°C-27°C) is 1 year minimum.

CAUTION

Skin and sye irritant; avoid contact. The use of NiOSH/MSHA approved respirator, safety goggles and rubber gloves is recommended. Avoid breatning product, Use with adequate ventilation. Remove contaminated clothing.

FIRST AID

Wash skin with soap and water. In case of eye contact, flush with water for 15 minutes; contacts physician, Wash clothing before re-use.

CLEAN UP

Contain and collect with absorbent material. Dispose of in accordance with local, state and federal regulations.

TYPICAL DATA FOR SIKA AEA-15					
ASTM CERTIFICATION	C-260 Air Entraining Admixtures				
COLOA	Brown				
SPECIFIC GRAVITY g/ml	1.02 ± 0.02				
pH	>8				
CHLORIDES %	<0.1				



Plastocrete® 161

Water Reducing Admixture (Type A)

DESCRIPTION

Plastocrete 161 is a polymer-type waterreducing admixture. Plastocrete 161 contains no chlorides.

Plastocrete 161 meets the requirements of ASTMC-494 Type A and AASHTOM194 Type A.

APPLICATIONS

Plastocrete 161 is recommended for use in all applications where high quality concrete with superior workability and normal setting times is required.

HOW IT WORKS

Plastocrete 161 water reducing admixture provides an economical and highly effective means of reducing the amount of mixing water required to produce concrete of a certain slump by acting as a dispersant for the cement particles in the mix.

Through this dispersing action more of the surface area of the cement particles is available for early hydration. The more cement particles hydrated by contact with the mixing water, the greater the compressive strength of the concrete.

ADVANTAGES

Plastocrete 161 is formulated as a Type A water reducer to allow 7 - 10% water reduction and maximize the benefits of increased hydration in both the hardened and plastic states.

BENEFITS

- A Reduced water content required to achieve desired slump, increases compressive and flexural strengths and allows the use of more aconomical mixes.
- ▲ Improved paste quality makes concrete easier to pump and finish.

- Consistent normal setting times throughout the recommended dosage.
- Lower water cement ratios provide decreased permeability and increased durability.

Combination with other Admixtures:

Plastocrete 161 works effectively as a single admixture or in combination with other admixtures in the Sika System. When air entrained concrete is specified, Sika recommends the use of Sika air entraining agents.

HOW TO USE

DOSAGE

Addition rates of 3 - 6 fl. oz./100 lbs. (195 - 390 ml/100 kg) of cement are recommended for general concrete applications where normal setting characteristics are desired.

MIXING

Plastocrete 161 is added at the concrete plant. Measure required quantity manually or by automated dispenser. Add into the sand at the walgh hopper or into the water line at the batch plant.

When used in combination with other admixtures, care must be taken to dispense each admixture separately into the mix. Do not mix with dry cement.

PACKAGING

Plastocrete 161 is supplied in 55 gallon (208 liter) drums and bulk delivery.

STORAGE AND SHELF-LIFE

Plastocrete 161 should be stored at above 35°F (2°C). If frozen, thaw and agitate thoroughly to return to normal state before use.

Shelf life when stored in dry warehouse conditions between 50°F and 80°F (10°C-27°C) is one year minimum.

CAUTION

Skin and eye irritant; avoid contact. The use of NIOSH/MSHA approved respirator, safety goggles and rubber gloves is recommended. Avoid breathing product. Use with adequate ventilation. Remove contaminated clothing.

FIRSTAID

Wash skin with soap and water, in case of eye contact, flush with water for 15 minutes; contact a physician. Wash clothing before re-use.

CLEAN UP

Contain and collect with absorbent material. Dispose of in accordance with local, state and federal regulations.

TYPICAL DATA FOR PLASTOCRETE 161					
ASTM CERTIFICATION	ASTM C-494 Type A				
COLOR	Brown				
SPECIFIC GRAVITY g/ml	1,17 ± 0.05				
pH	>8				
CHLORIDES %	<0.1				





Plastiment

Water Reducing and Retarding Admixture (Types B & D)

DESCRIPTION

Plastiment is a water-reducing and retarding admixture. Plastiment contains no calcium chloride or any other intentionally added chlorides.

Plastiment meets the requirements of ASTMC-494 Types B and D and AASHTO M194 Types B and D.

APPLICATIONS

Plastiment is recommended for use whenever high qualify concrete with predictable and controlled set times is desired. Use in flatwork and horizontal or vertical slipform placements where a superior surface finish is required.

ADVANTAGES

Plastiment is highly effective in hot weather concreting to offset the accelerating effects of high ambient temperatures by controlling the heat of hydration. Concrete workability is enhanced and a superior surface finish is obtained.

BENEFITS

- In mass concrete pours Plastiment controlstemperaturerise and reduces the risk of thermal cracking,
- Initial set times are delayed, allowing time for proper placement and finishing without cold joints in hot weather conditions.
- Plastiment increases concrete density and delivers increased early and ultimate, compressive and flexural strengths.

- For flatwork applications Plastiment acts as a finishing aid, workability is improved, bleeding is controlled and a superior surface finish is obtained.
- Lower water cement ratios provide decreased permeability and increased durability.

Combination with other Admixtures: Plastiment works effectively as a single admixture or in combination with other admixtures in the Sika System.

HOW TO USE

DOSAGE

Addition rates of 2 - 4 fl. oz./100 lbs. (130-260 ml/100 kg) cement are recommended for general concrete applications. Where extended retardation is required dosage may be increased. Please contact your local Sika Representative for Information and assistance.

MIXING

Add Plastiment at the concrete plant. Measure required quantity manually or by automated dispenser. Add into the sand at the weigh hopper or into the water line at the batch plant.

When used in combination with other admixtures, care must be taken to dispense each admixture separately into the mix. Do not mix with dry cement.

PACKAGING .

Plastiment is supplied in 55 gallon (208 liter) drums and bulk delivery.

STORAGE AND SHELF-LIFE

Plastiment should be stored at above 30°F (-1°C). If frozen, thaw and agitate thoroughly to return to normal state before use.

Shelf life when stored in dry warehouse conditions between 50°F and 80°F (10°C-27°C) is one year minimum.

CAUTION

Skin and eye Irritant; avoid contact. The use of NIOSH/MSHA approved respirator, safety goggles and rubber gloves is recommended. Avoid breathing product. Use with adequate ventilation. Remove contaminated clothing.

FIRSTAID

Wash skin with soap and water, in case of eye contact, flush with water for 15 minutes; contact a physician. Wash clothing before re-use.

CLEANUP

Contain and collect with absorbent material. Dispose of in accordance with local, state and federal regulations.

TYPICAL DATA FOR PLASTIMENT				
ASTMCERTIFICATION	ASTM C-494 Types B and D			
COLOR	Yellow/Green			
SPECIFIC GRAVITY g/ml	1.18 ± 0.5			
pH	>8			
CHLORIDES%	<0.1			





Sikament® 10 ESL

Extended Slump Life High Range Water Reducer (Types A & F)

DESCRIPTION

Sikament 10 ESL is a high range water reducer and superplasticizer formulated to provide extended slump life.

Sikament 10 ESL is a unique formatdehyde-free product based on a vinyl copolymer. It is a non air-entraining admixture that does not interfere with the air-void system in the concrete matrix.

Sixament 10 ESL does not contain formaldehyde, calcium chloride or any other intentionally added chlorides and will not initiate or promote the corrosion of steel present in the concrete.

Sikament 10 ESL meets the requirements for ASTMC-494 Types A and F and AASHTO M-194 Types A and F.

APPLICATIONS

Sikament 10 ESL may be used as a plant added, ready mix or precast, high range water reducer to obtain desired plasticity and maintain slump for up to two hours. Controlled set times make Sikament 10 ESL ideal for horizontal and vertical slipform applications.

ADVANTAGES

Water Reduction:

When used as a high range water reducer up to 30% water reduction can be obtained with Sikament 10 ESL because of the polymer improved cement hydration efficiency.

High Plasticity:

The superplasticizing action of Sikament 10 ESL provides high-slump flowing concrete with excellent work ability that may be placed with minimal vibration even at very low water cement ratio's.

Sikament 10 ESt. plasticized concrete is highly fluid while maintaining complete cohesion within the concrete matrix to eliminate excessive bleeding or segregation.

Extended Slump Life and Set Control: Sikamont 10 ESL has been formulated to provide controlled and predictable extended slump life for periods of 60 to 120 minutes with normal set times.

BENEFITS

The combined high maye water reduction and superplesticizing action of Sikament 10 ESL provide the following benefits in herdened concrete:

Higher early compressive strengths for earlier removal of forms and structural use of concrete.

- Higher ultimate strengths allow for greater engineering design flexibility and structural economies.
- Reduced water cement ratios produce more durable, dense concrete with reduced permeability.
- Highly effective plasticizer reduces surface defects in concrete elements and improves aesthelic appearance.

Combination with other admixtures: Sikament 10 ESL is highly effective as single admixture or in combination with other admixtures in the Sika System.

Combination with microsilies:

Sikament 10 ESL is particularly well suited for use with microsilica because of its water reduction capability and superior slump control.

HOW TO USE

ADDITION RATES

Dosage rates will vary according to materials used, ambient conditions and the requirements of a specific project. Sika recommends dosage at 6-20 ft. oz. per 100 fbs. (390-1300 ml/100 kg) of cement for general concrete applications.

Dosage rates outside the recommended range may be used where spacialized materials such as micro-silipa are specified, extreme ambient conditions are encountered or unusual project conditions require special consideration. Please contact your Sika representative for more information and assistance.

MIXING

For best superplasticizing results, add Sikament 10 ESL directly to freshly mixed concrete in the concrete mixer at the end of the batching cycle.

Sikament 10 ESL may also be dispensed es an integral material during the regular admixture batching cycle, or into freshly mixed concrete in a Ready-Mix truck at the concrete plant or at the jobsite.

To optimize the superplasticizing effect, after the addition Sikament 10 ESL Sika recommends that the combined materials be mixed for 80-100 revolutions or approximately 6 minutes, either in the concrete mixer or in the Ready-Mix truck.

PACKAGING

Sikament 10 ESL is available in 55 gallon (208 liter) drums and bulk delivery.

STORAGE AND SHELF-LIFE

Sikament 10 ESL should be stored at above 35°F (2°C). If frozen, thaw and agitate thoroughly to return to normal state.

Shelf life when stored in dry warehouse conditions between 50°F and 80°F (10°C - 27°C) is one year minimum.

CAUTION

Skin and eye irritant; avoid contact. The use of NIOSH/ MSHA approved respirator, safety goggles and rubber gloves is recommended. Avoid breathing product. Use with adequate ventilation. Remove contaminated clothing.

FIRSTAID

Wash skin with soap and water, in case of eye contact, flush with water for 15 minutes; contact a physician. Wesh clothing before re-use.

CLEANUP

Contain and collect with absorbent material. Dispose of in accordance with local, state and federal regulations.

TYPICAL DATA FOR S	IKAMENT 10 ESL	
ASTM CERTIFICATION	ASTM C-494 Types A and F	
COLOR	Brown	
SPECIFIC GRAVITY	1.11 ± 0.05	C C
PH	>6	
CHLORIDES%	< 0.1	



Date: 20-Aug-04

Cllent

Texas Standard Construction

Project:

Addison Airport - Fuel Truck Pavement Repair

Addison, Texas

Materials:

Cement: ASTM C-150, Type I/II Flyash: ASTM C-518, Class F

Coarse Agg.: ASTM C 33, 1"- #4 Crushed Stone

#N/A

Fine Agg.:

ASTM C-33, Concrete Sand ASTM C 494, Type A or D Admixtures;

ASTM C-260

1 Cubic Yard By Weight - \$3D

Use	Paving	
Mix No. Strength @ 28 Days	9994 4500 Alr	(CLASS P 7 SK FA, WR, AIR) psi
Cement Fly Ash Coarse Apgregate	526 110 2001	ibs ibs
Fine Aggregate Water Admixture Water Reducer	974 280 25	bs
AEA Total Weight	<u>4.1</u> 3691	
Unit Weight W/Cm Ratio Fly Ash Replacement Maximum Temperature Slump Entrained Air		pcf * F inches

Lattimore Materiale Company guarantees the above mix deelign will achieve the specified strongth when tested and evaluated in accordance with ABTM C172, C31, C32 and C94, and when the recommended procedures for placement and ouring outlined in ACI 305 and ACI 306 are followed.

In accordance with ASYM C94, Lattimore Materials Company shall receive all copies of testing reports, and they should be forwarded to nur Quality Control Department (fax 972-221-9647) as soon as available. Failure to forward reports in a timely fachion can delay response time in dealing with concrete concerns as wall as future project submittals.

This mix design submittel, price quote, or material specific information (aggregate properties, grading, material composition, or other information regarding materials manufactured by Lattimore Materials Company) is proprietery and confidential and not to be shared or transmitted in any form to any person or organization that is not expressly suthorized in writing by a designated official of Latilmore Materials Company. Any unauthorized person or entity in possession of this information will be prospected to the fullest extent of the

BR



Date: 20-Aug-04

Client: Texas Standard Construction

Project: Addison Airport - Fuel Truck Payement Repair

Addison, Texas

Materials: Cement: ASTM C-160, Type I/II

Flyash: ASTM C-618, Class F

Coarse Agg.: ASTM C 33, 1"-#4 Crushed Stone

Fine Agg.: ASTM C-33, Concrete Sand Admixtures: ASTM C 494, Type F

ASTM C-260

1 Cubic Yard By Weight - \$\$D

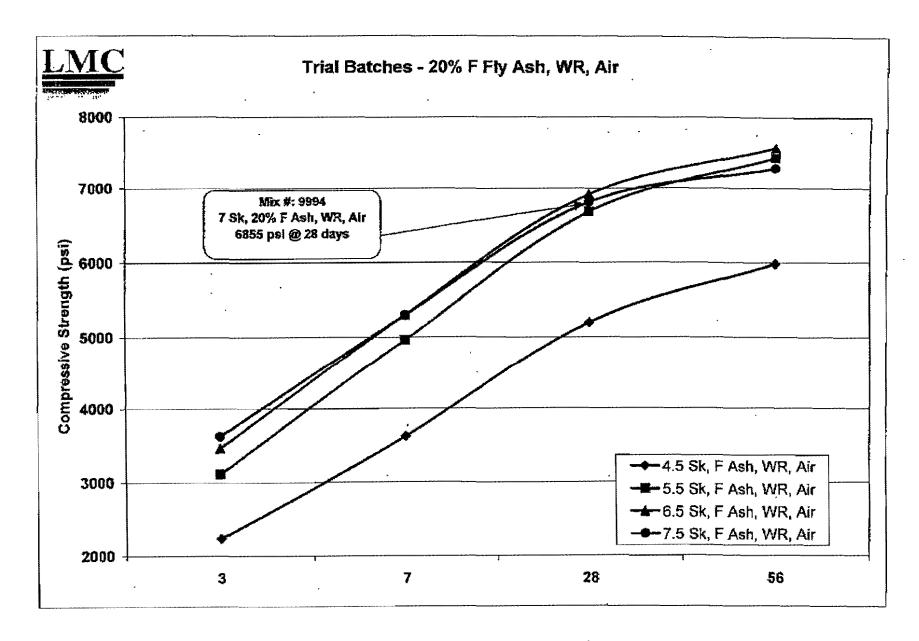
Use	Paving	
Mix No.	8139	, ,
Strangth @ 24 Hours	3600	pe!
	Air	
Cement	752	
	0	
Coarsa Aggregate	1850	lpa
Fine Aggregate	1120	
Water	250	bs
Admixture Superplasticizer	90	028
AEA	<u>4.9</u>	<u>078</u>
Total Weight	3972	ibe
N-14 18 - 1 - 1 - 1	ماريان ماريان	
Unit Weight	147.10	per
W/Cm Ratio	0.33	
Fly Ash Replacement	0%	
Maximum Temperature	95	°F
Slump	6- 8	Inches
Entrained Air	3-8%	

Lattimore Materials Company guarantees the above mix design will schieve the specified strength when tested and evaluated in accordance with ASTM C172, C31, C39 and C94, and when the recommended procedures for placement and curing outlined in ACi 306 and ACi 306 are followed.

In accordance with ASTM C94, Lattimore Materials Company shall receive all copies of testing reports, and they should be forwarded to our Quality Control Department (fax 972-221-9647) as soon as systicise. Failure to forward reports in a timely fashion can delay response time in dealing with concrete concerns as well as future project submittals.

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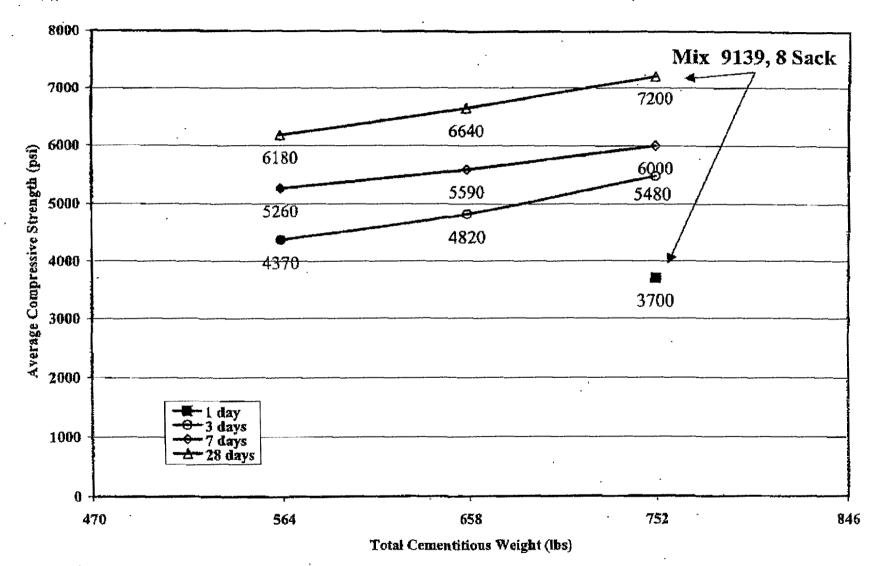


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- in the second	ज ।	20% ISG WAIR		20% ISG WAIR		20% ISG WAIR		20% ISG WAIR	
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	K[-Type!	<u> </u>	423	 0	517	-	_ §	0	705
	Martin Lake	85	ž	103	8	122	20%	141	20%
1º Brid	geport Stone	1850		1850	- <u>-</u>	1850	<u> </u>	1950	<u> </u>
1/4" Col	eman Buckshol Oncrete Sand	2	-	0	-	0	_	0	•
	own Mig. Sand	1404	0%	1802		1197	- 6	1094	
	sion Water	240	~	248	- 2	257	<u> </u>	265	
Actua	Water Used	240	<u> </u>	248	` }	257	- A	265	- ≩
	mentitious Retlo Nater Reduction	0.57	After Opsing Admixture-	0.48	After Dosing Admixture	0.42	After Dosing Admixture>	0.38	After Dosing Admixhura-S
	Retio (Actual) .	0.57	- 85	0,48	- <u>Ĉ</u>	0,42	- 8.	0.38	
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	Dose, oz / cwl	17		21	d mi	24	- S	28	. <u>\$</u>
2nd Admix	Dose, oz / yd	0.0	. §	0.0	· Ě	0,0	- §	0,0 0.0	Š
	gned Air%	4.5%	- . ¥	4.5%	- #	4,5%	- T	4.6%	
	' Dose/yd e Batched	2,7 8:39 AM		3.4		4.0 10:06 AM		4.6 10:41 AM	
***	as Batched	4.50		9:43 AM 5.25		5,00	····	5.50	
Unit W	eight (Bucket)	0.2516		0.2516		0.2516		0.2516	
	Velght (PCF)	36.35	144.48	36.90	146,56	36.90	146.66	36,35	144,48
	Grav. Air (%)	= 00/					,	2 AN	
C231 Air (%) C137 Yield - Actual		5.6% 27.11		5.0%	.71	4.8% 26,69		5.6% 27.09	
	crete Temp. (F)	53	62	53	62	54	62	54	62
	y) - Theoretical	145.09	27.00	145.38	27.00	145.72	27,00	146.01	27.00
'চ হ	500 PSI		8:39		D:43		10:06		10:41
Time of Set (hrs)	4000 PSI	Houre	6:39 Time	Hours	9:43 [ln]a	Hours	10:00 Time	Hours	10:41 Time
Få									
	1/16/2004	2	1277227	12.67					0400
	1/17/2004	12924	1030	19762	1570	24263	1930	26406	2100
	1 Day Avg. 5	% 12020 d	il in napta)	98197603	8 4570 J	24260	. 1930 🕉	6 25000	设数2100部 ³
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(psi)				数点温度		等 种种		MATERIAL SERVICE	3640
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E .	3 Day Avg.	28170	2240	39130	3110	43510	3460	45410	3620
Compressive Strengths	1/23/2004	44601	3650	62908	5010	66516	5290	70054	5570
ě	1/23/2004	46415	3690	61534	4900	66555	5300	63224	5030
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ပိ	02/13/04	63877	. 5080	84040	6690	85400	6800	83109	6610
	28 Day Avg.	05300	5200	83840	6670	86810	6610	65550	6800
	03/12/04	75 696	6020	919aB	7320	98187	7810	~: 9246<u>8</u>	7360
	03/12/04	745 (4	5930	94665	7530	.82023.	7320	90522	7200
	56 Day Avo.	107.6	5980	420.3	7430	100.0	7570 (3)	33 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7280 7.5
	PSI/LB (c+p) Slump Life	107.6 Time	8.6	120,3 Time	9.6 Slump	108.9 Time	8,7 Slump	94.5 Time	7,5 \$lump
	Initial Time/Slump	\$ **** *	Slump	11114	Sinuih	t HIIE	AIKIIII	1.0175	សាការវត្ត
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Ī	2	-4-A							
	_ 3			i		1	I	1	

8/20/2004 2:40 PM



Laboratory Trial Batches - No Ash, HRWR, Air





Field Test Data

9139 Mix No. (748)

Basis for Selection

Contractor:

McMahon Contracting

Project: Henrietta Creek Roznoke, Texas

Design Strength P.: Data Represents:

Data Updated:

3000 psi

05/16/03

Mod. Standard Deviation:

ACI 318, Table 5.3.2.2 1200

8

Required Strength fur

4200 psi

1

Tests

Average Strength: 7720

Lab	oratory:	нвс/т	erracon				Avg. Slump:	5_42	Avg. Air%	4.30		Average	Strength:	7720	psi
			Cone.			7)	Day Data	28)	Day Compre	ssive Stre	ngth Da	ta	28 Day	28 Day	
#	Date	Slump	Temp	Air%	3 Day	Cyl.I	7Avg.	Cyl.i	Cyl.2	SetAvg	Avg./3	Range	StDev.	Run.Avg.	ı
1	12/16/02	6.75	70	3.50	4520	5470	5470	8320	8180	8250	······································	140		8250	
2	12/16/02	7.00	71	3.70	5740	5950	5950	8680	8560	8620		120	262	8440	
3	12/16/02	5.75	70	4.20	5540	6650	6650	8290	7990	8140	8340	300	251	8340	
4	12/17/02	5.25	74	3.00		5410	5410	8500	7910	8210	8320	590	215	8310	
5	02/11/03	4.00	67	5.50	5110	6060	6060	7350	7410	7380	7910	60	454	8120	
б	02/13/03	5.00	69	5.00	5470	5690	5690	6800	7090	6950	7510	290	627	7930	
7	02/13/03	5,00	69	5.50	5640	5840	5840	6780	6870	683 0	7050	90	706	7770	
8	03/25/03	4.00	74	4.20	5110	6410	6410	7330	7410	7370	7050	80	669	7720	



Lattimore Materials Company

1700 Redbud Blvd, Sutle 200 McKinney, Texas 75069 972-221-4646 (main) 972-221-9647 (fax) www.lattimorematerials.com

Gradation	Analys	sis for	#57	Coarse	Aggre	gate
ASTI	V C29.	C33.	C117	C127	L D75	

Date Sampled: 15-Jul-2004

Sample:

1" x #4

Date ran: 20

20-Jul-2004

Source:

Bridgeport

Total dry wt:

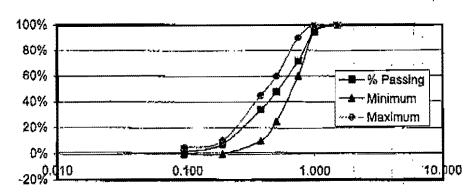
61.36

lbs.

Location:

Current

1-1/2"	1.500	0.00	0.0%	100.0%	100%	95% to 100%
1"	1.000	3.04	5.0%	95.0%	95% to 100%	*
3/4"	0.750	17.48	28.5%	71.5%		60% to 90%
1/2"	0.500	32.06	52.2%	47.8%	25% to 60%	25% to 60%
3/8"	0.375	40,70	66.3%	33.7%	*	-
#4	0.188	56.80	92.6%	7.4%	0% to 10%	0% to 5%
#8	0.094	60.56	98.7%	1.3%	0% to 5%	
PAN					-	₩



Sieve Size (In.)

Decant: 0.44%

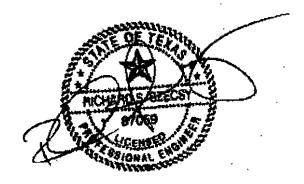
Specific Gravity: 2.68

Absorbtion:

Dry Unit Wt: 103.43 lb/ft³

0.86%

L.A. Abrasion: 26





Lattimore Materials Company

1700 Redbud Blvd, Sutie 200 McKinney, Texas 75069 972-221-4646 (main) 972-221-9647 (fax) www.lattimorematerials.com

Gradation Analysis for Fine Aggregates ASTM C29, C33, C117, C128 & D75

Date Sampled: 19-Jul-2004 Sample: Spec

Date ran: 21-Jul-2004 Source: Denton Blend

Total dry wt: 746.3 grams Location: Current

1948 - 184 1840 - 184		and the second		7 176 Sec.	400W	Was an all red in the concil.
***************************************		الأسامات يتناثروا		ل سنتانات در در	DEE EMPHORISE EMP	
3/8"	0.375	0.0	0.0%	100.0%	100%	0%
1/4"	0.250	4.5	0.6%	99.4%	•	
#4	0.188	19.4	2.6%	97.4%	95% to 100%	0% to 5%
#8	0.094	143.1	19.2%	80.8%	80% to 100%	0% to 20%
#10	0.079	190.0	25.5%	74.5%	P	<u>-</u>
#16	0.047	292.2	39.2%	60.8%	50% to 85%	15% to 50%
#20	0.033	345.4	46.3%	53.7%	-	. <u>-</u>
#30	0.023	408.5	54.7%	45.3%	25% to 60%	35% to 75%
#40	0.017	505.8	67.8%	32.2%	-	-
#50	0.012	607.2	81.4%	18.6%	10% to 30%	65% to 90%
#80	0.007	685.4	91.8%	8.2%	•	
#100	0.006	722.5	96.8%	3.2%	2% to 10%	90% to 100%
#200	0.003	737.2	98.8%	1.2%	0% to 3%	97% to 100%
PAN	I				-	-

Sand Eq.: 88.1

Specific Gravity: 2.64

Dry Unit Wt: 108.42 lb/ft³

Absorbtion: 1.20%



SIKE AEATE

Air Entraining Admixture

DESCRIPTION

Sika AEA-15 admixture is a liquid solution of concentrated organic materials. It has been formulated and manufactured specifically to provide stable and predictable air contents in concrete, with uniform air bubble spacing throughout the concrete matrix.

Sika AEA-15 meets the requirements of ASTMC-260 for air entraining admixtures and AASHTO M-154

APPLICATIONS

Sika AEA-15 can be used whenever air entrained concrete is desired. Readymix, precast and block producers can all achieve optimum entrained air contents, even where harsh mixes are used or fly-ash is added to the mix,

ADVANTAGES

Air entrainment is recognized as the most effective prevention against concrete scaling in exposed environments. Air entrained concrete delivers particular benefits in the form of increased concrete durability. This is important in colder climates where frost and freezethaw cycles can cause scaling and damage to the concrete surface.

Air entraining agents help to prevent scaling by creating millions of microscopic air volds, allowing water trapped in the concrete to expand when the concrete freezes, thus preventing cracks caused by natural expansion. Entrained air volds in the concrete will also increase durability in harsh environmente where concrete is exposed to delcing salts, manne salts and sulfates.

Workability and placeability are also improved by the lubricating action of the microscopic bubbles in the concrete. Concrete will flow batter, and bleeding and shrinkage will be reduced because less water is needed to obtain the desired workability.

HOW TO USE

DOSAGE

Addition rates will vary depending on the air content required for a particular project. Typically air contents will be specified in the range of 4 to 8 percent by volume. Other factors that may affect the amount of air entrained into the concrete include, but are not limited to, cement content and type, sand gradation, temperature and water content whenever material or any other changes are made that may affect the amount of entrained air.

Dosage rates for Sika AEA-15 will typically fall between 1/4 and 1 fl. oz./100 lbs. (16 - 65 mi/100 kg) of cement to entrain between 4 and 6 percent alr. Higher air contents may be obtained by increasing the dosage rate.

Combination with other admixtures, particularly water reducers and retarders, will tend to increase the amount of entrained air in the mix. Air contents should be checked with an air-meter after batching and dosage adjustments made at the concrete plant.

MIXING

Measure the required quantity per batch manually or with automatic dispenser equipment, Add Sika AEA-15 to mixing water or sand. Do not mix with dry cement. When used in combination withother

admixtures, care must be taken to dispense each admixture separately into the mix.

PACKAGING

Sike AEA-15 is supplied in 55 gallon (208 liter) drums and bulk delivery.

STORAGE AND SHELFLIFE

Sika AEA-15 should be stored at above 35°F (2°C). If frozen, thaw and agitate thoroughly to return to its normal state before use.

Shelf life when stored in dry warehouse conditions between 50°F and 80°F (10°C-27°C) is 1 year minimum.

CAUTION

Skin and eye irritant; avoid contact. The use of NIOSH/MSHA approved respirator, safety goggles and rubber gloves is recommended. Avoid breathing product. Use with adequate ventilation. Remove contaminated clothing.

FIRST AID

Wash skin with soap and water. In case of eye contact, flush with water for 15 minutes; contact, physician. Wash clothing before re-use.

CLEAN UP

Contain and collect with absorbent material. Dispose of in accordance with local, state and federal regulations.

TYPICAL DATA FOR SIKA AEA-15							
ASTM CERTIFICATION C-260 Air Entraining Admixtures							
Brown .							
1.02 ± 0.02	-						
>8	,		·				
CHLORIDES% <0.1							
	C-260 Air Entraining Brown 1.02 ± 0.02 > 8	C-260 Air Entraining Admixture Brown 1.02 ± 0.02 > 8	C-260 Air Entraining Admixtures Brown 1.02 ± 0.02 > 8				



Plastocrete® 161

Water Reducing Admixture (Type A)

DESCRIPTION

Plastocrete 161 is a polymer-type waterreducing admixture. Plastocrete 161 contains no chlorides.

Plastocrete 161 meets the requirements of ASTMC-494 Type A and AASHTO M194 Type A.

APPLICATIONS

Plastocrete 161 is recommended for use in all applications where high quality concrete with superior workability and normal setting times is required.

HOW IT WORKS

Plastocrete 161 water reducing admixture provides an economical and highly effective means of reducing the amount of mixing water required to produce concrete of a certain slump by acting as a dispersant for the cement particles in the mix.

Through this dispersing action more of the surface area of the cement particles is available for early hydration. The more cement particles hydrated by contact with the mixing water, the greater the compressive strength of the concrete.

ADVANTAGES

Plastocrete 161 is formulated as a Type A water reducer to allow 7 - 10% water reduction and maximize the benefits of increased hydration in both the hardened and plastic states.

BENEFITS

- Reduced water content required to achieve desired slump, increases compressive and flexural strengths and allows the use of more economical mixes.
- Improved paste quality makes concrete easier to pump and finish.

- Consistent normal setting times throughout the recommended dosage.
- Lower water cement ratios provide decreased permeability and increased durability.

Combination with other Admixtures: Plastocrete 161 works effectively as a single admixture or in combination with other admixtures in the Sika System. When air entrained concrete is specified, Sika recommends the use of Sika air entraining agents.

HOW TO USE

DOSAGE

Addition rates of 3 - 6 fl. oz./100 lbs. (195 - 390 mi/100 kg) of cement are recommended for general concrete applications where normal setting characteristics are desired.

MIXING

Plastocrete 161 is added at the concrete plant, Messurerequired quantity manually or by automated dispenser. Add into the sand at the weigh hopper or into the water line at the batch plant.

When used in combination with other admixtures, care must be taken to dispense each admixture separately into the mix. Do not mix with dry cement.

PACKAGING

Plastocrete 161 is supplied in 55 gallon (208 liter) drums and bulk delivery.

STORAGEAND SHELF-LIFE

Plastocrete 161 should be stored at above 35°F (2°C). If frozen, thaw and agitate thoroughly to return to normal state before use.

Shelf Ille when stored in dry warehouse conditions between 50°F and 80°F (10°C-27°C) is one year minimum.

CAUTION

Skin and eye irritant; avoid contact. The use of NIOSH/MSHA approved respirator, safety goggles and rubber gloves is recommended, Avoid breathing product. Use with adequate ventilation. Remove contaminated clothing.

FIRST AID

Wash skin with soap and water. In case of eye contact, thus h with water for 15 minutes; contact a physician. Wash clothing before re-use.

CLEAN UP

Contain and collect with absorbent material. Dispose of in accordance with local, state and federal regulations.

TYPICAL DATA FOR PLAS	TOCRETE 161	
ASTM CERTIFICATION	ASTM C-494 Type A	•
COLOR	Brown	
SPECIFIC GRAVITY g/ml	1,17 ± 0.05	
pH	>8	
CHLORIDES %	<0.1	





Plastiment

Water Reducing and Retarding Admixture (Types B & D)

DESCRIPTION

Plastiment is a water-reducing and retarding admixture. Plastiment contains no calcium chloride or any other intentionally added chlorides.

Plastiment meets the requirements of ASTMC-494 Types B and D and AASHTO M194 Types B and D.

APPLICATIONS

Plastiment is recommended for use whenever high quality concrete with predictable and controlled set times is desired. Use in flatwork and horizontal or vertical slipform placements where a superior surface finish is required.

ADVANTAGES

Plastiment is highly affective in hot weather concreting to offset the accelerating effects of high ambient temperatures by controlling the heat of hydration. Concrete workability is enhanced and a superior surface finish is obtained.

BENEFITS

- In mass concrete pours Plastiment controls temperature rise and reduces the risk of thermal cracking.
- Initial set times are delayed, allowing time for proper placement and finishing without cold joints in hot weather conditions.
- Plastiment increases concrete density and delivers increased early and ultimate, compressive and flexural strengths.

- For flatwork applications Plastiment acts as a finishing aid, workability is improved, bleeding is controlled and a superior surface finish is obtained.
- Lower water cement ratios provide decreased permeability and increased durability.

Combination with other Admixtures: Plastiment works effectively as a single admixture or in combination with other admixtures in the Sika System.

HOW TO USE

DOSAGE

Addition rates of 2 - 4 ff. oz./100 lbs. (130-260 ml/100 kg) cement are recommended for general concrete applications. Where extended retardation is required dosage may be increased. Please contact your local Sika Representative for information and assistance.

MIXING

Add Plastiment at the concrete plant. Measure required quantity manually or by automated dispenser. Add into the sand at the weigh hopper or into the water line at the batch plant.

When used in combination with other admixtures, care must be taken to dispense each admixture separately into the mix. Do not mix with dry cement.

PACKAGING ...

Plastiment is supplied in 55 gallon (208 liter) drums and bulk delivery.

STORAGE AND SHELF-LIFE

Plastiment should be stored at above 30°F (-1°C). If frozen, thaw and agitate thoroughly to return to normal state before use.

Shelf life when stored in dry warehouse conditions between 50°F and 80°F (10°C-27°C) is one year minimum.

CAUTION

Skin and eye irritant; avoid contact. The use of NIOSH/MSHA approved respirator, safety goggles and rubber gloves is recommended. Avoid breathing product. Use with adequate ventilation. Remove contaminated clothing.

FIRST AID

Wash skin with soap and water, in case of eye contact, flush with water for 15 minutes; contact a physician. Wash clothing before re-use.

CLEANUP

Contain and collect with absorbent material. Dispose of in eccordance with local, state and federal regulations.

TYPICAL DATA FOR PLAS	STIMENT		
ASTM CERTIFICATION	ASTM C-494 Types B and D	-	
COLOR	Yellow/Green .	"	
SPECIFIC GRAVITY g/mi	1.18 ± 0.5		
рН	>8		
CHLORIDES %	< 0.1		





Sikament® 10 ESL

Extended Slump Life High Range Water Reducer (Types A & F)

DESCRIPTION

Sikament 10 ESL is a high range water reducer and superplasticizer formulated to provide extended slump life.

Sikament 10 ESC is a unique formaldehyde-free product based on a vinyl copolymer. It is a non air-entraining admixture that does not interfere with the air-vold system in the concrete matrix.

Sikament 10 ESL does not contain formaldehyde, calcium chloride or any other intentionally added chlorides and will not initiate or promote the corrosion of steel present in the concrete.

Sikament 10 ESL meets the requirements for ASTMC-494 Types A and F and AASHTO M-194 Types A and F.

APPLICATIONS

Sikament to ESL may be used as a plant added, ready mix or precest, high range water reducer to obtain desired plasticity and maintain slump for up to two hours. Controlled set times make Sikament 10 ESL ideal for horizontal and vertical slipform applications.

ADVANTAGES

Water Reduction:

When used as a high range water reducer up to 30% water reduction can be obtained with Sikement 10 ESL because of the polymer improved cement hydration efficiency.

High Plasticity:

The superplasticizing action of Sikament 10 ESL provides high-slump flowing concrete with excellent work ability that may be placed with minimal vibration even at very low water cement ratio's.

Sikament 10 ESL plasticized concrete is highly fluid while maintaining complete cohesion within the concrete matrix to eliminate excessive bleeding or segregation.

Extended Slump Life and Set Control: Sikamont 10 ESL has been formulated to provide controlled and predictable extended slump life for periods of 60 to 120 minutes with normal set times.

BENEFITS

The combined high range water reduction and superplasticizing action of Sikament 10 ESL provide the following benefits in hardened concrete:

Higher early compressive strengths for earlier removal of forms and structural use of concrete.

- Higher ultimate strengths allow for greater engineering design flexibility and structural economies.
- Reduced water cement ratios produce more durable, dense concrete with reduced permeability.
- Highly effective plasticizer reduces surface defects in concrete elements and improves aesthetic appearance.

Combination with other admixtures; Sikament 10 ESL is highly effective as single admixture or in combination with other admixtures in the Sika System.

Combination with microsilica:

Stkament 10 ESL is particularly well suited for use with microsilica because of its water reduction capability and superior slump control.

HOW TO USE

ADDITION HATES

Dosage rates will vary according to materials used, ambient conditions and the requirements of a specific project. Sika recommends dosage at 8-20 ft. oz. per 100 lbs. (390-1300 ml/100 kg) of cement for general concrete applications.

Dosage rates outside the recommended range may be used where specialized materials such as micro-sitioa are specified, extreme ambient conditions are encountered or unusual project conditions require special consideration. Please contact your Sika representative for more information and assistance.

MIXING

For best superplasticizing results, add Sikament 10 ESL directly to freshly mixed concrete in the concrete mixer at the end of the batching cycle. Sikament 10 ESL may also be dispensed as an integral material during the regular admixture batching cycle, or into freshly mixed concrete in a Ready-Mix truck at the concrete plant or at the jobsite.

To optimize the superplasticizing effect, after the addition Sikament 10 ESL Sika recommends that the combined materials be mixed for 80-100 revolutions or approximately 6 minutes, either in the concrete mixer or in the Ready-Mix truck.

PACKAGING

Sikament 10 ESL is available in 55 gallon (208 liter) drums and bulk delivery.

STORAGE AND SHELF-LIFE

Sikament 10 ESL should be stored at above 35°F (2°C). If frozen, thaw and agitate thoroughly to return to normal state.

Shelf life when stored in dry warehouse conditions between 50°F and 80°F (10°C - 27°C) is one year minimum.

CAUTION

Skin and eye irritant; avoid contact. The use of NIOSH/MSHA approved respirator, safety goggles and rubber gloves is recommended. Avoid breathing product. Use with adequate ventilation. Remove contaminated clothing.

FIRST AID

Wash skin with soap and water, in case of eye contact, flush with water for 15 minutes; contact a physician. Wesh clothing before re-use.

CLEANUP

Contain and collect with absorbent material. Dispose of in accordance with local, state and federal regulations.

TYPICAL DATA FOR SIKAMENT 10 ESL ASTM CERTIFICATION ASTM C-494 Types A and F COLOR Brown SPECIFIC GRAVITY 1.11 ± 0.05 PH > 6 CHLORIDES% < 0.1



Date: 20-Aug-04

Citent:

Texas Standard Construction

Project:

Addison Airport - Fuel Truck Pavement Repair

Addison, Texas

Materials:

Cement: ASTM C-150, Type I/II

Flyash: ASTM C-818, Class F Coarse Agg.: ASTM C 33, 1"-#4 Crushed Stone

#N/A

Fine Agg.:

ASTM C-33, Concrete Sand

Admbdures: ASTM C 494, Type A or D

ASTM C-260

1 Cubic Yard By Weight - \$SD

Use	Paving
Mix No.	9994 (CLASS P 7 SK FA, WR, AIR
Strength @ 28 Days	4500 ps)
	Air
Cement	526 lbs
Fly Ash	110 lbs
Coarse Aggregate	2001 (bs
Fine Aggregate	974 lbs
Water	280 lbs
Admixture Water Reducer	25 026
AEA	4.1 <u>ozs</u>
Total Weight	3891 lbs
Unit Weight	1 44 ,12 pof
W/Cm Ratio	0.44
Fly Ash Replacement	17%
Maximum Temperature	95 ° F
Slump	3-5 inches
Entrained Air	3-6%

Lattimore Materials Company guarantees the above mix design will achieve the specified strength when tested end evaluated in accordance with ASTM C172, C31, C38 and C84, and when the recommended procedures for placement and curing outlined in ACI 385 and ACI 385 are followed.

In accordance with ASTM C94, Lattimore Materials Company shall receive all copies of testing reports, and they should be forwarded to our Quality Control Department (fax 972-221-9647) as soon as available. Failure to forward reports in a timely fashion can delay response time in dealing with concrete concerns as well as future project submittals.

This mix design aubmittal, price quote, or material specific information (aggregate properties, grading, material composition, or other information regarding materials menufactured by Lattimore Materials Company) is proprietery and confidential end not to be shared or transmitted in any form to any person or organization that is not expressly sufficiently in writing by a designated official of Lattimore Materials Company. Any unauthorized person or entity in possession of this information will be prosecuted to the fullest extent of the law.

BR



Date:

20-Aug-04

Client:

Texas Standard Construction

Project

Addison Almont - Fuel Truck Pevement Repair

Addison, Texas

Materials:

Cement: Flyash: ASTM C-160, Type I/II ASTM C-618, Class F

Coarse Agg.: ASTM C 33, 1"- #4 Crushed Stone

Fine Agg.:

ASTM C-33, Concrete Sand

Admixtures: ASTM C 494, Type F

ASTM C-260

1 Cubic Yard By Weight - \$\$D

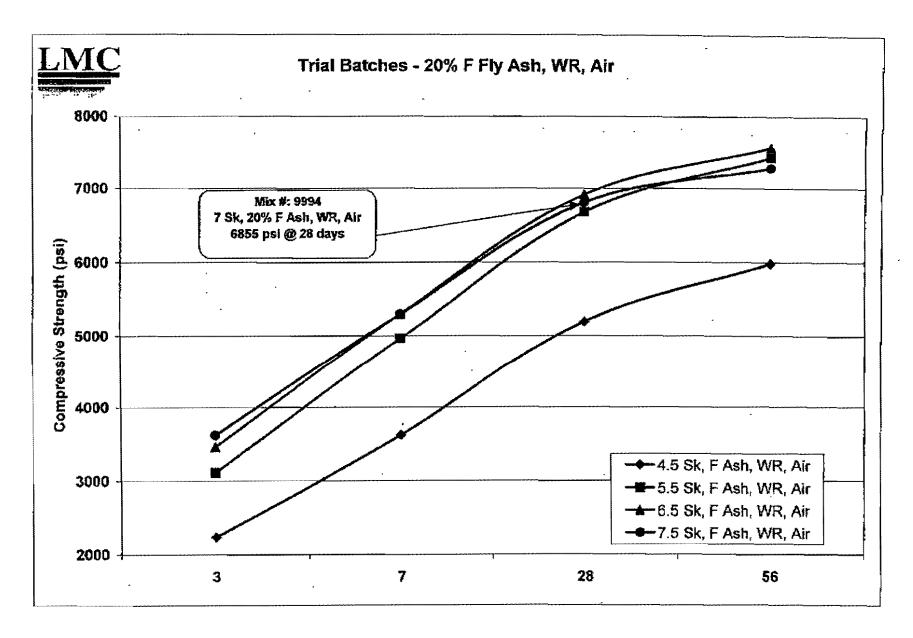
Use	Paving	
Mix No. Strangtin @ 24 Hours	9139 3600	fa minten to mid
Cement	Air 752 0	2.4.2
Coarse Aggregate	1850	1-4-2
Fine Aggregate Water Admixture Superplasticizer	1120 250 90	(bs
AEA Total Weight	<u>4.9</u> 3972	ozs ibe
Unit Weight W/Cm Ratio Fly Ash Replacement Maximum Temperature Slump Entrained Air	147.10 0.33 0% 95 6-8 3-6%	•

Lattimore Materials Company guarantees the above mix design will schleve the specified strength when tested and evaluated in accordance with ASTM C172, C31, C39 and C34, and when the recommended procedures for placement and curing outlined in ACI 306 and ACI 306 are followed.

in accordance with ASTM C94, Lattimore Materiale Company shall receive all copies of testing reports, and they should be forwarded to our Quality Control Department (fax 972-221-9547) as soon so available. Failure to forward reports in a timely fashion can delay response time in dealing with concrete concerns as well as future project submittals.

This mix design submittal, price quote, or material specific information (aggregate properties, grading, material composition, or other information regarding materials manufactured by Latilmore Materials Company) is proprietary and confidential and not to be shared or transmitted in any form to any person or organization that is not expressly authorized in writing by a designated official of Latilmore Materials Company. Any unauthorized person or entity in possession of this information will be prosecuted to the fullest extent of the law.

BR

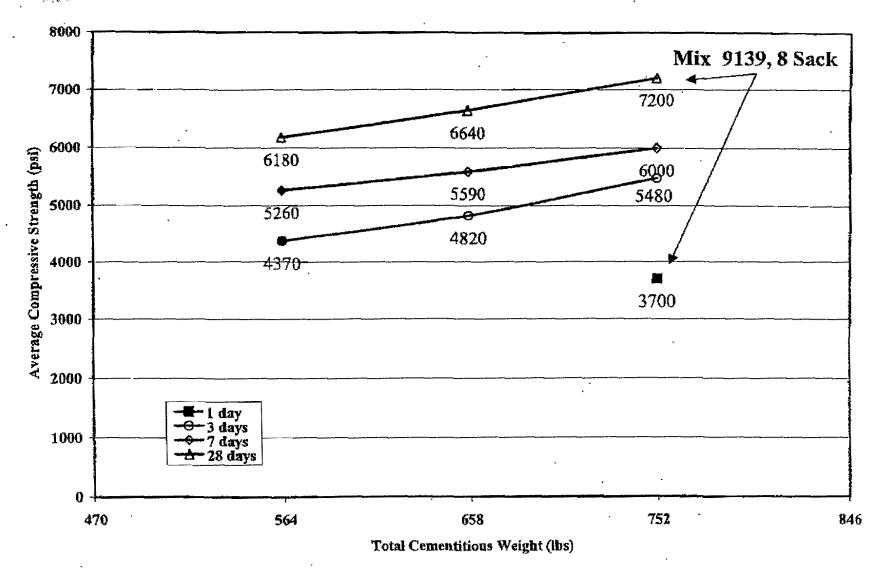


LMC			17		18		19		20
		20% ISG WAIR		20% ISG WAIR		20% (8G WAIR		20% ISG WAIR	
Mix			077		217	5507		5725	
Holoam (Cement - Type I/II Cement - Type I	338		414	~ o.	488.6	- è	564	
	Ki-Type i	0	- ਨ	0	- 57	0	- ģ	0	705
ISG	Martin Lake	85	20%	103	ğ	122	20%	141	25
	igeport Stone	1850	· · · · · · · · · · · · · · · · · · ·	1860	<u> </u>	1850	<u> </u>	1850	37
	eman Buckshot	Ö		0	····	0	···	0	-
	Concrete Sand	1404	~ •	1302	. a	1197		1094	
	sign Water	240	98	0 747	8	<u> </u>	2%	0	8
Actus	Water Used	240		248	- }	267 257	- <u>></u>	265 265	- ≱
Water/Ce	mentitious Ratio	0.57	After Dosing Admixture->	0.48	After Dosing Admixture-	0.42	After Dosing Admixture->	0.38	After Dosing Admixture>
Percent V	Nater Reduction Ratio (Actual)		- basi				. Si		- 08
	Dose, oz / cwt	0.57	- 3	0,48	- ອີ	0,42	- <u>E</u>	0.38	- 8
161	Dose, oz / yd	17	Ę	21	- <u>È</u>	24	- 2	28	- 6
2nd Admix	Dose, oz / cwt	0.0		0,0		0.0		0.0	_ <u>\$</u>
Oes	Dose, az / yd Igned Air%	0.0 4.5%	~ }	0.0 4.5%	- 5	4.5%	- 🖣	0.0 4.5%	- ₹
	Dose/yd	2,7	¥	3,4	- Ý	4.0	¥	4.6	_ V.
	e Batched	9:39 AM		9;43 AM		10:06 AM		10:41 AM	
	s Batched	4,50		5,25	***************************************	5,00		5,50	
	sight (Bucket)	0.2516		0.2516		0.2516		0.2516	
	Velght (PCF)	36.35	144.48	36.90	145.66	36.90	146,65	36.35	144,48
	Gray, A/r (%)	E 69/		5,0%	····	4.8%	· · ·	E 20/	
C231 Air (%) C137 Yield - Actual		5.6%	.11		.71		,69	5.6%	.09
	crete Temp. (F)	53	62	53	62	54	62	54	62
	y) - Theoretical	145.09	27.00	145.38	27.0D	145.72	27.00	146,01	27.00
	500 PSI	170,00	8:39	140,00	9:43	340.74	10:06	1-70,43	10:41
9 ⊆	4000 PSI		6:39		9:43		10:06		10:41
Time of Set (hrs)		Hours	Time	Hours	Time	Hours	Time	Hours	Tinre
	3/16/2004	· · · · · · · · · · · · · · · · · · ·	* Wolds	1200 (515 (SI)	Street Galle	of adjust and	1. 1. V. 1. W. (1. W.)	in in the second	
	1/17/2004	12924	1030	19762	1570	24263	1930	25406	2100
	1/17/2004				1 1 1				
	1 Day Avg. K	M 12920#	4 page 3	劉图9760景	€ 4570 d	24260	1930	25440	经最2100数
	1/18/20D4								
(psi)	1/18/2004	E MANAGEMENT - SE	Activities and an about	Singraphy Availa	Same and the last time		FERENDERS SER	or the sales of the	Gentle State Control
9	2 Day tvo si		artic de			评道杨晓	经产品的	7 17 10 10 1	A42.8 (45.5)
SE I	1/19/2004 1/19/2004	28025	2230	39132	3110	43153	3430 3490	45725 45097	3640 3590
Ē	3 Day Avg.	28314 28170	2250 2240	39130	3110	43867 43510	3460	45410	3620
₽	1/23/2004	44601	3650	62908	5010	66516	5290	70054	5570
Compressive Strengths	1/23/2004	46415	3690	61534	4900	66555	5300	63224	5030
<u>\$</u>	1/23/2004) - 1			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Š	7 Day Avg	i. 46510 ∴	j∜ 3620 j	62220	4960	66540	530U/3	66640	5300
ğ.	02/13/04	65316	5200	80357	6390	84620	6730	88901	7070
5	92/13/04	66720	5310	87130	6930	90403	7190	84631	6730
O	02/13/04	63877	5080	84040	6690	85400	6800	83109	6610
	28 Day Avg.	65300°	5200	83840	6620 %	\$ 8681G	6810		6800
	03/12/04	75696	6020	91948	7320	98187	7810	92468	7360
İ	03/12/04	74514	5930	04665	7530	92023	7320	90522	7200
	56 Day Avo	10 T	5980	('7) (1'8 ₀)	7430		<u>7570</u>		7280
	PSI/LB (c+p)	107.6	8.6	120,3	9.6	108.9	8.7	94.5	7,5
ŀ	Slump Life	Time	Slump	Time	Slump	Time	\$lump	Time	Slump
}	Initial Time/Slump				<u> </u>				
	<u> </u>								
ŀ	3			~·~	<u> </u>	 			
			L		L	<u> </u>		<u> </u>	

5617 20% F ASIL-SICXII



Laboratory Trial Batches - No Ash, HRWR, Air



L	N	1	C
-11-1		-	

Field Test Data

9739 Mix No. (748)

Basis for Selection

Contractor: Project:

McMahon Contracting

Henrietta Creek

Roznoke, Texas

Data Updated: Design Strength ('ci 05/16/03

ACI 318, Table 5.3.2.2

Mod. Standard Deviation:

1200

Data Represents:

3000 psi 2 Tests

Required Strength Part 4200 7720 Average Strength:

Lab	Laboratory: HBC/Terracon			Avg. Slump: 5.42 Avg. Ai		Avg. Air	vg. Air% 4.30 Average		e Strength: 7720		psi				
			Cope.			71	Day Data	28]	Day Compressive Strength Data			ta	28 Day	28 Day	
#	Date	Slump	Temp	Air%	3 Day	Cyl.1	7Avg.	Cyl.1	Cyl.2	SetAvg	Avg./3	Range	SLDev.	Run.Avg.	
1	12/16/02	6.75	70	3.50	4520	5470	5470	8320	8180	8250		140	,	8250	
2	12/16/02	7.00	71	3.70	5740	5950	5950	8680	8560	8620		120	262	8440	
3	12/16/02	5.75	70	4,20	5540	·6650	6659	8290	7990	8140	8340	300	251	8340	
4	12/17/02	5.25	74	3.00		5410	5410	8500	7910	8210	8320	590	215	8310	
5	02/11/03	4.00	67	5.50	5110	6060	6060	7350	7410	7380	7910	60	454	8120	
б	02/13/03	5.00	69	5.00	5470	5690	5690	6800	7090	6950	7510	290	627	7930	
7	02/13/03	5.00	69	5.50	5640	5840	5840	6780	6870	6830	7050	90	706	7770	
8	03/25/03	4.00	74	4.20	5110	6410	6410	7330	7410	7370	7050	80	669	7720	



Lattimore Materials Company

1700 Redbud Blvd, Sutie 200 McKinney, Texas 75069 972-221-4646 (main) 972-221-9647 (fax) www.lattimorematerials.com

Gradation	Analys	is for #57	Coarse	Aggregate
AST	И C29.	C33, C117	C127 &	& D75

Date Sampled: 15-Jul-2004

Sample:

1" x #4

Date ran:

20-Jul-2004

Source:

Bridgeport

Total dry wt:

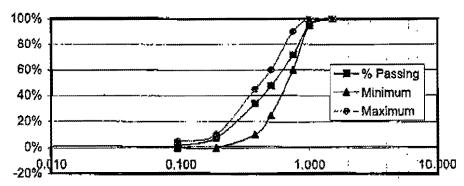
61.36

lbs.

Location:

Current

						والمقار المستراج وموسا والتراث
1-1/2"	1,500	0.00	0.0%	100.0%	100%	95% to 100%
1"	1.000	3.04	5.0%	95.0%	95% to 100%	***
3/4"	0.750	17.48	28.5%	71.5%		60% to 90%
1/2"	0.500	32.06	52.2%	47.8%	25% to 60%	25% to 60%
3/8"	0.375	40.70	66.3%	33.7%	**	-
#4	0.188	56.80	92.6%	7.4%	0% to 10%	0% to 5%
#8	0.094	60.56	98.7%	1.3%	0% to 5%	
PAN					-	***



Sieve Size (In.)

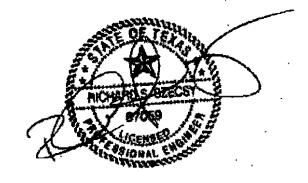
Absorbtion: 0.86%

Decant: 0.44%

Specific Gravity: 2.68

Dry Unit Wt: 103.43 lb/ft³

L.A. Abrasion: 26





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Gradatio	n Ana	llysis	for F	ine	Aggi	regates
ASTM	C29.	C33.	C117	. C1	28 &	D75

Date Sampled: 19-Jul-2004 Sample: Spec

Date ran: 21-Jul-2004 Source: Denton Blend

Total dry wt: 746.3 grams Location: Current

		N. Z. Z. X.		**************************************		Washing the second
					[1] [2] [2] [2] [2] [2] [2] [2] [2] [2] [2	
3/8"	0.375	0.0	0.0%	100.0%	100%	0%
1/4"	0.250	4.5	0.6%	99,4%	•	**
#4	0.188	19.4	2.6%	97.4%	95% to 100%	· 0% to 5%
#8	0.094	143.1	19.2%	80.8%	80% to 100%	0% to 20%
#10	0.079	190.0	25.5%	74.5%	-	*
#16	0.047	292.2	39.2%	60.8%	50% to 85%	15% to 50%
#20	0.033	345.4	46.3%	53.7%	-	
#30	0.023	408.5	54.7%	45.3%	25% to 60%	35% to 75%
#40	0.017	505.8	67.8%	32.2%	.	и
#50	0.012	607.2	81.4%	18.6%	10% to 30%	65% to 90%
#80	0.007	685.4	91.8%	8.2%	-	* '
#100	0.006	722.5	96.8%	3.2%	2% to 10%	90% to 100%
#200	0.003	737.2	98.8%	1.2%	0% to 3%	97% to 100%
PAN		u /			-	**

Fineness Mod.: 2.94

Sand Eq.: 88.1

Specific Gravity: 2.64

Dry Unit Wt: 108.42 lb/ft³

Absorbtion: 1.20%



Sika * AEA15

Air Entraining Admixture

DESCRIPTION

Sika AEA-15 admixture is a liquid solution of concentrated organic materials, it has been formulated and manufactured specifically to provide stable and predictable air contents in concrete, with uniform air bubble spacing throughout the concrete matrix.

Sika AEA-15 meets the requirements of ASTMC-260 for air entraining admixtures and AASHTO M-154

APPLICATIONS

Sika AEA-16 can be used whenever air entrained concrete is desired. Readymix, precast and block producers can all achieve optimum entrained air contents, even where harsh mixes are used or fly-ash is added to the mix.

ADVANTAGES

Air entrainment is recognized as the most effective prevention against concrete scaling in exposed environments. Air entrained concrete delivers particular benefits in the form of increased concrete durability. This is important in colder climates where frost and freezethaw cycles can cause scaling and damage to the concrete surface.

Air entraining agents help to prevent scaling by creating millions of microscopic air voids, allowing water trapped in the concrete to expand when the concrete freezes, thus preventing cracks caused by natural expansion. Entrained air voids in the concrete will also increase durability in harsh environments where concrete is exposed to deicing salts, marine salts and sulfates.

Workability and placeability are also improved by the lubricating action of the microscopic bubbles in the concrete. Concrete will flow batter, and bleeding and strinkage will be reduced because less water is needed to obtain the desired workability.

HOW TO USE

DOSAGE

Addition rates will vary depending on the air content required for a particular project. Typically air contents will be specified in the range of 4 to 8 percent by volume. Other factors that may affect the amount of air entrained into the concrete include, but are not limited to, cement content and type, sand gradation, temperature and water content. Sika recommends the trial mixes be tested whenever material or any other changes are made that may affect the amount of entrained air.

Dosage rates for Sika AEA-15 will typically fall between 1/4 and 1 fl. oz./100 lbs. (16 - 65 ml/100 kg) of cement to entrain between 4 and 6 percent air. Higher eir contents may be obtained by increasing the dosage rate.

Combination with other admixtures, particularly water reducers and retarders, will tend to increase the amount of entrained air in the mix. Air contents should be checked with an air-meter after batching and do sage adjustments made at the concrete plant.

MIXING

Measure the required quantity per batch manually or with automatic dispenser equipment, Add Sika AEA-15 to mixing water or sand. Do not mix with dry cament. When used in combination with other

admixtures; care must be taken to dispense each admixture separately into the mix.

PACKAGING

Sika AEA-15 is supplied in 55 gallon (208 liter) drums and bulk delivery.

STORAGE AND SHELFLIFE

Sika AEA-15 should be stored at above 35°F (2°C). If frozen, thaw and agitate thoroughly to return to its normal state before use.

Shelf life when stored in dry warehouse conditions between 50°F and 80°F (10°C-27°C) is 1 year minimum.

CAUTION

Skin and sye irritant; avoid contact. The use of NiOSH/MSHA approved respirator, safety goggles and rubber gloves is recommended. Avoid breathing product, Use with adequate ventilation. Remove contaminated clothing.

FIRST AID

Wash skin with soap and water. In case of eye contact, flush with water for 15 minutes; contact aphysician. Wash ciothing before re-use.

CLEAN UP

Contain and collect with absorbent material. Dispose of in accordance with local, state and federal regulations.

TYPICAL DATA FOR SIKA AEA-15								
ASTM CERTIFICATION	C-260 Air Entraining Admixtures							
COLOR	Brown							
SPECIFIC GRAVITY g/ml	1.02 ± 0.02							
рH	>8							
CHLORIDES%	<0.1							



Plastocrete® 161

Water Reducing Admixture (Type A)

DESCRIPTION.

Plastocrete 161 is a polymer-type waterreducing admixture. Plastocrete 161 contains no chlorides,

Plastocrete 161 meets the requirements of ASTMC-494 Type A and AASHTO M194 Type A.

APPLICATIONS

Plastocrete 161 is recommended for use in all applications where high quality concrete with superior workability and normal setting times is required.

HOW IT WORKS

Plastocrete 161 water reducing admixture provides an economical and highly effective means of reducing the amount of risking water required to produce concrete of a certain slump by acting as a dispersant for the cement particles in the mix

Through this dispersing action more of the surface area of the cement particles is available for early hydration. The more cement particles hydrated by contact with the mixing water, the greater the compressive strength of the concrete.

ADVANTAGES

Plastocrete 161 is formulated as a Type A water reducer to allow 7 - 10% water reduction and maximize the benefits of increased hydration in both the hardened and plastic states.

BENEFITS

- A Reduced water content required to achieve desired slump, increases compressive and flexurel strengths and allows the use of more economical mixes.
- ▲ improved paste quality makes concrete easier to pump and finish.

- ▲ Consistent normal setting times throughout the recommended dosage.
- Lower water cement ratios provide decreased permeability and increased durability.

Combination with other Admixtures:

Plastocrete 161 works effectively as a single admixture or in combination with other admixtures in the Sika System. When air entrained concrete is specified, Sika recommends the use of Sika air entraining agents.

HOW TO USE

DOSAGE

Addition rates of 3 - 61l. oz./100 lbs. (195 - 390 ml/100 kg) of cement are recommended for general concrets applications where normal setting characteristics are desired.

MIXING

Plastocrete 161 is added at the concrete plant. Measurer equired quantity manually or by automated dispenser. Add into the sand at the weigh hopper or into the water line at the batch plant.

When used in combination with other admixtures, care must be taken to dispense each admixture separately into the mix. Do not mix with dry cement.

PACKAGING

Plastocrete 161 is supplied in 55 gallon (208 liter) drums and bulk delivery.

STORAGE AND SHELF-LIFE

Piastocrete 161 should be stored at above 35°F (2°C). If frozan, thaw and agitate thoroughly to return to normal state before use.

Shelf life when stored in dry warehouse conditions between 50°F and 80°F (10°C-27°C) is one year minimum.

CAUTION

Skin and eye irritant; avoid contact. The use of NIOSH/MSHA approved respirator, safety goggles and rubber gloves is recommended. Avoid breathing product. Use with adequate ventilation. Remove contaminated clothing.

FIRST AID

Wash skin with soap and water. In case of eye contact, flush with water for 15 minutes; contact a physician. Wash clothing before re-use.

CLEAN UP

Contain and collect with absorbent material. Dispose of in accordance with local, state and federal regulations.

TYPICAL DATA FOR PLAS	TOCRETE 161	;
ASTM CERTIFICATION	ASTM C-494 Type A	
COLOR	Brown	
SPECIFIC GRAVITY g/ml	1.17 ± 0.05	•
pH	>8	
CHLORIDES %	<0,1	····





Plastiment

Water Reducing and Retarding Admixture (Types B & D)

DESCRIPTION

Plastiment is a water-reducing and retarding admixture. Plastiment contains no calcium chloride or any other intentionally added chlorides.

Plastiment meets the requirements of ASTMC-494Types B and D and AASHTO M194 Types B and D.

APPLICATIONS

Plastiment is recommended for use whenever high quality concrete with predictable and controlled set times is desired. Use in flatwork and horizontal or vertical sliptorm placements where a superior surface finish is required.

ADVANTAGES

Plastiment is highly effective in hot weather concreting to offset the accelerating effects of high ambient temperatures by controlling the heat of hydration. Concrete workebility is enhanced and a superior surface finish is obtained.

BENEFTTS

- In mass concrete pours Plastiment controls temperature rise and reduces the risk of thermal cracking.
- Initial set times are delayed, allowing time for proper placement and finishing without cold joints in hot weather conditions.
- A Plastiment increases concrete density and delivers increased early and ultimate, compressive and flexural strengths.

- For flatwork applications Plastiment acts as a finishing aid, workability is improved, bleeding iscontrolled and a superior surface finish is obtained.
- Lower water cement ratios provide decreased permeability and increased durability.

Combination with other Admixtures: PlastIment works effectively as a single admixture or in combination with other admixtures in the Sika System.

HOW TO USE

DOSAGE

Addition rates of 2 - 4 ff. oz./100 lbs. (130-260 ml/100 kg) cement are recommended for general concrete applications. Where extended retardation is required dosage may be increased. Please contact your local Sika Representative for Information and assistance.

MIXING

Add PlastIment at the concrete plant. Measure required quantity manually or by automated dispenser. Add into the sand at the weigh hopper or into the water line at the batch plant.

When used in combination with other edmixtures, care must be taken to dispense each admixture separately into the mix. Do not mlx with dry cement.

PACKAGING .

Plastiment is supplied in 55 gallon (208 liter) drums and bulk delivery.

STORAGEAND SHELF-LIFE

Plastiment should be stored at above 30°F (-1°C). If frozen, thaw and agitate thoroughly to return to normal state before use.

Shelf life when stored in dry warehouse conditions between 50°F and 80°F (10°C-27°C) is one year minimum.

CAUTION

Skin and eye irritant; avoid contact. The use of NIOSH/MSHA approved respirator, safety goggles and rubber gloves is recommended. Avoid breathing product. Use with adequate ventilation. Remove contaminated clothing.

FIRSTAID

Wash skin with soap and water, in case of eye contact, flush with water for 15 minutes; contact a physician. Wash clothing before re-use.

CLEANUP

Contain and collect with absorbent material. Dispose of in accordance with local, state and federal regulations.

TYPICAL DATA FOR PLASTIMENT								
ASTMCERTIFICATION	ASTM C-494 Types B and D							
COLOR	Yallow/Green .							
SPECIFIC GRAVITY g/mi	1.18 ± 0.5							
pH	>8							
CHLORIDES%	<0.1							





Sikament® 10 ESL

Extended Slump Life High Range Water Reducer (Types A & F)

DESCRIPTION

Sikament 10 ESL is a high range water reducer and superplasticizer formulated to provide extended slump life.

Sikament 10 ESL is a unique formaldehyde-free product based on a vinyl copolymer. It is a non air-entraining admixture that does not interfere with the air-void system in the concrete matrix.

Sikament 10 ESL does not contain formaldehyde, calcium chloride or any other intentionally added chlorides and wilt not initiate or promote the corrosion of steel present in the concrete.

Sikament 10 ESL meets the requirements for ASTMC-494 Types A and F and AASHTO M-194 Types A and F.

APPLICATIONS

Sikament 10 ESL may be used as a plant added, ready mix or precest, high range water reducer to obtain desired plasticity and maintain slump for up to two hours. Controlled set times make Sikament 10 ESL ideal for horizontal and vertical slipform applications.

ADVANTAGES

Water Reduction:

When used as a high range water reducer up to 30% water reduction can be obtained with Sikement 10 ESL because of the polymer improved cement hydration efficiency.

High Plasticity:

The superplasticizing action of Sikament10 ESL provides high-slump flowing concrete with excellent workability that may be placed with minimal vibration even at very low water cement ratio's.

Sikament 10 ESL plasticized concrete is highly ifuid while maintaining complete cohesion within the concrete matrix to eliminate excessive bleeding or segregation.

Extended Slump Life and Set Control: Sikament 10 ESL has been formulated to provide controlled and predictable extended slump life for periods of 60 to 120 minutes with normal set times.

BENEFITS

The combined high range water reduction and superplasticizing action of Sikament 10 ESL provide the following benefits in hardened concrete:

 Higher early compressive strengths for earlier removal of forms and structural use of concrete.

- Higher ultimate strengths allow for greater engineering design (lexibility and structural economies.
- Reduced water cement ratios produce more durable, dense concrete with reduced permeability.
- Highly effective plasticizer reduces surface defects in concrete elements and improves aesthelic appearance.

Combination with other admixtures; Sikament 10 ESL is highly effective as single admixture or in combination with other admixtures in the Sika System.

Combination with microsilica:

Sikament 10 ESL is particularly well suited for use with microsillica because of its water reduction capability and superior slump control.

HOW TO USE

ADDITION RATES

Dosage rates will vary according to materials used, ambient conditions and the requirements of a specific project. Sika recommends dosage at 6-20 ft. oz. per 100 lbs. (390-1300 ml/100 kg) of cement for general concrete applications.

Dosage rates outside the recommended range may be used where specialized malerials such as micro-silioa are specified, extreme ambient conditions are encountered or Unusual project conditions require special consideration. Please contact your Sika representative for more information and assistance.

MIXING

For best superplasticizing results, add Sikament 10 ESL directlyto freshly mixed concrete in the concrete mixer at the end of the batching cycle. Sikament 10 ESL may also be dispensed as an integral material during the regular admixture batching cycle, or into freshly mixed concrete in a Ready-Mix truck at the concrete plant or at the jobsite.

To optimize the superplasticizing effect, after the addition Sikament 10 ESL Sika recommends that the combined materials be mixed for 80-100 revolutions or approximately 6 minutes, either in the concrete mixer or in the Ready-Mix truck.

PACKAGING

Sikament 10 ESL is available in 55 gallon (208 liter) drums and bulk delivery.

STORAGE AND SHELF-LIFE

Sikament 10 ESL should be stored at above 35°F (2°C). If frozen, thaw and agitate thoroughly to return to normal state.

Shelf life when stored in dry warehouse conditions between 50°F and 80°F (10°C - 27°C) is one year minimum.

CAUTION

Skin and eye irritant; avoid contact. The use of NiOSH/ MSHA approved respirator, safety goggles and rubber gloves is recommended. Avoid breathing product. Use with adequate ventilation. Remove contaminated clothing.

FIRST AID

Wash skin with soap and water, in case of eye contact, flush with water for 15 minutes; contact a physician. Wash clothing before re-use.

CLEANUP

Contain and collect with absorbent material. Dispose of in accordance with local, state and federal regulations.

TYPICAL DATA FOR SIKAMENT 10 ESL								
ASTM CERTIFICATION	ASTM C-494 Types A and F	· · · · · · · · · · · · · · · · · · ·						
COLOR	Вгожп							
SPECIFIC GRAVITY	1.11 ± 0.05							
PH	>6	-						
CHLORIDES %	< 0.1							





August 23, 2004

Texas Standard Construction P.O. Box 210768 Dallas, TX 75211

Attn: Mr. Sherman Griffith

RE: Paving Repair Addison Airport

8225 9669 U-P J CL-M

The attached concrete mix designs utilizing the appropriate ASTM C-33 or ASTM C-330 aggregate are proposed for use on the above referenced project for ready-mixed concrete to be furnished by TXI.

TXI certifies that the above mix designs, when ordered by specified design identity, and delivered by TXI, will meet or exceed the indicated design strength at the designated age when tested in accordance with the applicable and current ASTM Standards C 31, C 39, C 78, C 172, C 293, applicable provisions of C 94, and evaluated in accordance with applicable provisions of the ACI Building Code.

TXI would like to be included on your mailing list to receive all test reports. ASTM C 94 entitles a manufacturer to receive copies of all test reports when strength of concrete is used as a basis for acceptance.

Contact us if you have any questions or require any additional information. Please notify TXI of approval of the proposed mix design prior to its use. Failure to notify us prior to first placement shall constitute acceptance. To ensure that the proper mix design is ordered, please send a copy of this letter, after approval, to the above referenced project to be used by the person ordering the concrete for this job.

The information contained in this submittal is confidential and the exclusive property of TXI. It cannot be copied, duplicated or disclosed to third parties without the expressed written consent of TXI.

Sincerely,

TXI Operations, L.

Victor H. Villarréal Manager - Q.A./Q.C.

GENERAL NOTES

Pumping Notes:

- 1. 5" minimum diameter lines with no reduction to smaller lines.
- 2. Keep rubber hose to absolute minimum length and plan pipe with as few 90 degree angles as possible.
- 3. Samples for slump and strength tests should be taken at discharge end of hose for strength guarantee to be valid.
- 4. To prime pump lines, a minimum of 8.0 sack grout is recommended for lubrication. In the case of strength concrete, equivalent strength grout should be used if the grout remains in the placement.
- 5. Pump mixes are based on minimum cement content pumped at ground level. As pump line increases in length or height and/or layout configuration changes, mix design modifications may be required to assure strength and pumpability at additional cost to the contractor.
- 6. TXI cannot control, and is therefore not responsible for excessive loss of entrained air content when loss occurs as a result of boom configuration or free fall discharge from hose. To ensure minimum air loss when pumping, maintain a continuous flow of concrete through the entire length of pipe and do not subject concrete to free fall.
- 7. The term "pumpable concrete" refers to concrete which is capable of being transported through an apparatus which forces concrete to the placing position through a pipeline or hose as long as the recommendations indicated above are followed. The term "pumpable concrete" does not relate to concrete proportioned in a particular manner or containing a specific type of product.

Strength of lightweight mix designs valid provided strength specimens are air cured in accordance with ASTM Test Method C 567-01, as referenced in section 8.1 of ASTM Specification C 330.

Unless otherwise indicated, when the concrete temperature at point of placement exceeds 90 degrees Fahrenheit, TXI will guarantee the strength performance of the mix design(s) herein submitted up to a maximum placement temperature of 100 degrees Fahrenheit using an ASTM C 494 Type D retarding water-reducer, as long as the concrete is placed within 75 minutes from batch time. Unless otherwise indicated, strength of plain concrete guaranteed up to a maximum placement temperature of 85 degrees Fahrenheit.

We are enclosing all available back up data for the referenced mix design(s). If the strength information is not available, or is insufficient, confirmation tests may have to be conducted by your laboratory.

TXI PROPRIETARY AND CONFIDENTIAL

Paving Repair Addison Airport

Mix #:

8225

CLASS-P

Description: 611# ADMIX/AEA

1.5"CS

Strength:

4500 psi @ 28 Days

HAND PLACED PAVING (CLASS P-2)

(NON-PUMP)

Maximum Size Coarse Aggregate: 1 1/2 - 3/4" CRUSHED STONE

Maximum Water/Cement Ratio:

0.422 lbs/lb

Cement/Cementitious Content: Design Slump:

611 lbs (per cubic yard)

3.00 inches

Air Entraining Agent:

ASTM C-260

Admixture:

ASTM C-494 Type A or D

MATERIAL QUANTITIES PER 1.0 CUBIC YARD AT S.S.D.

489 lbs. ASTM C 150 TYPE I/II CEMENT

122 lbs. ASTM C 618 FLY ASH

800 lbs. 1 1/2 - 3/4" CRUSHED STONE

1200 lbs. 1" - #4 CRUSHED STONE

1053 lbs. CONCRETE SAND

258 lbs. or 31.0 Gallons of Water

2.0 to 4.0 oz/cwt of ASTM C-494 Type D

Specified Air Content: 3.0% - 6.0%

Placement Slump: 3.00 + or - 1.00 inches

Mix Design Proportions and specifications are confidential and proprietary trade secrets of TXI. Any Use or dissemination without permission is a violation of federal criminal law.

TXI PROPRIETARY AND CONFIDENTIAL

Paving Repair Addison Airport

Mix #: 9669 CLASS M'

Description: 8.00SK NCA/ADMIX/AEA 1.5"CS

PAVING - EARLY STRENGTH AS REQUIRED

Maximum Size Coarse Aggregate: 1 1/2 - 3/4" CRUSHED STONE

Maximum Water/Cement Ratio: 0.355 lbs/lb

Cement/Cementitious Content: 752 lbs (per cubic yard)

Design Slump: 3.00 inches
Air Entraining Agent: ASTM C-260

Admixture: ASTM C-494 Type A or D

MATERIAL QUANTITIES PER 1.0 CUBIC YARD AT S.S.D.

752 lbs. ASTM C 150 TYPE I/II CEMENT

730 lbs. 1 1/2 - 3/4" CRUSHED STONE

1097 lbs. 1" - #4 CRUSHED STONE

1126 lbs. CONCRETE SAND

267 lbs. or 32.0 Gallons of Water

20.0 to 60.0 oz/cwt of ASTM C-494 Type C

2.0 to 4.0 oz/cwt of ASTM C-494 Type A

Specified Air Content: 3.0% - 5.0% Placement Slump: 3.00 + or - 1.00 inches

HIGH-EARLY STRENGTH NOTES:

- 1) Obtain ALL strength specimens at the point of placement.
- 2) Test specimens used for in-place early strength determination should be cured in a manner as close as possible to the in-place concrete. Utilization of insulated blankets or an insulated curing box is highly recommended. Hydration of portland cement is a temperature sensitive chemical reaction. In-place concrete generally develops and maintains substantially more heat than 6"x12" test cylinders. The difference in magnitude between in-place strength and the measured strength of 6"x12" cylinders increases as ambient temperatures decrease. Standard test cylinders used for 7 and 28 day evaluation should still be cured in strict accordance with ASTM C 31.

Mix Design Proportions and specifications are confidential and proprietary trade secrets of TXI. Any Use or dissemination without permission is a violation of federal criminal law.

TEXAS INDUSTRIES

CONCRETE DESIGN EVALUATION

Date: 08/23/04 ** Statistics Compiled From Independent Laboratory Test Specimens **

Mix Number: 8225

Strength: 4500 psi @ 28 Days

28 Day Test Data Test Type: COMPRESSIVE

Description:ASTM C 39 Compressive Strength

Test Number	Date	Plant Number	(Fahre	erature enheit) Concrete	Placement Slump(in)	Percent of Air	 PSI 1	28 Day PSI 2	PSI AVG	Cumulative Average	Moving Avg of 3	Range
1	01/23/04	47	65	68	2.50	N/A	6190	6190	6190	6190		0
2	01/23/04	38	55	64	5.00	5.9%	5660	5730	5695	5943		70
3	01/29/04	38	50	56	6.00	8.5%	5120	4930	5025	5637	5637	190
4	01/30/04	38	30	49	4.50	4.5%	5630	5700	5665	5644	5462	70
5	02/10/04	38	46	56	5.75	8.0%	5660	5360	5510	5617	5400	300
6	02/18/04	44	43	59	6.00	N/A	4680	4630	4655	5457	5277	50
7	02/19/04	47	70	68	3.50	6.0%	6050	5960	6005	5535	5390	90
8	02/19/04	46	73	67	5.00	8.0%	4790	4940	4865	5451	5175	150
9	02/20/04	47	50	66	2.50	5.2%	6060	5970	6015	5514	5628	90
10	02/20/04	47	64	72	2.50	5.5%	6810	6790	6800	5643	5893	20
11	02/23/04	43	62	68	2.50	5.0%	7420	7200	7310	5794	6708	220
12	02/26/04	40	53	67	3.00	4.2%	6300	6080	6190	5827	6767	220
13	02/27/04	40	70	68	3.25	5.4%	5300	5500	5400	5794	6300	200
14	02/28/04			64	5.50	N/A	4730	4670	4700	5716	5430	60
15	02/28/04	13	45	58	5.00	N/A	5370	5320	5345	5691	5148	50
16	02/28/04	13	63	69	5.25	N/A	5030	5130	5080	5653	5042	100
17	03/01/04	43	67	64	5.00	5.5₺	6870	6800	6835	5723	5753	70
18	03/02/04	42	71	69	3.00	5.9%	6660	6290	6475	5764	6130	370
19	03/05/04	40	81	75	2.50	5.5%	5850	5790	5820	5767	6377	60
20	03/08/04	47	71	74	3.50	4.5%	5250	5430	5340	5746	5878	180
21	03/16/04	38	72	4	4.60	N/A	5840	5650	5745	5746	5635	190
22	04/01/04		67	66	3.75	5.5%	5260	5460	5360	5728	5482	200
23	04/07/04	38	75	77	3.75	4.8%	5680	5730	5705	5727	5603	50
24	04/15/04			78	4.00	5.3%	5030	5100	5065	5700	5377	70
25	04/15/04			72	3.25	5.7%	4900	4830	4865	5666	5212	70
26	04/20/04		66	76	3.00	6.0%	5540	5500	5520	5661	5150	40
27	04/30/04	42	90	94	3.00	5.2%	6250	6220	6235	5682	5540	30
28	05/03/04	40	76	82	3.20	4.0%	4720	4810	4765	5649	5507	90
29	05/04/04	42	80	80	2.50	5.5%	5940	5890	5915	5658	5638	50
30	05/25/04	38	73	77	4.00	n/A	6540	6590	6565	5689	5748	50
*** Ave	rages ***		64	67	3.89	5.6%						

Mix Num: 8225 Strength: 4500 psi @ 28 Days

Paragraph 5.5 of ACI 318-02 provides that as data becomes available during construction, the amount by which (F'cr) must exceed the specified value of (F'c) may be reduced, provided:

- (a) 30 or more test results are available and average of test results exceeds that required by Section 5.3.2.1, using a standard deviation calculated in accordance with Section 5.3.1.1, or
- (b) 15 to 29 test results are available and average of test results exceeds that required by Section 5.3.2.1, using a standard deviation calculated in accordance with Section 5.3.1.2.

The required average strength has been calculated using a standard deviation calculated in accordance with ACI 318-02 Section 5.3.1.1 or Section 5.3.1.2 and is the larger value of these calculations:

SUMMARY OF STATISTICAL ANALYSIS 28 Day Test Data

Number of Tests	30	
Maximum Value	7310	psi
Minimum Value	4655	psi
	2655	psi
	5689	psi
Standard Deviation	685	psi
Required Average Strength to satisfy		-
minimum probability conditions of		
	5595	psi
Design excess beyond code requirements	94	psi



MIDLOTHIAN CEMENT • 245 Ward Road • Midlothian, Texas 76065 • www.txl.com

SPECIFICATIONS
Portland Cement
Type I/II (Low Alkali)
A.S.T.M. C150-02a

Bin Number			****			
Car Number			· · · · · · · · · · · · · · · · · · ·			
Tons						
Date of Sampling	June-2004 Mon	thly Average		*********		
		AS	TM T	T	EST	
		SPECIF	ICATION	RES	SULTS	
CHEMI	CAL REQUIREMENTS					
Silica Oxide, Minimum Percer	ıt	20	0.0		21.0	
Alum <mark>ina Oxide, Maximum</mark> Per	cent	6	.0		4.2	
Iron Oxide, Maximum Percent			.0		3.7	
Magnesia Oxide, <mark>M</mark> aximum Po	ercent	6	.0		1.1	
SO ₃ (C ₃ A less than 8%), Maxi	mum Percent		*		3.0	
Loss on Ignition, Maximum Pe	ecent	3	3.0		1.1	
Insoluble Residue, Maximum	Percent	0.	75	0,18		
Tricalcium Aluminate, Maximu	m Percent	8	.0	5		
OPTIONAL C	HEMICAL REQUIREMENTS		· .			
Total Alkalies, Max. % (Na2O	equiv.)	0.	60		0.48	
PHYSI	CAL REQUIREMENTS					
Specific surface, Blaine Minim	ium (m²/kg)		80		359	
Gillmore, Initial Set, Minimum			60	176		
Gillmore, Final Set, Maximum		6	00		284	
Vicat, Minir	num (Minutes)	4	5			
Initial Set Maxi	mum (Minutes)	3	75	96		
Air Content, Volume, Maximui			2		7	
Autoclave Expansion, Maximu	ım Percent	0.	80		-0.01	
Minimum Compressive Streng	iths	MPa	psi	MPa	psi _	
3 Day		12.0	1740	25.2	3661	
7 Day		19.0	2760	30.8	4474	

STATE OF TEXAS

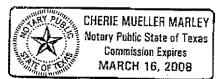
Jeff Wendel	, being duly sworn deposes and says: that he is Quality Services
Manager of TXI Midlothian Ce	ment Plant, who prepared the above report of tests and that the same
is true and correct.	

Subscribed and sworn to before me on this date:

07/13/04

NOTALLY LUDIC

* See ASTM C150 Table 1, Footnote D.



Quality Services Manager

NSF

Certified to NSF/ANSI 61



ISG Resources, Inc. certifies that, to the best of its knowledge, the test data listed herein was generated by applicable ASTM methods and meets requirements of ASTM C-618 and AASHTO M-295 and TX, DOT DMS-8900

Report of Fly Ash Welsh Plant, Cason, Texas Unit #1

DATE: February 16, 2004 LABORATORY NUMBER: WELSH-1-12/26/03

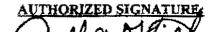
MTRF #91 CA

COMPOSITE DATE

		11/27/03 - 12/26/03				
CHERRICAL ANALYSON	.,,_,	ASTM C-618-03 SPECIFICATIONS		TX. DOT DMS-8900 SPECIFICATIONS		
CHEMICAL ANALYSIS		CLASS C	CLASS F	TYPE C	TYPEF	
Silicon Dioxide (SiO ₂)	33,95	CDASS C	CLASS I	11112	XXXXX	
Aluminum Oxide (Al ₂ O ₃)	18.66					
Iron Oxide (FE ₂ O ₃)	5.84					
Sum of SiO ₂ , Al ₂ O ₃ , & Fe ₂ O ₃	58.45	50 Min.	70 Min.	50 Min	70 Min.	
Magnesium Oxide (MgO)	6.19					
Sulfur Trioxide (SO ₃)	2.51	5.0 Max.	5.0 Max.	5,0 Max.	5.0 Max.	
Moisture Content	0.08	3.0 Max.	3.0 Max.	2.0 Max.	2.0 Max.	
Loss On Ignition	0.13	6.0 Max.	6.0 Max.	3.0 Max.	3,0 Max.	
Available Alkalies as Na ₂ O	1.59			A 1.5Max.	Al.5Max.	
Calcium Oxide (CaO)	27,67					
PHYSICAL ANALYSIS						
Fineness: Amount retained						
on 325 sieve %	17.17	34% Max.	34% Max.	30%Max.	30%Max.	
Water Requirement, % Control	96%	105%Max	105%Max	100%Max	100%Max	
Specific Gravity	2.76					
Autoclave Expansion, %	+ 0,09	0.8% Max	0.8% Max	0.8% Max	0.8% Max	
Strength Activity Index						
With Portland Cement, 7 Day	97%	75% Min.	75% Min.	75% Min.	75% Min.	

Applicable only when required by purchaser.

Phone: (281) 343-0079 Fax: (281) 343-0872



A I-MEADAWATHEREN Company



Grace Construction Products W.R. Grace & Co. – Conn. 4323 Crites Street Houston, TX 77003

713-223-8353 www.graceconstruction.com

1/19/2004

Victor H. Villarreal TXI Operations, LP 1341 W. Mockingbird Lane Dallas, Texas 75247

Project Name: All Projects Product Selected: MIRA® 85

This is to certify that the MIRA® 85, a(n) Mid-Range Water Reducer, as manufactured and supplied by Grace Construction Products, W.R. Grace & Co. – Conn., is formulated to comply with the Specifications for Chemical Admixtures for Concrete, ASTM: C494, Type A, F AASHTO: M194, Type A, F.

MIRA® 85 does not contain calcium chloride or chloride containing compounds as a functional ingredient. Chloride ions may be present in trace amounts contributed from the process water used in manufacturing.

The foregoing is in addition to and not in substitution for our standard Conditions of Sale attached.

Fred E. Hightower

Fred E. Hightown

South Western Region Technical Services Manager



Grace Construction Products W.R. Grace & Co. – Conn. 4323 Crites Street Houston, TX 77003

713-223-8353 www.graceconstruction.com

1/19/2004

Victor H. Villarreal TXI Operations, LP 1341 W. Mockingbird Lane Dallas, Texas 75247

Project Name: All Projects

Product Selected: WRDA® with Hycol®

This is to certify that the WRDA® with Hycol®, a(n) Water Reducer, as manufactured and supplied by Grace Construction Products, W.R. Grace & Co. – Conn., is formulated to comply with the Specifications for Chemical Admixtures for Concrete, ASTM: C494, Type A, D AASHTO: M194, Type A, D.

WRDA® with Hycol® does not contain calcium chloride or chloride containing compounds as a functional ingredient. Chloride lons may be present in trace amounts contributed from the process water used in manufacturing.

The foregoing is in addition to and not in substitution for our standard Conditions of Sale attached.

Fred E. Hightower

Fred & Highton

South Western Region Technical Services Manager



Grace Construction Products W.R. Grace & Co. - Conn. 4323 Crites Street Houston, TX 77003

713-223-8353 www.graceconstruction.com

1/19/2004

Victor H. Villarreal TXI Operations, LP 1341 W. Mockingbird Lane Dallas, Texas 75247

Project Name: All Projects

Product Selected: Daravair® 1000

This is to certify that the Daravair® 1000, a(n) Air–Entraining Agent, as manufactured and supplied by Grace Construction Products, W.R. Grace & Co. – Conn., is formulated to comply with the Specifications for Chemical Admixtures for Concrete, ASTM: C260 AASHTO: M154.

Daravair® 1000 does not contain calcium chloride or chloride containing compounds as a functional ingredient. Chloride lons may be present in trace amounts contributed from the process water used in manufacturing.

The foregoing is in addition to and not in substitution for our standard Conditions of Sale attached.

Fred E. Hightower

And E Hydrin

South Western Region Technical Services Manager

GRACE

Grace Construction Products

W.R. Grace & Co.-Conn. 4323 Crites Street P.O. Box 2585-77252 Houston, TX 77003

713-223-8353 http://www.gcp-grace.com

March 3, 2003

TXI 1341 West Mockingbird Lane Dallas, TX 75247

To Whom It May Concern:

This is to certify that **POLARSET**[®], a non-corrosive, non-chloride, set-accelerating admixture, as manufactured and supplied by Grace Construction Products, W. R. Grace & Co.-Conn., is formulated to comply with the Specification for Chemical Admixtures for Concrete, ASTM: C 494, Type C, (AASHTO M 194, Type C).

POLARSET® does not contain calcium chloride or chloride containing compounds as a functional ingredient. Chloride ions may be present in trace amounts contributed from the process water used in the manufacturing.

The foregoing is in addition to and not in substitution for our standard Conditions of Sale printed on the reverse side hereof.

Sincerely,

Fred Hightower Technical Services

Subscribed and sworn to, before me, this 3rd day of March, 2003.

Notary Public

My commission expires: 10/12/c.

Fred E. Hightown





TEXAS INDUSTRIES QUALITY CONTROL DEPT. AGGREGATE SIEVE ANALYSIS

Date:

4/15/2004

Production Facility:

TXI - BRIDGEPORT, TEXAS

Designation:

C 33 (No. 467)

Grading Designation:

ASTM C-33 1.5" - #4

Project:

******ALL TESTS******

Sample Location:

SIEVE SIZE	CUMULATIVE WT. RETAINED	CUMULATIVE % RETAINED	CUMULATIVE % PASSING	REQUIRED % RETAINED	SPECIFICATION % PASSING
2.0"				NV	
1.5"		4.65	95.35	0 - 5	95 - 100
1.0"		97.02	2.98		
3/4"		63.00	37.00	30 - 65	35 - 70
1/2"		99.64	0.36		
3/8"		71.80	28.20	70 - 90	10 - 30
#4	WWW.8000055	99.98	0.02	95 - 100	0-5
#8					
#10					
#16					
#30					
#40					
#50					
#100					
#200					
PAN WT.			·		

DECANT

100% of tests: 1

Size: 467 PLANT: BRIDGEPORT

Job: *******ALL JOBS*******

TEXAS INDUSTRIES QUALITY CONTROL DEPT. AGGREGATE SIEVE ANALYSIS

Date:

08/12/2004

Production Facility:

TXI MILL CREEK

Designation:

<u>C57</u>

Grading Designation:

ASTM C-33 1" - #4

Project:

*****ALL TESTS*****

Sample Location:

SIEVE SIZE	CUMULATIVE WT. RETAINED	CUMULATIVE % RETAINED	CUMULATIVE % PASSING	REQUIRED % RETAINED	SPECIFICATION % PASSING
2.0"					
1.5"		0	100	0	100
1.0"		3.40	96.60	0 – 5	95 - 100
3/4"		24.87	75.13		
1/2"		61.00	39.00	40 - 75	25 - 60
3/8"		79.06	20.94		
#4		95.66	4.34	90 – 100	0 – 10
#8		98.73	1.27	95 – 100	0 – 5
#10					
#16					
#30					
#40					
#50					
#100					
#200					
PAN WT.		Fineness Modules	s: 1.9		

Decant:

0.85%

100% of 6 tests:

Size: 57

PLANT: TXI MILL CREEK

Job:

*******ALL JOBS******

TEXAS INDUSTRIES QUALITY CONTROL DEPT. AGGREGATE SIEVE ANALYSIS

Date:

07/07/2004

Production Facility:

TXI BELL SAVOY (WADE)

Designation:

<u>C 33</u>

Grading Designation:

ASTM C-33 FINE AGG.

Project:

*****ALL TESTS*****

Sample Location:

SIEVE SIZE	CUMULATIVE WT. RETAINED	CUMULATIVE % RETAINED	CUMULATIVE % PASSING	REQUIRED % RETAINED	SPECIFICATION % PASSING
2.0"					
1.5"					
1.0"					
3/,"					
1/2"					
3/8"		0.00	100.00	0	100
#4		2.19	97.81	0 - 5	95 - 100
#8		10.87	89.13	0 - 20	80 - 100
#10					
#16		20.64	79.36	15 - 50	50 - 8 <u>5</u>
#30		41.41	58.59	40 - 75	25 - 6 <u>0</u>
#40					
#50		77.77	22.23	70 - 90	10 - 30
#100		96.23	3.77	90 - 98	2 - 10
#200		99.56	1.44		
PAN WT.		Fineness M	odulus: 2.5		

M. C. Decant S. E.

100% of tests: 26

Size: 33 PLANT: TXI BELL SAVOY

Job: *******ALL JOBS*******



1341 West Mockingbird Lane • Dallas, Texas 75247 • 972.647.6700 • www.txi.com

August 23, 2004

Texas Standard Construction P.O. Box 210768 Dallas, TX 75211

Attn: Mr. Sherman Griffith

RE: Paving Repair Addison Airport

8225 9669 U-P J CL-M

The attached concrete mix designs utilizing the appropriate ASTM C-33 or ASTM C-330 aggregate are proposed for use on the above referenced project for ready-mixed concrete to be furnished by TXI.

TXI certifies that the above mix designs, when ordered by specified design identity, and delivered by TXI, will meet or exceed the indicated design strength at the designated age when tested in accordance with the applicable and current ASTM Standards C 31, C 39, C 78, C 172, C 293, applicable provisions of C 94, and evaluated in accordance with applicable provisions of the ACI Building Code.

TXI would like to be included on your mailing list to receive all test reports. ASTM C 94 entitles a manufacturer to receive copies of all test reports when strength of concrete is used as a basis for acceptance.

Contact us if you have any questions or require any additional information. Please notify TXI of approval of the proposed mix design prior to its use. Failure to notify us prior to first placement shall constitute acceptance. To ensure that the proper mix design is ordered, please send a copy of this letter, after approval, to the above referenced project to be used by the person ordering the concrete for this job.

The information contained in this submittal is confidential and the exclusive property of TXI. It cannot be copied, duplicated or disclosed to third parties without the expressed written consent of TXI.

Sincerely,

TXI Operations, LI

Victor H. Villarreal Manager - Q.A./Q.C.

GENERAL NOTES

Pumping Notes:

- 1. 5" minimum diameter lines with no reduction to smaller lines.
- 2. Keep rubber hose to absolute minimum length and plan pipe with as few 90 degree angles as possible.
- 3. Samples for slump and strength tests should be taken at discharge end of hose for strength guarantee to be valid.
- 4. To prime pump lines, a minimum of 8.0 sack grout is recommended for lubrication. In the case of strength concrete, equivalent strength grout should be used if the grout remains in the placement.
- 5. Pump mixes are based on minimum cement content pumped at ground level. As pump line increases in length or height and/or layout configuration changes, mix design modifications may be required to assure strength and pumpability at additional cost to the contractor.
- 6. TXI cannot control, and is therefore not responsible for excessive loss of entrained air content when loss occurs as a result of boom configuration or free fall discharge from hose. To ensure minimum air loss when pumping, maintain a continuous flow of concrete through the entire length of pipe and do not subject concrete to free fall.
- 7. The term "pumpable concrete" refers to concrete which is capable of being transported through an apparatus which forces concrete to the placing position through a pipeline or hose as long as the recommendations indicated above are followed. The term "pumpable concrete" does not relate to concrete proportioned in a particular manner or containing a specific type of product.

Strength of lightweight mix designs valid provided strength specimens are air cured in accordance with ASTM Test Method C 567-01, as referenced in section 8.1 of ASTM Specification C 330.

Unless otherwise indicated, when the concrete temperature at point of placement exceeds 90 degrees Fahrenheit, TXI will guarantee the strength performance of the mix design(s) herein submitted up to a maximum placement temperature of 100 degrees Fahrenheit using an ASTM C 494 Type D retarding water-reducer, as long as the concrete is placed within 75 minutes from batch time. Unless otherwise indicated, strength of plain concrete guaranteed up to a maximum placement temperature of 85 degrees Fahrenheit.

We are enclosing all available back up data for the referenced mix design(s). If the strength information is not available, or is insufficient, confirmation tests may have to be conducted by your laboratory.

TXI PROPRIETARY AND CONFIDENTIAL

Paving Repair Addison Airport

Mix #:

8225

CLASS-P

Description: 611# ADMIX/AEA

1.5"CS

Strength:

4500 psi @ 28 Days

HAND PLACED PAVING (CLASS P-2)

(NON-PUMP)

Maximum Size Coarse Aggregate: 1 1/2 - 3/4" CRUSHED STONE

Maximum Water/Cement Ratio:

0.422 lbs/lb

Cement/Cementitious Content:

611 lbs (per cubic yard)

Design Slump:

3.00 inches

Air Entraining Agent:

ASTM C-260

Admixture:

ASTM C-494 Type A or D

MATERIAL QUANTITIES PER 1.0 CUBIC YARD AT S.S.D.

489 lbs. ASTM C 150 TYPE I/II CEMENT

122 lbs. ASTM C 618 FLY ASH

800 lbs. 1 1/2 - 3/4" CRUSHED STONE

1200 lbs. 1" - #4 CRUSHED STONE

1053 lbs. CONCRETE SAND

258 lbs. or 31.0 Gallons of Water

2.0 to 4.0 oz/cwt of ASTM C-494 Type D

Specified Air Content: 3.0% - 6.0%

Placement Slump: 3.00 + or - 1.00 inches

Mix Design Proportions and specifications are confidential and proprietary trade secrets of TXI. Any Use or dissemination without permission is a violation of federal criminal law.

TXI PROPRIETARY AND CONFIDENTIAL

Paving Repair Addison Airport

Mix #: 9669 CLASS M'

Description: 8.00SK NCA/ADMIX/AEA 1.5"CS

PAVING - EARLY STRENGTH AS REQUIRED

Maximum Size Coarse Aggregate: 1 1/2 - 3/4" CRUSHED STONE

Maximum Water/Cement Ratio: 0.355 lbs/lb

Cement/Cementitious Content: 752 lbs (per cubic yard)

Design Slump: 3.00 inches
Air Entraining Agent: ASTM C-260

Admixture: ASTM C-494 Type A or D

MATERIAL QUANTITIES PER 1.0 CUBIC YARD AT S.S.D.

752 lbs. ASTM C 150 TYPE L/II CEMENT

730 lbs. 1 1/2 - 3/4" CRUSHED STONE

1097 lbs. 1" - #4 CRUSHED STONE

1126 lbs. CONCRETE SAND

267 lbs. or 32.0 Gallons of Water

20.0 to 60.0 oz/cwt of ASTM C-494 Type C 2.0 to 4.0 oz/cwt of ASTM C-494 Type A

Specified Air Content: 3.0% - 5.0%

Placement Slump: 3.00 + or - 1.00 inches

HIGH-EARLY STRENGTH NOTES:

- 1) Obtain ALL strength specimens at the point of placement.
- 2) Test specimens used for in-place early strength determination should be cured in a manner as close as possible to the in-place concrete. Utilization of insulated blankets or an insulated curing box is highly recommended. Hydration of portland cement is a temperature sensitive chemical reaction. In-place concrete generally develops and maintains substantially more heat than 6"x12" test cylinders. The difference in magnitude between in-place strength and the measured strength of 6"x12" cylinders increases as ambient temperatures decrease. Standard test cylinders used for 7 and 28 day evaluation should still be cured in strict accordance with ASTM C 31.

Mix Design Proportions and specifications are confidential and proprietary trade secrets of TXI. Any Use or dissemination without permission is a violation of federal criminal law.

TEXAS INDUSTRIES

CONCRETE DESIGN EVALUATION

Date: 08/23/04 ** Statistics Compiled From Independent Laboratory Test Specimens **

Mix Number: 8225

Strength: 4500 psi @ 28 Days

28 Day Test Data Test Type: COMPRESSIVE Description: ASTM C 39 Compressive Strength

Test		Plant		erature enheit)	Placement	Percent	## ## pr pr pr pr qr =	28 Day	ages many areas verse very duty whole \$100	Cumulative	Moving	
Number	Date	Number		Concrete	Slump(in)	of Air	PSI 1	PSI 2	PSI AVG	Average	Avg of 3	Range
1	01/23/04	47	65	68	2.50	n/A	6190	6190	6190	6190		0
2	01/23/04	38	55	64	5.00	5,9%	5660	5730	5 695	5943		סר
3	01/29/04	38	50	56	6.00	8.5%	5120	4930	5025	5637	5637	190
4	01/30/04	38	30	49	4.50	4.5%	5630	5700	5665	5644	5462	70
5	02/10/04	38	46	56	5.75	8.0%	5660	5360	5510	5617	5400	300
6	02/18/04	44	4.3	59	6.00	N/A	4 680	4630	4655	5457	5277	50
7	02/19/04	47	70	68	3.50	6.0%	6050	5960	6005	5535	5390	90
8	02/19/04	46	73	67	5.00	8.0%	4790	4940	4865	5451	5175	150
9	02/20/04	47	50	66	2.50	5.2%	6060	5970	6015	5514	5628	90
10	02/20/04	47	64	72	2.50	5.5%	6810	6790	6800	5643	5893	20
11	02/23/04	43	62	68	2.50	5.0%	7420	7200	7310	5794	6708	220
12	02/26/04	40	53	67	3.00	4.2%	6300	6080	6190	5827	6767	220
13	02/27/04	40	70	68	3.25	5.4%	5300	5500	5400	5794	6300	200
14	02/28/04			64	5.50	N/A	4730	4670	4700	5716	5430	60
15	02/28/04	13	45	58	5.00	N/A	5370	5320	5345	5691	5148	50
16	02/28/04	13	63	69	5.25	A/N	5030	5130	5080	5653	5042	100
17	03/01/04	43	57	64	5.00	5.5%	6970	6800	6835	5723	5753	70
18	03/02/04	42	71	69	3.00	5.9%	5660	6290	6475	5764	6130	370
19	03/05/04	40	\$ 1	75	2.50	5.5%	5850	5790	5820	5767	6377	60
20	03/08/04	47	71	74	3.50	4.5%	5250	5430	5340	5746	5878	180
21	03/16/04	36	72	4	4.60	N/A	5840	5650	5745	5746	5635	190
22	04/01/04		67	66	3,75	5.5%	5260	5460	5360	5728	5482	200
23	04/07/04	38	75	77	3.75	4.8%	5680	5730	5705	5727	5603	50
24	04/15/04			78	4.00	5.3%	5030	5100	5065	5700	5377	70
25	04/15/04			72	3.25	5.7%	4900	4630	4865	5666	5212	70
26	04/20/04		66	76	3.00	6.0%	5540	5500	5520	5661	5150	40
27	04/30/04	42	90	94	3.00	5.2%	6250	6220	6235	5682	5540	30
28	05/03/04	40	76	82	3.20	4.0%	4720	4810	4765	5649	5507	90
29	05/04/04	42	80	BO	2.50	5.5%	5940	5890	5915	5658	5638	50
30	05/25/04	38	73	77	4.00	N/A	6540	6590	6565	5689	574B	50
*** Ave:	rages ***		64	67	3.89	5.6%						

Mix Num: 8225 Strength: 4500 psi @ 28 Days

Paragraph 5.5 of ACI 318-02 provides that as data becomes available during construction, the amount by which (F'cr) must exceed the specified value of (F'c) may be reduced, provided:

- (a) 30 or more test results are available and average of test results exceeds that required by Section 5.3.2.1, using a standard deviation calculated in accordance with Section 5.3.1.1, or
- (b) 15 to 29 test results are available and average of test results exceeds that required by Section 5.3.2.1, using a standard deviation calculated in accordance with Section 5.3.1.2.

The required average strength has been calculated using a standard deviation calculated in accordance with ACI 318-02 Section 5.3.1.1 or Section 5.3.1.2 and is the larger value of these calculations:

SUMMARY OF STATISTICAL ANALYSIS 28 Day Test Data

Number of Tests	30	
Maximum Value	7310	psi
Minimum Value	4655	psi
Range	2655	psi
Average Strength	5689	psi
Standard Deviation	685	psi
Required Average Strength to satisfy		_
minimum probability conditions of		
ACI 318-02 Section 5.3.2.1	5595	psi
Design excess beyond code requirements	94	psi



MIDLOTHIAN CEMENT • 245 Ward Road • Midlothian, Texas 76065 • www.txi.com

SPECIFICATIONS
Portland Cement
Type I/II (Low Alkali)
A.S.T.M. C150-02a

Bin Number							
Car Number			***************************************				
Tons							
Date of Sampling	June-2004 Monthl	y Average					
			ASTM	T	EST		
		SPEC	DIFICATION	RE	SULTS		
CHEMICAL RE	QUIREMENTS						
Silica Oxide, Minimum Percent			20.0		21.0		
Alumina Oxide, Maximum Percent			6.0		4.2		
Iron Oxide, Maximum Percent			6.0		3.7		
Magnesia Oxide, Maximum Percent	*		6.0		1.1		
SO ₃ (C ₃ A less than 8%), Maximum Pe	ercent		*	3.0			
Loss on Ignition, Maximum Percent		•	3.0	1.1			
Insoluble Residue, Maximum Percent			0.75		0.18		
Tricalcium Aluminate, Maximum Perce	ent		0.8		5		
OPTIONAL CHEMIC	AL REQUIREMENTS		, x				
Total Alkalies, Max. % (Na ₂ O equiv.)			0.60		0.48		
PHYSICAL RE	QUIREMENTS						
Specific surface, Blaine Minimum (m²	'kg)		280	359			
Gillmore, Initial Set, Minimum (Minute			60	176			
Gillmore, Final Set, Maximum (Minute	s)		600		284		
Vicat, Minimum (M	inutes)		45				
Initial Set Maximum (Minutes) 375					96		
Air Content, Volume, Maximum Perce		12		7			
Autoclave Expansion, Maximum Perc		0.80		-0.01			
Minimum Compressive Strengths	MPa MPa	psi	MPa	psi			
3 Day		12.0	1740	25.2	3661		
7 Day		19.0	2760	30.8	4474		

STATE OF TEXAS

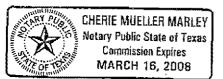
Jeff Wendel	, being duly sworn deposes and says: that he is Quality Services
Manager of TXI Midlothian Ceme	ent Plant, who prepared the above report of tests and that the same
is true and correct.	

Subscribed and sworn to before me on this date:

07/13/04

.

* See ASTM C150 Table 1, Footnote D.



Quality Services Manager

NSF

Certified to NSF/ANSI 61



ISG Resources, Inc. certifies that, to the best of its knowledge, the test data listed herein was generated by applicable ASTM methods and meets requirements of ASTM C-618 and AASHTO M-295 and TX. DOT DMS-8900

Report of Fly Ash Welsh Plant, Cason, Texas Unit #1

DATE: February 16, 2004

LABORATORY NUMBER: WELSH-1-12/26/03

MTRF #91 CA

COMPOSITE DATE

		– 12/26/03				
		ASTM C- SPECIFIC	618-03 CATIONS	TX. DOT DMS-8900 SPECIFICATIONS		
CHEMICAL ANALYSIS						
Silicon Dioxide (SiO ₂)	33.95	CLASS C	CLASS F	TYPE C	TYPEF	
Aluminum Oxide (Al ₂ O ₃)	18.66					
Iron Oxide (FE ₂ O ₃)	5.84					
Sum of SiO ₂ , Al ₂ O ₃ , & Fe ₂ O ₃	58.45	50 Min.	70 Min.	50 Min	70 Min.	
Magnesium Oxide (MgO)	6.19					
Sulfur Trioxide (SO ₃)	2.51	5.0 Max.	5.0 Max.	5,0 Max.	5.0 Max.	
Moisture Content	0.08	3.0 Max.	3.0 Max.	2.0 Max.	2.0 Max.	
Loss On Ignition	0.13	6.0 Max.	6.0 Max,	3.0 Max.	3.0 Max.	
Available Alkalies as Na ₂ O	1.59			A 1.5Max.	A1.5Max.	
Calcium Oxide (CaO)	27,67					
PHYSICAL ANALYSIS						
Fineness: Amount retained						
on 325 sieve %	17.17	34% Max.	34% Max.	30%Max.	30%Max.	
Water Requirement, % Control	96%	105%Max	105%Max	100%Max	100%Max	
Specific Gravity	2.76					
Autoclave Expansion, %	+ 0.09	0.8% Max	0.8% Max	0. 8% Ma x	0.8% Max	
Strength Activity Index						
With Portland Cement, 7 Day	97%	75% Mín.	75% Min.	75% Min.	75% Min.	

Applicable only when required by purchaser.

Po. Box 38, Thompsons, TX 77461-0038 Phone: (281) 343-0079 Fax: (281) 343-0872 AUTHORIZED SIGNATURE

A HILADANATHINE Company



713-223-8353 www.graceconstruction.com

1/19/2004

Victor H. Villarreal TXI Operations, LP 1341 W. Mockingbird Lane Dallas, Texas 75247

Project Name: All Projects Product Selected: MIRA® 85

This is to certify that the MIRA® 85, a(n) Mid-Range Water Reducer, as manufactured and supplied by Grace Construction Products, W.R. Grace & Co. – Conn., is formulated to comply with the Specifications for Chemical Admixtures for Concrete, ASTM: C494, Type A, F AASHTO: M194, Type A, F.

MIRA® 85 does not contain calcium chloride or chloride containing compounds as a functional ingredient. Chloride ions may be present in trace amounts contributed from the process water used in manufacturing.

The foregoing is in addition to and not in substitution for our standard Conditions of Sale attached.

Fred E. Hightower

Fred E. Hightown



713-223-8353 www.graceconstruction.com

1/19/2004

Victor H. Villarreal TXI Operations, LP 1341 W. Mockingbird Lane Dallas, Texas 75247

Project Name: All Projects

Product Selected: WRDA® with Hycol®

This is to certify that the WRDA® with Hycol®, a(n) Water Reducer, as manufactured and supplied by Grace Construction Products, W.R. Grace & Co. – Conn., is formulated to comply with the Specifications for Chemical Admixtures for Concrete, ASTM: C494, Type A, D AASHTO: M194, Type A, D.

WRDA® with Hycol® does not contain calcium chloride or chloride containing compounds as a functional ingredient. Chloride ions may be present in trace amounts contributed from the process water used in manufacturing.

The foregoing is in addition to and not in substitution for our standard Conditions of Sale attached.

Fred E. Hightower

And & Hightine



713-223-8353 www.graceconstruction.com

1/19/2004

Victor H. Villarreal TXI Operations, LP 1341 W. Mockingbird Lane Dallas, Texas 75247

Project Name: All Projects

Product Selected: Daravair® 1000

This is to certify that the Daravair® 1000, a(n) Air–Entraining Agent, as manufactured and supplied by Grace Construction Products, W.R. Grace & Co. – Conn., is formulated to comply with the Specifications for Chemical Admixtures for Concrete, ASTM: C260 AASHTO: M154.

Daravair® 1000 does not contain calcium chloride or chloride containing compounds as a functional ingredient. Chloride ions may be present in trace amounts contributed from the process water used in manufacturing.

The foregoing is in addition to and not in substitution for our standard Conditions of Sale attached.

Fred E. Hightower

South Western Region Technical Services Manager

And & Hydin

GRACE

Grace Construction Products

W.R. Grace & Co.-Conn. 4323 Crites Street P.O. Box 2585-77252 Houston, TX 77003

713-223-8353 http://www.gcp-grace.com

March 3, 2003

TXI 1341 West Mockingbird Lane Dallas, TX 75247

To Whom It May Concern:

This is to certify that **POLARSET**[®], a non-corrosive, non-chloride, set-accelerating admixture, as manufactured and supplied by Grace Construction Products, W. R. Grace & Co.-Conn., is formulated to comply with the Specification for Chemical Admixtures for Concrete, ASTM: C 494, Type C, (AASHTO M 194, Type C).

POLARSET® does not contain calcium chloride or chloride containing compounds as a functional ingredient. Chloride ions may be present in trace amounts contributed from the process water used in the manufacturing.

The foregoing is in addition to and not in substitution for our standard Conditions of Sale printed on the reverse side hereof.

Sincerely,

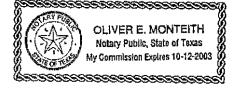
Fred Hightower Technical Services

Subscribed and sworn to, before me, this 3rd day of March, 2003.

Notary Public

My commission expires: 10/13/

Fred E. Hightown





Date:

<u>4/15/2004</u>

Production Facility:

TXI - BRIDGEPORT, TEXAS

Designation:

C 33 (No. 467)

Grading Designation:

ASTM C-33 1.5" - #4

Project:

*****ALL TESTS*****

Sample Location:

SIEVE SIZE	CUMULATIVE WT. RETAINED	CUMULATIVE % RETAINED	CUMULATIVE % PASSING	REQUIRED % RETAINED	SPECIFICATION % PASSING
2.0"					
1.5"		4.65	95.35	0 - 5	95 - 100
1.0"		97.02	2.98		
3/"		63,00	37.00	30 - 65	35 - 70
1/2"		99.64	0.36		
3/8"		71.80	28.20	70 - 90	10 - 30
#4		99.98	0.02	<u>95 - 100</u>	0 - 5
#8					
#10					
#16					
#30					
#40					
#50					
#100					
#200					
PAN WT.					

DECANT

100% of tests: 1

Size: 467 PLANT: BRIDGEPORT

Job: *******ALL JOBS*******

Date:

08/12/2004

Production Facility:

TXI MILL CREEK

Designation:

<u>C57</u>

Grading Designation:

ASTM C-33 1" - #4

Project:

*****ALL TESTS*****

Sample Location:

SIEVE SIZE	CUMULATIVE WT. RETAINED	CUMULATIVE % RETAINED	CUMULATIVE % PASSING	REQUIRED % RETAINED	SPECIFICATION % PASSING
2.0"					
1.5"		0	100	0	100
1.0"		3.40	96.60	0 – 5	95 - 100
3/4"		24.87	75.13		
1/2"		61.00	39.00	40 - 75	25 - 60
3/8"		79.06	20.94		•
#4		95.66	4.34	<u>90 – 100</u>	0 – 10
#8		98.73	1.27	95 – 100	0 – 5
#10		***			
#16					
#30					
#40					
#50					
#100					
#200					
PAN WT.		Fineness Module	s: 1.9		

Decant:

0.85%

100% of 6 tests:

Size: 57

PLANT: TXI MILL CREEK

Job:

*******ALL JOBS*****

Date: 07/07/2004 Production Facility: TXI BELL SAVOY (WADE)

Designation: C 33 Grading Designation: ASTM C-33 FINE AGG.

Project: ******ALL TESTS****** Sample Location:

SIEVE SIZE	CUMULATIVE WT. RETAINED	CUMULATIVE % RETAINED	CUMULATIVE % PASSING	REQUIRED % RETAINED	SPECIFICATION % PASSING
2.0"					
1.5"					
1.0"					
3/4"					
3/2"				······································	
3/8"		0.00	100.00	0	100
#4		2.19	97.81	0 - 5	95 - 100
#8		10.87	89.13	0 - 20	80 - 100
#10		***************************************			
#16		20.64	79.36	15 - 50	50 - 85
#30	***************************************	41.41	58.59	40 - 75	25 - 60
#40					
#50		77.77	22.23	70 - 90	10 - 30
#100		96.23	3.77	90 - 98	2 - 10
#200		99.56	1.44		
PAN WT.		Fineness M	odulus: 2.5		

M. C. Decant S. E.

100% of tests: 26 Size: 33 PLANT: TXI BELL SAVOY Job: *******ALL JOBS*******



1341 West Mockingbird Lane • Dallas, Texas 75247 • 972.647.6700 • www.txi.com

August 23, 2004

Texas Standard Construction P.O. Box 210768 Dallas, TX 75211

Attn: Mr. Sherman Griffith

RE: Paving Repair Addison Airport

8225 9669 U-P J CL-M

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The information contained in this submittal is confidential and the exclusive property of TXI. It cannot be copied, duplicated or disclosed to third parties without the expressed written consent of TXI.

Sincerely,

TXI Operations, LP

Manager - Q.A./Q.C.

GENERAL NOTES

Pumping Notes:

- 1. 5" minimum diameter lines with no reduction to smaller lines.
- 2. Keep rubber hose to absolute minimum length and plan pipe with as few 90 degree angles as possible.
- 3. Samples for slump and strength tests should be taken at discharge end of hose for strength guarantee to be valid.
- 4. To prime pump lines, a minimum of 8.0 sack grout is recommended for lubrication. In the case of strength concrete, equivalent strength grout should be used if the grout remains in the placement.
- 5. Pump mixes are based on minimum cement content pumped at ground level. As pump line increases in length or height and/or layout configuration changes, mix design modifications may be required to assure strength and pumpability at additional cost to the contractor.
- 6. TXI cannot control, and is therefore not responsible for excessive loss of entrained air content when loss occurs as a result of boom configuration or free fall discharge from hose. To ensure minimum air loss when pumping, maintain a continuous flow of concrete through the entire length of pipe and do not subject concrete to free fall.
- 7. The term "pumpable concrete" refers to concrete which is capable of being transported through an apparatus which forces concrete to the placing position through a pipeline or hose as long as the recommendations indicated above are followed. The term "pumpable concrete" does not relate to concrete proportioned in a particular manner or containing a specific type of product.

Strength of lightweight mix designs valid provided strength specimens are air cured in accordance with ASTM Test Method C 567-01, as referenced in section 8.1 of ASTM Specification C 330.

Unless otherwise indicated, when the concrete temperature at point of placement exceeds 90 degrees Fahrenheit, TXI will guarantee the strength performance of the mix design(s) herein submitted up to a maximum placement temperature of 100 degrees Fahrenheit using an ASTM C 494 Type D retarding water-reducer, as long as the concrete is placed within 75 minutes from batch time. Unless otherwise indicated, strength of plain concrete guaranteed up to a maximum placement temperature of 85 degrees Fahrenheit.

We are enclosing all available back up data for the referenced mix design(s). If the strength information is not available, or is insufficient, confirmation tests may have to be conducted by your laboratory.

TXI PROPRIETARY AND CONFIDENTIAL

Paving Repair Addison Airport

Mix #: 8225 CLASS - P

Description: 611# ADMIX/AEA 1.5"CS

Strength: 4500 psi @ 28 Days

HAND PLACED PAVING (CLASS P-2) (NON-PUMP)

Maximum Size Coarse Aggregate: 1 1/2 - 3/4" CRUSHED STONE

Maximum Water/Cement Ratio: 0.422 lbs/lb

Cement/Cementitious Content: 611 lbs (per cubic yard)

Design Slump: 3.00 inches
Air Entraining Agent: ASTM C-260

Admixture: ASTM C-494 Type A or D

MATERIAL QUANTITIES PER 1.0 CUBIC YARD AT S.S.D.

489 lbs. ASTM C 150 TYPE I/II CEMENT

122 lbs. ASTM C 618 FLY ASH

800 lbs. 1 1/2 - 3/4" CRUSHED STONE

1200 lbs. 1" - #4 CRUSHED STONE

1053 lbs. CONCRETE SAND

258 lbs. or 31.0 Gallons of Water

2.0 to 4.0 oz/cwt of ASTM C-494 Type D

Specified Air Content: 3.0% - 6.0% Placement Slump: 3.00 + or - 1.00 inches

Mix Design Proportions and specifications are confidential and proprietary trade secrets of TXI. Any Use or dissemination without permission is a violation of federal criminal law.

TXI PROPRIETARY AND CONFIDENTIAL

Paving Repair Addison Airport

Mix #: 9669 CLASS m

Description: 8.00SK NCA/ADMIX/AEA 1.5"CS

PAVING - EARLY STRENGTH AS REQUIRED

Maximum Size Coarse Aggregate: 1 1/2 - 3/4" CRUSHED STONE

Maximum Water/Cement Ratio: 0.355 lbs/lb

Cement/Cementitious Content: 752 lbs (per cubic yard)

Design Slump: 3.00 inches
Air Entraining Agent: ASTM C-260

Admixture: ASTM C-494 Type A or D

MATERIAL QUANTITIES PER 1.0 CUBIC YARD AT S.S.D

752 lbs. ASTM C 150 TYPE I/II CEMENT

730 lbs. 1 1/2 - 3/4" CRUSHED STONE

1097 lbs. 1" - #4 CRUSHED STONE

1126 lbs. CONCRETE SAND

267 lbs. or 32.0 Gallons of Water

20.0 to 60.0 oz/cwt of ASTM C-494 Type C

2.0 to 4.0 oz/cwt of ASTM C-494 Type A

Specified Air Content: 3.0% - 5.0%

Placement Slump: 3.00 + or - 1.00 inches

HIGH-EARLY STRENGTH NOTES:

- I) Obtain ALL strength specimens at the point of placement.
- 2) Test specimens used for in-place early strength determination should be cured in a manner as close as possible to the in-place concrete. Utilization of insulated blankets or an insulated curing box is highly recommended. Hydration of portland cement is a temperature sensitive chemical reaction. In-place concrete generally develops and maintains substantially more heat than 6"x12" test cylinders. The difference in magnitude between in-place strength and the measured strength of 6"x12" cylinders increases as ambient temperatures decrease. Standard test cylinders used for 7 and 28 day evaluation should still be cured in strict accordance with ASTM C 31.

Mix Design Proportions and specifications are confidential and proprietary trade secrets of TXI. Any Use or dissemination without permission is a violation of federal criminal law.

TEXAS INDUSTRIES

CONCRETE DESIGN EVALUATION

Date: 08/23/04 ** Statistics Compiled From Independent Laboratory Test Specimens **

Mix Number: 8225

Strength: 4500 psi @ 28 Days

28 Day Test Data Test Type: COMPRESSIVE Description: ASTM C 39 Compressive Strength

Test		Plant		rature nheit)	tracement tetreur	-	/	Cumulative	Moving			
Number	Date	Number	Ambient	Concrete	Slump(in)	of Air	PSI 1	PSI 2	PSI AVG	Average	Avg of 3	Range
1	01/23/04	47	65	68	2.50	N/A	6190	6190	6190	6190		0
2	01/23/04	38	55	64	5.00	5.9%	5660	5730	5695	5943		70
3	01/29/04	38	50	56	6.00	8.5%	5120	4930	5025	5637	5637	190
4	01/30/04	38	30	49	4.50	4.5%	5630	5700	5665	5644	5462	70
5	02/10/04	38	46	56	5.75	8.0%	5660	5360	5510	5617	5400	300
6	02/18/04	44	43	59	6.00	N/A	4680	4630	4655	5457	5277	50
7	02/19/04	47	70	68	3.50	6.0%	6050	5960	6005	5535	5390	90
8	02/19/04	46	73	67	5.00	8.0%	4790	4940	4865	5451	5175	150
9	02/20/04	47	50	66	2.50	5.2%	6060	5970	6015	5514	5628	90
10	02/20/04	47	64	72	2.50	5.5%	6810	6790	6800	5643	5893	20
11	02/23/04	43	62	68	2.50	5.0%	7420	7200	7310	5794	6708	220
12	02/26/04	40	53	67	3.00	4.24	6300	6080	6190	5827	6767	220
13	02/27/04	40	70	68	3.25	5.4%	5300	5500	5400	5794	6300	200
14	02/28/04			64	5.50	N/A	4730	4670	4700	5716	5430	60
15	02/28/04	13	45	58	5.00	n/a	5370	5320	5345	5691	5148	50
16	02/28/04	1.3	63	69	5.25	N/A	5030	5130	5080	5653	5042	100
17	03/01/04	43	67	64	5.00	5.5%	6870	6800	6835	5723	5753	70
18	03/02/04	42	71	69	3.00	5.9%	6660	6290	6475	5764	6130	370
19	03/05/04	40	81	75	2.50	5.5%	5850	5790	5820	5767	6377	60
20	03/08/04	47	71	74	3.50	4.5%	5250	5430	5340	5746	5878	180
21	03/16/04	38	72	4	4.60	n/a	5840	5650	5745	5746	5635	190
22	04/01/04		67	66	3,75	5.5%	5260	5460	5360	5728	5482	200
23	04/07/04	38	75	77	3.75	4.8%	5680	5730	5705	5727	5603	50
24	04/15/04			78	4.00	5.3%	5030	5100	5065	5700	5377	70
25	04/15/04			72	3.25	5.74	4900	4830	4865	5666	5212	70
26	04/20/04		66	76	3.00	6.0%	5540	5500	5520	5661	5150	4 D
27	04/30/04	42	90	94	00.E	5.2%	6250	6220	6235	5682	5540	30
28	05/03/04	40	76	82	3.20	4.04	4720	4810	4765	5649	5507	90
29	05/04/04	42	80	80	2,50	5.5%	5940	5890	5915	5658	5638	50
30	05/25/04	38	73	77	4.00	N/A	6540	6590	6565	5689	5748	50
*** Ave	rages ***		64	67	3.89	5.6%						

Mix Num: 8225 Strength: 4500 psi @ 28 Days

Paragraph 5.5 of ACI 318-02 provides that as data becomes available during construction, the amount by which (F'cr) must exceed the specified value of (F'c) may be reduced, provided:

- (a) 30 or more test results are available and average of test results exceeds that required by Section 5.3.2.1, using a standard deviation calculated in accordance with Section 5.3.1.1, or
- (b) 15 to 29 test results are available and average of test results exceeds that required by Section 5.3.2.1, using a standard deviation calculated in accordance with Section 5.3.1.2.

The required average strength has been calculated using a standard deviation calculated in accordance with ACI 318-02 Section 5.3.1.1 or Section 5.3.1.2 and is the larger value of these calculations:

SUMMARY OF STATISTICAL ANALYSIS 28 Day Test Data

Number of Tests	30	
Maximum Value	7310	psi
Minimum Value	4655	psi
Range.,	2655	psi
Average Strength	5689	psi
Standard Deviation	685	psi
Required Average Strength to satisfy		
minimum probability conditions of		
ACI 318-02 Section 5.3.2.1	5595	psi
Design excess beyond code requirements	94	psi



MIDLOTHIAN CEMENT • 245 Ward Road • Midlothian, Texas 76065 • www.txi.com

SPECIFICATIONS Portland Cement Type I/II (Low Alkali) A.S.T.M. C150-02a

Bin Number					·-			
Car Number						-		
Tons								
Date of Sampling	June-2004 Month	ly Average						
			AS	TM	٦	EST		
			SPECIF	ICATION	RE	SULTS		
CHEMICAL RE	EQUIREMENTS			_				
Silica Oxide, Minimum Percent			20	0.0		21.0		
Alumina Oxide, Maximum Percent			6	.0		4.2		
Iron Oxide, Maximum Percent			6	.0		3.7		
Magnesia Oxide, Maximum Percent	7		6	.0		1.1		
SO ₃ (C ₃ A less than 8%), Maximum Pe	ercent		•	*	3.0			
Loss on Ignition, Maximum Percent			3.0		1.1			
Insoluble Residue, Maximum Percent			0.	75		0.18		
Tricalcium Aluminate, Maximum Perc	ent		8	.0		5		
OPTIONAL CHEMIC	AL REQUIREMENTS		•	•				
Total Alkalies, Max. % (Na ₂ O equiv.)			0.60			0.48		
PHYSICAL RE	QUIREMENTS	•						
Specific surface, Blaine Minimum (m2	/kg)		28	30	359			
Gillmore, Initial Set, Minimum (Minute	s)		6	0	176			
Gillmore, Final Set, Maximum (Minute	s)		60	00		284		
Vicat, Minimum (M	inutes)		4	.5				
Initial Set Maximum (Minutes) 375					96			
Air Content, Volume, Maximum Perce		1	2		7			
Autoclave Expansion, Maximum Percent				30		-0 <u>.01</u>		
Minimum Compressive Strengths				psi	M <u>Pa</u>	psi		
3 Day			12.0	1740	25.2	3661		
7 Day			19.0	2760	30.8	4474		

STATE OF TEXAS

Jeff Wendel	, being duly sworn deposes and says: that he is Quality Services
Manager of TXI Midlothian Cem	ent Plant, who prepared the above report of tests and that the same
is true and correct.	

Subscribed and sworn to before me on this date:

07/13/04

* See ASTM C150 Table 1, Footnote D.

CHERIE MUELLER MARLEY
Notary Public State of Texas
Commission Expires
MARCH 16, 2008

Quality Services Manager



Certified to NSF/ANSI 61



ISG Resources, Inc. certifies that, to the best of its knowledge, the test data listed herein was generated by applicable ASTM methods and meets requirements of ASTM C-618 and AASHTO M-295 and TX. DOT DMS-8900

Report of Fly Ash Welsh Plant, Cason, Texas Unit #1

DATE: February 16, 2004

LABORATORY NUMBER: WELSH-1-12/26/03

MTRF #91 CA

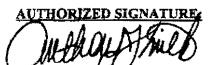
COMPOSITE DATE

		- 12/26/03					
		ASTM C-	618-03 CATIONS		TX. DOT DMS-8900 SPECIFICATIONS		
CHEMICAL ANALYSIS		CLASS C	CLASS F	TYPE C	TYPE F		
Silicon Dioxide (SiO ₂)	33,95	CLASS C	CLASS F	THEC) ILE E		
Aluminum Oxide (Al ₂ O ₃)	18.66						
Iron Oxide (FE ₂ O ₃)	5.84						
Sum of SiO ₂ , Al ₂ O ₃ , & Fe ₂ O ₃	58.45	50 Min.	70 Min.	50 Min	70 Min.		
Magnesium Oxide (MgO)	6.19				,		
Sulfur Trioxide (SO ₃)	2.51	5.0 Max.	5,0 Max.	5.0 Max.	5.0 Max.		
Moisture Content	0.08	3,0 Max.	3.0 Max.	2.0 Max.	2.0 Max.		
Loss On Ignition	0.13	6.0 Max.	6.0 Max.	3.0 Max.	3,0 Max.		
Available Alkalies as Na ₂ O	1.59			A 1.5Max.	A1,5Max.		
Calcium Oxide (CaO)	27,67						
PHYSICAL ANALYSIS							
Fineness: Amount retained							
on 325 sieve %	17.17	34% Max.	34% Max.	30%Max.	30%Max.		
Water Requirement, % Control	96%	105%Max	105%Max	100%Max	100%Max		
Specific Gravity	2.76						
Autoclave Expansion, %	+ 0.09	0.8% Max	0.8% Max	0.8% Max	0.8% Max		
Strength Activity Index							
With Portland Cement, 7 Day	97%	75% Min.	75% Min.	75% Min.	75% Min.		

Applicable only when required by purchaser.

A HILL COMPANY Company

PO. Box 38, Thompsons, TX 77461-0038 Phone: (281) 343-0079 Fax: (281) 343-0872





713-223-8353 www.graceconstruction.com

1/19/2004

Victor H. Villarreal TXI Operations, LP 1341 W. Mockingbird Lane Dallas, Texas 75247

Project Name: All Projects
Product Selected: MIRA® 85

This is to certify that the MIRA® 85, a(n) Mid-Range Water Reducer, as manufactured and supplied by Grace Construction Products, W.R. Grace & Co. – Conn., is formulated to comply with the Specifications for Chemical Admixtures for Concrete, ASTM: C494, Type A, F AASHTO: M194, Type A, F.

MIRA® 85 does not contain calcium chloride or chloride containing compounds as a functional ingredient. Chloride ions may be present in trace amounts contributed from the process water used in manufacturing.

The foregoing is in addition to and not in substitution for our standard Conditions of Sale attached.

Fred E. Hightower

Fred E. Hightom



713-223-8353 www.graceconstruction.com

1/19/2004

Victor H. Villarreal TXI Operations, LP 1341 W. Mockingbird Lane Dallas, Texas 75247

Project Name: All Projects

Product Selected: WRDA® with Hycol®

This is to certify that the WRDA® with Hycol®, a(n) Water Reducer, as manufactured and supplied by Grace Construction Products, W.R. Grace & Co. – Conn., is formulated to comply with the Specifications for Chemical Admixtures for Concrete, ASTM: C494, Type A, D AASHTO: M194, Type A, D.

WRDA® with Hycol® does not contain calcium chloride or chloride containing compounds as a functional ingredient. Chloride ions may be present in trace amounts contributed from the process water used in manufacturing.

The foregoing is in addition to and not in substitution for our standard Conditions of Sale attached.

Fred E. Hightower

Fred & Hightime



713-223-8353 www.graceconstruction.com

1/19/2004

Victor H. Villarreal TXI Operations, LP 1341 W. Mockingbird Lane Dallas, Texas 75247

Project Name: All Projects

Product Selected: Daravair® 1000

This is to certify that the Daravair® 1000, a(n) Air-Entraining Agent, as manufactured and supplied by Grace Construction Products, W.R. Grace & Co. – Conn., is formulated to comply with the Specifications for Chemical Admixtures for Concrete, ASTM: C260 AASHTO: M154.

Daravair® 1000 does not contain calcium chloride or chloride containing compounds as a functional ingredient. Chloride ions may be present in trace amounts contributed from the process water used in manufacturing.

The foregoing is in addition to and not in substitution for our standard Conditions of Sale attached.

Fred E. Hightower

And & Highin

GRACE

Grace Construction Products

W.R. Grace & Co.-Conn. 4323 Crites Street P.O. Box 2585-77252 Houston, TX 77003

713-223-8353 http://www.gcp-grace.com

March 3, 2003

TXI 1341 West Mockingbird Lane Dallas, TX 75247

To Whom It May Concern:

This is to certify that **POLARSET**[®], a non-corrosive, non-chloride, set-accelerating admixture, as manufactured and supplied by Grace Construction Products, W. R. Grace & Co.-Conn., is formulated to comply with the Specification for Chemical Admixtures for Concrete, ASTM: C 494, Type C, (AASHTO M 194, Type C).

POLARSET® does not contain calcium chloride or chloride containing compounds as a functional ingredient. Chloride ions may be present in trace amounts contributed from the process water used in the manufacturing.

The foregoing is in addition to and not in substitution for our standard Conditions of Sale printed on the reverse side hereof.

Sincerely,

Fred Hightower

Technical Services

Fred E. Hightown

Subscribed and sworn to, before me, this 3rd day of March, 2003.

Notary Public

My commission expires:

OLIVER E. MONTEITH
Notary Public, State of Texas
My Commission Expires 10-12-2003



Date:

<u>4/15/2004</u>

Production Facility:

TXI - BRIDGEPORT, TEXAS

Designation:

C 33 (No. 467)

Grading Designation:

ASTM C-33 1.5" - #4

Project:

*****ALL TESTS*****

Sample Location:

SIEVE SIZE	CUMULATIVE WT. RETAINED	CUMULATIVE % RETAINED	CUMULATIVE % PASSING	REQUIRED % RETAINED	SPECIFICATION % PASSING
2.0"					·
1.5"		4.65_	95.35	0 - 5	<u>95 - 100</u>
1.0"		97.02	2.98		
3/4"		63.00	37.00	30 - 65	35 - 70
1/2"		99.64	0.36		
3/8"		71.80	28.20	7 0 - <u>9</u> 0	10 ~ 30
#4		99.98	0.02	<u>95 - 100</u>	0-5
#8					
#10					4
#16					
#30					
#40					
#50					
#100					
#200					
PAN WT.					

DECANT

100% of tests: 1

Size: 467 PLANT: BRIDGEPORT

Job: ******ALL JOBS******

Date:

08/12/2004

Production Facility:

TXI MILL CREEK

Designation:

<u>C57</u>

Grading Designation:

ASTM C-33 1" - #4

Project:

*****ALL TESTS*****

Sample Location:

SIEVE SIZE	CUMULATIVE WT. RETAINED	CUMULATIVE % RETAINED	CUMULATIVE % PASSING	REQUIRED % RETAINED	SPECIFICATION % PASSING
2.0"		•			
1.5"	***************************************	0	100	0	100
1.0"		3.40	96.60	0 – 5	95 - 100
3/2"		24.87	75.13		
1/2"		61.00	39.00	40 - 75	25 - 60
3/8"		79.06	20.94		·
#4		95.66	4.34	90 – 100	0 – 10
#8		98.73	1.27	95 – 100	0 – 5
#10					
#16					
#30					
#40					
#50					
#100					
#200					
PAN WT.		Fineness Modules	s: 1 <i>.</i> 9		

Decant:

0.85%

100% of 6 tests:

Size: 57

PLANT: TXI MILL CREEK

Job:

*******ALL JOBS*****

Date:

07/07/2004

Production Facility:

TXI BELL SAVOY (WADE)

Designation:

C 33

Grading Designation:

ASTM C-33 FINE AGG.

Project:

*****ALL TESTS*****

Sample Location:

SIEVE SIZE	CUMULATIVE WT. RETAINED	CUMULATIVE % RETAINED	CUMULATIVE % PASSING	REQUIRED % RETAINED	SPECIFICATION % PASSING
2.0"					
1.5"		***************************************			
1.0"			! ! !		
3/31					
1/2"				****	
3/8"		0.00	100.00	0	100
#4		2.19	97.81	0 - 5	95 - 100
#8		10.87	89.13	0 - 20	80 - 100
#10			1		
#16		20.64	79.36	15 - 50	50 - 85
#30		41.41	58.59	40 - 75	25 - 60
#40					
#50		77.77	22.23	70 - 90	10 - 30
#100		96,23	3,77	90 - 98	2 - 10
#200		99.56	1,44		
PAN WT.		Fineness M	odulus: 2.5	· · · · · · · · · · · · · · · · · · ·	

M. C. Decant S. E.

100% of tests: 26

Size: 33

PLANT: TXI BELL SAVOY

Job: *******ALL JOBS*******

PLEASE REMIT TO:

ENGINEERING CONSULTING SERVICES, LTD. 14026 THUNDERBOLT PLACE, SUITE 100 CHANTILLY, VA 20151-3232

19.4246
Always Refer To
Allove Number

Page 1 of 2

CUSTOMER CODE 332305

INVOICE DATE

09/28/04

SPECIAL INSTRUCTIONS
Addison Airport Fuel Truck

Access Road Addison, Texas

Progress Invoice

TO:

Jim Pierce Town of Addison P.O. Box 9010 Addison, TX 75001

PLEASE DETACH AND RETURN DUPL	ICATE COPY W	ITH YO	UR REMITTANCI	E			
OFFICE JOB NO.		******	ED THRU DATE	TERMS	Invoice Tot	m.l.	\$2,669.00
4026	19-380		09/25/04	UPON RECEIPT	MAGICE 100		41,000,00
Description				Unit Price	Extension	Total	
For services provided by ECS,	Ļid.					_	
through 09/25/04							Toward Annual An
Week Ending Sep 4, 2004							
Principal Engineer		0.50	HR\$	\$125.00	\$62.50		004
Project Manager (CMT)		0.50	HRS	\$75.00	\$37.50		004
Senior Field Technician		4.00	HRS	\$34.00	\$136.00		004
Senior Field Technician (OverTin	ne)	2.00	HRS	\$51.00	\$102.00		004
Field Technician	•	7.00	HRS	\$30.00	\$210.00		004
Concrete Lab Secretary		1.50	HRS	\$30.00	\$45.00		004
Concrete Test Cylinders - Tested		8.00	EA	\$11.00	\$88.00		005
Concrete Test Cylinders - Stored		8.00	EA	\$5.00	\$40.00		005
Trip Charge		6.00	EA	\$20.00	\$120.00		004
	Subtotal:					\$841.00)
Neek Ending Sep 11, 2004							
Principal Engineer		0.50	HRS	\$125.00	\$62.50		004
Project Manager (CMT)		0.50	HRS	\$75.00	\$37.50		004
Senior Field Technician		4.25	HRS	\$34.00	\$144,50		004
Senior Field Technician (OverTim	e)	4.00	HRS	\$51.00	\$204.00		004
Joncrete Lab Secretary		1.00	HRS	\$30.00	\$30.00		004
Concrete Test Cylinders - Tested		10.00	EA	\$11.00	\$110.00		005
Concrete Test Cylinders - Stored		2.00	EA	\$5.00	\$10.00		005
îrip Charge		4.00	EA	\$20.00	\$80.00		004
;	Subtotal:					\$678,50	
Veek Ending Sep 18, 2004							
¹rincipal Engineer		0.50	HRS	\$125.00	\$ 62.50		004
Project Manager (CMT)		1.00	HRS	\$75.00	\$75.00		004
Senior Field Technician		10.50	HRS	\$34.00	\$357.00		004
Senior Field Technician (OverTim	e)	4.00	HRS	\$51.00	\$204.00		004
Concrete Lab Secretary		2.00	HRS	\$30.00	\$60.00		004
Concrete Test Cylinders -Tested		11.00	EA	\$11.00	\$121.00		005
				A			
		_	24.44				



TO:

PLEASE REMIT TO:

ENGINEERING CONSULTING SERVICES, LTD. 14026 THUNDERBOLT PLACE, SUITE 100 CHANTILLY, VA 20151-3232

19.4246
Always Refer To
Above Number

Page 2 of 2

CUSTOMER CODE 332305

INVOICE DATE

09/28/04

SPECIAL INSTRUCTIONS
Addison Airport Fuel Truck

Access Road Addison, Texas

Progress Invoice

Jim Pierce Town of Addison P.O. Box 9010 Addison, TX 75001

LEASE DETACH A	ND RETURN DUP	ICATE COPY WI	TH YÓUR	REMITTANC	900V	****		
OFFICE	JOB NO. 4026	19-380		THRU DATE 09/25/04		Invoice To	otal:	2,669.00
1.0	Description	E	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Unit Price	Extension	Total	
For services pro through 09/25/0	ovided by ECS, 04	Ltd.						
Concrete Test Cy Trip Charge			3.00 7.00	EA EA	\$5.00 \$20.00	\$15.00 \$140.00	1	005 004
Veek Ending S rincipal Enginee roject Manager Concrete Lab Se	cr(CMT)		0.50 0.50 0.50	HRS HRS HRS	\$125.00 \$75.00 \$30.00	\$62.50 \$37.50 \$15.00		004 004 004
		* Invoice To	otal - Ple	ase Remit	=>	****	\$2669.00	
If you have any of invoice, please of at (972) 392-32	ontacl Daniel L		OF		\$2285.	SE ONLY *** 30 - Dept. 004 30 - Dept. 005		
* B U D G E T S Budget Estimate: Previous Invoice: Amt. This Invoice: Amt. Remaining:	: 3; a:	\$3000.00 \$0.00 \$2669.00 \$331.00))			OKto	pay	
						Jul	9/28/04	L



Facsimile Cover Sheet

1		2		3
To: Jim Piero				
Company:				
Fax: 972-450-	28371			
From: Company: Phone: Fax: Date: ECS Job/Proposal No.:	Kathy D Engineering Co 4950 Keller Spr Addison, Texas 972-392-3222 972-392-0102	ings Road, Sui 75001	ces, Ltd.	ECS Use Only Rin. to Sancer FS File Work File Billing File Prop. File
Pages including this cover:	<u> </u>			Sent By:
Originals: X	will	will not follow	via mail	
			/	\$ x \ 236

TOWN OF ADDISON PAYMENT AUTHORIZATION MEMO

Date	9/7/2004	Claim #		<u> </u>		Check \$	40,000.00			
	Vendor No.		-							
	Vendor Name	Texas S	tandard	Constru	ction LTE)				
	Address	P.O. Box	<u>< 21076</u>	8						
	Address	Dallas, 1	Dallas, TX							
	Address									
	Zip Code	752 11								
	E # OD DECODIDATION	.	TREST							
INVOIC	E#OR DESCRIPTION	FUND	DEPT	OBJ	PROJ	SAC	AMOUNT.			
Inv 0831	In _A	(00) 12	(000) 625	(00000) 54210	(00000) 04000	(000)	(\$000,000.00) 40,000.00			
				•						
EXPLAN	NATION	,	_			TOTAL	\$40,000.00			
Paving F	Repair & Storm Sewer m	odification	for Fue	Truck F	≀oadway					
	RAMP Drogram									

Men Authoriz	de Signature		***************************************		Finance					

972 450 7096;

SEP-1-04 8:59AM;

PAGE 2/2

FAX NO.

TEXAS STANDARD CONSTRUCTION LTD.

INVOICE

P.O. BOX 210768 DALLAS, TX. 75211 (214) 330-5229 Office (214) 330-5254 Fax

Number:

083104

Date:

August 31, 2004

Bill To:	Job:		
Dave Foster	Bid 04-27 Paying Repair & Storm Sewer		
Jim Pierce, P.E.	Modification for the Fuel Truck Roadway		
Town of Addison			
P.O. Box 9010			
Addison, TX 75001			
	Tayon		
	Terms		
Pay Request #1	Net 30		
⁷			

İtem No.	Description	Amount
I.	Work completed this pay period.	\$ 40,000.00
	a. Areas 100% completed, B-1, B-2, B-3, & C-1 b. Sawcut & removed existing paving A-1, D-3, & D-4	
	al I saw	
	OK to to	awak
	8/31/04 OK- White	John John John John John John John John
,	@ 12-625-5421004000	
	mulf Halm props 10 AVI Total	\$ 40,000.00

Thank you for your business! Please pay from this invoice. No others will be sent.

TEXAS STANDARD CONSTRUCTION LTD.

P.O. BOX 210768 DALLAS, TX. 75211 (214) 330-5229 Office (214) 330-5254 Fax **INVOICE**

Number:

092404

Date:

September 24, 2004

Bill To:

Daye Foster
Jim Pierce, P.E.
Town of Addison
P.O. Box 9010
Addison, TX 75001

Terms

Pay Request #2 and Final

Bid 04-27 Paving Repair & Storm Sewer
Modification for the Fuel Truck Roadway

Truck Roadway

Terms

Item No.	Description		Amount
Y.	Work completed this pay period. a. All areas 100% complete.	5	\$ 68,565.00
	OK to pay quein quein		
	Q-24-07 To	tal \$	68,565.00

Thank you for your business! Please pay from this invoice. No others will be sent.



Texas Standard Construction

FACSIMILE TRANSMISSION SHEET

To: Attn: Fax No.	Town of Addison Mr. Jim Pierce, P.E. 972-450-2837	Date: September 24, 2004 Re: Invoice #2 and Final From: Ronald H. Dalton, President Total # of Pages: 2 (including cover sheet)
Messag Please se	e; e attached.	,
Thank You	J	
		•

Jim Pierce

From: Mike Hutchison [MHutchison@HNTB.com]

Sent: Monday, August 30, 2004 6:04 PM

To: Jim Pierce

Subject: Fuel Truck Roadway Concrete Mix Design Review

Jim:

I have reviewed the Class "M" Custom Crete concrete mix design submitted by Texas Standard Construction dated 8/30/04. This design meets the requirements of the specifications.

Please give me a call if you have any questions.

Thanks,

Michael A. Hutchison, P.E.
Project Manager
HNT8 Corporation
5910 West Plano Parkway, Suite 200
Plano, Texas 75093

ph: 972-628-3174 fax: 972-661-5614

This e-mail and any files transmitted with it are confidential and are intended solely for the use of the individual or entity to whom they are addressed. If you are NOT the intended recipient or the person responsible for delivering the e-mail to the intended recipient, be advised that you have received this e-mail in error and that any use, dissemination, forwarding, printing, or copying of this e-mail is strictly prohibited.

HP LaserJet 3200se

HP LASERJET 3200

SEP-7-2004 10:15AM



Fax Call	Report
----------	--------

Job	Date	Time	Туре	Identification	Duration	Pages	Result
875	9/ 7/2004	10:15:22AM	Send	92143305254	0:31	1	OK

To Sam Dulton Fax Tx Std. Const 214-330-5254

Contract Aercont Amou Amount complete Due A mount Description Base Bid Add. Alt. 1 Add Alt 2 Add Alt 3 Add Alt 4 TotalB 1stat

Less Amt Previously

Ant one this Invoice #

Sam - Please use this formation your next invoice: Thenks, Jim Pierie Town & addison 11/04

P.10.



FINANCE DEPARTMENT/PURCHASING DIVISION

5350 Belt Line Road (972) 450-7091

E-mail msuh@ci.addison.tx.us

Facsimîle (972) 450-7096

P.O. Box 9010 Addison, Texas 75001

August 23, 2004

Texas Standard Construction, LTD. Ronald H. Dalton, President 5524 W. Ledbetter Dr. Dallas, TX 75236

Re: NOTICE TO PROCEED- 04-27 Paving and Storm Sewer Modification for the Fuel Truck Roadway

Dear Mr. Dalton:

This document shall serve as your Notice to Proceed for the above referenced Project, and effective to start work August 25, 2004 to provide all labor and materials as outlined in the specifications, and under the terms and conditions of the contract documents. Enclosed is your copy of the signed contract.

The proposed improvements and work shall be completed with the original contract price of \$108, 565.00 and within 45 days as stated on the contract. Please include Bid No. and Name: 04-27 Paving and Storm Sewer Modification for the Fuel Truck Roadway:, on all monthly invoices or other correspondence to the Town of Addison.

Should you have any questions, please contact my office at 972-450-7091.

Sincerely

Minok Suh

Purchasing Coordinator

Copy:

Steve Chutchian

Jim Pierce

Enclosure

Public Works

SECTION CA

CONTRACT AGREEMENT

SECTION CA CONTRACT AGREEMENT

STATE OF TEXAS

COUNTY OF DALLAS

THIS AGREEMENT is made	and entered in	to this _10_ da	iy ofAugust_	_, 2004_, by
and between the Town of Add	lison, of the Co	ounty of Dallas	and State of T	exas, acting
through its Mayor or City Man	ager, thereunto	duly authorize	d so to do, Party	of the First
Part, hereinafter termed the O'	WNER, and	Texas Stand	ard Construction	n LTO, of the
City ofDallas	_, County of	Dallas	, State of	TX,
Party of the Second Part, herein	after termed Co	ONTRACTOR	•	

WITNESSETH: That for and in consideration of the payment and agreement hereinafter mentioned, to be made and performed by the OWNER, the said CONTRACTOR hereby agrees with the said OWNER to commence and complete construction of certain improvements as follows:

Paving Repair and Storm Sewer Modification for the Fuel Truck Roadway

and all extra work in connection therewith, under the terms as stated in the General and Specific Provisions of the AGREEMENT; and at his own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance and other accessories and services necessary to complete the said construction, in accordance with the conditions and prices stated in the Proposal attached hereto and in accordance with the Advertisement for Bids, Instructions to Bidders, General Provisions, Special Provisions, Plans, and other drawings and printed or written explanatory matter thereof, and the Technical Specifications and Addenda thereto, as prepared by the OWNER, each of which has been identified by the endorsement of the CONTRACTOR and the OWNER thereon, together with the CONTRACTOR's written Proposal and the General Provisions, all of which are made a part hereof and collectively evidence and constitute the entire AGREEMENT.

The CONTRACTOR hereby agrees to commence work within ten (10) calendar days after the date of written notice shall have been given to him, and to complete all work within 45 days after he commences work, subject to such extensions of time as are provided by the General Provisions.

The OWNER agrees to pay the CONTRACTOR <u>\$One-hundred eight thousand five-hundred sixty-five and 00/100 (\$108,565.00)</u> in current funds for the performance of the Contract in accordance with the Proposal submitted thereof, subject to additions and deductions, as provided in the General Provisions, and to make payments of account thereof as provided therein.

IN WITNESS THEREOF, the parties of these presents have executed this AGREEMENT in the year and day first above written.

TOWN OF ADDISON (OWNER)	ATTEST:
BY: Rollille	City Secretary City Secretary
	TEXAS STANDARD CONSTRUCTION, LTD. Party of the Second Part (CONTRACTOR)
ATTEST:	By Monald Hallon
The following to be executed if the CONT	RACTOR is a corporation:
CONTRACTOR herein; that	Storm Sewer Modification for the Fuel Truck and in behalf of said corporation by authority of
	Signed:
Cornorate Seal	

MID-CONTINENT CASUALTY COMPANY

P.O. Box 1409

TULSA, OKLAHOMA 74101

LABOR AND MATERIAL PAYMENT BOND

Texas Standard Construction, LTD., P. O. Box 210768, Dallas, Texas 75211

KNOW ALL MEN BY THESE PRESENTS:

BOND NUMBER TXD-0010315

				as Principal,
Tulsa, Oklahoma, as Surety,	nd MID-CONTINENT CASUALTY hereinafter called Surety, are he	COMPANY, a corporation organized at it does not firmly bound unto	nd existing under the laws of the f Addison	• •
as Obligee, hereinafter called	d Owner, for the use and benefit	of claimants as hereinbelow defined,	in the amount of —One Hu	andred Eight
Thousand Five Hundre	d Sixty-Five and 00/100	s, their heirs, executors, administrat	Dollars (c. 108,	565.00
for the payment whereof Prin	ncipal and Surety bind themselve	s, their heirs, executors, administrat	ors, successors and assigns,	ointly and severally,
firmly by these presents.				
WHEREAS, Principal har Paving Repair and Stor	as by written agreement dated . rm Sewer Modifications fo	August 10, or the Fuel Truck Roadway at	. 2004 entered into a cor Addison Airport	ntract with Owner for
in accordance with drawings	and specifications prepared by	HNTB Corporation, 5910 W.	Plano Parkway, #200, P	lano,
Texas 75093			(Here invertible name, title and a , Which contract is by	ddress)
hereof, and is hereinafter refe	erred to as the Contract.		* ******* Occupant to m	ioraronao mada a part
and effect, subject, however, (1) A claimant is defined performance of the control of the contr	to the following conditions: if as one having a direct contract contract as one having a direct contract contract are expiration of a period of ninety lats were furnished by such claims is as may be justly due claimant, as suit. If be commenced hereunder by a other than one having a direct cover, or the Surety above named, is of the materials for which said to materials were furnished, or for red mall or certified mall, postage y maintained for the transaction of said project is located, save that	ntract with the Principal, shall have gi within ninety (90) days after such claimal laim is made, stating with substantial whom the work or labor was done or p prepaid, in an envelope addressed to to f business, or served in any manner in	or for labor, material, or both, every claimant as herein defined last of such claimant's work or if such claimant, prosecute the er shall not be liable for the pay even written notice to any two of ant did or performed the last of taccuracy the amount claimed accuracy the amount claimed the Principal, Owner or Surety, any which legal process may be spublic officer.	used directly in the , who has not been labor was done or suit to final judgment ment of any costs or I the following: The he work or labor, or and the name of the served by mailing the at any place where an
(b) After the expirable any limitation er amended so as (c) Other than in a st part thereof, is a elsewhere. (4) The amount of this bo	mbodied in this bond is prohibite to be equal to the minimum per ate court of competent jurisdiction situated, or in the United States I and shall be reduced by and to the nics' liens which may be filed of	te on which Principal ceased work on d by any law controlling the construct of of limitation permitted by such law in and for the county or other political district Court for the district in which the extent of any payment or payments may record against said improvement, we	tion hereof such ilmitation shav. subdivision of the state in which he project, or any part thereof, de in good faith hereunder, inclu	If be deemed to be the project, or any is situated, and not sive of the payment
(b) After the expirable any limitation er amended so as (c) Other than in a st part thereof, is a elsewhere. (4) The amount of this boy by Surety of mecha	mbodied in this bond is prohibite to be equal to the minimum per ate court of competent jurisdiction situated, or in the United States I and shall be reduced by and to the nics' liens which may be filed of d against this bond.	te on which Principal ceased work on d by any law controlling the construct of of limitation permitted by such law in and for the county or other political District Court for the district in which to extent of any payment or payments man	tion hereof such ilmitation shav. subdivision of the state in which the project, or any part thereof, the in good faith hereunder, inclu the hether or not claim for the am	If be deemed to be the project, or any is situated, and not sive of the payment

MID-CONTINENT CASUALTY COMPANY

P.O. Box 1409 TULSA, OKLAHOMA 74101

PERFORMANCE BOND

	BOND NU	MBER TXD-0010315	
KNOW ALL MEN BY THESE PRESENTS:			
That Texas Standard Construction, LTD., P.O. Box 210768, Da	allas, Texas 752	11	
			as Principal,
hereinafter called Contractor, and MID-CONTINENT CASUALTY COMPANY,	, a corporation orga	nized and existing under t	
Tulsa, Oklahoma, as Surely, hereinafter called Surety, are held and firmly	y bound unto To	vn of Addison	
as Obligee, hereinafter called Owner, in the amount ofOne Hundre	ed Eight Thousa	nd Five Hundred Sixty-	Five and 00/100
			ars (\$ 108,565.00).
for the payment whereof Contractor and Surety bind themselves, their heir firmly by these presents. $ \\$	rs, executors, adm	inistrators, successors a	nd assigns, jointly and severally,
WHEREAS, Contractor has by written agreement datedAug	just 10	, 2004, enter	ed into a contract with Owner for
Paving Repair and Storm Sewer Modifications for the Fuel Truck R	toadway at Addis	son Airport	· .
in accordance with drawings and specifications prepared by HNTB Corp	oration, 5910 W	. Plano Parkway, #200, e insert full name, litle and a	, Plano, Texas 75093
	тэн)	-	tract is by reference made a part
hereof, and is hereinafter referred to as the Contract.			
NOW, THEREFORE THE CONDITION OF THIS OBLIGATION is then this obligation shall be null and void, otherwise it shall remain in full $\frac{1}{2}$		actor shall promptly and	faithfully perform said Contract,
The Surety hereby waives notice of any alteration or extension of time	e made by the Ow	ner.	
Whenever Contractor shall be, and declared by Owner to be in default under, the Surety may promptly remedy the default, or shall promptly (1) Complete the Contract in accordance with its terms and conditions (2) Obtain a bid or bids for completing the Contract in accordance with responsible bidder, or, if the Owner elects, upon determination by the contract between such bidder and Owner, and make available as a defaults under the contract or contracts of completion arranged u balance of the contract price; but not exceeding, including other cost forth in the first paragraph hereof. The term "balance of the contract Owner to Contractor under the Contract and any amendments the	s, or n its terms and con ne Owner and the S Work progresses (i ander this paragrap its and damages fo nect price," as used	ditions, and upon determ curety jointly of the lowest even though there should th) sufficient funds to pay r which the Surety may be in this paragraph, shall m	ination by Surety of the lowest responsible bidder, arrange for a be a default or a succession of the cost of completion less the liable hereunder, the amount set nean the total amount payable by
Any suit under this bond must be instituted before the expiration of one	(1) year from the d	ate on which final paymer	nt under the Contract falls due.
No right of action shall accrue on this bond to or for the use of any personadministrators or successors of the Owner.	on or corporation o	ther than the Owner name	ed herein or the heirs, executors,
Signed, sealed, and dated this18th	day of	August	, _2004
	1		

MID-CONTINENT CASUALTY COMPANY Tulsa, Oklahoma

Know all Men by these presents: That the MID-CONTINENT CASUALTY COMPANY, a corporation of the State of Oklahoma, having its principal office in the city of Tulsa, Oklahoma, pursuant to the following By-Law, which was adopted by the Stockholders of the said Company on March 13th, 1947, to-wit:

"Article IV, Section 7. - The Executive Officers of the Company shall have power and authority to appoint, for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, one more Resident Vice President, Resident Assistant Secretaries and Attorneys-in-Fact and at any time to remove any such Resident Vice President, Resident Assistant Secretary, or Attorney-in-Fact and revoke the power and authority given him. None of such appointees need be Directors of the Company."

The Company does hereby constitute and appoint Richard W. Daiker, Tony Fierro, James W. Leeker,

Charles K. Miller, Clinton G. Norris, Rudolph Norris, David C. Oxford, Stephen J. Rickenbacher, Robert C. Siddons and Steven B. Siddons, individually of ROCKWALL, TX

its true and lawful attorney(s)-in-fact, to execute, seal and deliver for and on its behalf as Surety, and as its act and deed, Any and all bonds and undertakings of Suretyship

And the execution of such instrument(s) in pursuance of these presents, shall be as binding upon the said MID-CONTINENT CASUALTY COMPANY, as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at its principal office in Tulsa, Oklahoma.

MID-CONTINENT CASUALTY COMPANY IN WITNESS WHEREOF has executed and attested these presents this 2004 day of February ATTEST: SECRETARY VICE PRESIDENT February On this day of 2004 before me, a Notary Public of the State of Oklahoma in and

for the County of Tulsa, came the individual to me personally known to be the officer described in, and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, said that he is the therein described and authorized officer of the MID-CONTINENT CASUALTY COMPANY aforesaid, and that the seal affixed to the preceding instrument is the corporate of said Company, and the said corporate seal and his signature as such officer were duly affixed to the said instrument by the authority and direction of the said Company, and that Article IV, Section 7, of the By-Laws of said Company, referred to in the preceding instrument, is now in force. Manufacture of the last of the

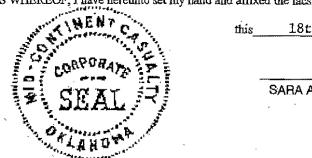
WHEABOF, I have hereunto set my hand and affixed my official seal at the City of Tulsa, the day and year first above written.

 Commission # 00018867 My Commission expires Notary Public

Assistant Secretary of MID-CONTINENT CASUALTY COMPANY do hereby certify that the foregoing extracts of the By-Laws and of a Resolution of the Board of Directors of this corporation, and of a Power of Attorney issued pursuant thereto, are true and correct, and that both the By-Laws, the Resolution and the Power of Attorney are still in full force and effect.

This certifies that any facsimile or mechanically-produced signature of any officer of the Company and Company seal, wherever appearing upon a power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the facsimile seal of said corporation



August 2004 18th day of Assistant Secretary SARA ANDERSON

DATE (MW/DD/YYYY) ACORD. CERTIFICATE OF LIABILITY INSURANCE **B/19/2004** THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE LEWISVILLE INSURANCE AGENCY, INC HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR P O BOX 916 ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. LEWISVILLE, TX 75029-2635 972-436-6608 INSURERS AFFORDING COVERAGE NAIC# INSURER A: United Fire Lloyds INSURER B: ALEA NORTH AMERICA INS. CO. TEXAS STANDARD CONSTRUCTION, LTD. P.O.BOX 210768 INSURER C: DALLAS, TX 75211 INSURER D INSURER E:

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A	**************************************	GENERAL LIABILITY COMMERCIAL GENERAL LIABILITY CLAIMS MADE X OCCUR X PER PROJECT GENL AGGREGATE LIMIT APPLIES PER POLICY X PECT LOC	506-20-125 160	11/16/03	11/16/04	EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurence) \$ MED EXP (Any ona person) \$ PERSONAL & ADV INJURY \$	1,000,000 100,000 5,000 1,000,000 2,000,000 2,000,000
A	x	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS HIRED AUTOS NON-OWNED AUTOS	506-12-018 326	11/16/03	11/16/04	COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$	1,000,000
		GARAGE LIABILITY ANYAUTO				AUTO ONLY- EA ACCIDENT S OTHER THAN AUTO ONLY: AGG S	
A	x	EXCESS/UMBRELLA LIABILITY X OCCUR CLAIMS MADE DEDUCTIBLE RETENTION \$	506-27-024 767	11/16/03	11/16/04	EACH OCCURRENCE S AGGREGATE S S S S	2,000,000
В	ANY I OFFIC Ifyes	KERS COMPENSATION AND	104564200	12/24/03	12/24/04	WCSTATU-TORYLIMITS OTH-TORYLIMITS SEL. EACH ACCIDENT \$ E.L. DISEASE - FA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$	1,000,000 1,000,000 1,000,000
	отні	ER					

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS

TOWN OF ADDISON IS ADDITIONAL INSURED FOR GENERAL, AUTOMOBILE AND UMBRELLA LIABILITIES. WAIVER OF SUBROGATION AS TO THE TOWN OF ADDISON ON GENERAL AND AUTO LIABILITIES AND WORKERS COMPENSATION.

CERTIFICATE HOLDER

TOWN OF ADDISON 5350 BELTLINE RD

ADDISON, TEXAS 75001

(972) 450-7091

RE: Bid 04-27 Paving Repairs

Addison Airport

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR

REPRESENTATIVES.
AUTHORIZED REPRESENTATIVE

© ACORD CORPORATION 1988



Public Works / Engineering

16801 Westgrove • P.O. Box 9010

Addison, Texos 75001

GENTLEMAN:

COPIES

☐ Shop Drawings

☐ Copy of letter

☐ For approval

☐ For your use

□ As requested

☐ FOR BIDS DUE

REMARKS

☐ For review and comment

Telephone: (972) 450-2871 • Fax: (972) 450-2837

то	Sam Lundgren
	Washington broup
	J

NO.

THESE ARE TRANSMITTED as checked below:

A Attached

WE ARE SENDING YOU

DATE

	The state of the s	ITTER O	F TRAR	ISMITT/
	DATE	8/26/04	JOB NO.	
	ATTENT	ION		
	RE:	addison o	arport	Enel
		Fa	nn	
450-2837				
roys				****
Attached	∏ Under sei	parate cover via	+}	ne following items
Prints		□ Samples		
Change order		Samuel Works & Sport William		
- t 0 1		DESCRIPTION	12.11.	
es of X	CANS -	- 1 Det	fure	
NOUS!	mm	enty	1_2-	***************************************
checked below:				
Approved as submi	πεα		copies	
Approved as noted Returned for correc		☐ Return	copies fo	
]			TURNED AFTER	LOAN TO US
		h Sets		
			444444444444444444444444444444444444444	***************************************
er inder				

COPY TO Mark acers

SIGNED:

If enclosures are not as noted, please notify us at once.

ENGINEERING CONSULTING SERVICES, LTD.



4950 Keller Springs Road, Suite 480 Addison, TX 75001 (972) 392-3222 (FAX) 392-0102

Fax Cover Sheet

Date:

August 27, 2004

of Pages (incl. cover)

To:

Mr. Jim Pierce Town of Addison P.O. Box 9010 Addison, TX, 75001

	Addison, 12 13001			
Phone:	(972) 450-2860		Fax: (S	972) 450-2837
From:	Stewart M. Owings		***	Faxed by: SMO
Re:	Work Authorization ECS Proposal # 19:2244	4 — Addison Airport Fi	uel Truck Access	Road
Origina	als to Follow Via:	FedEx/UPS	Courier	X N/A
Remar	ks: Urgent	X Reply ASAP	X For Your R	eview X Please Comment
	tate to call with any furthe		r the above refer	enced project. Please do not

HP LaserJet 3200se

Type

HP LASERJET 3200

Job

AUG-27-2004 1:28PM

Date



Result

0K

Fax	Call	Report	

Time

782 8/27/2004 1:27:57PM 99723920102 0:57 Send T-764 P-882/808 F-048 ******** Aug-27-2064 12:87pm Fram-WORK AUTHORIZATION ECS, Ltd.
4950 Kather Springs Rd. Suite 414
Addition, TX 75001
conjugactionsections Engineering Consulting Services, Ltd. (ECS) is pleased to provide the services outlined in the proposed scope of services below. This contract confirms your authorization for the services requested and is in agreement with the analysis General Conditions (Attachment I) under which the services are provided. Please attach a copy of those to be copied for report distribution. Project Information ECS Proposal Number: 19-7244-CP Project Name: Addison Airport Foel Truck Access Road
Project Street Address: Zip: State: TX City: Addison Client Invoice Information Am.: Mr. Jim Pince Firm: Town of Addison
Mailing Address: PO Box 9010 Jenence ci. addism. tr. us City: Addison Phone 972-450-2879 Proposed Scope of Services (please check all that applies) Unit Rates TRATION SERVICES PATE STRAIN

Identification

warrants his/her authority to bind the entity represents

Duration

Pages

2

Work Authorized By: Signature:

Properties By:

ENGINEERING CONSULTING SERVICES, LTD.

ECS, Ltd.

4950 Keller Springs Rd. Suite 480 Addison, TX 75001

sowings@ecslimited.com

To stewarts

WORK AUTHORIZATION

Phone 972-392-3222 Fax 972-392-0102

Engineering Consulting Services, Ltd. (ECS) is pleased to provide the services outlined in the proposed scope of services below. This contract confirms your authorization for the services requested and is in agreement with the attached General Conditions (Attachment I) under which the services are provided. Please attach a copy of those to be copied for report distribution.

Project Information											
Project Name: Addison Air	port Fuel Tr	uck Acces	s Road		E	CS Pr	oposal	Numbe	er:	19-2244	-CP
Project Street Address:					***		•				
City: Addison		State:	TX		Zip:	***************************************					*****
Client Invoice Information											
Firm: Town of Addison					į.	Atm.:	Мг.	. Jim P	ierce		
Mailing Address: PO Box 90	010										
City: Addison		State:	TX	Zip:	75001	En	nail:				
Phone 972-450-2879	Fax:	972-45	0-2837				pierc	e0	ci.a	ddison	1. tx. US
Proposed Scope of Services	(please che	ck all that	applies))		•	•				
() Eurthwork Observat () Masonry Sampling () Asphalt Observation		() Мазо	rete Observ nry Observ ng Observe	ation	()	Structu	ıral Steel	el Observation	on	
Unit Rates											
FIELD SERVICES					ENG	INCEP	ung/ad	MINSTI	RATION	SERVICES	
	32.00/how					ject Eng		\$ 75,00/			
	34.00/hour					ncipal Es	ginoar	\$ 125.00/			
	45.00/how 45.00/how					irelary jest Man	inger	\$ 75.00			
ABORATORY SERVICES											
. Compressive strength making of concrete		\$ 11,00/euch	ô.	Washed Si	eve Analys	ts				5 KU-00/ca	ich
Compressive agength testing of grout prisms		\$ 25.00/cach	7.	CBR Test	•					\$ 250.00/e:	icl.
 Compressive strength testing of 3x6 mortar cyli 	inders	\$ 17.50/oach	8.		sls on Pirep	A ugacus	Muterials			\$ 25.00/e	ioh
L. Sundard Proctor (ASTM D-698)		\$ 125,00/each	9 .							\$ 0.45/m	
i. Anotherg Limits Tests The services described above would be residered potential & hour work day. Monday through Friday, be folldays will be invoiced at a rate of 1.5 times the near rates. Samples requiring result turnsmund of les	etwoen the normal to formal tiously rate in	ousiness hours o idicated above.	l 7:00 a.m. to Special conv	is. There will 55:00 p.m. (ultation by the	ill be n 3 he Overtime be te Project M	syond 8) Islagor (rouns/day, c	ron shistor	mai houra a	nd on Socurdin	re based on a y, Suiduy and
Work <u>Authorized By:</u>	γ)					~ <i>l</i>	1			
Signature:	*14	in.			Dat	¢:	8/2	7/09	<u>Ł</u>		
Print Name: Jim Pierce			2 .	· · · · · · · · · · · · · · · · · · ·	Titl						· · · · · · · · · · · · · · · · · · ·
:	Signatory wa	arrants his	ner auti	nority to	oind ti	ne ent	ity repr	csente	α.		
Prepared By:				~ +]	Date:	08-2	7-04		*****
ENGINEERING	G CUNSUL	コロソレン ひじ	KY!した	シ・レコル							

9723920102

ECS PROPOSAL 19-2244-CP

BELTSCHEICHELTSCHEICHELTSCHEICHELTSCHEICHELTSCHEICHELTSCHEICHE

GENERAL CONDITIONS OF SERVICE

ATTACHMENT I

Those General Candillons of Service, including any Supplemental Conditions of Service which are or may become applicable to the services to be provided in the Proposal, the incorporated by reference on the ferencing Proposal and shall be part of the Agreement under which services are to be performed by ECS for Client. For the purposes of these General Conditions, "Agreement what mean the Proposal, these General Conditions, Supplemental Concerns (if pay) and Fee Schedule

SECTION 1: SCOPE OF WORK

- White Severt We want shall include all services provided by ECS, in its discretion, which ere research the sergestry and appropriate for the effective and prompt fittilliment of ECS's pergalants under the Agreement, including these Goneral Conditions and any supplemental conditions incomparated herein; it being expressly provided that all such services provided that it is invoiced and paid for in accompance.
- were option a bollow. It is unuambod that the scope of work and time school to befind in the Pruposal are based on the information provided by Chanc. If this information is incomplete or insocurate, or if unexpected conducts and discovering the access of which has change, even at the work is in progress. If the Client requests additional restricted or when a citange in the scope of work or time schooling to recognize, a written archefulment to the Agreement applied executed by the Client and ECS as soon as is practicable and consent to attach emandments shall not on unreasonably withheld.

- SECTION 2: CLIENT DISCLOSURES

 a. The Client year north ECS of any known or suspected hezerdove spostences which are or may be The Client half hours of the provided of the precision of supplications are straightful to the sortices to be provided. Such hazerdote substances shall notice but not be limited to any shall not the sortices to be provided. Such hazerdote substances shall notice but not be limited to any substances which goods or may pose a present or potential negarit to terman health or the environment whether contained in a product, manural, openuduct, waste or alegate whether it exhibit in a solid, fluid, some tolid or gazeous form. This surty of notify ECS of any such hazardous substances which ECS may be provided or contain or which mast or may saits on an hear any oremises upon which senders are us performed by employees, against or mays tast on an hear any oremises upon which each experience of ECS. The Ctent shall notify ECS of all such hazardous divisions of which it has any entities and continuous and notification to ECS has be required immedietely upon discovery of any other hazardous substances or upon discovery of increased concentrations of proviously disclosed substances and substances or upon discovery of increased concentrations of one strain had not increased concentration makes them negations.

 Potioning any disclosure as set forth in the preceding paragraph, or if any hazardous substances and discovered or researches, but the substances of solid the substances in secondary on the continuous in secondary in contractions of substances in the precision of the precision of the precision of the contraction of the precision of the precision of the contraction of the precision of the precision of the precision of the precision of the particles and the assumption of substances in the event of the precision of the precision of the precision of the precision of the precision of the precision of the precision of the precision of the precision of the precision of the precision of the precision of the precision of the precision of the precision of the precision of the precision of the precision of the precision of the p

- SECTION 3: Bit LINGS AND PAYMENTS

 Dispass ofnamines specifically provided in the Proposal or Agreement, Stangs will be based on actual units used at the abandard rates shown on the attended feal scinedries, travel cost and other programs. Such britings shall not be limited by the setimates of total, incremental or prisps project costs previded for information purposed in the Proposal. Client recognizes that time to if the descence with respect of payment of ECS's involose, and that timely payment is a moteroid part of time consideration of this Agreement. Client shall pay ECS for sorvices performed in U.S. Involose disher shown as add in accordance with the rates and changes set fonts hereby. Involose will be explained by ECS from time or line, but no more frequently than every two weaks, shit shall as due and payable upon raccipt. If Client objects to allor any portion of an involos, Corott shall pay underputed portion of involose notify ECS willing fourtoon (14) calendar cays of the involose date of the stude of disagreement and the portion of the horistic in depote. Threetier, ECS and the Client shall make good faith affort or missive such dispute.

 Chort shall pay an additional charge of one-and-one-half (1.5) percent for the ribertimum unremitted paths whichever is involved afforting for mind raching by ECS more than thirty (30) calender days from the date of the revoked, excepting any partion of the involved amount in dispute and resolved in flower of Client. Payment in unrealiter that first be applied to excited information to the principal unpast emount. Payment in unrealiter that first be applied to excited information to the principal unpast emount. Payment of the circuits to no case subject or others.
- interest and then to the principal unpaid amount. Payment of invoices in in no case subject to unitarian
- amount in dispute and resolved in layor of Client, Payment thereafter shall first be applied to eccurs littanes and then to the principal unpaid amount. Payment of forecast is in no case subject to undiscuss discounting or set-ons by Client.

 Application of the percentrals rute indicated above as a collegeuence of Client's tall payments does not constitute any willingness on ECS's part to finance Client's operation, and no such willingness should be intered. If Client falls on excellent and contract client and wilhout finately locuring any size collection soldies Client and wilhout finately locuring any issuing to Client, suppord or terminate this Agraement, Termination shall not rollove Client of its obtainting to terminate this Agraement, Termination shall not rollove Client of its obtainting flowers, approval of governmental or requisiony appacies, that adjustances of a layout it which ECS is not involved, or upon Client's about successful comparison of a layout it which ECS is not involved, or upon Client's accessful comparison of the original in which ECS is not involved, or upon Client's accessful comparison of the original of the original or the contract which is educated in the Client of the original or the contract which is educated in the contract of the original or the contract shall remain valid for a payment or contract or on obtaining tons, obtaining judgments or collecting only training and only of the Agraement or in obtaining tons, obtaining judgments or collecting only training and only of the CRIENT Contract and the media valid for a payon of the very occurred to the contract shall remain valid for a payon of the very Client and only of the contract shall remain valid for a payon of the very Consumer Price Index (CPI) for into last notice (12) mentras.

SECTION 4: RIGHT OF ENTRY

- Client person grants ECB and its subcontractors or against the right to order time to time properly counted by Crient and/or ethen(s) in order for ECB to fulfil the scope of hercices included hermunder. Client understands had use of exploration equipment may counte dominant, the correction of which is not part of this Agripment. Client understands that the discovery of contin hazardeau conditions and/or part of this Agripment. Client asks conditions and/or provide massages retained to these conditions may read in a electricist of many provides may retain a fact the discovery of continuous and/or part of the Agripment. Client waters are claim and insect from our labelity for viving to itse affecting providing and procedures accordated with subsidiate exploration activities or according his analysis for the procedures accordated with subsidiate exploration activities or according historiations materials unifers any such client or fibrilly affairs out of the negligence or insected the accordance of any such client agrics to components CCS for any time appets or expensions incomed a superior of the deplication of the dep
- encliprolaxe eschuedue prisneminos oi roba selilupni

SECTION 5: SAMPLES

NAME, LANGUELLES SOR, TORK, whish end/or piles samples obtained from the Project site are the property of Client, ECS shall projected such samples for no longer chan study (60) caloniser days after the assulance of any document lines includes the data polithrad from them, unless other attengement are multiply appead upon in writing. Should any of insise temples on contembrated by nazingous systematics of supported

- nazardous substances, it is Client's reconneibility to select and arrange for lawful ulspreat procedures, that is, procedures which encompass removing the conteminated samples from ECS's custody and transporting from it is disposed allow. Client is advised that, in all cases, produce and good judgment should not papelled its selecting and arranging for instell otherwise procedure. Due to the table is selecting and arranging for instell other production appears ECS, and to dispose it may be the selecting and the ECS is expected. Creat agrees to waive any cluim appears ECS, and to dispose it from any cities or limiting for influency to bee setting from containing, lobdling, transporting, essuing, stomag, or other manding of contaminated samples unloss such claim unities out of line transporting, for international or insconding in ECS. Claim also agrees to companies eCS for any time agont and expenses incurred by ECS in defense of any such date. With such companies into the transporting and expenses incurred by ECS in defense of any such date. With such companies in the process of the such companies and expenses incurred by ECS in defense of any such date.

SECTION 8: REPORTS AND OWNERSHIP OF DOCUMENTS

2. ECS may furnish litter (3) copies of each report to Cront. Additional copies shall go furnished at the rates specified in the fee schedule. With the exception of ECS Report to Client, all documents, including original boding logs, fabl data, field makes, isourcharp test state, activations and safetiles are and remain the property of ECS. Client may provide copies of each report to potential buyers, investors, fenders, and lensing. Only Client may rely on such reports. Client agrees that all reports and other work furnished to the Cront not gate for in full will be returned to ECS upon gortand and well not be used for design, construction, parmits at (contain).

- SECTION 7: STANDARD OF CARE

 3. Services perfound by ECS under the Agreement will be conducted to a manner consistent with that fewel of cere and skill ordinarily exercised by members of the Engineering profession currently preciping in the same focality under similar conditions. No other representation, express or implied, and no womany or guaranteers included or intended in this Agreement, or in any repair, epitiant, document, or otherwise.
- otherwise. Any explosition, testing, surveys and shallysts associated with the work will be performed by ECS for the Client's sole use to fulfill the purpose of this Agreement and ECS is not responsible for interpretation by others of the information developed. The Client recognities that evaluations conditions benegit the Region site may very from those concurrence to benegit, surveys or explositions and or information and recognitions developed by ECS are based edely on this information available from such pomos, surveys and explorations.

- SECTION 9: LIMITATION OF PROFESSIONAL LIBRUITY

 3. Client spreas to simil ECC9 tability to Client and all construction convectors entaing from EC9's professional acts, corons or christsions in performing this Agreement, such that the total pageogatic basility of ECS to all those named shall not exceed \$50,000 or bout less for the services rendered on this
- khadily of ECS to all those named shall not exceed \$60,000 or boul fee for the services rendered on his project, whichever is greater. Clean tryther agrees to require of the Clean'ts General contractor and its subcontractors on its subcontractors on its subcontractors on its subcontractors are inspected by the contractors of the subcontractors are interested by the contractors are inspected by the contractors of ECS. Department, including but not florated to, technical reports, capital bearing logs, float data, field notes, laboratory test data, calculations, and estimates for the Clean of the Species of the Agreement are not intended or represented to as a unitable for reuse by the Cliant or black on the standard of the Policies or data, field the project of the Policies or data, field the project of the Policies or data or data project. Any other rouse without ECS and that consent with be at Clean't sold risk and without lightly to ECS or to ECS's contractories and cliable shall independ under the base and explanation to the project in the project in the project of th Note harmines ECS and ECS's contractor(e) from all claims, damages, losses and expenses including attempts from all time age of prescribing therefrom.

 Linear his circumstances shall ECS to kibbs for extra work or other consequences due to changed
- conditions or for costs related to fallure of the construction contractor or materialmen or sarvice providers to install work in accordance with the plane and apacitications.

ECS represents that it and its egents, and consultants employed by it, is and are protected by Workers Componential that it and its egents, and consultants employed by it, is and are protected by Workers Componential investmence in accordance with the laws of the State of Toxas and that ECS has coverage under tability insurance point as which ECS affell not be reapposition for bodily injury and properly damage or losses artising executive or indirectly, is whole or in part, from acts by the Creek, its employable, agents, staff, consultants or exponential consultants or exponential processors. The Creek agrees to prift the liability of ECS to the limits or EC3's insurance. The Cleek is proposed appointed by inclusions or rights of coverage that are not present in ECS insurance, the cost of such inclusions or coverage increases, if evaluable, to be at the expense of the Cleek.

SECTION 10: ARRITATION OF DISPUTES

All claims, disputes or cohmoversies smaling and of, or in relation to the interpretation, application or enforcement of this Agreement shall be decided through artistion, as adepted and described by the then most current rules of the American Activition Association.

SECTION 11: TERMINATION

a. Client or ECS may forminate the Agreement for proach of this Agreement, or for any eliter reasons. Otent or ECS may forminate the agreement for project of this agreement, or for any other measure which may arise. In the event of termination, the party effecting learnington shall so notify the other party and offert combination will become effective upon receipt of the termination notice. Interpeditive of which party shall offert combination or the cause therefore, ECS area promptly tender to Client it finet involce and Client amost involce-backy remunerate ECS for sendous removering occurs for consist neutrals. In accordance with ECS's prevailing fee schedule and expense relativatement policy. Services shall include those rendered up to the time of termination, as well as those associated with termination itself, such as termination, generated and recogning participated. Upon such removaling the schedule and recogning participated. Upon such removaling the termination of termination.

SECYION 12: SEVERABILITY

Any provision of this Agreement total noid to violate a tow or requisition shall be deserted vote, and all remeithing provisions shall continue in force.

fine liter livice in this Agraement are for general relevance only and are not part of the Agraement. Parties to tike Agraement are accessed to read each provision and roly on the guidance of logal counsel as necessary to help assure a complete understanding of all provisions and the obligations imposed intrough acceptance.

SECTION 14: SURVIVAL

All obligations adding prior to the termination of this Agreement and all provisions of this Agreement should provide a provision of the Agreement and ECS anall secrets the completion of services and the termination of this Agreement.

SECTION 15: ASSIGNS

A. Neither tire Client not ECS may delegate, assign, subtat or transforms during, responsibilities of injerteur in time Agreement waturul the written consent of the conditipanty.

SECTION 16: CHOICE OF LAW

This Agreement shall be interpreted according to the laws of the State in which the Project is located (but not including its choice of law rules).



LETTER OF TRANSMITTAL

lob No.	
	39959
)ale	
	08/24/04

Re: Inlet locations for "Type D" Repair Areas Town of Addison Attn:Jim Pierce, P.E. Assistant Public Works Director 16801 Westgorve Drive Addison, TX 75001

WE ARE FORWARDING TO

NO. OF

COPIES	SHEET NO.	LAST DATED	DESCRIPTION
1		8/24/04	Inlet Installation schedule
1		8/24/04	Inlet location Sketch
***************************************	-		
***************************************		VIII	
		3441	
THESE ARE TRA	ANSMITTED:		
For appro	ovał	For your use	As requested For review & comment
PLEASE NOT			
Fuel Truck		ct, along with a sl	ocations and addition information requested by the contractor for the ketch of the inlet locations. A copy of this document is being sent to

COPY TO:

Dave Foster w/attachment

Texas Standard Construction Ltd. w/ attachment

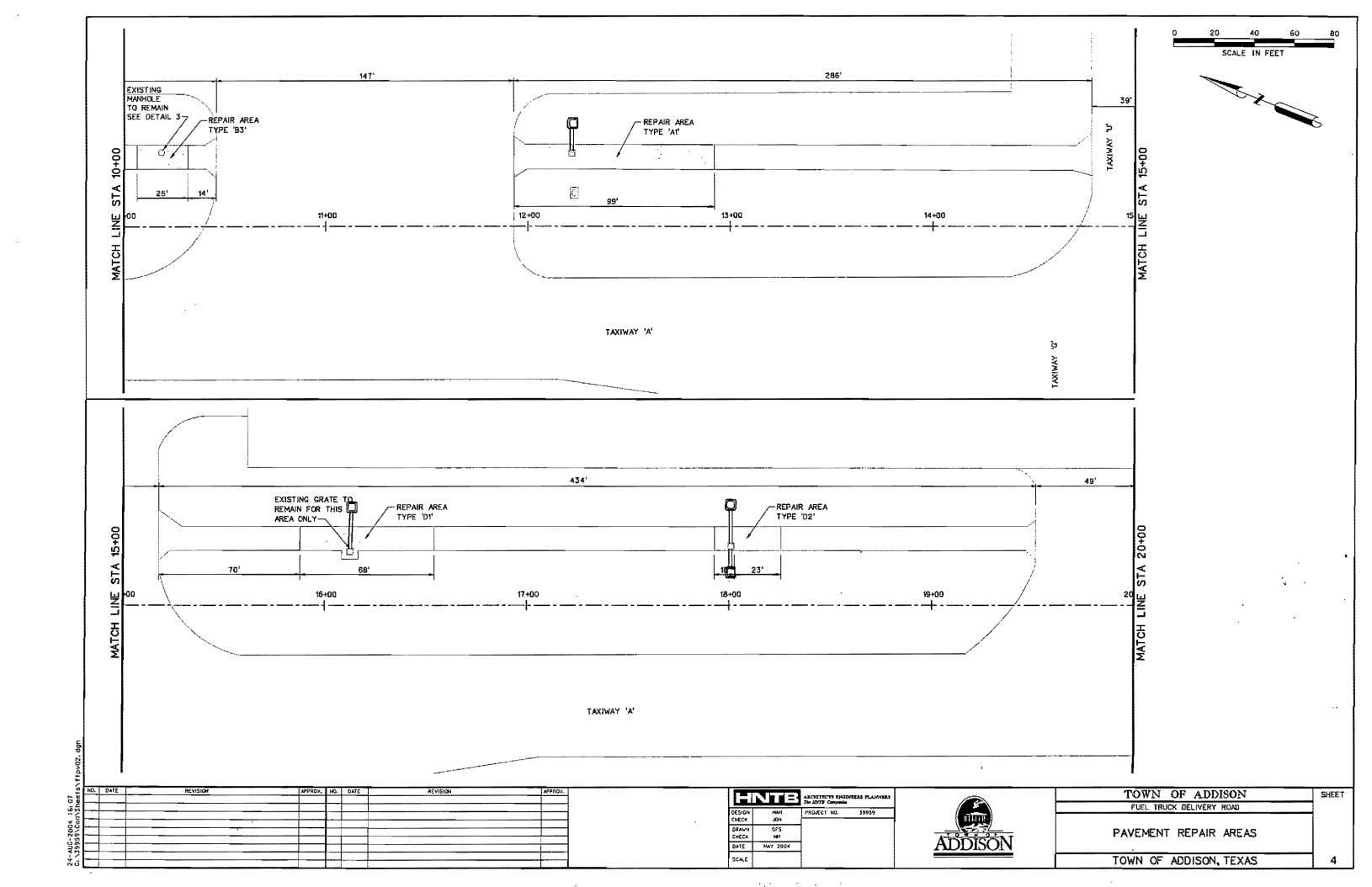
Michael A. Hutchison, P.E.

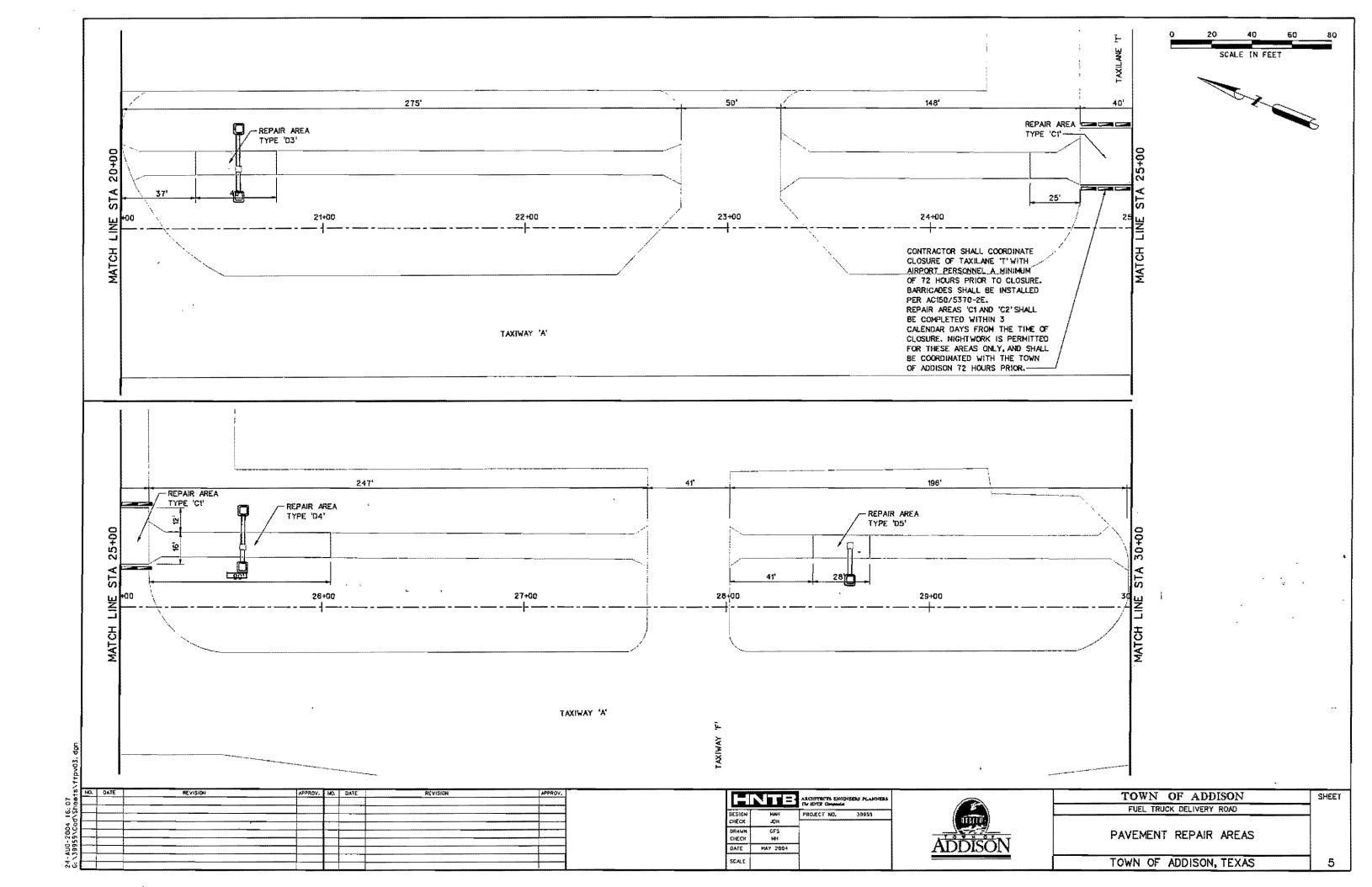
Project Manager

PAVEMENT REPAIR AND STORM SEWER MODIFICATIONS FOR THE FUEL TRUCK ROADWAY INLET INSTALLATION SCHEDULE

n/a	NO	0.2'	YES	5	D6
0,2	YES	0.2' below sign slab elev.	YES	5	24
0.2"	YES	0.2'	YES	5	0
0.2'	YES	0.2'	YES	4	D2
0.2'	YES	n/a	NO	4	מ
0.5'	YES	n/a	ON	4	Αí
finished pavement	West Side	finished pavement	East Side	No.	Repair Area
Top of inlet below	Inlet to be installed:	Top of inlet below	Inlet to be installed:	Plan sheet	

Note: All proposed pipe shall be installed at a minimum slope of 0.5%.





arport Food Form Design Person Meeting arport bre anot Meeting Full Farm Aces

- 3 day limit

Do Tango First Then C-2 then

outside in

C-2 also has a 3 day Limit Tx Std Coust 6524 W. Ledbetter D. 75236

HP LaserJet 3200se

9:03:00AM Send

HP LASERJET 3200

498

AUG-12-2004 9:03AM

8/12/2004



OK

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Job	Date	Time	Type	Identification	Duration	Pages	Result

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ADDISON	PUBLIC WORKS
To: <u>Sam Delton</u> Company: <u>Tx Std. Crust:</u> FAX#: <u>214-330-1525</u> Date: <u>8/12/04</u>	From: Jim Plerce, P.E. Asst, Public Wks. Dir. Phone: 972/450-2879 FAX: 972/450-2837 jplerce@ci.addison.ts.us 16801 Westgrove P.O.Box 9010
# of pages (including cover): 2	Addison, TX 75001-9010
Re: Fuel Truck Roada	ing Bid Tab
Original in mail Per your reques	
Comments:	
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DATE SUBMITTED: August 2,, 2004 FOR COUNCIL MEETING: August 10, 2004

Council Agenda Item: K

SUMMARY:

This item is for the award of a bid by Texas Standard Construction for Paving Repair and Storm Sewer Modifications for the Fuel Truck Roadway at Addison Airport.

FINANCIAL IMPACT:

Budgeted Amount:

\$110,000

Cost:

\$108,565

Funding Source:

Airport Operations Fund and Routine Airport Maintenance Program

(RAMP) Fund

BACKGROUND:

Each year the airport receives \$30,000 from TxDOT Aviation Division for RAMP, which requires a \$30,000 local match, and therefore provides \$60,000 that can be used for routine airport maintenance projects. So far \$13,000 has been spent on roof repairs, \$5,810 has been spent on engineering for this project, leaving \$41,290 in RAMP funds for this project. An additional \$70,000 is available from the Airport Operations Fund for this project.

The bid process was set up with alternates such that the repairs were prioritized in order of need.

Four bids were received for this project. A tabulation of the bids received is attached. Covenant Construction's bid is considered non-responsive as they did not break out the alternates as required. Further analysis of the two lowest bids from Pioneer and Texas Standard Construction follows:

Fuel Truck Road Bids 7/28/2004 With With With With With

Base Bid Alt. 1 Alt. 1,2 Alt. 1,2,3 Alt. 1,2,3,4

Pioneer 27,777.78 43,177.78 47,944.45 78,711.12 116,399.08

Tx. Std 38,800.00 50,200.00 55,400.00 78,045.00 108,565.00

Even though Pioneer submitted the low base bid, Texas Standard Construction is the low bidder considering all alternates. Texas Standard's references checked out very satisfactory.

RECOMMENDATION:

Staff recommends that a contract, including the Base Bid and Alternates 1 through 4, for the Paving Repair and Storm Sewer Modifications for the Fuel Truck Roadway be awarded to, and, that the City Manager be authorized to enter into a contract with Texas Standard Construction in the amount of \$108,565.00.

Paving Repair and Storm Sewer Modifications for the Fuel Truck Roadway **BID NO 04-27**

DUE: July 28, 2004 @ 2:00PM

BIDDER	SIGNED	bno8 bi8	Pase Bid	Alternate #1	Alternate #2	Alternate #3	Alternate #4	Total Base + Alternates
Texas Standard Construction	ý	ý	\$38,800,00	\$38,800.00 \$11,400.00	\$5,200.00	\$5,200.00 \$22,645.00 \$30,520.00	\$30,520.00	\$108,565
Pioneer	^	λ	\$27,777.78	\$27,777.78 \$15,400.00	\$4,766.67	\$30,766.67	\$37,687.96	\$116,399
Jim Bowman Construction LP	^	λ	\$39,200.00	\$16,400.00	\$39,200.00 \$16,400.00 \$12,300.00 \$48,500.00 \$33,400.00	\$48,500.00	\$33,400.00	\$149,800
Covenant Construction	Λ	Λ	\$187,668.00	included	included	included	included	\$187,668
Gibson & Associates	^	χ	\$57,200.00	\$24,800.00	\$57,200.00 \$24,800.00 \$15,000.00 \$62,200.00 \$55,300.00	\$62,200.00	\$55,300.00	\$214,500

Minsk Suh

Minok Suh, Purchasing Coordinator

Cover Baydon Witness

5 dalton 7470 aol. com Sax 214-330-5254

PAVING REPAIR AND STORM SEWER MODIFICATION FOR THE FUEL TRUCK ROADWAY July 19, 2004 2:00 pm Pre-Bid Meeting Sign in Sheet

in the second of	with the second of the second	Cress **Bhone # 4 **
1 Lynn Fowler	ED A. WILSON INC.	817-923-6400
2 Janin E. CARTER	DCC DC	87-637-6599
	TEYAS STANOARD COMSTANCTION	6225-05E-HE
4 Smal Snellier	Chronat Construction, 214 221 6822.	EE89 186 41C
15 MAVE FOSTER 0	Addison Air Bort	-E584-865-666
6 ADRIAN BOWAN	The Brun As Constitution	972 - 423-1313
7 SMALMASIMS	Town et Address	12 10 100 - 1232
8 tem Holder	HUTB	472-661.5626
. Bed inou	Plonter Scale Co, INC.	A39-77-98-289
10 Jim Pipre	Town of Addison	972-450-2879
—		•
13	, j.f.	

1-817-490-8732

To David Carter

SECTION AB ADVERTISEMENT FOR BIDS

- Sealed bids addressed to the Town of Addison, Texas, for the Construction of Paving Repair and Storm Sewer Modification for the Fuel Truck Roadway at the Addison Airport, for the Town of Addison, Texas, hereinafter called "Town", in accordance with the plans, specifications and contract documents prepared by HNTB Corporation, will be received at the office of Ms. Minok Suh, Purchasing Coordinator, Finance Building, 5350 Belt Line Road, Dallas, Texas until 2:00 p.m. on Wednesday, the 28th day of July, 2004. Bids received by the appointed time will be opened and read aloud. Any bids received after closing time will be returned unopened.
- 2. The contractor shall identify his bid on the outside of the envelope by writing the words <u>PAVING</u> REPAIR AND STORM SEWER MODIFICATION FOR THE FUEL TRUCK ROADWAY.
- 3. Bids shall be accompanied by a cashier's check or certified check upon a national or state bank in an amount not less than five percent (5%) of the total maximum bid price payable without recourse to the Town of Addison, or a bid bond in the same amount from a surety company licensed by the State of Texas to act as a Surety, or a Binder of Insurance executed by a surety company licensed by the State of Texas to act as a surety or its authorized agent as a guarantee that the bidder will enter into a contract and execute a Performance Bond within ten (10) business days after notice of award of contract to him.
- Plans, specifications and bidding documents may be secured beginning at 9:00 a.m. on Friday, the 9th day of July, 2004 from Ms. Minok Suh, Purchasing Coordinator; Finance Building, 5350 Belt Line Road, Dallas, Texas.
- 5. The right is reserved by the Mayor and the Town Council as the interest of the Town may require to reject any or all bids and to waive any informality in bids received.
- 6. The Bidder (Proposer) must supply all the information required by the Proposal Form.
- 7. A Performance Bond, Labor and Material Payment Bond, and Maintenance Bond will be required by the Owner; each Bond shall be in the amount of 100% of the total contract amount. Bonds shall be issued by a surety company licensed by the State of Texas to act as a Surety. The performance and payment bonds shall name the Town of Addison as obligee (or such other entities as may be designated at the time a contract is executed).
- 8. For information on bidding or to secure bid documents, call Ms. Minok Suh, (972) 450-7091. For information on the work to be performed, call Jim Pierce, P.E., Assistant Public Works Director, (972) 450-2879 or Mike Hutchison, P.E., HNTB Corporation, (972) 661-5626.
- 9. This project consists of providing Pavement Repair and Storm Sewer Modification as shown on the plans and in accordance with these specifications.
- 10. A <u>Mandatory</u> Site Visit will be held at 2:00 p.m. on Monday, the 19th day of July, 2004 beginning at the Addison Service Center, 16801 Westgrove Drive, Addison, Texas 75001, 972-450-2871. <u>All bidders are required to attend</u>. Lack of attendance will be considered non-responsive and a bid will not be accepted from anyone not attending.

Fuel Truck Roadway	
Priority One Projects'	د میرو سامل محمول المعالی محمولی المعالی می این این این این این این این این این ای
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Unclassified excavation	83 cy
Block Sod	1200 Sf
	an appropriate March 1966 — September 1966
B. 10 thick 5000 psi Reint Concrete Pavening	
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Town of Addison 972-450-28	~
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7-15-04	/ / /

HP LaserJet 3200se

HP LASERJET 3200

JUL-15-2004 4:28PM



Fax Call Report

Job Date

Time

Type

Identification

Duration

Pages

Result

212 7/1

7/15/2004

4:25:31PM

Send

918174908732

2:52

2

OK

1-817-490-8732 To David Carter

SECTION AB ADVERTISEMENT FOR BIDS

- Sealed bids addressed to the Town of Addison, Texas, for the Construction of Pavlag Repair and Storm Sower Medification for the Puel Trock Readway at the Addison Airport, for the Town of Addison, Texas, hereinafter called Town, in secondance with the plans, specifications and contract documents prepared by HNTB Corporation, will be received at the office of Ms. Minck Sul, Purchasing Coordinator, Finance Building, 3320 Belt Line Road, Dalles, Texas until 2:06 p.m. on Weshersday, the 12th age of 1-by, 2604. Bids received by the appointed time will be opened and read about. Any bids received after closing time will be returned unopeased.
- The contractor shall Mentify his bid on the certaide of the envelope by writing the words PAVING REPAIR AND STORM SEWER MODIFICATION FOR THE FUEL TRUCK RUADWAY.
- 3. Bide shall be accompanied by a cashier's check or certified theck upon a national or state bank in an amount not least than five percent (5%) of the total maximum bid price payable without recourse to the Town of Addison, or a bid boad in the same amount from a surety company licensed by the State of Texas to ext as a Surety, or a Binder of lasarance executed by a surety company licensed by the State of Texas to act as a surety or its suthorized agent as a guarantee that the bidder will enter into a contract and execute a Performance Bond within ten (10) business days after notice of award of contract to him.
- Plans, specifications and hidding documents may be secured beginning at 9:00 a.m. on Friday, the ⁹ day of July, 2004 from Ms. Minok Suh, Purchasing Coordinator; Finance Building, 5350 Belt Line Road, Dallas, Taxas.
- The right is reserved by the Mayor and the Town Council as the interest of the Town may require to reject any or all bids and to waive any informality in bids received.
- 6. The Bidder (Proposer) must supply all the information required by the Proposet Form.
- 7. A Performance Bond, Labor and Material Payment Bond, and Maintenance Bond will be required by the Owner, each Bond shall be in the amount of 100% of the total contract amount. Bonds shall be laused by a surery company licensed by the State of Texas to act as a Surety. The performance and payment bonds shall name the Town of Addison as obliges (or such other entities as may be designated at the time a contract is executed).
- For information on bidding or to secure bid documents, call Mt. Minok Sub. (972) 450-7091. For information on the work to be performed, call Jim Pierce, P.E., Assistant Public Works Director, (972) 450-2879 or Mike Hutchison, P.E., HNTB Corporation, (972) 661-5626.
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June 25, 2004

Town of Addison 16801 Westgrove

P. O. Box 9010 Addison, Texas 75001-9010

In Account With

HNTB CORPORATION

Architects Engineers Planners 5910 West Plano Pkwy., Suite 200 Plano. Texas 75093 Remittance Address: HNTB Corporation P.O. Box 802741 Kansas City, MO 64180-2741

Invoice No. 1-39959-DS-001

Contract Amount

\$ 10,603.00

Lump Sum Fee

Services through May 21, 2004

100%

X

\$10,603.00

....

\$ 10,603.00

Amount Earned To Date Less Previously Invoiced

\$ 10,603.00

AMOUNT DUE THIS INVOICE

\$ 10,603.00

Pavement Repair
Finel Truck Roadway

OK to pay

Jufun

6/29/03

Jim Pierce

From: Jerry Holder [JHolder@HNTB.com]

Sent: Wednesday, June 16, 2004 7:00 PM

To: Jim Pierce

Cc: Mike Hutchison

Subject: Fuel Truck Road at Airport

Jim, you left a message on my voice mail recently that I just came across. You asked about the \$5,810 fee for the Fuel Truck Road and you weren't sure what it was for. The original contract for \$4,793 was to develop the details of the different pavement replacements. After we finished those, you and I discussed in your office the need to produce a set of plans and specs that you could give to contractor's to bid on so that they would know what they were actually bidding on, and would have the necessary bonds, etc. the Town needs to bid a project. The \$5,810 was a supplemental agreement to develop the plan set and contract documents that Mike Hutchison put together for you.

I spoke with one of the contractors (North Star) about why he didn't bid, he said he has too much work at the moment and wasn't going to be able to get it done on the time frame you needed. He said if it came out again in mid to late July he would bid on it. He was surprised that we only had one bidder. Did you ever find out why Bowman didn't bid it?

By the way, I really enjoyed visiting with your wife at the TPWA convention in Abilene.

Thanks, Jerry

This e-mail and any files transmitted with it are confidential and are intended solely for the use of the individual or entity to whom they are addressed. If you are NOT the intended recipient or the person responsible for delivering the e-mail to the intended recipient, be advised that you have received this e-mail in error and that any use, dissemination, forwarding, printing, or copying of this e-mail is strictly prohibited.

mike pleaseving you.

DATE SUBMITTED: June 14, 2004 FOR COUNCIL MEETING: June 22, 2004

Council Agenda Item:_____

SUMMARY:

This item is for the rejection of a bid by Gibson & Associates, Inc. for Paving Repair and Storm Sewer Modifications for the Fuel Truck Roadway at Addison Airport.

FINANCIAL IMPACT:

Budgeted Amount:

\$41,290

Cost:

\$57,200 (Base Bid)

Funding Source:

Airport Fund and Routine Airport Maintenance Program (RAMP)

Funds

BACKGROUND:

Each year the airport receives \$30,000 from TxDOT Aviation Division for RAMP, which requires a \$30,000 local match, and therefore provides \$60,000 that can be used for routine airport maintenance projects. So far \$13,000 has been spent on roof repairs, \$5,810 has been spent on engineering for this project, leaving \$41,290 for this project.

There are more repairs needed on the fuel truck access road than we have money for in RAMP so the bid process was set up such that the repairs were prioritized in order of need.

Only one bidder bid on this project and his base bid exceeded the amount of money available for the project. All amounts bid exceeded the Engineer's Estimate as well.

A tabulation of the bids received is attached.

RECOMMENDATION:

Staff recommends that the bid received from Gibson and Associates, Inc. for the Paving Repair and Storm Sewer Modifications for the Fuel Truck Roadway be rejected.

15 plan holders

PAVING REPAIR AND STORM SEWER MODIFICATION FOR THE FUEL TRUCK ROADWAY June 3, 2004 2:00 pm Pre-Bid Meeting Sign in Sheet

			- Courbant	
	-	DAVE FOSTER	Addison Airport	972-342-4652
	es.	Meitres Bound Cott bile times	The Bowney construction	472-423-1813
7		Term Johnston	Chosen & Associates Fire	6611-125-216
ı	ব	MARY LAMOKin	Jim Bounda Const.	24-535-2804
M	(n)	Eddie Sten1	Silver Creak court	8162-3615. 966
-	ø	Andrews Fileder 400K Job?	Onach Industrial Corporation	4012) 495-3734
ما	~	essex could not must exturbula	NORTHSTAR CONST., INC.	817-327-5110
ى	8	JOE GOFERS WINDS	CARLAND CONCRETE	4856 727 216
r	6	VER FRINKLIN Had too meny other	Nowork Texus Construction	1-817-430-9500
~ ∕2	10	Boverly Farren on - duit bid	Ed A. Wilson, Inc.	1917-923-6400
	;	damy Holden		472-661-5626
	2	Mile Habbira	HNTB	9732-628-3174
	ŧ	Jim Hene	Town of Addison	912-450-2879

Fuel Truck Roadway Repair Pre Bid Meeting



ADDISON .		ATTENTION	
Public Works / Engineering 6801 Westgrove • P.O. Box 9010		RE: Suppleme	intel Agreement
Addison, Texos 75001 elephone: (972) 450-2871 • Fax: (972) 450-2837		
o Carmen V	Novan		
Tom Hal			
GENTLEMAN:	. 1		
WE ARE SENDING YOU	I Attached □ Un	der separate cover via	the following items:
☐ Shop Drawings		ans	☐ Specifications
☐ Copy of letter	☐ Change order ☐		
COPIES DATE NO.		DESCRIPTION	
	Supplemental	agreement 1	Vo. I to the
	agreement -	for Engineer	ma Servies
	dated 2-10-1	04 between	the Town and
	HNTB		

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For your use	☐ Approved as noted		copies for distribution
☐ As requested	☐ Returned for corrections		corrected prints
☐ For review and comment			
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OPY TO CC Mark			

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LETTER OF TRANSMITTAL

SUPPLEMENTAL AGREEMENT

This Supplemental Agreement, Number 1, to the AGREEMENT FOR ENGINEERING SERVICES, dated February 10, 2004 (the Agreement), between Town of Addison (Owner) and HNTB Corporation (Engineer) is made effective as of the 17th day of May, 2004.

- 1. Engineer shall perform the following Services:
 - Plan Production/Design
 - o Initial site visit
 - o Graphics for initial site visit
 - o Produce plan sheets
 - o Quantity sheet
 - Modify detail sheets
 - Site visit to verify plans
 - Address City comments (1 review submittal only)
 - o Printing
 - Specifications
 - Estimates
 - Bidding/Construction Phase
 - Advertise
 - o Addendum/RFI
 - Pre-bid meeting
 - o Bid-opening
 - o Construction phase
- 2. In conjunction with the performance of the foregoing Services, Engineer shall provide the following submittals/deliverables (Documents) to Owner:

Changes to be incorporated into the plan production/design documents and will be reflected in the interim review submittals.

3. Engineer shall perform the Services and deliver the related Documents (if any) according to the following schedule:

Services identified in Section 1 will be accomplished no later than May 27, 2004.

In return for the performance of the foregoing obligations, Owner shall pay to Engineer the amount of \$5,810.00, payable according to the following terms:

Payments will be made based upon the provisions of the original contract, with a corresponding increase in the total contract amount.

Except to the extent modified herein, all terms and conditions of the Agreement shall continue in full force and effect.

Town of Addison	HNTB Corporation
(Owner)	(Engineer)
Signature: Hui	Signature: <u>Senzenz ulle</u>
Name: Um Pierce	Name: Benjamin J. Biller
Title: ASST. Public Wks Dir.	ν
Title: F155T. Public Wks Dir.	Title: Vice President
Date: 6-21-04	Date:





The HNTB Companies

Transmittal

To:

Mr. Jim Pierce

Town of Addison

Date: 6/17/2004

Fax No.:

(972) 450-2837

Total Pages: 6

(Including this cover)

Phone No.:

(972) 450-2879

From:

Jerry Holder

Phone No.: (972) 661-5626

★ Action

Please notify sender at (972) 661-5626 if pages are missing or if there is any transmission difficulty.

Message

Jim,

As a follow up to my e-mail about the Fuel Truck Road project, here is a copy of the original contract and the supplemental agreement.

Thanks,

∫¢шу

5910 West Plano Parkway, Suite 200 · Plano, Texas 75093 Voice (972) 661-5626 · Fax (972) 661-5614

AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT is entered into between the Town of Addison (Owner) and HNTB Corporation (HNTB), based upon Owner's intention to prepare a set of drawings and details with respect to Pavement Repairs for the Fuel Truck Roadway at the Addison Airport (the Project) and Owner's requirement for certain professional engineering services in connection with the Project (the Services) which HNTB is prepared to provide.

- 1. HNTB shall provide the Services described in Attachment A. "Scope of Services".
- Owner shall pay HNT8 the lump sum amount of \$4,793 in accordance with Attachment B, "Compensation".
- 3. The same degree of care, skill, and diligence shall be exercised in the performance of the Services as is ordinarily possessed and exercised by a member of the same profession, currently practicing, under similar circumstances. No other warranty, express or implied, is included in this Agreement or in any drawing, specification, report, opinion, or other instrument of service, in any form or media, produced in connection with the Services.
- 4. HNTB shall not be liable to Owner for any consequential damages resulting in any way from the performance of the Services. To the fullest extent permitted by law, HNTB's liability under this Agreement shall not exceed HNTB's total compensation actually received under this Agreement.
- 5. HNTB and Owner waive all rights against each other for damages covered by property insurance during and after the completion of the Services.
- 6. Not withstanding anything to the contrary in any Attachments hereto, HNTB has no responsibility for the failure of any consultant, contractor, subcontractor, vendor, or other Project participant, not under contract to HNTB, to fulfill contractual responsibilities to Owner or to comply with federal, state, or local laws, regulations, and codes.
- 7. HNTB does not guarantee that proposals, bids, or actual Project costs will not vary from HNTB's cost estimates or that actual schedules will not vary from HNTB's projected schedules.
- 8. This Agreement may be terminated upon written notice at Owner's convenience or by either party in the event of substantial failure by the other party to perform in accordance with the terms of this Agreement. HNTB shall terminate performance of Services on a schedule acceptable to Owner, and Owner shall pay HNTB for all Services performed and reasonable termination expenses. Paragraphs 4 and 5 shall survive any termination or completion of this Agreement.
- 9. All documents prepared by HNTB pursuant to this Agreement are instruments of service in respect to the Project. Any use except for the specific purpose intended by this Agreement will be at the user's sole risk and without liability or legal exposure to HNTB. HNTB shall retain its ownership in its data bases, computer software, and other proprietary property. Intellectual property developed, utilized, or modified in the performance of the Services shall remain the property of HNTB.
- 10. In the event the Owner requests HNTB to execute any certificates or other documents, the proposed language of such certificates or documents shall be submitted to HNTB for review at least 15 days prior to the requested date of execution. HNTB shall not be required to execute any certificates or documents that in any way would, in HNTB's sole judgment, (a) Increase HNTB's legal or contractual obligations or risks; (b) require knowledge, services or responsibilities beyond the scope of this Agreement; or (c) result in HNTB having to certify, guarantee or warrant the existence of conditions whose existence HNTB cannot ascertain.
- 11. The Services provided for in this Agreement are for the sole use and benefit of Owner and HNTB. Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than Owner and HNTB.

IN WITNESS WHEREOF, Owner and HNTB have executed this Agreement, effective as of February 10, 2004.

Town of Addison (Owner)	HNTB Corporation (HNTB)
Signature	Signature
Name	Name
Title	Title
Date	Date

Attachment "A"

Scope of Service

Develop detailed engineering drawings the Addison Airport can use to repair pavement distresses on the Fuel Truck Roadway that runs parallel to taxiway "A". These details shall include the following:

- Plan view drawings will indicate general dimensions and locations of saw cuts, pavement removal, and drainage. Proper radii will also be shown to prevent fuel trucks from running their rear wheels off the pavement. Drawings that will be delivered will be plan views of the following distress conditions:
 - 1 Distressed area adjacent to grate inlets located in the full truck roadway.
 - 2 Distressed areas located at corners of slabs.
 - 3 Distressed areas where concrete fuel truck roadway intersects asphalt taxiways.
- Section view drawings of the following repair conditions:
 - 1 Typical Section of new pavement area showing thickness of new slab, reinforcing steel size and locations, tie-in to existing slab, type of joints, and joint seal material.
 - 2 Section of new pavement with existing MH located in pavement.

These details are intended to be a guide for a contractor to use for repairs in the field.

Attachment "B"

Compensation

Airport:

Project Manager:

Consultant:

Addison Jerry Holder HNTB

HOURLY RATES

	Project	Design			
Principal	Manager	Engineer	Technical	Drafting	Clerical
\$75.00	\$50,00	\$37.00	\$32.00	\$28.00	\$17.00

LABOR HOURS BY PHASE	Princ ipal	Project Manager	Design Engineer	Technical	Drafting	Clerical
Site Visit and Documentation	0	2	2	0	0	
Details and Section Sketches	Ō	2	8	Ō	Ò	2
Draffing and Layout	0	0	0	4	16	0
QA/QC and Product Delivery	0	2	4	2	2	2
Total Hours	0	6	14	6	18	4
	\$0	\$900	\$1,555	\$576	\$1,513	\$204
TOTAL PAYROLL COSTS	\$4,748					
TOTAL MISC. EXPENSES	\$45					

TOTAL ENGINEERING COST \$4,793

SUPPLEMENTAL AGREEMENT

This Supplemental Agreement, Number 1, to the AGREEMENT FOR ENGINEERING SERVICES, dated February 10, 2004 (the Agreement), between Town of Addison (Owner) and HNTB Corporation (Engineer) is made effective as of the 17th day of May, 2004.

- 1. Engineer shall perform the following Services:
 - Plan Production/Design
 - o Initial site visit
 - o Graphics for initial site visit
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 - Modify detail sheets
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 - o Printing
 - Specifications
 - Estimates
 - Bidding/Construction Phase
 - o Advertise
 - Addendum/RFI
 - o Pre-bid meeting
 - o Bid-opening
 - o Construction phase
- In conjunction with the performance of the foregoing Services, Engineer shall provide the following submittals/deliverables (Documents) to Owner:

Changes to be incorporated into the plan production/design documents and will be reflected in the interim review submittals.

3. Engineer shall perform the Services and deliver the related Documents (if any) according to the following schedule:

Services identified in Section 1 will be accomplished no later than May 27, 2004.

In return for the performance of the foregoing obligations, Owner shall pay to Engineer the amount of \$ 5,810.00, payable according to the following terms:

Payments will be made based upon the provisions of the original contract, with a corresponding increase in the total contract amount.

06/16/04

SA No. 1 39959 - Fuel Truck Delivary Route

Except to the extent modified herein, all terms and conditions of the Agreement shall continue in full force and effect.

Town of Addison (Owner)	HNTB Corporation (Engineer)
Signature:	Signature:
Name:	Name: Benjamin J. Biller
Title:	Title: Vice President
Date:	Date:

39959 - Supplemental No. 1

SECTION PF PROPOSAL FORM

June 14 , 2004

TO:	The Honorable Mayor and Town Council Town of Addison, Texas
Gentl	emen:
work,	indersigned bidder, having examined the plans, specifications and contract documents, and cation of the proposed work, and being fully advised as to the extent and character of the proposes to furnish all equipment and to perform labor and work necessary for letion of the work described by and in accordance with the Plans, Specifications and fact for the following prices, to wit:
	Signed By:
ACK	NOWLEDGEMENT OF ADDENDA:
The B	idder acknowledges receipt of the following addenda:
Adde	ndum No. 1 Dated:
	ndum No. 2 Dated:
	ndum No. 3 Dated:
Adde	ndum No. 4 Dated:
Adde	ndum No. 5 Dated:
Adde	ndum No. 6 Dated:

PROPOSAL FORM

Plac	ze
Date	e
	•
Proposal of Gibson + Associates, Inc	
a Corporation	
organized and existing under the laws of the State of	Texas
	OR
Proposal of	
a partnership consisting of	
and	
•	OR
Proposal of	
an individual trading as	
	OR
Proposal of	
a Joint Venture consisting of	
and	
A	

TO: Town of Addison, Texas

Sealed bids addressed to the Town of Addison, Texas, for the Construction of Paving Improvements for the PAVING REPAIR AND STORM SEWER MODIFICATION FOR THE FUEL TRUCK ROADWAY project for the Town of Addison, Texas, hereinafter called "Town", in accordance with the plans, specifications and contract documents prepared by HNTB Corporation, will be received at the office of Ms. Minok Suh, Purchasing Coordinator, Finance Building, 5350 Belt Line Road, Addison, Texas until 9:00 a.m. on the 14th day of June, 2004. Bids received by the appointed time will be opened and read aloud. Any bids received after stated time will be returned unopened.

The undersigned Bidder, having visited the site of the work, having examined the Plans, Specifications, and other Contract Documents, including all Addenda, and being familiar with all of the conditions relating to the proposed project, hereby proposes to furnish all material, supplies, equipment, and appliances specified for the project and to furnish all labor, tools, equipment and incidentals to complete the work in accordance with the Specifications, and other Contract Documents at and for the unit prices proposed herein:

BASE BID PAVING REPAIR AND STORM SEWER MODIFICATION FOR THE FUEL TRUCK ROADWAY

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		\$5	7. 200,00	` <u> </u>
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ADDITIVE ALTERNATE 1 PAVING REPAIR AND STORM SEWER MODIFICATION FOR THE FUEL TRUCK ROADWAY

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TOTAL AMOUNT BID FOR MATERIALS AND SERVICES, ADDITIVE ALTERNATE 1,
ITEM 1:

\$ 24, 500.00

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della: \$ 100 cm/s

ADDITIVE ALTERNATE 2 PAVING REPAIR AND STORM SEWER MODIFICATION FOR THE FUEL TRUCK ROADWAY

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TOTAL AMOUNT BID FOR MATERIALS AND SERVICES, ADDITIVE ALTERNATE 2, ITEM 1:

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**************************************		NOTE: FILL (OUT NEXT S	HEET -			

ADDITIVE ALTERNATE 3 PAVING REPAIR AND STORM SEWER MODIFICATION FOR THE FUEL TRUCK ROADWAY

্য শাল্লকাড় অধিকান্ত্র সূত্র ভাল্লকাড় প্রমাণ বিশ্ববিদ্যান্ত্র স্থানির শাল্লকাড় অনুস্থানির বিশ্ববিদ্যান্ত্র স্থানির বিশ্ববিদ্যান্ত্র		ining Ediriti		AMACIUNI7 ESTR
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TOTAL AMOUNT BID FOR MATERIALS AND SERVICES, ADDITIVE ALTERNATE 3 ITEMS 1 THROUGH 6, INCLUSIVE:

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ADDITIVE ALTERNATE 4 PAVING REPAIR AND STORM SEWER MODIFICATION FOR THE FUEL TRUCK ROADWAY

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TOTAL AMOUNT BID FOR MATERIALS AND SERVICES, ADDITIVE ALTERNATE 4, ITEM 1:

			\$	55, 300.00	
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+ No	. *				
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BID SCHEDULE SUMMARY PAVING REPAIR AND STORM SEWER MODIFICATION FOR THE FUEL TRUCK ROADWAY

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WRITTEN IN WORDS: Twenty- Four Rouse of eight hundred
Troller & No comb
TOTAL OF ADDITIVE ALTERNATE 2: \$ 15,000.00
WRITTEN IN WORDS: Effen thomas of dollar to mo anh
TOTAL OF ADDITIVE ALTERNATE 3: \$
WRITTEN IN WORDS: Sixty - two though two hundred
della d no conte
TOTAL OF ADDITIVE ALTERNATE 4: \$ 55 3.90 . 190
WRITTEN IN WORDS: Ity for Howard thru hundred
dollar + no unt
NOTES: 1. All items, labor, materials, equipment, facilities, incidentals, and work required for construction of the project are to be provided and installed by the Contractor as part of the project and payment for the cost of such shall be included in the price bid for the construction of the project.
Prices must be shown in words and figures for each item listed in this proposal. In the event of discrepancy, the words shall control.
3. It is understood that the Bid Security shall be collected and retained by the Owner as liquidated damages in the event a contract is made by the Owner based on this proposal within ninety (90) calendar days after receiving bids and the undersigned fails to execute the contract and required bonds within ten (10) days from the date the Contractor is notified and has received the conformed documents. After this period, if the contract has been executed and the required bonds have been submitted, the said Bid Security shall be returned to the undersigned upon demand.
4. One contract will be awarded based on the total value of the base bid plus any combination of additive alternates as determined by the Owner after the bid opening.
Bidder's Tax I.D. No. or Employer No.

The undersigned Bidder agrees that this bid may not be withdrawn for a period of sixty (60) days after the opening of the bids.

In submitting this bid, it is understood by the undersigned Bidder that the right is reserved by the Town of Addison to reject any and all bids.

NOTES: Sign in ink. Do not detach.



CHUBB GROUP OF INSURANCE COMPANIES

Surety Department, 15 Mountain View Road, P.O. Box 1615, Warren, NJ 07061-1615 Phone: (908) 903-3485 - Facsimile: (908) 903-3656

FEDERAL INSURANCE COMPANY

BID BOND

Bond No.

Amount \$

Know All Men By These Presents,

		•		•	
Γhat we,	Gibson & Associates, Inc.				
	11210 Ryliecrest, Balch Springs, 7	ΓX 75180			
	and the FEDERAL INSURANCE COM f Indiana, (hereinafter called the Surety				
Town of Addis	son			(hereinafter calle	d the Obligee),
\$ 5% GAB-	Five Percent of the Greatest Amount), for the poutors, administrators, successors and	payment of which v	ve, the said Principal a d severally, firmly by th		Dollars oind ourselves,
Sealed with ou	ur seals and dated this	14 th	Day of	June, 2004	
WHEREAS th	e Principal has submitted a bid dated	June 14, 2004			

For Addison Airport Pavement Repairs

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Obligee shall accept the bid of the Principal and the Principal shall enter into a contract with the Obligee in accordance with such bid and give bond with good and sufficient surety for the faithful performance of such contract, or in the event of the Principal to enter into such contract and give such bond, if the Principal shall pay to the Obligee the difference, not to exceed the penalty hereof, between the amount specified in said bid and the amount for which the Obligee may legally contract with another party to perform the work covered by said bid, if the latter amount be in excess of the former, then this obligation shall be null and void, otherwise to remain in full force and effect.

By: Principal

FEDERAL INSURANCE COMPANY

Robbi Morales, Attorney-in-fact



Chubb Surety POWER OF ATTORNEY Federal Insurance Company Vigilant Insurance Company Pacific Indemnity Company Attn: Surety Department 15 Mountain View Road Warren, NJ 07059

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than ball bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations.

in Witness Whereof, said FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY have each executed and attested these presents and affixed their corporate seals on this 13th day of August, 2003

Canneth C. Wandel Appletant Secretary

STATE OF NEW JERSEY

County of Somerset

湖.

On this 13th day of August, 2003, before me, a Notary Public of New Jersey, personally came Kenneth C. Wendel, to me known to be Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY, the companies which executed the foregoing Power of Attorney, and the said Kenneth C. Wendel, being by me duly sworn, did depose and say that he is Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY and knows the corporate seats thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seats and were thereto affixed by authority of the By-Laws of said Companies; and that he signed said Power of Attorney as Assistant Secretary of said Companies by like authority; and that he is acquainted with Frank E. Robertson, and knows him to be Vice President of said Companies; and that the signature of Frank E. Robertson, subscribed to said Power of Attorney is in the genuine handwriting of Frank E. Robertson, and was thereto subscribed by authority of said By-Laws and in deponent's presence.

Notarial Seal



JANA KRUMPFER
Notary Public, State of New Jersey
No. 2297116
Commission Expires February 25, 2008

CERTIFICATION

Extract from the By-Laws of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY:

"All powers of attorney for and on behalf of the Company may and shall be executed in the name and on behalf of the Company, either by the Chairman or the President or a Vice President or an Assistant Vice President, jointly with the Secretary or an Assistant Secretary, under their respective designations. The signature of such officers may be engraved, printed or lithographed. The signature of each of the following officers: Chairman, President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary and the seal of the Company may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such power of attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached."

I, Kenneth C. Wender, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY (the "Companies") do hereby certify that

(i) the foregoing extract of the By-Laws of the Companies is true and correct,

(ii) the Companies are duty licensed and authorized to transact surety business in all 50 of the United States of America and the District of Columbia and are authorized by the U.S. Treasury Department, turther, Federal and Vigilant are licensed in Puerto Ricc and the U.S. Virgin Islands, and Federal is licensed in American Samos, Guam, and each of the Provinces of Canada except Prince Edward Island; and

(III) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Warren, NJ this $-14\,th$

th day of June,

2004







with human Kenneth C. Wendel, Assistant Secretary

IN THE EVENT YOU WISH TO NOTIFY US OF A CLAIM, VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT ADDRESS LISTED ABOVE, OR BY

Telephone (908) 903-3497

Fax (908) 903-3656

e-mail: surety@chubb.com



Fax Transmittal

	Jim Pierce	Date	6/14/04
Firm	Town of Addison	Total Pages	(Including this cove
	972-450-2437	Job Number	39959
	-		☐ High Resolution
riom	Mike Huthison		☐ Urgent

9726615614

Please notify sender at 972-661-5626 if pages are missing or if there is any transmission difficulty.

Message

Jim:

Attached is the Engineer's Estimate for the fuel truck road project. Please call with any questions.

Thanks, Mika 12.

ENGINEER'S OPINION OF PROBABLE COST PAVING REPAIR AND STORM SEWER MODIFICATION FOR THE FUEL TRUCK ROADWAY

PREPARED BY: Michael A. Hutchison MAT WHY

DATE: 05/27/04							
DESCRIPTION	QTY	UNIT	Ul	NIT PRICE		AMOUNT	
REPAIR AREA A1							PRIGRITY 2
10" THICK 5000 PSI REINF, CONC. PVMT.	132	SY	\$	55.00	\$	7,260	
REMOVE EXIST PAVEMENT	132	SY	\$	12.00			the district of the first statement of the
UNCL. EXCAVATION	88		\$	6.00			AND REAL PROPERTY OF THE PARTY OF
CAP EXIST, JUNCTION BOX	1		\$	500.00	S		35 5 5
18" RCP, C76, CLASS III, INCL EMBEDMENT	18		\$	30.00			and the same of th
GRATE INLET	1		-	2,000.00			
BLOCK SOD	1980		\$	0.65			The state of the s
SUBTOTAL					\$		man after to the an expension to the second
REPAIR AREA B1							
10" THICK 5000 PSI REINF, CONC. PVMT.	27	SY	S	55.00	S	1,485	-
REMOVE EXIST PAVEMENT		SY	S	12.00			
UNCL. EXCAVATION	18		\$	6.00			
CAP EXIST, JUNCTION BOX	0		\$	500.00			
18" RCP, C76, CLASS III, INCL EMBEDMENT	ŏ		\$	30.00		_	
GRATE INLET	-	ĒΑ		2,000,00		-	
BLOCK SOD		SF	\$	0.65		260	
SUBTOTAL	700		*	0.00	\$	2,177	
OPDIVING					•	in it	
REPAIR AREA B2							
10" THICK 5000 PSI REINF, CONC. PVMT.	46	SY	\$	55.00	\$	2,530	-
REMOVE EXIST PAVEMENT	48	SY	\$	12,00	5	552	
UNCL. EXCAVATION	31	CY	\$	6.00		186	
CAP EXIST, JUNCTION BOX	0	ĒΑ	\$	500.00	-	4	
18° RCP, C76, CLASS III, INCL EMBEDMENT	0	LF	S	30.00		-	
GRATE INLET	Ö		\$	2,000.00	5	•	
BLOCK SOD	680		\$	0.65	\$	442	
SUBTOTAL					\$	3,710	•
REPAIR AREA B3							
10' THICK 5000 PSI REINF, CONC. PVMT.	34	ŞY	\$	55.00	S	1,870	•
REMOVE EXIST PAVEMENT	34		\$	12.00		408	
UNCL. EXCAVATION	23		S	6.00		138	
CAP EXIST. JUNCTION BOX	Õ		\$	500.00		,	
18" RCP, C76, CLASS III, INCL EMBEDMENT	ŏ	LF	\$	30.00	\$	**	
GRATE INLET	ő	ĒΑ	\$	2,000.00	\$		
BLOCK SOD	500	SF	\$	0,65	\$	325	
SUBTOTAL		<u> </u>	Ψ	V:VV	S	2,741	•
REPAIR AREA C1							PRIORITY
12" THICK 5000 PSI REINF, CONC. PVMT. AREA A	125	SY	\$	60.00	\$		
10" THICK 5000 PSI REINF, CONC. PVMT, AREA B		SY		65.00			
REMOVE EXIST PAVEMENT	163		\$ \$	12.00	\$	2,090 1,956	Containing the second
UNCL. EXCAVATION	83		\$	6.00		1,920 498	
CAP EXIST, JUNCTION BOX	0	EA	э \$	500,00	\$	435	
18" RCP, C76, CLASS III, INCL EMBEDMENT	0	LF	35 35			•	
GRATE INLET	-		-	30,00	-	•	
BLOCK SOD	0 1200	EA SF	\$	2,000.00	\$	700	
SUBTOTAL	1200	or	\$	0.65	\$	780	
AARIAIUE					ş	12,824	

PAGE 1 OF 3 PRINT DATE: 5/28/2004

ENGINEER'S OPINION OF PROBABLE COST PAVING REPAIR AND STORM SEWER MODIFICATION FOR THE FUEL TRUCK ROADWAY

127 THICK 5000 PSI REINF. CONC. PVMT. AREA B 9 6 8Y \$ 5.00 \$ 13,260 107 THICK 5000 PSI REINF. CONC. PVMT. AREA B 9 6 8Y \$ 5.00 \$ 3,804 UNCL EXCAVATION	DESCRIPTION REPAIR AREA C2	QTY	UNIT	U	NIT PRICE	į	TNUOMA	
10" THICK 5000 PSI REINF. CONC. PVMT. AREA B 96 SY \$ 5.00 \$ 5.280	12" THICK 5000 PSI REINF, CONC. PVMT, AREA A	221	SY	\$	60.00	\$	13,260	-
UNICL EXCAVATION 106 CY \$ 5.00 \$ 5.88	10" THICK 5000 PSI REINF, CONC. PVMT, AREA B	96	SY				5,280	
UNICL EXCAVATION 106 CY \$ 5.00 \$ 5.88	REMOVE EXIST PAVEMENT	317	SY	\$	12.00	\$	3,804	
CAP EXIST, JUNCTION BOX REPAIR AREA DZ REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REMOVE EXIST PAVEMENT UNCL, EXCAVATION CAP EXIST, JUNCTION BOX 1 EA S 50,000 \$ - 1,056 1200 SF S 0.65 \$ 780 S 23,760 REPAIR AREA DZ REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REMOVE EXIST PAVEMENT LOCAL STATE AND STATE REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REMOVE EXIST PAVEMENT LOCAL STATE LOCAL STATE REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REMOVE EXIST PAVEMENT LOCAL STATE LOCAL STATE REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REMOVE EXIST PAVEMENT LOCAL STATE REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REMOVE EXIST PAVEMENT LOCAL STATE REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REMOVE EXIST PAVEMENT LOCAL STATE REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REMOVE EXIST PAVEMENT LOCAL STATE REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REMOVE EXIST PAVEMENT LOCAL STATE REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REMOVE EXIST PAVEMENT LOCAL STATE REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REMOVE EXIST PAVEMENT LOCAL STATE REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REMOVE EXIST PAVEMENT LOCAL STATE LOCAL STATE REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REMOVE EXIST PAVEMENT LOCAL STATE LOCAL STATE REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REMOVE EXIST PAVEMENT LOCAL STATE LOCAL STATE REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REMOVE EXIST PAVEMENT LOCAL STATE LOCAL STATE REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REMOVE EXIST PAVEMENT LOCAL STATE LOCAL STATE REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REPAIR AREA DZ TO THICK 5000 PSI REINF, CONC, PVMT. REPAIR AREA DZ TO THICK 5000 PSI REI	UNCL. EXCAVATION						•	
18" FICP, C76, CLASS III, INCL EMBEDMENT Q		0	ĒΑ					
GRATE INLET Cock SOD 1200 SF \$ 0.65 \$ 780					30.00			
BLOCK SOD 1200 SF 0.65 780 SUBTOTAL S 23,760							•	
SUBTOTAL S 23,760		-		_	•		780	
REPAIR AREA D1 10* THICK 5000 PSI REINF. CONC. PVMT. 88 SY \$ 55.00 \$ 4,840 REMOVE EXIST PAVEMENT 88 SY \$ 12.00 \$ 1,055 RUNCL EXCAVATION 59 CY \$ 6.00 \$ 354 REPAIR AREA D2 10* THICK 5000 PSI REINF. CONC. PVMT. 44 SY \$ 55.00 \$ 2,420 REPAIR AREA D3 10* THICK 5000 PSI REINF. CONC. PVMT. 44 SY \$ 55.00 \$ 2420 REPAIR AREA D3 10* THICK 5000 PSI REINF. CONC. PVMT. 44 SY \$ 55.00 \$ 2,970 REPAIR AREA D3 10* THICK 5000 PSI REINF. CONC. PVMT. 54 SY \$ 55.00 \$ 2,970 REPAIR AREA D3 10* THICK 5000 PSI REINF. CONC. PVMT. 54 SY \$ 55.00 \$ 2,970 REPAIR AREA D3 10* THICK 5000 PSI REINF. CONC. PVMT. 54 SY \$ 55.00 \$ 2,970 REPAIR AREA D3 10* THICK 5000 PSI REINF. CONC. PVMT. 54 SY \$ 55.00 \$ 2,970 REPAIR AREA D3 10* THICK 5000 PSI REINF. CONC. PVMT. 54 SY \$ 55.00 \$ 2,970 REPAIR AREA D3 10* THICK 5000 PSI REINF. CONC. PVMT. 54 SY \$ 55.00 \$ 2,970 REPAIR AREA D3 10* THICK 5000 PSI REINF. CONC. PVMT. 54 SY \$ 55.00 \$ 2,970 REPAIR AREA D3 10* THICK 5000 PSI REINF. CONC. PVMT. 54 SY \$ 55.00 \$ 2,970 REPAIR AREA D3 10* THICK 5000 PSI REINF. CONC. PVMT. 54 SY \$ 55.00 \$ 2,970 REMOVE EXIST PAVEMENT 54 SY \$ 55.00 \$ 2,970 REMOVE EXIST PAVEMENT 54 SY \$ 55.00 \$ 2,970 REMOVE EXIST PAVEMENT 54 SY \$ 55.00 \$ 2,970 REMOVE EXIST PAVEMENT 54 SY \$ 55.00 \$ 2,970 REMOVE EXIST PAVEMENT 54 SY \$ 55.00 \$ 2,970 REPAIR AREA D4 10* THICK 5000 PSI REINF. CONC. PVMT. 118 SY \$ 55.00 \$ 3,490 REPAIR AREA D4 10* THICK 5000 PSI REINF. CONC. PVMT. 118 SY \$ 55.00 \$ 3,490 REPAIR AREA D5 10* THICK 5000 PSI REINF. CONC. PVMT. 118 SY \$ 55.00 \$ 3,490 REPAIR AREA D5 10* THICK 5000 PSI REINF. CONC. PVMT. 118 SY \$ 55.00 \$ 3,490 REPAIR AREA D5 10* THICK 5000 PSI REINF. CONC. PVMT. 118 SY \$ 55.00 \$ 3,490 REPAIR AREA D5 10* THICK 5000 PSI REINF. CONC. PVMT. 118 SY \$ 55.00 \$ 3,490 REPAIR AREA D5 10* THICK 5000 PSI REINF. CONC. PVMT. 118 SY \$ 55.00 \$ 3,490 REPAIR AREA D5 10* THICK 5000 PSI REINF. CONC. PVMT. 118 SY \$ 55.00 \$ 3,490 REPAIR AREA D5 10* THICK 5000 PSI REINF. CONC. PVMT. 118 SY \$ 55.00 \$ 3,490 REPAIR A				_				-
107 THICK 5000 PSI REINF. CONC. PVMT.						_	,	
107 THICK 5000 PSI REINF. CONC. PVMT.	REPAIR AREA D1							
REMOVE EXIST PAVEMENT		88	SY	\$	55.00		4 840	-
UNICL EXCAVATION								
CAP EXIST, JUNCTION BOX			_					
18" RCP, C76, CLASS III, INCL EMBEDMENT 28								
BLOCK SOD 1320 SF \$ 0.65 \$ 358				-				
BLOCK SOD				-				
SUBTOTAL S 12,448 REPAIR AREA D2 PRIORITY 3 10" THICK 5000 PSI REINF. CONC. PVMT. 44 SY \$ 55.00 \$ 2,420 REMOVE EXIST PAVEMENT 44 SY \$ 12.00 \$ 528 MILE OF STATE OF ST			_	_	•			
REPAIR AREA D2 10" THICK 5000 PSI REINF, CONC, PVMT. REMOVE EXIST PAVEMENT 144 SY \$ 55.00 \$ 2.420 REMOVE EXIST PAVEMENT 144 SY \$ 12.00 \$ 528 UNCL, EXCAVATION 30 CY \$ 6.00 \$ 180 CAP EXIST, JUNCTION BOX 1 EA \$ 500.00 \$ 500 18" RCP, C76, CLASS III, INCL EMBEDMENT 2 EA \$ 2,000.00 \$ 4,000 REPAIR AREA D3 10" THICK 5000 PSI REINF, CONC, PVMT, REMOVE EXIST PAVEMENT 154 SY \$ 12.00 \$ 648 UNCL, EXCAVATION 36 CY \$ 5.00 \$ 2,970 REMOVE EXIST PAVEMENT 154 SY \$ 12.00 \$ 648 UNCL, EXCAVATION 36 CY \$ 5.00 \$ 216 CAP EXIST, JUNCTION BOX 1 EA \$ 500.00 \$ 500 18" RCP, C76, CLASS III, INCL EMBEDMENT 18" RCP, C76, CLASS III, INCL EMBEDMENT 19" THICK 5000 PSI REINF, CONC, PVMT, 118 SY \$ 55.00 \$ 4,000 REMOVE EXIST PAVEMENT 10" THICK 5000 PSI REINF, CONC, PVMT, 118 SY \$ 55.00 \$ 6,490 REPAIR AREA D4 10" THICK 5000 PSI REINF, CONC, PVMT, 118 SY \$ 55.00 \$ 6,490 REPAIR AREA D4 10" THICK 5000 PSI REINF, CONC, PVMT, 118 SY \$ 50.00 \$ 600 REPAIR AREA D4 10" THICK 5000 PSI REINF, CONC, PVMT, 118 SY \$ 50.00 \$ 600 REPAIR AREA D4 10" THICK 5000 PSI REINF, CONC, PVMT, 118 SY \$ 50.00 \$ 600 REPAIR AREA D4 10" THICK 5000 PSI REINF, CONC, PVMT, 118 SY \$ 50.00 \$ 6,490 REPAIR AREA D4 10" THICK 5000 PSI REINF, CONC, PVMT, 118 SY \$ 50.00 \$ 6,490 REPAIR AREA D4 10" THICK 5000 PSI REINF, CONC, PVMT, 118 SY \$ 50.00 \$ 6,490 REPAIR AREA D5 10" THICK 5000 PSI REINF, CONC, PVMT, 118 SY \$ 50.00 \$ 400 REPAIR AREA D5 10" THICK 5000 PSI REINF, CONC, PVMT, 118 SY \$ 50.00 \$ 2.000 REPAIR AREA D5 10" THICK 5000 PSI REINF, CONC, PVMT, 118 SY \$ 50.00 \$ 2.000 REPAIR AREA D5 10" THICK 5000 PSI REINF, CONC, PVMT, 118 SY \$ 50.00 \$ 2.000 REPAIR AREA D5 10" THICK 5000 PSI REINF, CONC, PVMT, 118 SY \$ 50.00 \$ 2.000 REPAIR AREA D5 10" THICK 5000 PSI REINF, CONC, PVMT, 118 SY \$ 50.00 \$ 2.000 REPAIR AREA D5 10" THICK 5000 PSI REINF, CONC, PVMT, 118 SY \$ 50.00 \$ 2.000 REPAIR AREA D5 10" THICK 5000 PSI REINF, CONC, PVMT, 118 SY \$ 50.00 \$ 2.000 REPAIR AREA D5 10" THICK 5000 PSI REINF, CONC, PVMT, 118 SY \$ 50.00 \$ 2.000 REPAIR AREA D5 10" THI		1020	ېد	Ď	0.00			-
10" THICK 5000 PSI REINF. CONC. PVMT.	SUBTUTAL					ð	12,440	
10" THICK 5000 PSI REINF. CONC. PVMT.	DEDAID AGEA NO							251555575
REMOVE EXIST PAVEMENT		<i>à 4</i>	61/		FE 00		0.400	
UNCL. EXCAVATION CAP EXIST. JUNCTION BOX 1 EA \$ 500.00 \$ 500 18" RCP, C76, CLASS III, INCL EMBEDMENT BLOCK SOD BLOCK								
CAP EXIST, JUNCTION BOX 18" RCP, C76, CLASS III, INCL EMBEDMENT 28 LF \$ 30.00 \$ 840 BLOCK SOD \$60 SF \$ 0.65 \$ 429 SUBTOTAL REPAIR AREA D3 10" THICK 5000 PSI REINF, CONC, PVMT, REMOVE EXIST PAVEMENT 10" CLASS III, INCL EMBEDMENT 10" THICK 5000 PSI REINF, CONC, PVMT, 10" THICK 5000 PSI REINF, CONC, PVMT, 10" THICK 5000 PSI REINF, CONC, PVMT, 10" THICK 5000 PSI REINF, CONC, PVMT, 10" THICK 5000 PSI REINF, CONC, PVMT, 10" THICK 5000 PSI REINF, CONC, PVMT, 10" THICK 5000 PSI REINF, CONC, PVMT, 11" SV \$ 12.00 \$ 648 10" THICK 5000 PSI REINF, CONC, PVMT, 11" SV \$ 55.00 \$ 4,000 BLOCK SOD \$00 SF \$ 0.65 \$ 520 SUBTOTAL REPAIR AREA D4 10" THICK 5000 PSI REINF, CONC, PVMT, 11" SV \$ 12.00 \$ 1,416 UNCL, EXCAVATION 79 CY \$ 6.00 \$ 474 LINCL, EXCAVATION 79 CY \$ 6.00 \$ 474 LINCL, EXCAVATION 79 CY \$ 6.00 \$ 474 CAP EXIST, JUNCTION BOX 1 EA \$ 500.00 \$ 500 18" RCP, C76, CLASS III, INCL EMBEDMENT 28 LF \$ 30.00 \$ 840 CAP EXIST, JUNCTION BOX 1 EA \$ 500.00 \$ 500 18" RCP, C76, CLASS III, INCL EMBEDMENT 28 LF \$ 30.00 \$ 840 CAP EXIST, JUNCTION BOX 1 EA \$ 500.00 \$ 500 18" RCP, C76, CLASS III, INCL EMBEDMENT 28 LF \$ 30.00 \$ 840 BLOCK SOD 1760 SF \$ 0.65 \$ 1,144 SUBTOTAL REPAIR AREA D5 10" THICK 5000 PSI REINF, CONC, PVMT. 38 SY \$ 55.00 \$ 2,090 BLOCK SOD 51 REINF, CONC, PVMT. 38 SY \$ 55.00 \$ 2,090 BLOCK SOD 51 REINF, CONC, PVMT. 38 SY \$ 55.00 \$ 2,090 BLOCK SOD 51 REINF, CONC, PVMT. 38 SY \$ 55.00 \$ 2,090 BLOCK SOD 51 REINF, CONC, PVMT. 38 SY \$ 55.00 \$ 2,090 BLOCK SOD 51 REINF, CONC, PVMT. 38 SY \$ 55.00 \$ 2,090 BLOCK SOD 51 REINF, CONC, PVMT. 38 SY \$ 55.00 \$ 2,090 BLOCK SOD 51 REINF, CONC, PVMT. 38 SY \$ 55.00 \$ 2,090 BLOCK SOD 51 REINF, CONC, PVMT. 38 SY \$ 55.00 \$ 2,090 BLOCK SOD 51 REINF, CONC, PVMT. 38 SY \$ 55.00 \$ 2,090 BLOCK SOD 51 REINF, CONC, PVMT. 14 LF \$ 30.00 \$ 400 BLOCK SOD 51 REINF, CONC, PVMT. 14 LF \$ 30.00 \$ 400 BLOCK SOD 51 REINF, CONC, PVMT. 14 LF \$ 30.00 \$ 400 BLOCK SOD 550 SF \$ 5.55 \$ 364	The state of the s							
18" RCP, C76, CLASS III, INCL EMBEDMENT 28					4			nakanem et et
REPAIR AREA D4 THICK 5000 PSI REINF. CONC. PVMT. 118 SY \$ 55.00 \$ 2.970				-				
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ENGINEER'S OPINION OF PROBABLE COST PAVING REPAIR AND STORM SEWER MODIFICATION FOR THE FUEL TRUCK ROADWAY

DESCRIPTION	QTY	UNIT	UNIT	PRICE	AMOUNT	
MOBILIZATION (10%)	1	LS	\$	11,079	11,100.00	
SIGNS, BARRICADES, TRAFFIC CONTROL	1	LS	\$	2,000	2,000.00	
TOTAL					\$123,894.00	
			Say:		\$124,000.00	
BASE BID (C1, D4):					35,000.00	
ADDITIVE ALTERNATE 1 (A1):					15,000.00	
ADDITIVE ALTERNATE 2 (D2):					10,000.00	
ADDITIVE ALTERNATE 3 (B1, B2, B3, D1, O3, D5	i):				39,000.00	
ADDITIVE ALTERNATE 4 (C2):	-	,			25,000.00	
TOTAL:					124,000.00	

PAGE 3 OF 3 PRINT DATE: 5/28/2004

ADDISON AIRPORT

PAVING REPAIR AND STORM SEWER MODIFICATION TO THE FUEL TRUCK ROADWAY

ADDENDUM NO. 1

June 9, 2004

To: All Bidders

This addendum becomes a part of the "PAVING REPAIR AND STORM SEWER MODIFICATION TO THE FUEL TRUCK ROADWAY" plans and specifications. Page PF-2 of the contract documents <u>must</u> be filled out by the bidder acknowledging the receipt of this addendum. Bids will not be accepted if the above instructions are not followed.

All provisions of the original "PAVING REPAIR AND STORM SEWER MODIFICATION TO THE FUEL TRUCK ROADWAY" plans and specifications shall remain in full force and effect, except as modified by this addendum No. 1.

MODIFICATIONS TO THE SPECIFICATIONS:

1. Section "MB" Has been reissued in its entirety.

MODIFICATIONS TO THE DRAWINGS:

The following sheets have been reissued:

- 1. Sheet 5 Plan sheet
- 2. Sheet 6 Plan sheet
- 3. Sheet 9 Repair Area Type "C"
- 4. Sheet 10 Repair Area Type "D"
- 5. Sheet 11 Typical Section 1A
- 6. Sheet 12 Typical Section 1B

CLARIFICATIONS FROM THE PRE-BID MEETING - QUESTIONS FROM CONTRACTORS

- 1) The budget for the project is approximately \$45,000.
- 2) The concrete pavement for all repair areas except "C1" and "C2" has been revised to be 4500 psi, NCTCOG type P2 (see note on revised sheets 11 and 12).
- 3) Repair Areas "C1" and "C2" (Taxilanes "T" and "S") shall be performed in an expeditious manner. These areas shall be completed and open in no more than three (3) calendar days from the time of closure of these areas, including cure time. Night work is permitted for these areas only, and shall be coordinated with the Town of Addison 72 hours prior to commencement of the night work (See revised note on revised Sheets 5 and 6). In the event that Additive Alternate 4 is accepted, Repair Areas "C1" and "C2"

Page 1 of 2 (Addendum No. 1)

- may be completed at different times, provided that the total closure time for each is no more than three (3) calendar days.
- 4) The concrete for Repair Areas "C1" and "C2" has been modified to be Type "M", and shall meet all of the minimum requirements of Type "P2" concrete, and shall achieve a compressive strength of 3600 p.s.i. within 24 hours (see note on revised sheets 11 and 12).
- 5) Normal working hours for areas other than "C1" and "C2" is between 7:00 am and 5:00 pm Monday through Friday.
- 6) On Sheet 12, the removal of the top of the junction box may be cleanly broken, as opposed to sawed. Forms for the proposed concrete cap may remain, provided that the form material used does not have the potential of deterioration and blockage of the storm sewer system.

SECTION MB

MAINTENANCE BOND

SECTION MB MAINTENANCE BOND

STATE OF TEXAS

COUNTY OF DALLAS

That	as principal and	
	, a corporation organized under the laws of	
	as sureties, said sureties being au	thorized to do business in the
State of Texa	s, do hereby expressly acknowledge themselves to be	held and bound to pay unto
the Town of	Addison, Texas, a duly incorporated home rule mur	nicipal corporation under the
laws of the St	ate of Texas, the sum of	
(\$) for the payment of which sum will and truly t	o be made unto said Town of
Addison and	its successors, said principal and sureties do hereby b	ind themselves, their assigns
and successor	s, jointly and severally.	
This obligatio	on is conditioned, however, that whereas said:	
has this day construct the	entered into a written contract with the said Town	of Addison to build and
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		-

which contract and the Plans and Specifications therein mentioned adopted by the Town of Addison, are hereby expressly made a part hereof as though the same were written and embodied herein.

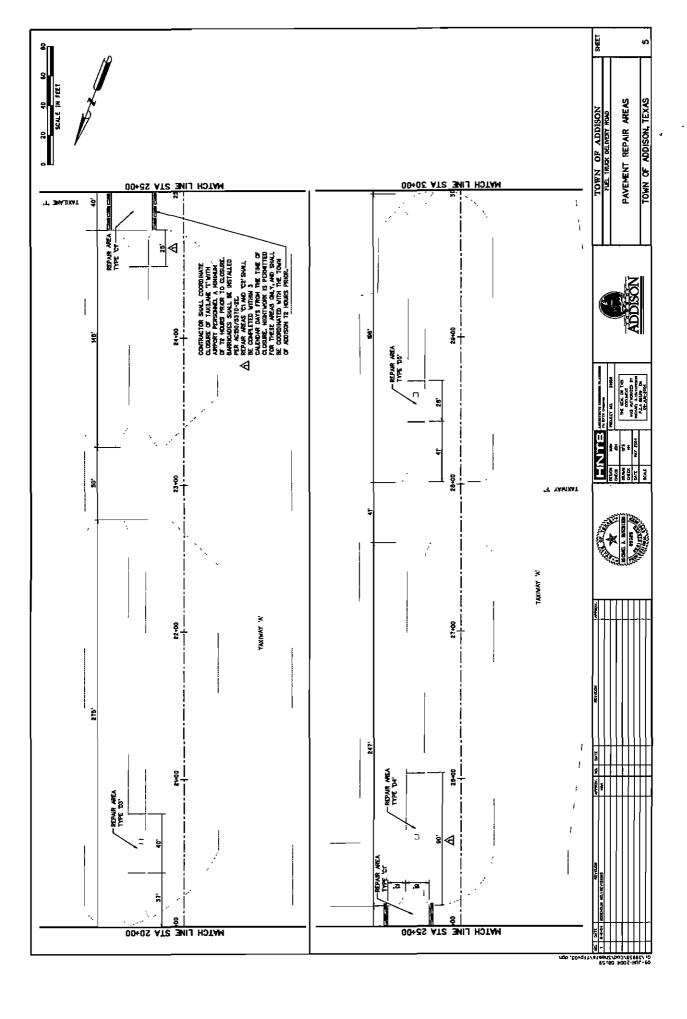
WHEREAS, under the Plans, Specifications and Contract it is provided that the Contractor will maintain and keep in good repair the work herein contracted to be done and performed for a period of two (2) years from the date of acceptance, and to do all necessary backfilling that may arise on account of sunken conditions in ditches, or otherwise, and to do and perform all necessary work and repair any defective condition growing out of or arising from the improper joining of the same, or on account of any breaking of the same caused by the said Contractor in laying or building the same, or on account of any defect arising in any of said part of said work laid or constructed by the said Contractor, or on account of improper excavation or backfilling; it being understood that the purpose of this section is to cover all defective conditions arising by reason of defective materials, work or labor performed by the said Contractor; and in case the said Contractor shall fail to do, it is agreed that the City may do said work and supply such materials, and charge the same against the said Contractor and sureties on this obligation, and the said Contractor and sureties hereon shall be subject to the liquidated damages mentioned in said contract for each day's failure on its part to comply with the terms of the said provisions of said contract, and planting materials (grasses) will be maintained by the Town of Addison after the time of final completion and acceptance by the Town of Addison and are therefore excluded from the two (2) year maintenance period as required by these presents,

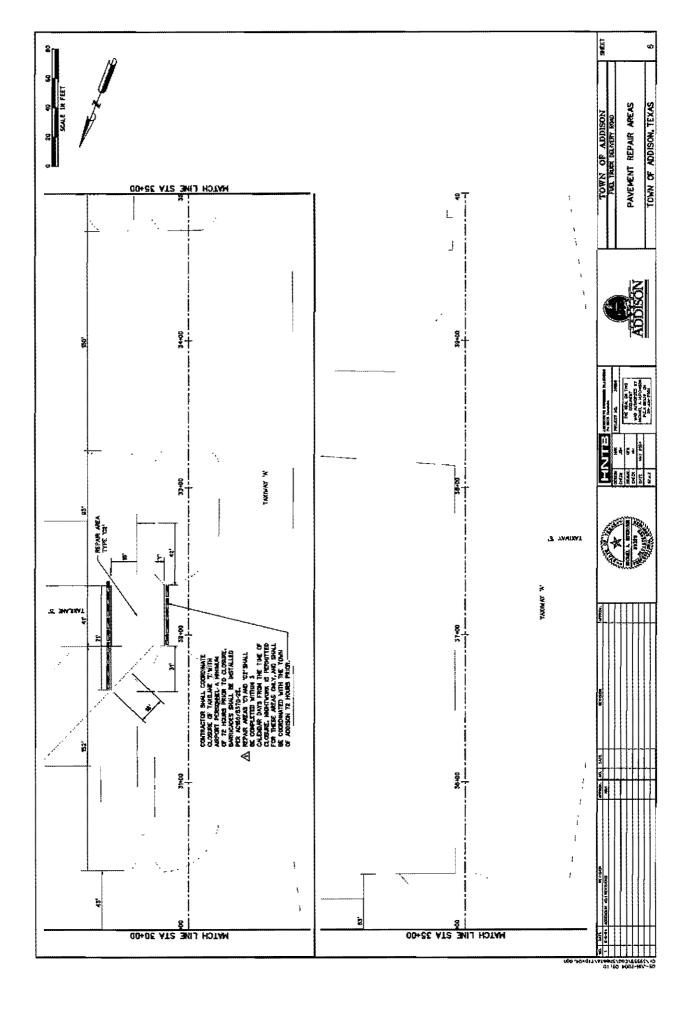
NOW THEREFORE, if the said Contractor shall keep and perform its said agreement to maintain said work and keep the same in repair for the said maintenance period of two (2) years, as provided, then these presents shall be null and void and have no further effect; but if default shall be made by the said Contractor in the performance of its contract to so maintain and repair said work, then these presents shall have full force and effect, and said Town of Addison shall have and recover from the Contractor and its sureties damages in the premises, as provided, and it is further understood and agreed that this obligation shall be a continuing one against the principal and sureties hereon and that successive recoveries may be had hereon for successive breaches until the full amount shall have been exhausted; and it is further understood that the obligation herein to maintain said work shall continue throughout said maintenance period, and the same shall not be changed, diminished, or in any manner affected from any cause during said time.

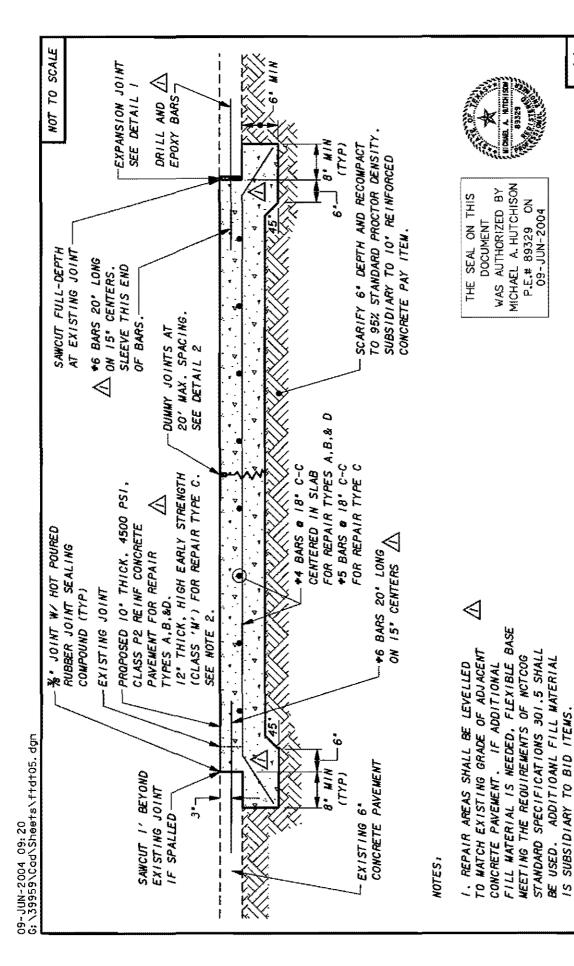
IN WITNESS WHEREOF, the said		has caused these presents to
be executed by	and the said	has hereunto set
his hand this the day of	, 20	
SURETY	PRIN	CIPAL

By:Attorney in Fact		
	ATTE	ST
By: Surety	Secretary	
Agency and Address		

NOTE: Date of Maintenance Bond must not be prior to date of Contract.







AIRPORT **ADDISON**

CONCRETE PAVEMENT REPLACEMENT FUEL TRUCK DELIVERY ROAD TYPICAL SECTION 1A

ADJACENT TO CONCRETE

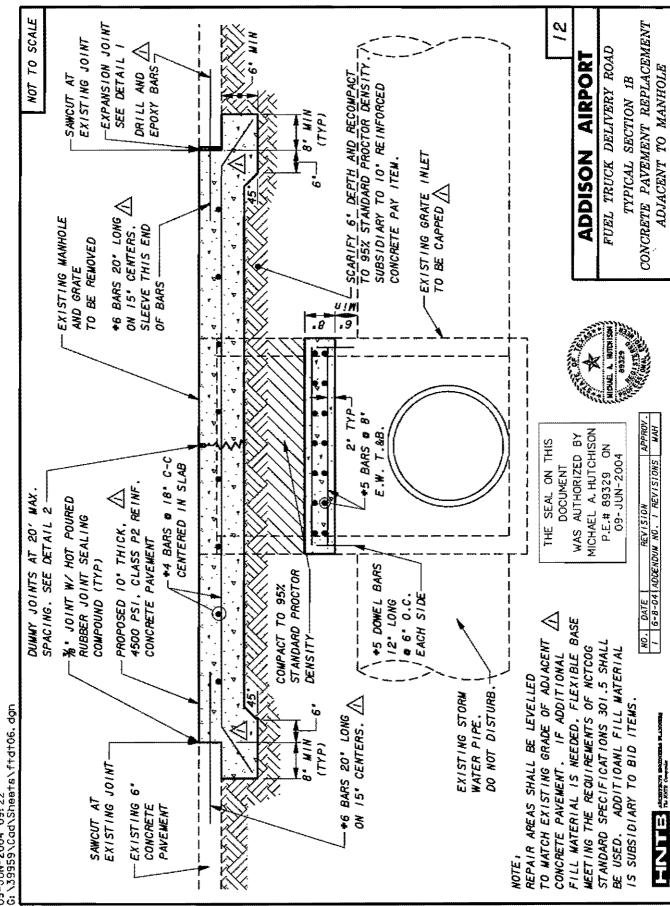
TINE SECTION STATE

24 HOURS.

2. CLASS 'M' CONCRETE FOR REPAIR AREA (1)
TYPE 'C' SHALL MEET ALL OF THE REQUIREMENTS

COMPRESSIVE STRENGTH OF 3600 PSI WITHIN OF CLASS 'PR' CONCRETE, PLUS ACHIEVE A

NO. DATÉ REVISION APPROV I 6-8-04 ADDENDUM NO. I REVISIONS MAH



09-JUN-2004 09:22 G:\39959\Cad\Sheets\ffdf06.dgn

Jim Pierce

From:

Jim Pierce

Sent:

Wednesday, May 12, 2004 11:21 AM

To:

Mark Acevedo; Lisa Pyles (E-mail)

Cc:

Dave Foster (E-mail); Jerry Holder (E-mail)

Subject:

Fuel Truck Access Road - RAMP

I met with Jerry Holder yesterday and the individual drawings for repair of the various conditions are complete. In figuring how we are going to get quotes, Jerry will meet with Dave Foster in the field and measure up the various areas so we can get quantities people can quote on. Jerry will also prepare a proposal form to use to get quotes from contractors, as well as a location map showing where the various repairs will be needed. Specifications for the work will reference NCTCOG specs or be on the plans. This will also get us insurance and a maintenance bond. The contractor's proposal will be flexible so we can prioritize the repairs and stay within our RAMP money. We are trying to keep this simple. However HNTB will need some additional fee to do this work. I do not expect this to be a large amount of money. Their fee to prepare the individual drawings was \$4,793. I have instructed Jerry to go ahead with this work and it should be complete within a week. Once we get into construction, I anticipate Dave Foster will be the inspector under my supervision.

Jim Pierce, P.E. Assistant Public Works Director P.O. Box 9010 Addison, TX 75001-9010 972-450-2879

Jim Pierce

From: Minok Suh

Sent: Monday, May 24, 2004 4:32 PM

To: Jim Pierce

Cc: 'Jerry Holder (E-mail)'; 'Lisa Pyles (E-mail)'; 'Dave Foster (E-mail)'; Mark Acevedo

Subject: Bid 04-25 Paving Repair Addison Airport

Bid No: 04-25

Bid Name: Paving Repair Addison Airport

First Ad: 5/28/04 Second Ad: 6/4/04

Pre Bid: Mandatory, June 3, 2004 2:00PM @ Service Center

Bid Open: Monday, June 14, 2004 9:00AM

Council: June 22, 2004

Minok Suh

Purchasing Coordinator Town of Addison 972-450-7091

----Original Message----

From: Jim Pierce

Sent: Monday, May 24, 2004 4:22 PM

To: Minok Suh

Cc: Jerry Holder (E-mail); Lisa Pyles (E-mail); Dave Foster (E-mail); Mark Acevedo

Subject: FW: 015-AB

Minok: Please place the attached ad.

Jerry: I'm OK with the mandatory meeting. I think it is valuable because of the special conditions the contractor

must work under on the Airport

Jim Pierce, P.E. Assistant Public Works Director P.O. Box 9010 Addison, TX 75001-9010 972-450-2879

----Original Message-----

From: Jerry Holder [mailto:JHolder@HNTB.com]

Sent: Sunday, May 23, 2004 9:56 PM

To: Jim Pierce; dave.foster@staubach.com; Lisa Pyles (E-mail); Mark Acevedo

Cc: Mike Hutchison Subject: 015-AB

Please review and give me your comments. Notice I have a mandatory site visit...you may not want this. Also check the bid opening date.

I had us getting the advertisement to Minok on Monday...she submits to the paper on Tuesday...the first advertisement is Friday (28th)....second advertisement is Friday (June 4th)...open bids the 11th...on council agenda

by the 15th...council approves at 22nd meeting.

Let me know if I missed anything.

Thanks, Jerry

<<015-AB.doc>>

This e-mail and any files transmitted with it are confidential and are intended solely for the use of the individual or entity to whom they are addressed. If you are NOT the intended recipient or the person responsible for delivering the e-mail to the intended recipient, be advised that you have received this e-mail in error and that any use, dissemination, forwarding, printing, or copying of this e-mail is strictly prohibited.



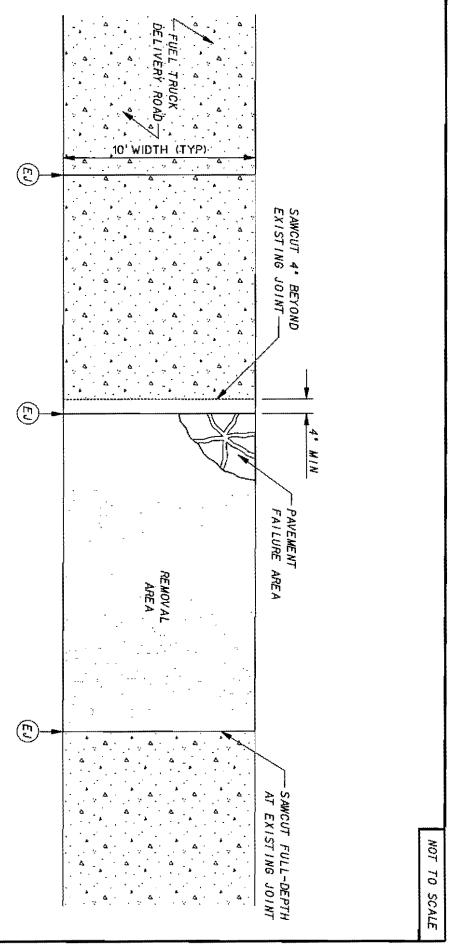
LETTER OF TRANSMITTAL

Job No. 39959 Date May 11, 2004

To: Mr. Jim Pierce, P.E. Town of Addison 16801 Westgrove Drive Addison, TX 75001-9010			Re: Addison Airport Fuel Truck Roadway Pavement Detail Sheets	Fuel Truck Roadway Pavement Repair	
WE ARE FORWARDING TO YOU: NO. OF					
COPIES	SHEET NO.	LAST DATED	DESCRIPTION		
5	5	May 7, 2004	Typ. Sects and Plan View Details		
THESE ARE TRANSMITTED: For approval					
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PLEASE NOTE:					

COPY TO:

39559, RB



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- I. CONTRACTOR WILL SOD DISTURBED AREA. THE SOD WILL NOT BE A SEPARATE PAY ITEM.
- 2. REMOVED PAVEMENT SHALL BE DISPOSED OF BY CONTRACTOR. SUBSIDIARY TO OTHER ITEMS.
- 3. REMOVED PAVEMENT WILL BE REPLACED WITH CONCRETE PAVEMENT AS SHOWN IN TYPICAL SECTION IA.

ALCHETALTS RATHERERS PLANTERS

LEGEND

PAVEMENT REMOVAL AREA

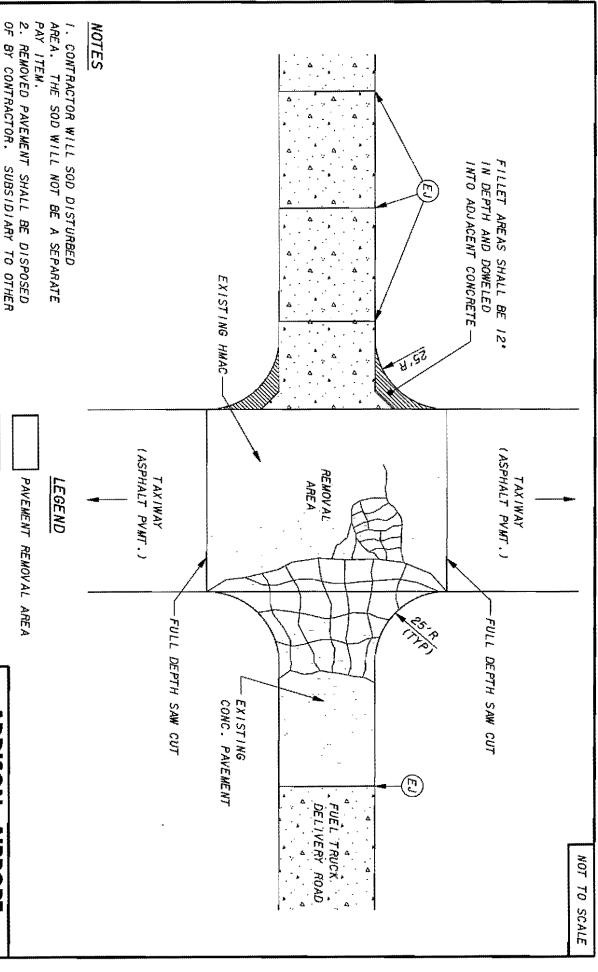
CONCRETE PAVEMENT

EJ EXSISTING JOINT

ADDISON AIRPORT

FUEL TRUCK DELIVERY ROAD

REPAIR AREA TYPE 'B'



WITH CONCRETE PAVEMENT AS SHOWN IN

3. REMOVED PAVEMENT WILL BE REPLACED

CONCRETE PAVEMENT

FUEL TRUCK DELIVERY ROAD

REPAIR AREA TYPE 'C'

ADDISON

AIRPORT

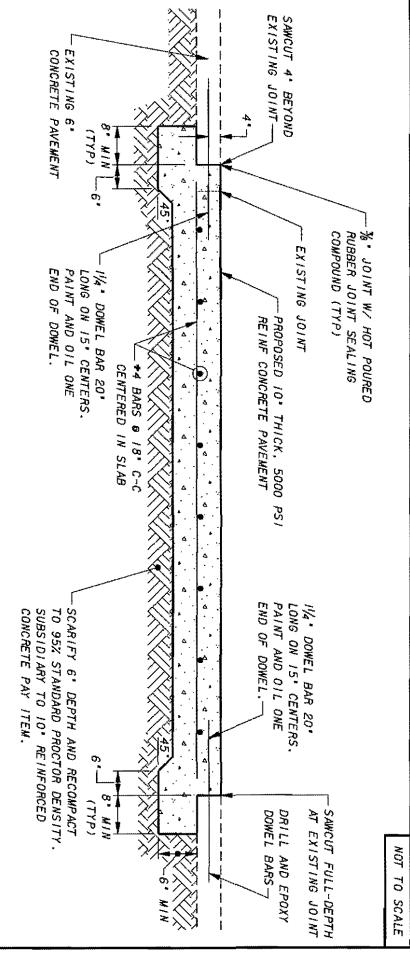
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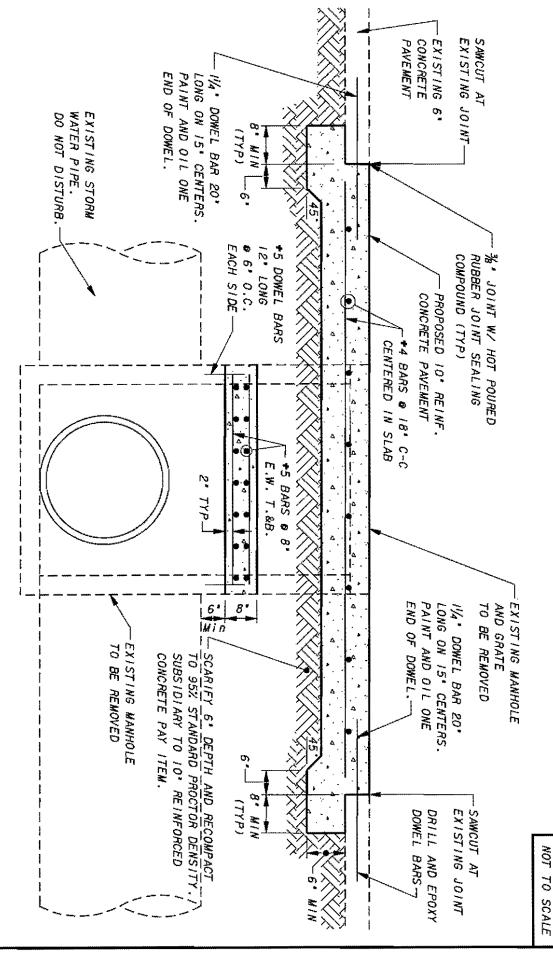
FUEL TRUCK DELIVERY ROAD

TYPICAL SECTION 1A

CONCRETE PAVEMENT REPLACEMENT

ADJACENT TO CONCRETE

The HHTB Company



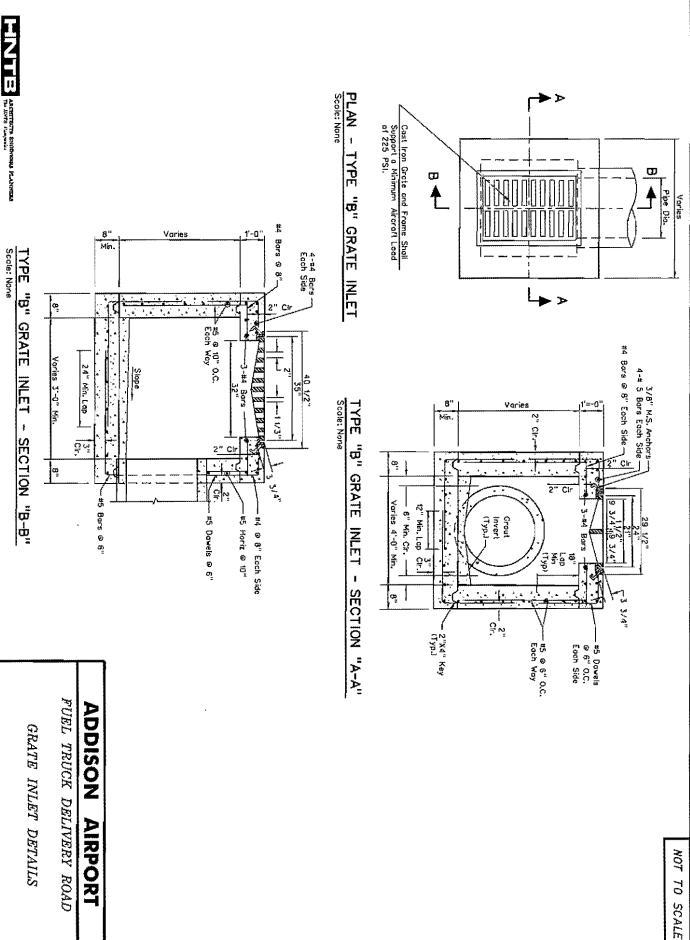
FUEL TRUCK DELIVERY ROAD

TYPICAL SECTION 1B

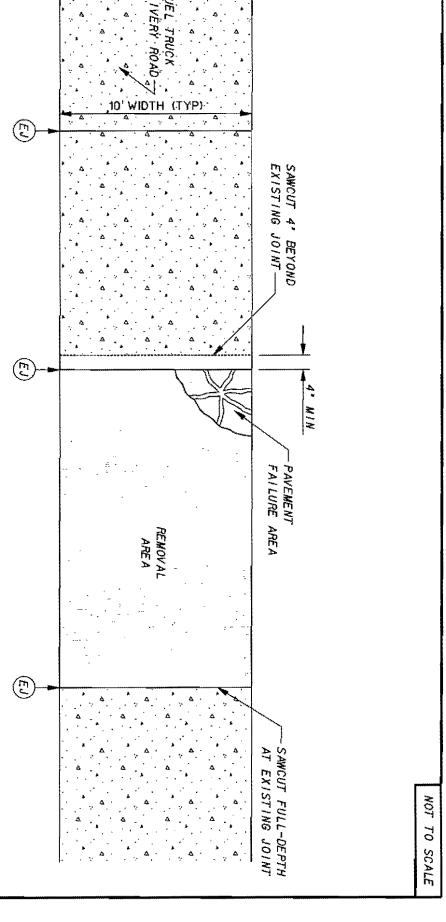
CONCRETE PAVEMENT REPLACEMENT

ADJACENT TO MANHOLE

ARCHITECTS ENGINEERS FLANKERS



HINTS ARCHITECTS SHIPPS STANDARD PLANTES



NO1ES

- I. CONTRACTOR WILL SOD DISTURBED AREA. THE SOD WILL NOT BE A SEPARATE PAY ITEM.
- 2. REMOVED PAVEMENT SHALL BE DISPOSED OF BY CONTRACTOR. SUBSIDIARY TO OTHER ITEMS.
- 3. REMOVED PAVEMENT WILL BE REPLACED WITH CONCRETE PAVEMENT AS SHOWN IN TYPICAL SECTION IA.

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CONCRETE PAVEMENT

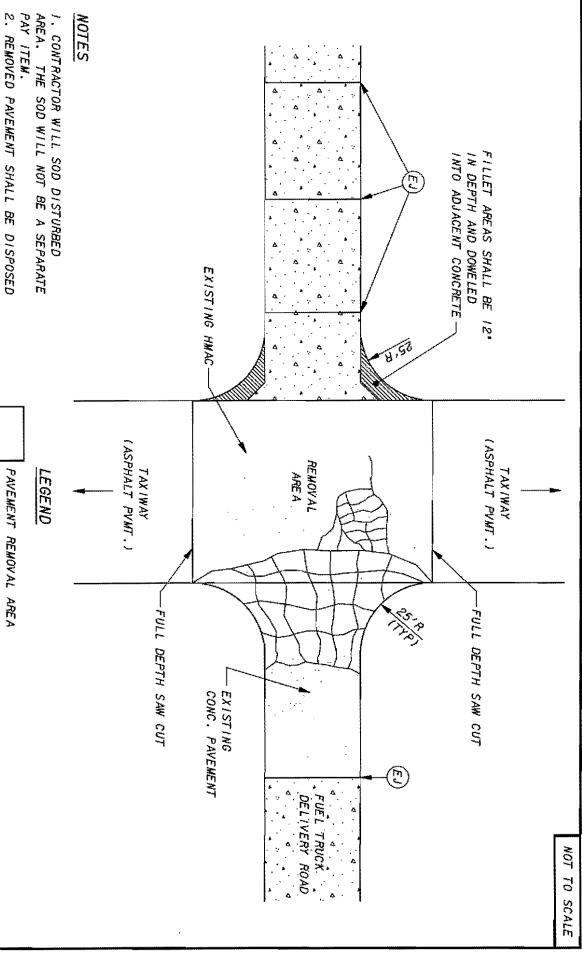
PAVEMENT REMOVAL AREA

LEGEND

ADDISON AIRPORT

FUEL TRUCK DELIVERY ROAD

REPAIR AREA TYPE 'B'



3. REMOVED PAVEMENT WILL BE REPLACED WITH CONCRETE PAVEMENT AS SHOWN IN TYPICAL SECTION IA.

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CONCRETE PAVEMENT

FUEL TRUCK DELIVERY ROAD

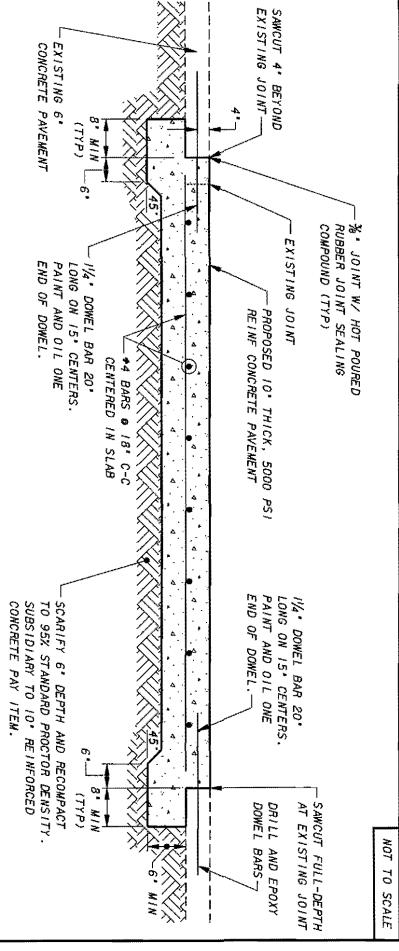
REPAIR AREA TYPE 'C'

ADDISON

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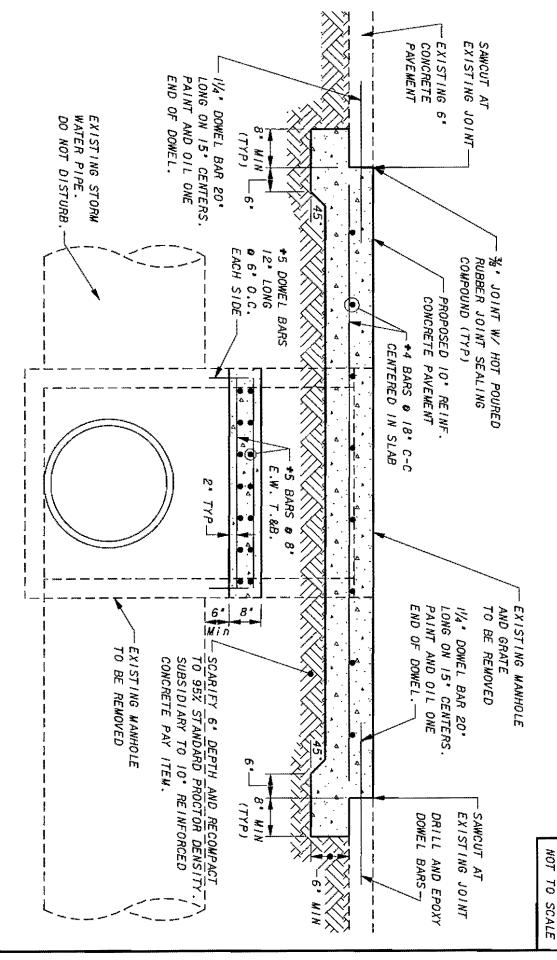
FUEL TRUCK DELIVERY ROAD

TYPICAL SECTION 1A

CONCRETE PAVEMENT REPLACEMENT

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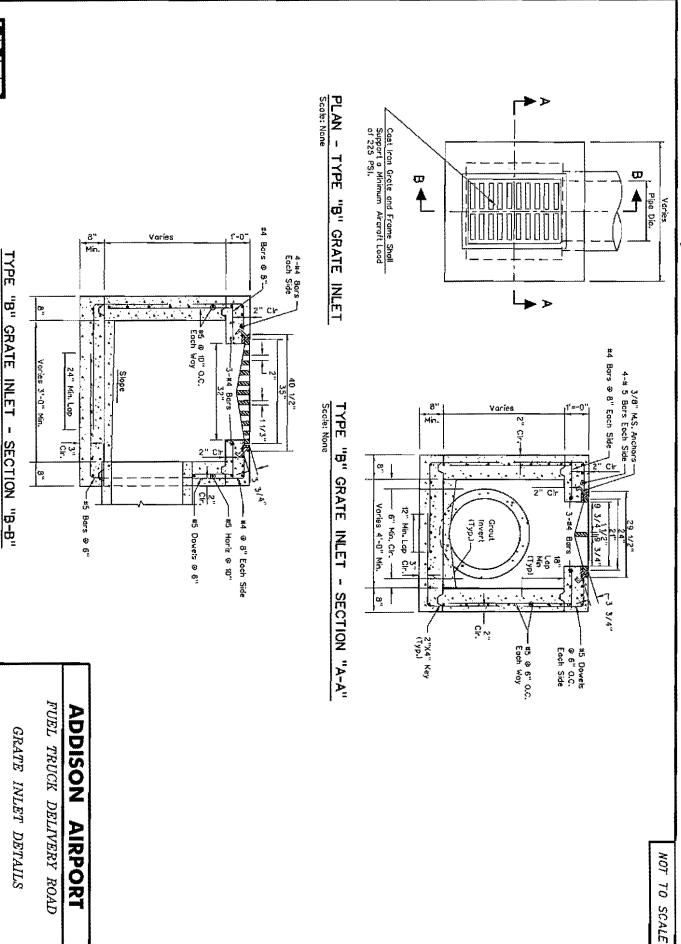
FUEL TRUCK DELIVERY ROAD

TYPICAL SECTION 1B

CONCRETE PAVEMENT REPLACEMENT

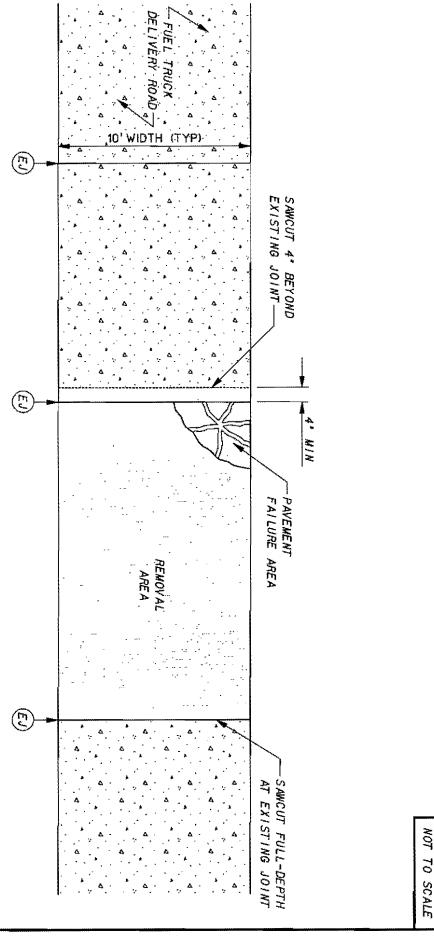
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Scale: None



- PAY ITEM. I. CONTRACTOR WILL SOD DISTURBED AREA. THE SOD WILL NOT BE A SEPARATE
- 2. REMOVED PAVEMENT SHALL BE DISPOSED OF BY CONTRACTOR. SUBSIDIARY TO OTHER
- WITH CONCRETE PAVEMENT AS SHOWN IN TYPICAL SECTION IA. 3. REMOVED PAYEMENT WILL BE REPLACED

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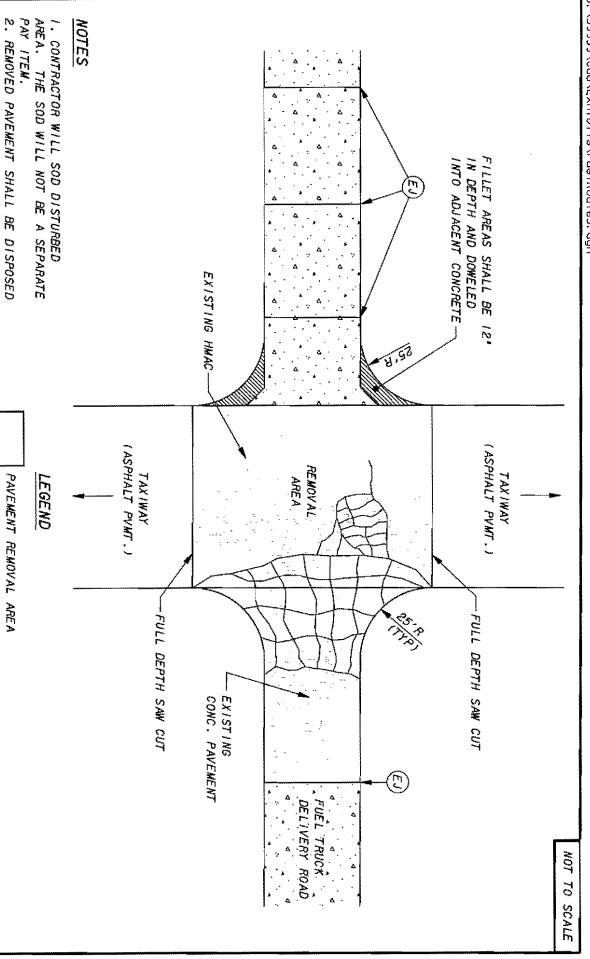
CONCRETE PAVEMENT

EXSISTING JOINT

ADDISON **AIRPORT**

FUEL TRUCK DELIVERY ROAD

REPAIR AREA TYPE 'B'



WITH CONCRETE PAVEMENT AS SHOWN IN

3. REMOVED PAVEMENT WILL BE REPLACED

CONCRETE PAVEMENT

FUEL TRUCK DELIVERY ROAD

REPAIR AREA TYPE 'C'

ADDISON

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RADIUS FILLETS

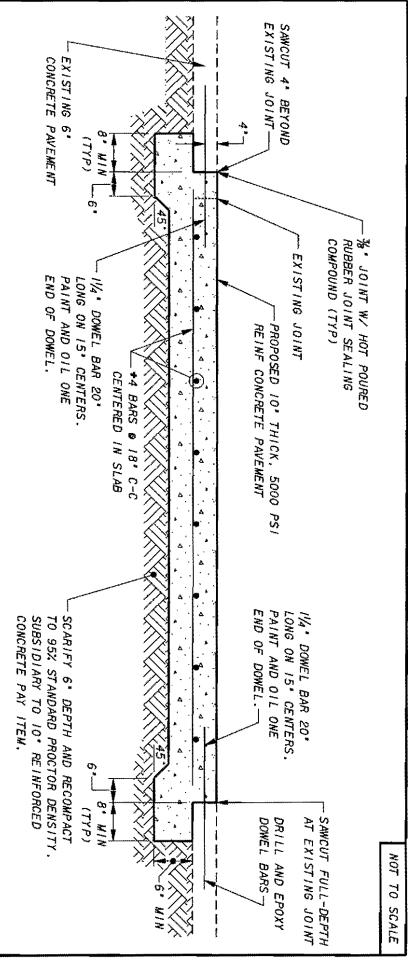
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TYPICAL SECTION IA.

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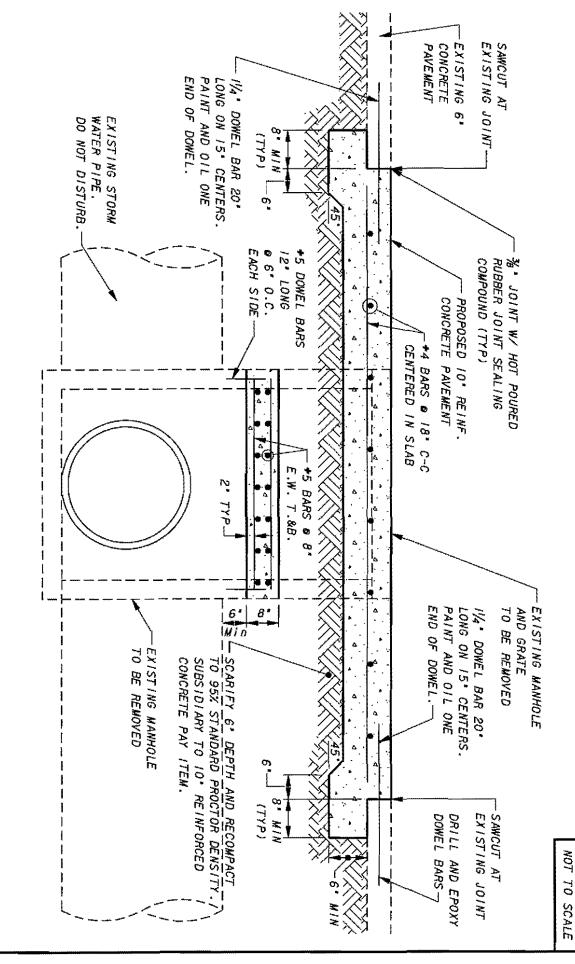
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TYPICAL SECTION 1A

CONCRETE PAVEMENT REPLACEMENT

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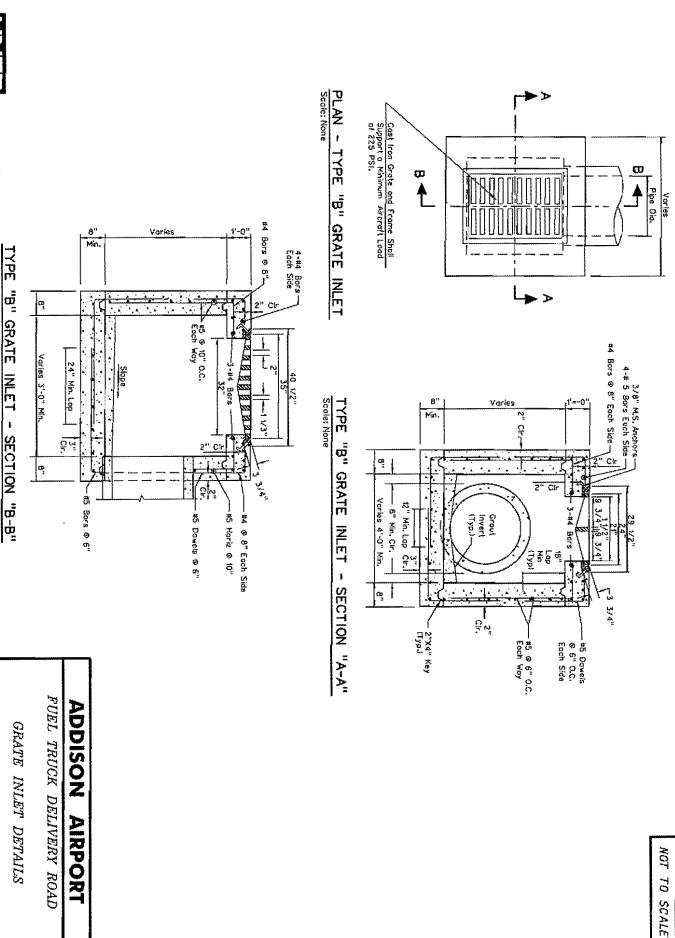
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TYPICAL SECTION 1B

CONCRETE PAVEMENT REPLACEMENT

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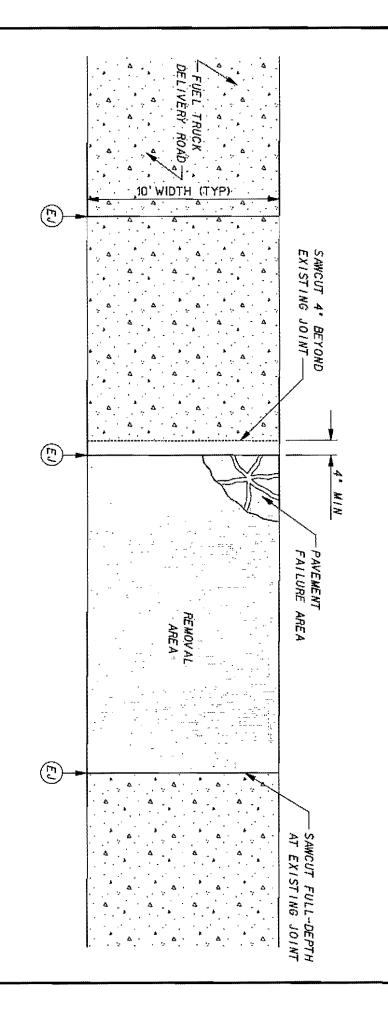
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Scale: None





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- I. CONTRACTOR WILL SOD DISTURBED AREA. THE SOD WILL NOT BE A SEPARATE PAY ITEM.
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- 3. REMOVED PAVEMENT WILL BE REPLACED WITH CONCRETE PAVEMENT AS SHOWN IN TYPICAL SECTION IA.

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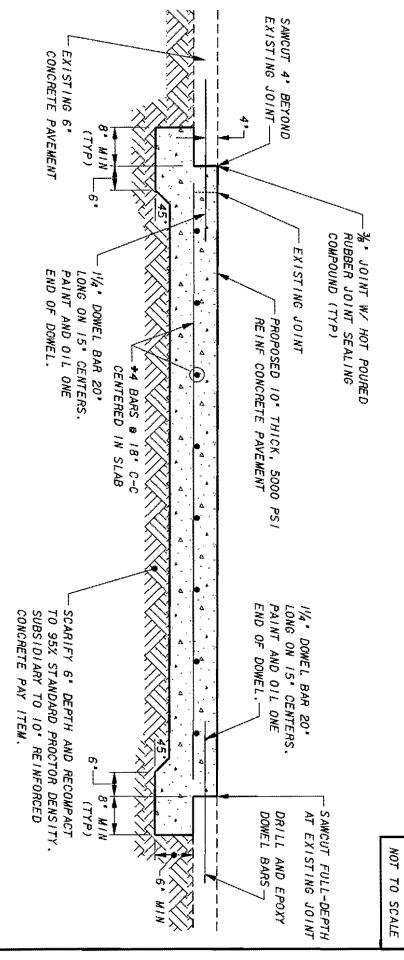
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ADDISON AIRPORT

FUEL TRUCK DELIVERY ROAD

REPAIR AREA TYPE 'B'



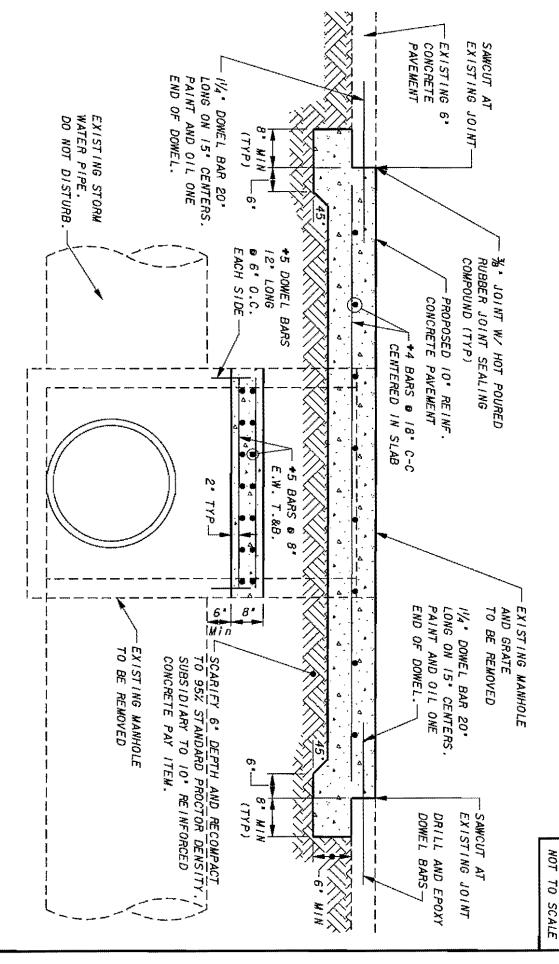
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TYPICAL SECTION 1A

CONCRETE PAVEMENT REPLACEMENT

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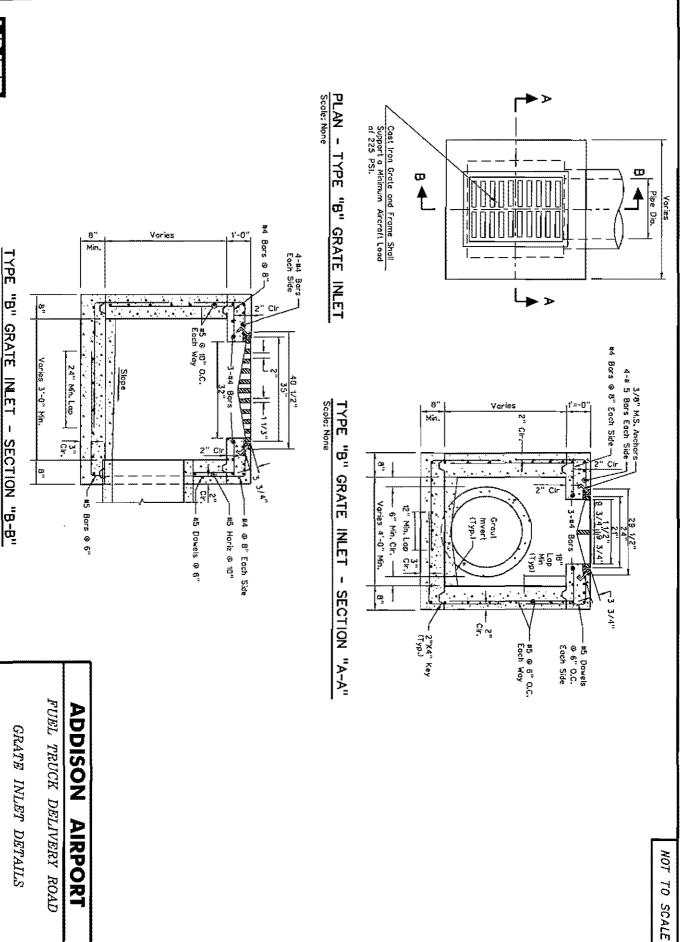
FUEL TRUCK DELIVERY ROAD

TYPICAL SECTION 1B

CONCRETE PAVEMENT REPLACEMENT

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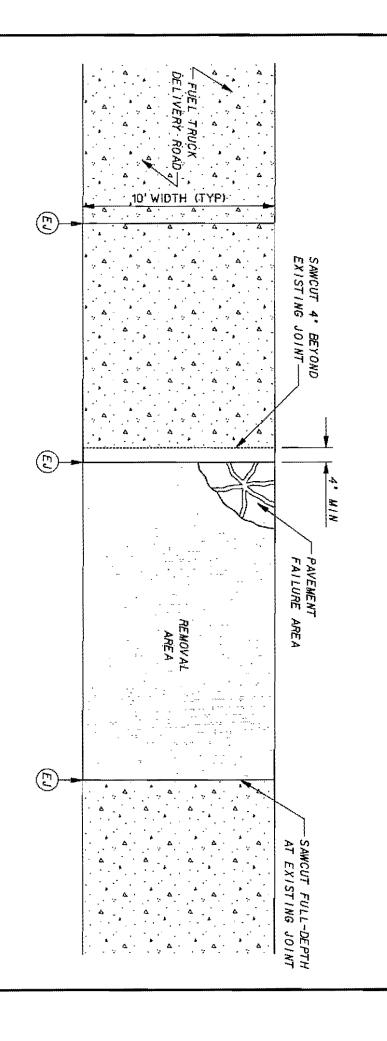
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Scale: None





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- I. CONTRACTOR WILL SOD DISTURBED AREA. THE SOD WILL NOT BE A SEPARATE PAY ITEM.
- 2. REMOVED PAVEMENT SHALL BE DISPOSED OF BY CONTRACTOR. SUBSIDIARY TO OTHER ITEMS.
- 3. REMOVED PAVEMENT WILL BE REPLACED WITH CONCRETE PAVEMENT AS SHOWN IN TYPICAL SECTION IA.

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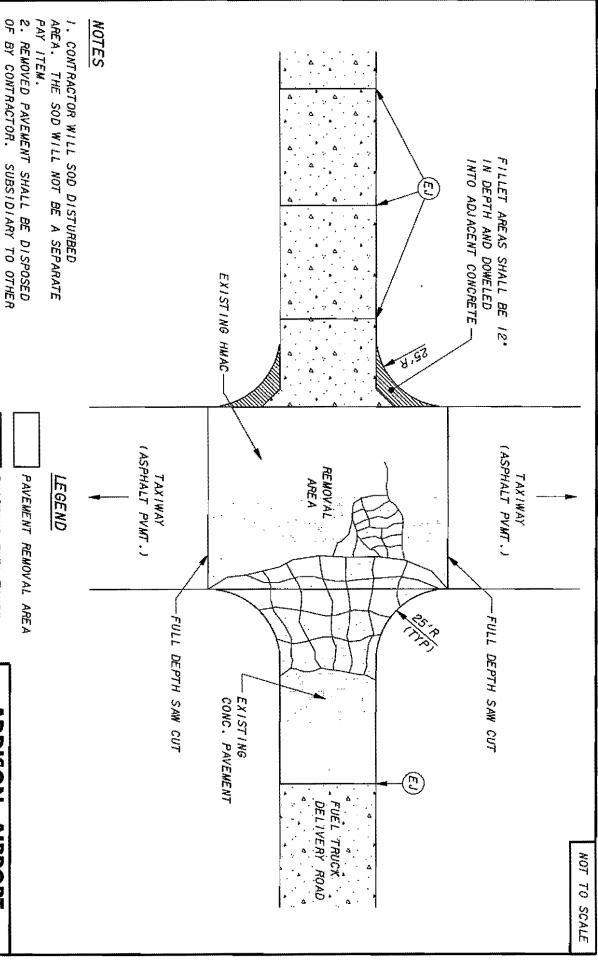
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ADDISON AIRPORT

FUEL TRUCK DELIVERY ROAD

REPAIR AREA TYPE 'B'



TYPICAL SECTION IA.

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3. REMOVED PAVEMENT WILL BE REPLACED WITH CONCRETE PAVEMENT AS SHOWN IN

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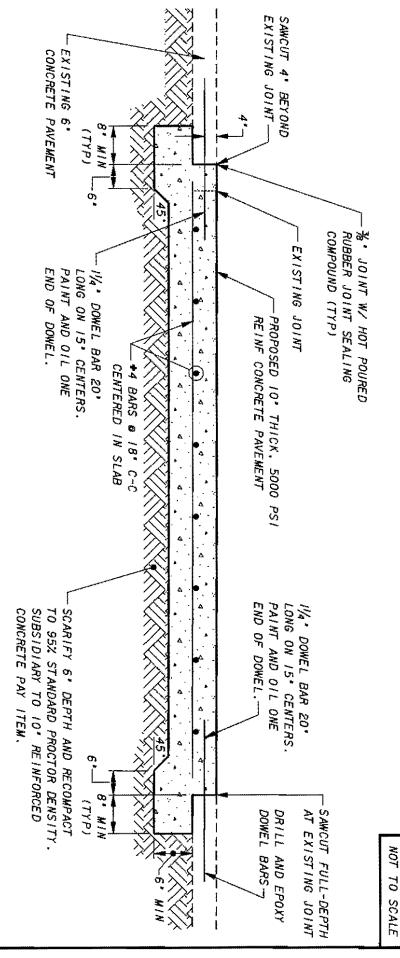
CONCRETE PAVEMENT

FUEL TRUCK DELIVERY ROAD

REPAIR AREA TYPE 'C'

ADDISON

AIRPORT



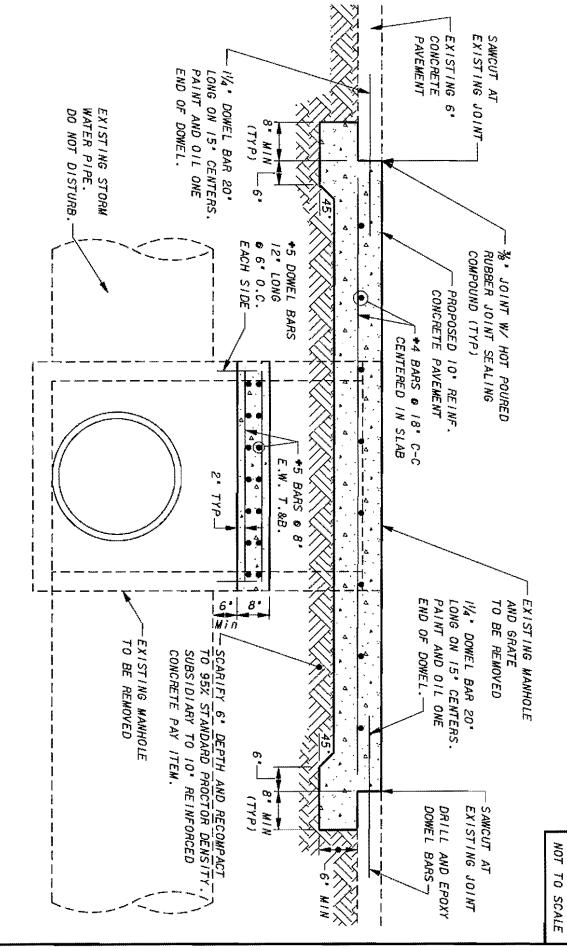
FUEL TRUCK DELIVERY ROAD

TYPICAL SECTION 1A

CONCRETE PAVEMENT REPLACEMENT

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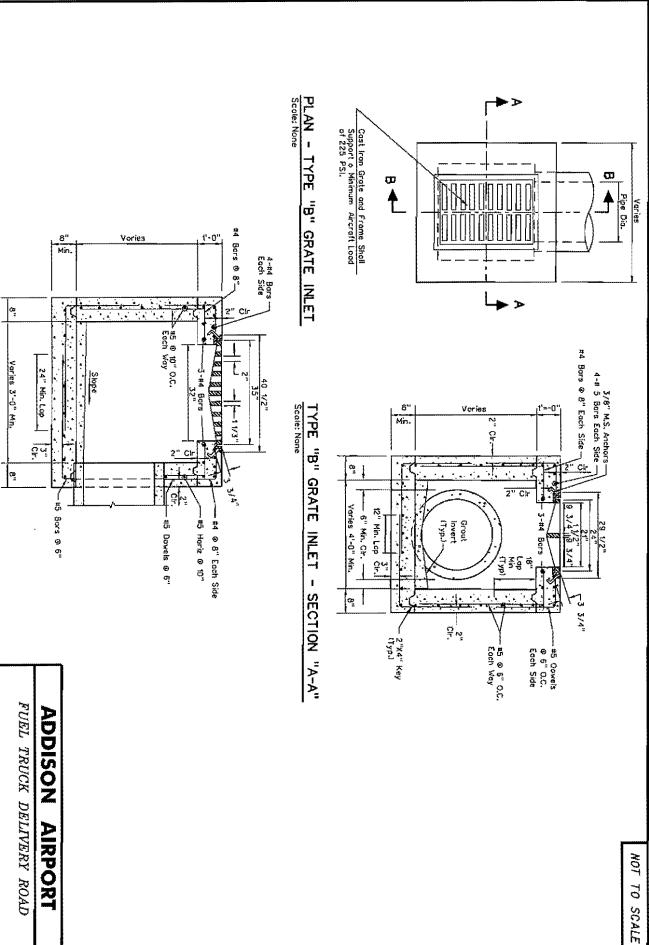
FUEL TRUCK DELIVERY ROAD

TYPICAL SECTION 1B

CONCRETE PAVEMENT REPLACEMENT

ADJACENT TO MANHOLE

Se since Company by and prantible



ARCHITECTS BRODGESSA PLOYICAS

Scale: None

TYPE "B" GRATE INLET - SECTION "B-B"

GRATE INLET DETAILS

Ful Truck Roadway / RAMP project Over 25K, must adustige & all info-to Mirok 11th open bids 15th on council agenda 22nd Council apporte 47,000 13K Roof repairs

SECTION AB ADVERTISEMENT FOR BIDS

1. Sealed bids addressed to the Town of Addison, Texas, for the Construction of Paving Repair and Storm Sewer Modification for the Fuel Truck Roadway at the Addison Airport, for the Town of Addison, Texas, hereinafter called "Town", in accordance with the plans, specifications and contract documents prepared by HNTB Corporation, will be received at the office of Ms. Minok Suh, Purchasing Coordinator, Finance Building, 5350 Belt Line Road, Addison, Texas until 3:00-7/11 p.m. on Friday, the 11 day of June, 2004. Bids received by the appointed time will be opened and read aloud. Any bids received after closing time will be returned unopened.

2. The contractor shall identify his bid on the outside of the envelope by writing the words - PAVING REPAIR AND STORM SEWER MODIFICATION FOR THE FUEL TRUCK ROADWAY.

Monday

144

- 3. Bids shall be accompanied by a cashier's check or certified check upon a national or state bank in an amount not less than five percent (5%) of the total maximum bid price payable without recourse to the Town of Addison, or a bid bond in the same amount from a surety company licensed by the State of Texas to act as a Surety, or a Binder of Insurance executed by a surety company licensed by the State of Texas to act as a surety or its authorized agent as a guarantee that the bidder will enter into a contract and execute a Performance Bond within ten (10) business days after notice of award of contract to him.
- 4. Plans, specifications and bidding documents may be secured beginning at 9:00 a.m. on Monday, the 31st day of May, 2004 from Ms. Minok Suh, Purchasing Coordinator; Finance Building, 5350 Belt Line Road, Addison, Texas. All bidding documents will be provided to the contractor in PDF format.
- 5. The right is reserved by the Mayor and the Town Council as the interest of the Town may require to reject any or all bids and to waive any informality in bids received.
- 6. The Bidder (Proposer) must supply all the information required by the Proposal Form.
- 7. A Performance Bond, Labor and Material Payment Bond, and Maintenance Bond will be required by the Owner, each Bond shall be in the amount of 100% of the total contract amount. Bonds shall be issued by a surety company licensed by the State of Texas to act as a Surety. The performance and payment bonds shall name the Town of Addison as obligee (or such other entities as may be designated at the time a contract is executed).
- 8 For information on bidding or to secure bid documents, call Ms. Minok Suh, (972) 450-7091. For information on the work to be performed, call Jim Pierce, P.E., Assistant Public Works Director, (972) 450-2879 or Mike Hutchison, P.E., HNTB Corporation, (972) 661-5626.
- 9. This project consists of providing Pavement Repair and Storm Sewer Modification as shown on the plans and in accordance with these specifications.
- A Mandatory Site Visit will be held at 2:00 p.m. on Thursday, the 3rd day of June, 2004 beginning at the Addison Service Center, 16801 Westgrove Drive, Addison, Texas 75001, 972-450-2871. All bidders are required to attend. Lack of attendance will be considered non-responsive and a bid will not be accepted from anyone not attending.

Fuel Truck Rd. 5-11-04 Weld figgal form from Jury He & Dave will out frythe Brief Spie Jusuran Cog Speas

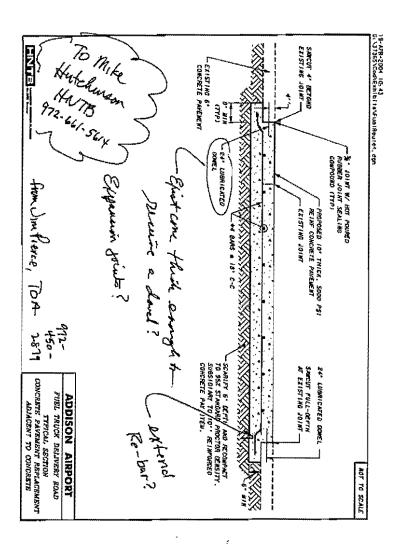
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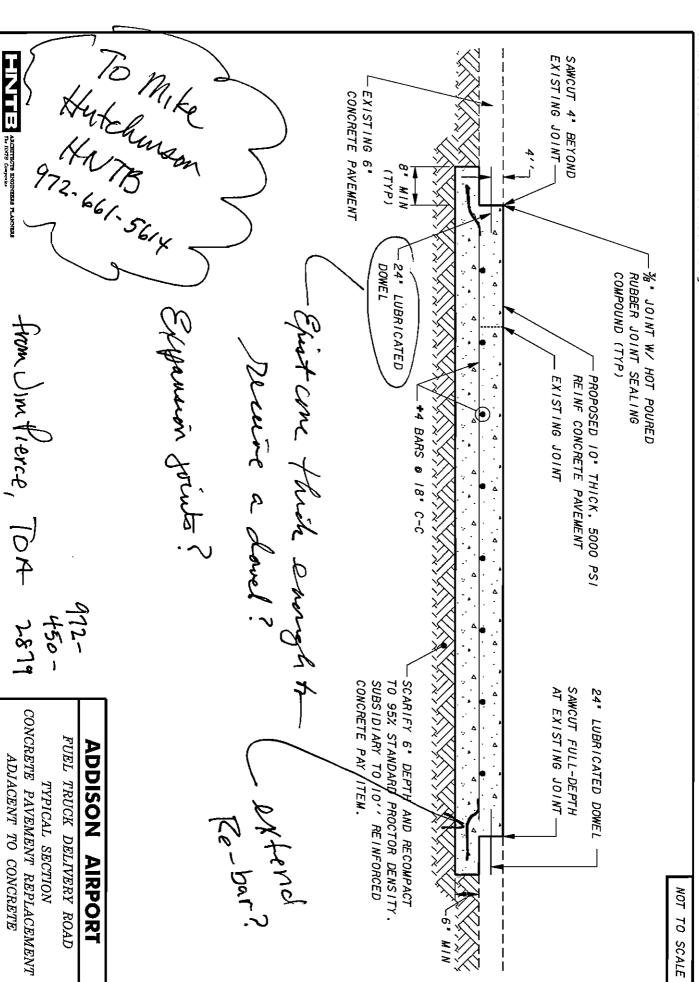
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MAY-10-2004 2:07PM



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Jim Pierce

From: Mark Acevedo

Sent: Monday, February 23, 2004 6:03 PM

To: Jim Pierce; 'Lisa Pyles' Subject: RE: RAMP program

Yes please. The letter went out today. As soon as we hear back from TxDoT you can have them proceed. Thanks!

Mark

Mark Acevedo

----Original Message----

From: Jim Pierce

Sent: Monday, February 23, 2004 6:00 PM

To: 'Lisa Pyles'; Mark Acevedo Subject: RE: RAMP program

I have given HNTB a notice to proceed. Should I stop them?

Jim Pierce, P.E. Assistant Public Works Director P.O. Box 9010 Addison, TX 75001-9010 972-450-2879

----Original Message----

From: Lisa Pyles [mailto:lisa.pyles@wgint.com] Sent: Monday, February 23, 2004 9:22 AM

To: Jim Pierce; Mark Acevedo **Subject:** RAMP program

Jim and Mark: I called Megan Caffell at TxDOT re whether we could move ahead with engineering on the access road prior to the approval of the RAMP projects. We cannot.

Mark: You should have a letter/memo from me requesting the projects to be included in the program. As soon as that is submitted to TxDOT and they approve them, we can get started. Let me know if you need that letter again. Thanks

Lisa A. Pyles Addison Airport 972 392 4855 Fax 972 788 9334 airport Fuel Truck/Access Rd 2-24-04 Stop work. We want to



Public Works / Engineering

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DATE

RE

ATTENTION

LETTER OF TRANSMITTAL

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If enclosures are not as noted, please notify us at once.

SIGNED:



ADĪ	ĎĪSŎN			DATE	2-12-04	JOB NO.		
Public Works / Engineering 16801 Westgrove • P.O. Box 9010			RE:					
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	Telephone: (972) 450-2871 • Fax: (972) 450-2837							
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GENTLE	MAN:							
		IG YOU	Attached	□ Under sep	arate cover via	th	e following items:	
	op Drawings		Prints	☐ Plans	□ Samples	☐ Specification	ons	
☐ Co _l	py of letter		□ Change order	C			_	
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If enclosures are not as noted, please notify us at once.

LETTER OF TRANSMITTAL

THIS AGREEMENT is entered into between the Town of Addison (Owner) and HNTB Corporation (HNTB), based upon Owner's intention to prepare a set of drawings and details with respect to Pavement Repairs for the Fuel Truck Roadway at the Addison Airport (the Project) and Owner's requirement for certain professional engineering services in connection with the Project (the Services) which HNTB is prepared to provide.

- 1. HNTB shall provide the Services described in Attachment A, "Scope of Services".
- 2. Owner shall pay HNTB the lump sum amount of \$4,793 in accordance with Attachment B, "Compensation".
- 3. The same degree of care, skill, and diligence shall be exercised in the performance of the Services as is ordinarily possessed and exercised by a member of the same profession, currently practicing, under similar circumstances. No other warranty, express or implied, is included in this Agreement or in any drawing, specification, report, opinion, or other instrument of service, in any form or media, produced in connection with the Services.
- 4. HNTB shall not be liable to Owner for any consequential damages resulting in any way from the performance of the Services. To the fullest extent permitted by law, HNTB's liability under this Agreement shall not exceed HNTB's total compensation actually received under this Agreement.
- 5. HNTB and Owner waive all rights against each other for damages covered by property insurance during and after the completion of the Services.
- 6. Not withstanding anything to the contrary in any Attachments hereto, HNTB has no responsibility for the failure of any consultant, contractor, subcontractor, vendor, or other Project participant, not under contract to HNTB, to fulfill contractual responsibilities to Owner or to comply with federal, state, or local laws, regulations, and codes.
- 7. HNTB does not guarantee that proposals, bids, or actual Project costs will not vary from HNTB's cost estimates or that actual schedules will not vary from HNTB's projected schedules.
- 8. This Agreement may be terminated upon written notice at Owner's convenience or by either party in the event of substantial failure by the other party to perform in accordance with the terms of this Agreement. HNTB shall terminate performance of Services on a schedule acceptable to Owner, and Owner shall pay HNTB for all Services performed and reasonable termination expenses. Paragraphs 4 and 5 shall survive any termination or completion of this Agreement.
- 9. All documents prepared by HNTB pursuant to this Agreement are instruments of service in respect to the Project. Any use except for the specific purpose intended by this Agreement will be at the user's sole risk and without liability or legal exposure to HNTB. HNTB shall retain its ownership in its data bases, computer software, and other proprietary property. Intellectual property developed, utilized, or modified in the performance of the Services shall remain the property of HNTB.
- 10. In the event the Owner requests HNTB to execute any certificates or other documents, the proposed language of such certificates or documents shall be submitted to HNTB for review at least 15 days prior to the requested date of execution. HNTB shall not be required to execute any certificates or documents that in any way would, in HNTB's sole judgment, (a) increase HNTB's legal or contractual obligations or risks; (b) require knowledge, services or responsibilities beyond the scope of this Agreement; or (c) result in HNTB having to certify, guarantee or warrant the existence of conditions whose existence HNTB cannot ascertain.
- 11. The Services provided for in this Agreement are for the sole use and benefit of Owner and HNTB. Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than Owner and HNTB.

Town of Addison (Owner) Signature Name	HNTB Corporation (HNTB) Signature Dengton J. Hiller Title Vict President
Date 2/12/04	Date 2 12 04

<u> Attachment "A"</u>

Scope of Service

Develop detailed engineering drawings the Addison Airport can use to repair pavement distresses on the Fuel Truck Roadway that runs parallel to taxiway "A". These details shall include the following:

- Plan view drawings will indicate general dimensions and locations of saw cuts, pavement removal, and drainage. Proper radii will also be shown to prevent fuel trucks from running their rear wheels off the pavement. Drawings that will be delivered will be plan views of the following distress conditions:
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 - 3 Distressed areas where concrete fuel truck roadway intersects asphalt taxiways.
- Section view drawings of the following repair conditions:
 - 1 Typical Section of new pavement area showing thickness of new slab, reinforcing steel size and locations, tie-in to existing slab, type of joints, and joint seal material.
 - 2 Section of new pavement with existing MH located in pavement.

Compensation

Airport:

Project Manager:

Consultant:

Addison Jerry Holder HNTB

		Project	Design			
	Principal	Manager	Engineer	Technical	Drafting	Clerical
ſ	\$75.00	\$50.00	\$37.00	\$32.00	\$28.00	\$17.00

LABOR HOURS BY PHASE		Project	Design			
	Principal	Manager	Engineer	Technical	Drafting	Clerical
Site Visit and Documentation	0	2	2	0	0	
Details and Section Sketches	0	2	8	0	Ô	2
Drafting and Layout	0	ō	ő	4	16	ō
QA/QC and Product Delivery	0	2	4	2	2	2
Total Hours	0	6	14	6	18	4
	\$0	\$900	\$1,555	\$576	\$1,513	\$204
TOTAL PAYROLL COSTS	\$4,748					
TOTAL MISC. EXPENSES	\$45					
TOTAL ENGINEERING COST	\$4,793					

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- 4. HNTB shall not be liable to Owner for any consequential damages resulting in any way from the performance of the Services. To the fullest extent permitted by law, HNTB's liability under this Agreement shall not exceed HNTB's total compensation actually received under this Agreement.
- 5. HNTB and Owner waive all rights against each other for damages covered by property insurance during and after the completion of the Services.
- 6. Not withstanding anything to the contrary in any Attachments hereto, HNTB has no responsibility for the failure of any consultant, contractor, subcontractor, vendor, or other Project participant, not under contract to HNTB, to fulfill contractual responsibilities to Owner or to comply with federal, state, or local laws, regulations, and codes.
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Town of Addison (Owner)	HNTB Corporation (HNTB)
Signature Weine	Signature
Name (Lim Herce	Name
Title Asst. Public Wks. Director	Title
Date <u>2-11-04</u>	Date

Scope of Service

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Compensation

Airport:

Project Manager:

Consultant:

Addison Jerry Holder

HNTB

	Project	Design			
Principal	Manager	Engineer	Technical	Drafting	Clerical
\$75.00	\$50.00	\$37.00	\$32.00	\$28.00	\$17.00

LABOR HOURS BY PHASE	Principal	Project Manager	Design Engineer	Technical	Drafting	Clerical
Site Visit and Documentation	0	2	2	0	0	
Details and Section Sketches	0	2	8	0	0	2
Drafting and Layout	0	0	0	4	16	0
QA/QC and Product Delivery	0	2	4	2	2	2
Total Hours	0	6	14	6	18	4
	\$0	\$900	\$1,555	\$576	\$1,513	\$204
TOTAL PAYROLL COSTS	\$4,748					
TOTAL MISC. EXPENSES	\$45					
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Town of Addison (Owner)	HNTB Corporation (HNTB)
Signature Ween	Signature
Name (Lim Kierce	Name
Title 45st. Public Wks. Director	Title
Date <u>2-11-04</u>	Date

Scope of Service

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Airport:

Project Manager:

Consultant:

Addison
Jerry Holder
HNTB

	Project	Design			
Principal	Manager	Engineer	Technical	Drafting	Clerical
\$75.00	\$50.00	\$37.00	\$32.00	\$28.00	\$17.00

LABOR HOURS BY PHASE	Principal	Project Manager	Design Engineer	Technical	Drafting	Clerical
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Details and Section Sketches	0	2	8	0	0	2
Drafting and Layout	0	0	0	4	16	0
QA/QC and Product Delivery	0	2	4	2	2	2
Total Hours	0	6	14	6	18	4
	\$0	\$900	\$1,555	\$576	\$1 ,513	\$204
TOTAL PAYROLL COSTS	\$4,748					
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Town of Addison (Owner)	HNTB Corporation (HNTB)
Signature Their	Signature
Name (Lim Herce	Name
Title 4531. Public Wks. Director	Title
Date 2-11-04	Date

Scope of Service

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Compensation

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Project Manager:

Consultant:

Addison Jerry Holder HNTB

	Project	Design			
 Principal	Manager	Engineer	Technical	Drafting	Clerical
\$75.00	\$50.00	\$37.00	\$32.00	\$28.00	\$17.00

	Project	Design			
<u>Principal</u>	Мападег	Engineer	Technical	<u>Drafting</u>	Clerical
0	2	2	0	0	
0	2	8	0	0	2
0	0	0	4	16	0
0	2	4	2	2	2
0	6	14	6	18	4
\$0	\$900	\$1,555	\$576	\$ 1,5 1 3	\$204
\$4,748					
\$45	,				
\$4,793					
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Fuel Farm Bids		7/28/2004			
		With	With	With	With
	Base Bid	Alt 1	Alt 1,2	Alt. 1,2,3	Alt. 1,2,3,4
Pioneer	27,777.78	43,177.78	47,944.45	78,711.12	116,399.08
Tx. Std	38,800.00	50,200.00	55,400.00	78,045.00	108,565.00

70K in operating Budget