

SERIAL 12180 S GUARD RAIL INSTALLATION, SERVICES & ACCESSORIES

DATE OF LAST REVISION: April 28, 2016

CONTRACT END DATE: April 30, 2017

CONTRACT PERIOD THROUGH APRIL 30, ~~2016~~ 2017

TO: All Departments

FROM: Office of Procurement Services

SUBJECT: Contract for **GUARD RAIL INSTALLATION, SERVICES & ACCESSORIES**

Attached to this letter is published an effective purchasing contract for products and/or services to be supplied to Maricopa County activities as awarded by Maricopa County on **April 11, 2013**.

All purchases of products and/or services listed on the attached pages of this letter are to be obtained from the vendor holding the contract. Individuals are responsible to the vendor for purchases made outside of contracts. The contract period is indicated above.

Wes Baysinger, Chief Procurement Officer
Office of Procurement Services

NP/jl
Attach

Copy to: Office of Procurement Services
Sami Birchard, MCDOT

FIVE G INC., 3801 E. SUPERIOR AVE., PHOENIX AZ 85040

COMPANY NAME: Five G Inc.
 DOING BUSINESS AS (DBA) NAME: Five G Inc.
 MAILING ADDRESS: 3801 E Superior Ave. Phoenix, Arizona 85040
 REMIT TO ADDRESS: Same
 TELEPHONE NUMBER: 602-437-0201
 FACSIMILE NUMBER: 602-437-0201
 WEB SITE: fiveginc.com
 REPRESENTATIVE NAME: Greg Mastin
 REPRESENTATIVE TELEPHONE NUMBER: 602-436-0201
 REPRESENTATIVE E-MAIL: greg@fiveginc.com

	<u>YES</u>	<u>NO</u>	<u>REBATE</u>
WILL ALLOW OTHER GOVERNMENTAL ENTITIES TO PURCHASE FROM THIS CONTRACT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
WILL ACCEPT PROCUREMENT CARD FOR PAYMENT:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

NET 30 DAYS

Contractor Pricing Rates			
Title	Standard Rate	Overtime Rate	Emergency Rate
Superintendent	\$78.00	\$117.00	\$156.00
Foreman	\$67.00	\$100.00	\$134.00
Operator	\$62.00	\$93.00	\$124.00
Laborer	\$55.00	\$82.50	\$110.00
Inspector / Technician	\$64.00	\$96.00	\$128.00

Mobilization / Demobilization			
Title	Area A	Area B	Area C
Mobilization / Demobilization	\$850.00	\$1,525.00	\$1,900.00

Equipment Rates			
Title	Unit	Qty	UofM
	Price		
Crew Truck	\$49.00	1	hour
Gooseneck Tandem Axle Trailer	\$18.00	1	hour
Guardrail Machine	\$143.00	1	hour
Heavy Haul Transport	\$175.00	1	hour
Fork Lift	\$58.00	1	hour
Backhoe	\$57.00	1	hour

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Compressor with Jackhammer	\$19.00	1	hour
Pick-Up Truck	\$28.00	1	hour
Vac Truck / Soft Digs	\$215.00	1	hour
Mileage Reimbursement	\$0.39	1	mile

Accessories, Parts, and Materials (Standard Guard Rail Material)				
Title	Unit Price	Qty	UofM	Bidder Notes
Galvanized Guard Rail, 13' Section	\$110.00	1	each	Section is actually 13.5' overall, effective length is 12.5' with standard post spacing of 6'3" on center. Straight non radius panels only.
Galvanized Guard Rail, 26' Section	\$185.00	1	each	Effective length of 25' with standard post spacing of 6'3" on center.
Galvanized Flared Guard Rail End	\$45.00	1	each	
Wood Timber Post with hardware (8" x 8" 5'4")	\$33.00	1	each	Hardware is galvanized only and consists of a 5/8" x 18" BHOS bolt, 5/8" double recess hex nut and a 5/8" washer.
Guard Rail Extruder Terminal (Head Only) with hardware	\$1,075.00	1	each	Extruder head galvanized only. Hardware consists of 2 each galvanized 3/8" lag screws.
Reflector Tabs with hardware	\$3.75	1	each	Reflector tab only no additional hardware.
8' x 8' wood block (include all hardware)	\$11.00	1	each	Block only no hardware. See posts for hardware
6" x 8" x 14" Wood Block (include all hardware)	\$9.00	1	each	Block only no hardware. See posts for hardware.
6" x 8" x 5'4" Wood Posts (include all hardware)	\$25.00	1	each	Hardware galvanized only and consists of 5/8" x 18" BHOS bolt, 5/8" double recess hex nut and a 5/8" washer
6" x 8" x 6 CRT Posts	\$45.00	1	each	
Hardware for 26' Galvanized Guardrail	\$9.60	1	each	Hardware consists of one set of splice hardware only, which is 8 each 5/8" x 1 1/4" BHOS bolts and 8 each 5/8" double recess hex nut.
Guard Rail Extruder Terminal with hardware (complete unit)	\$1,950.00	1	each	Extruder terminal is galvanized only 50' in total length with either 2 each soil tubes and 5 1/2" x 7 1/2" x 3'9" wood posts or 2 each HBA posts tops and bottoms.
5½ X 7 X 45" TIMBER POST	\$35.00	1	each	
6 X 8 X 64" TIMBER POST	\$22.00	1	each	
6 X 8 X 6'-0" TIMBER CRT POST	\$45.00	1	each	
8 X 8 X 64" TIMBER POST	\$29.00	1	each	
10 X 10 X 6'-6" TIMBER POST	\$78.00	1	each	
6 X 8 X 14" TIMBER BLOCK	\$7.00	1	each	
6 X 8 X 14" TIMBER BLOCK (TERMINALS)	\$10.00	1	each	

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8 X 8 X 14" TIMBER BLOCK	\$8.00	1	each	
8 X 8 X 17" TIMBER BLOCK DRILLED FOR THRIE BEAM	\$10.00	1	each	
8 X 8 X 22" TIMBER BLOCK DRILLED FOR THRIE BEAM	\$12.00	1	each	
8 X 8 X 6' TIMBER POST DRILLED FOR THRIE BEAM	\$33.00	1	each	
10 X 10 X 8' TIMBER POST DRILLED FOR THRIE BEAM	\$95.00	1	each	
W6 X 8.5 X 72" STEEL POST	\$56.00	1	each	
W6 X 8.5 X 78" STEEL POST	\$60.00	1	each	
W6 X 8.5 X 14" STEEL BLOCK	\$15.00	1	each	
W6 X 8.5 X 22" STEEL BLOCK	\$22.00	1	each	
6 X 8 X 14" NOTCHED WOOD BLOCK	\$9.00	1	each	
6 X 8 X 22" NOTCHED WOOD BLOCK	\$12.00	1	each	
14" COMPOSITE BLOCK - W-BEAM	\$7.50	1	each	
22" COMPOSITE BLOCK - THRIE BEAM	\$11.50	1	each	
TRANSITION BLOCK #1 - GALVANIZED	\$36.00	1	each	
TRANSITION BLOCK #2 - CORTEN	\$36.00	1	each	
TRANSITION BLOCK #2 - GALVANIZED	\$95.00	1	each	
TRANSITION BLOCK #2 - CORTEN	\$95.00	1	each	
TRANSITION BLOCK #3 - GALVANIZED	\$100.00	1	each	
TRANSITION BLOCK #3 - CORTEN	\$100.00	1	each	
TRANSITION BLOCK #4 - GALVANIZED	\$105.00	1	each	
TRANSITION BLOCK #4 - CORTEN	\$105.00	1	each	
TRANSITION BLOCK #5 - GALVANIZED	\$110.00	1	each	
TRANSITION BLOCK #5 - CORTEN	\$110.00	1	each	
C6 X 8.2 RUB RAIL 12-1/2' - GALVANIZED	\$195.00	1	each	
C6 X 8.2 RUB RAIL 12-1/2' - CORTEN	\$225.00	1	each	
C6 X 8.2 RUB RAIL 25' - GALVANIZED	\$400.00	1	each	
C6 X 8.2 RUB RAIL 25' - CORTEN	\$450.00	1	each	
C6 X 8.2 RUB RAIL 25' W/BENT END (MODIFIED) - CORTEN	\$475.00	1	each	
C6 X 8.2 RUB RAIL 25' W/BENT END (MODIFIED) - GALVANIZED	\$425.00	1	each	
RUB RAIL SPLICE PLATE	\$24.00	1	each	
RUB RAIL FLARE END STRIP (10" RADIUS) - GALVANIZED	\$48.00	1	each	
RUB RAIL FLARE END STRIP (10" RADIUS) - CORTEN	\$48.00	1	each	
6.25' STANDARD W-BEAM PANEL - CORTEN	\$45.00	1	each	
6.25' STANDARD W-BEAM PANEL - GALVANIZED	\$50.00	1	each	
12.5' STANDARD W-BEAM PANEL - CORTEN	\$105.00	1	each	
12.5' STANDARD W-BEAM PANEL - GALVANIZED	\$110.00	1	each	
25' STANDARD W-BEAM PANEL - CORTEN	\$190.00	1	each	

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25' STANDARD W-BEAM PANEL - GALVANIZED	\$195.00	1	each	
12.5' W-BEAM DEPARTURE ANCHOR PANEL - CORTEN	\$115.00	1	each	
12.5' W-BEAM DEPARTURE ANCHOR PANEL - GALVANIZED	\$120.00	1	each	
12.5' RADIUS 5' TO 15' W-BEAM PANEL - CORTEN	\$175.00	1	each	
12.5' RADIUS 5' TO 15' W-BEAM PANEL - GALVANIZED	\$185.00	1	each	
12.5' RADIUS 15' TO 150' W-BEAM PANEL - CORTEN	\$150.00	1	each	
12.5' RADIUS 15' TO 150' W-BEAM PANEL - GALVANIZED	\$160.00	1	each	
12.5' TRANSITION W-BEAM PANEL - CORTEN	\$105.00	1	each	
12.5' TRANSITION W-BEAM PANEL - GALVANIZED	\$115.00	1	each	
25' TRANSITION W-BEAM PANEL - CORTEN	\$195.00	1	each	
25' TRANSITION W-BEAM PANEL - GALVANIZED	\$200.00	1	each	
W-BEAM BACK-UP PLATE - CORTEN	\$12.00	1	each	
W-BEAM BACK-UP PLATE - GALVANIZED	\$12.00	1	each	
W-BEAM END SECTION - FLARED - CORTEN	\$45.00	1	each	
W-BEAM END SECTION - FLARED - GALVANIZED	\$45.00	1	each	
W-BEAM END SECTION - ROUNDED - CORTEN	\$75.00	1	each	
W-BEAM END SECTION - ROUNDED - GALVANIZED	\$75.00	1	each	
W-BEAM TRANSITION TERMINAL CONNECTOR - CORTEN	\$80.00	1	each	
W-BEAM TRANSITION TERMINAL CONNECTOR - GALVANIZED	\$70.00	1	each	
W-BEAM TO THRIE BEAM TRANSITION PANEL - CORTEN	\$170.00	1	each	
W-BEAM TO THRIE BEAM TRANSITION PANEL - GALVANIZED	\$190.00	1	each	
12.5' STANDARD THRIE BEAM PANEL - CORTEN	\$170.00	1	each	
12.5' STANDARD THRIE BEAM PANEL - GALVANIZED	\$175.00	1	each	
12.5' TRANSITION THRIE BEAM PANEL - CORTEN	\$175.00	1	each	
12.5' TRANSITION THRIE BEAM PANEL - GALVANIZED	\$180.00	1	each	
THRIE BEAM BACK-UP PLATE - CORTEN	\$20.00	1	each	
THRIE BEAM BACK-UP PLATE - GALVANIZED	\$18.00	1	each	
THRIE BEAM END SECTION - FLARED - CORTEN	\$145.00	1	each	
THRIE BEAM END SECTION - FLARED - GALVANIZED	\$125.00	1	each	

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THRIE BEAM END SECTION - ROUNDED - CORTEN	\$115.00	1	each	
THRIE BEAM END SECTION - ROUNDED - GALVANIZED	\$125.00	1	each	
THRIE BEAM TERMINAL CONNECTOR - CORTEN	\$175.00	1	each	
THRIE BEAM TERMINAL CONNECTOR - GALVANIZED	\$125.00	1	each	
THRIE BEAM ANCHOR PLATE - 5/8 X 12 X 20	\$100.00	1	each	
5/8" X 3" BHSS BOLT - CORTEN	\$3.50	1	each	
5/8" X 3" BHSS BOLT - GALVANIZED	\$3.20	1	each	
5/8" X 11" BHSS BOLT - CORTEN	\$4.50	1	each	
5/8" X 11" BHSS BOLT - GALVANIZED	\$4.25	1	each	
5/8" X 12" BHSS BOLT - CORTEN	\$4.65	1	each	
5/8" X 12" BHSS BOLT - GALVANIZED	\$4.35	1	each	
5/8" X 13" BHSS BOLT - CORTEN	\$4.75	1	each	
5/8" X 13" BHSS BOLT - GALVANIZED	\$4.25	1	each	
5/8" X 1-1/4" BHOS BOLT - CORTEN	\$0.80	1	each	
5/8" X 1-1/4" BHOS BOLT - GALVANIZED	\$0.70	1	each	
5/8" X 2" BHOS BOLT - CORTEN	\$0.90	1	each	
5/8" X 2" BHOS BOLT - GALVANIZED	\$0.80	1	each	
5/8" X 8" BHOS BOLT - CORTEN	\$2.45	1	each	
5/8" X 8" BHOS BOLT - GALVANIZED	\$2.25	1	each	
5/8" X 10" BHOS BOLT - CORTEN	\$2.60	1	each	
5/8" X 10" BHOS BOLT - GALVANIZED	\$2.45	1	each	
5/8" X 18" BHOS BOLT - CORTEN	\$3.20	1	each	
5/8" X 18" BHOS BOLT - GALVANIZED	\$3.00	1	each	
5/8" X 20" BHOS BOLT - CORTEN	\$3.45	1	each	
5/8" X 20" BHOS BOLT - GALVANIZED	\$3.25	1	each	
5/8" X 22" BHOS BOLT - CORTEN	\$3.75	1	each	
5/8" X 22" BHOS BOLT - GALVANIZED	\$3.50	1	each	
5/8" X 24" BHOS BOLT - CORTEN	\$4.20	1	each	
5/8" X 24" BHOS BOLT - GALVANIZED	\$4.00	1	each	
5/8" X 26" BHOS BOLT - CORTEN	\$4.50	1	each	
5/8" X 26" BHOS BOLT - GALVANIZED	\$4.25	1	each	
5/8" X 1-1/2" HEX BOLT - CORTEN	\$0.80	1	each	
5/8" X 1-1/2" HEX BOLT - GALVANIZED	\$0.60	1	each	
5/8" X 7-1/2" HEX BOLT - GALVANIZED	\$2.75	1	each	
5/8" X 9-1/2" HEX BOLT - GALVANIZED	\$2.95	1	each	
5/8" DOUBLE RECESS HEX NUT - CORTEN	\$0.80	1	each	
5/8" DOUBLE RECESS HEX NUT - GALVANIZED	\$0.70	1	each	
5/8 HEX NUT - CORTEN	\$0.65	1	each	
5/8 HEX NUT - GALVANIZED	\$0.60	1	each	
5/8 ROUND WASHER - CORTEN	\$0.40	1	each	
5/8 ROUND WASHER - GALVANIZED	\$0.35	1	each	

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RECTANGULAR PLATE WASHER - CORTEN	\$1.75	1	each	
RECTANGULAR PLATE WASHER - GALVANIZED	\$1.50	1	each	
3/4" X 1-1/2" HEX BOLT - GALVANIZED	\$0.80	1	each	
3/4" X 16" HEX BOLT WITH 8" THREAD - GALVANIZED	\$7.50	1	each	
3/4" HEX NUT - GALVANIZED	\$0.85	1	each	
3/4" ROUND WASHER - GALVANIZED	\$0.60	1	each	
7/8" X 16" A325 HEX BOLT WITH 8" THREAD - GALVANIZED	\$20.00	1	each	
7/8" A324 HEX NUT - GALVANIZED	\$1.50	1	each	
7/8" A325 WASHER - GALVANIZED	\$0.80	1	each	
1" HEX NUT - GALVANIZED	\$1.95	1	each	
1" ROUND WASHER- GALVANIZED	\$1.00	1	each	
1-1/4" X 12" HEX BOLT - GALVANIZED	\$12.50	1	each	
1-1/4" HEX NUT - GALVANIZED	\$2.95	1	each	
1-1/4" ROUND WASHER - GALVANIZED	\$1.25	1	each	
BOLTED ANCHOR BRACKET FOR TIMBER POST	\$44.00	1	each	
BOLTED ANCHOR BRACKET FOR STEEL POST	\$42.00	1	each	
2" X 5-1/2" PIPE SLEEVE	\$7.50	1	each	
5/8" X 8" X 8" BEARING PLATE	\$38.00	1	each	
3/4" X 6'-6" CABLE ANCHOR ASSEMBLY	\$100.00	1	each	
CABLE ANCHOR BRACKET	\$45.00	1	each	
4'-6" FOUNDATION TUBE (3/16" X 6" X 8")	\$175.00	1	each	
6'-0" FOUNDATION TUBE (3/16" X 6" X 8")	\$195.00	1	each	
REFLECTOR TABS, HIGH-REFLECTIVITY SHEETING, SILVER-WHITE	\$3.75	1	each	
REFLECTOR TABS, HIGH-REFLECTIVITY SHEETING, YELLOW	\$3.75	1	each	
HIGH ALTITUDE REFLECTOR - SILVER	\$7.50	1	each	
HIGH ALTITUDE REFLECTOR - YELLOW	\$7.50	1	each	
POST TOP REFLECTOR - SILVER	\$6.00	1	each	
POST TOP REFLECTOR - YELLOW	\$6.00	1	each	
4" X 4" HIGH REFLECTIVITY SHEETING - SILVER	\$3.50	1	each	
4" X 4" HIGH REFLECTIVITY SHEETING - YELLOW	\$3.50	1	each	
OBJECT MARKER (SQUARE, LEFT, RIGHT)	\$30.00	1	each	
16D HOT DIPPED GALVANIZED NAILS	\$0.10	1	each	

Accessories, Parts, and Materials (SKT 350/Fleat 350 End Treatments)			
Title	Unit Price	Qty	UofM
FLEAT IMPACT HEAD	\$700.00	1	each
SKT IMPACT HEAD	\$875.00	1	each

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SKT/FLEAT 12.5' ANCHOR PANEL	\$195.00	1	each
SLOTTED CABLE ANCHOR BRACKET	\$75.00	1	each
BEARING PLATE 5/8 X 8" X 8" WITH 3/16 LIP OFFSET HOLE	\$32.00	1	each
GROUND STRUT 2-1/2" X 2-1/2"	\$95.00	1	each
3/8 X 3 LAG SCREW	\$3.50	1	each
1/2 X 1-1/4 A325 SPL. SHOULDER BOLT/NUT/2 WASHERS (SET OF 8)	\$40.00	1	each

Accessories, Parts, and Materials (ET-Plus End Treatments)			
Title	Unit Price	Qty	UofM
ET 12.5' ANCHOR PANEL	\$175.00	1	each
ET EXTRUDER HEAD	\$1,075.00	1	each
ET CABLE ANCHOR BRACKET	\$75.00	1	each
BEARING PLATE 5/8 X 8" X 8" WITH TABS OFFSET HOLE	\$38.00	1	each
ANGLE STRUT 3" X 3" X 6'-6"	\$95.00	1	each
ET HBA POST #1 TOP (W6 X 8.5)	\$80.00	1	each
ET HBA POST #2 TOP (W6 X 8.5)	\$85.00	1	each
ET HBA POST #1 & 2 BOTTOM	\$150.00	1	each
SYTP POST #2-8 TOP	\$60.00	1	each
HDPE SPACER	\$40.00	1	each
3/8 X 4 LAG SCREW	\$3.75	1	each
3/8 FLAT WASHER	\$0.25	1	each
3/8 LOCK WASHER	\$0.25	1	each
3/8 FENDER WASHER	\$0.25	1	each
3/8 HEX NUT	\$0.50	1	each
3/8 X 1-1/2 HEX BOLT	\$0.75	1	each
3/8 X 2 HEX BOLT	\$0.95	1	each
3/8 X 10 HEX BOLT	\$3.00	1	each
3/4" LOCK WASHER	\$0.30	1	each
3/4 X 2-1/2 HEX BOLT (A325)	\$2.75	1	each
3/4 X 3 HEX BOLT (A325)	\$4.00	1	each

Accessories, Parts, and Materials (SRT-350)			
Title	Unit Price	Qty	UofM
12.5' SRT-1 PANEL	\$245.00	1	each
12.5' SRT-2 PANEL	\$245.00	1	each
12" SRT BACKUP	\$10.00	1	each
BUFFER/ROLLED TERMINAL	\$75.00	1	each
SRT HBA POST #1 TOP	\$85.00	1	each

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SRT HBA POST #2 TOP	\$85.00	1	each
SRT HBA POST #1 & 2 BOTTOM	\$200.00	1	each
SLOTTED BEARING PLATE	\$55.00	1	each
ANGLE STRUT 2" X 2"	\$95.00	1	each
SLOT GUARD	\$30.00	1	each
3/8" X 3" X 4" PIPE SLEEVE	\$12.00	1	each

Accessories, Parts, and Materials (CRP Retrofit)			
Title	Unit Price	Qty	UofM
CRP INSERT UPPER POST	\$225.00	1	each
CRP INSERT LOWER POST	\$250.00	1	each
CRP POST GUARD	\$175.00	1	each
CASS CABLE BRACKET FOR CRP POST	\$15.00	1	each
5/16" WASHER	\$0.20	1	each
5/16" HEX NUT	\$0.45	1	each
5/16" X 1-3/4" HEX BOLT	\$0.80	1	each
5/8 X 11" HEX BOLT (CHANNEL STRUT)	\$3.50	1	each
3/4 HVY HEX NUT	\$1.25	1	each
3/4 X 11" HEX BOLT (ANGLE STRUT)	\$10.00	1	each

Accessories, Parts, and Materials (Complete Assemblies)			
Title	Unit Price	Qty	UofM
NESTED GUARDRAIL TYPE 1 - 25' WOOD POST (MCDOT STD 3008-1)	\$635.00	1	each
NESTED GUARDRAIL TYPE 2 - 37.5' WOOD POST (MCDOT STD 3008-2)	\$835.00	1	each
NESTED GUARDRAIL TYPE 3 - 37.5' WOOD POST (MCDOT STD 3008-3)	\$835.00	1	each
NESTED GUARDRAIL TYPE 1 - 25' STEEL POST (MCDOT STD 3008-1)	\$745.00	1	each
NESTED GUARDRAIL TYPE 2 - 37.5' STEEL POST (MCDOT STD 3008-2)	\$945.00	1	each
NESTED GUARDRAIL TYPE 3 - 37.5' STEEL POST (MCDOT STD 3008-3)	\$945.00	1	each
W-BEAM TRANSITION - 37.5' (ADOT STD. DWG. C-10.30, 3/94 REV.)	\$1,295.00	1	each
THRIE BEAM TRANSITION - 18.75' (ADOT STD. DWG, C-10.30, 9/04 REV.)	\$1,095.00	1	each
DEPARTURE END TERMINAL ASSEMBLY - 12.5' (MCDOT STD 3007)	\$585.00	1	each
ET-PLUS 25' TERMINAL ASSEMBLY (PER TRINITY DWG. SS 610)	\$2,145.00	1	each
ET-PLUS 37.5' TERMINAL ASSEMBLY (PER TRINITY DWG. SS 611)	\$2,575.00	1	each
ET-PLUS 50' TERMINAL ASSEMBLY (PER TRINITY DWG. SS 612)	\$2,995.00	1	each
TRACC TL2 TERMINAL CRASH CUSHION ON 6" CONCRETE PAD	\$16,250.00	1	each
TRACC TL3 TERMINAL CRASH CUSHION ON 6" CONCRETE PAD	\$17,950.00	1	each
WIDE TRACC TL3 TERMINAL CRASH CUSHION ON 6" CONCRETE PAD	\$19,450.00	1	each

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Additional Pricing				
Title	Unit Price	Qty	UofM	Bidder Notes
Corrugated Metal Guard Rail, 13' Section with hardware	\$121.20	1	MF	Galvanized only, hardware consists of 8 each 5/8" x 1 1/4" BHOS bolts and 5/8" double recess hex nut.
Corrugated Metal Guard Rail, 26' Section with hardware	\$206.20	1	MF	Galvanized only, hardware consists of 8 each 5/8" x 1 1/4" BHOS bolts and 8 each 5/8" double recess hex nuts
Corrugated Metal Flared Guard Rail End B-Terminal with hardware	\$59.00	1	MF	Galvanized only, hardware consists of 8 each 5/8" x 1 1/4" BHOS bolts, 8 each 5/8" double recess hex nuts, and 8 each 5/8" washers.
Wood Timber Post with hardware	\$26.05	1	MF	Hardware galvanized only and consists of a 5/8" x 18" BHOS bolts, a 5/8" double recess hex nut and a 5/8" washer. Post is a 6" x 8" x 5'4" post
Guard Rail Extruder Terminal with hardware	\$1,082.50	1	MF	Hardware galvanized only and consists of 2 each 3/8" x 4" lag screw.
Reflector Tabs with hardware	\$3.75	1	MF	Reflector tab only no additional hardware.

****ADDED AS OF 1/14/2015****

Accessories, Parts, and Materials (Complete Assemblies)			
Title	Unit Price	Qty	UofM
SKT-350 25' TERMINAL ASSEMBLY (SOIL TUBES W/STEEL POSTS)	\$2,795.00	1	each
SKT-350 25' TERMINAL ASSEMBLY (SOIL TUBES W/TIMBER POSTS)	\$2,295.00	1	each
SKT-350 37.5' TERMINAL ASSEMBLY (SOIL TUBES W/STEEL POSTS)	\$3,170.00	1	each
SKT-350 37.5' TERMINAL ASSEMBLY (SOIL TUBES W/TIMBER POSTS)	\$2,685.00	1	each
SKT-350 50' TERMINAL ASSEMBLY (SOIL TUBES W/STEEL POSTS)	\$3,590.00	1	each
SKT-350 50' TERMINAL ASSEMBLY (SOIL TUBES W/TIMBER POSTS)	\$3,095.00	1	each

PRICING SHEET: NIGP CODE 57028

Vendor Number: 2011001508 0

Certificates of Insurance Required

Contract Period: To cover the period ending ~~April 30, 2016~~ **2017**.

GUARD RAIL INSTALLATION, SERVICES & ACCESSORIES

1.0 INTENT:

The intent of this contract is for providing Guard Rail Installation, Services and Accessories for various locations throughout Maricopa County. Construction and repair services of guardrail may include but are not limited to: supplying all labor, material, equipment and traffic control to construct new guardrail, reconstruct existing guardrail and install guardrail end treatments (extruded terminal, crash cushions, etc). Guardrail related construction activities shall include but not be limited to the delineation of guardrail sections and guardrail terminals, including all necessary components and markings, installed new or reconstructed.

Other governmental entities under agreement with the County may have access to services provided hereunder (see also Sections 2.22 and 2.23, below).

The County reserves the right to add additional contractors, at the County's sole discretion, in cases where the currently listed contractors are of an insufficient number or skill-set to satisfy the County's needs or to ensure adequate competition on any project or task order work.

2.0 SPECIFICATIONS:

2.1 CORRUGATED METAL GUARD RAIL

Corrugated Metal Guard Rail Flared Ends and Wood Timber Posts shall meet the specifications of Section 415 of the Uniform Standard Specifications for Public Works Construction by the Maricopa Association of Governments (MAG) and MAG Standard Details Nos. 135-1, 135-2 & 135-3 and Maricopa County Department of Transportation (MDOT) supplement to MAG Section 415, current edition.

2.2 GUARD RAIL EXTRUDED TERMINALS

Guard Rail Extruded Terminals shall comply with the Maricopa County Department of Transportation (MDOT) supplement to MAG Sections 415 & 416, current edition. End terminals shall be Trinity Industries type ET-2000, or equal.

2.3 PRISMATIC GUARD RAIL

Prismatic guard rail reflector tabs shall comply with the Maricopa County Department of Transportation (MDOT) supplement to MAG Sections 415, current edition, and MCDOT Standard Drawing 3002 or 3003, Reflector Tab Detail.

2.4 HARDWARE

All hardware to be included pursuant to bolt and nuts as specified in Section 2.1 and Section 2.2 above.

2.5 SPECIAL PROVISIONS – ADDITON OF SERVICES

The following special provisions modify the MAG Uniform Standard Specifications as revised by the MCDOT Supplement to MAG Uniform Standard Specifications.

2.5.1 SECTION 107 LEGAL REGULATIONS AND RESPONSIBILITY TO THE PUBLIC

2.6 (107.1) LAWS TO BE OBSERVED, add the following:

The Contractor shall insure that contract operations are in compliance with procedures and requirements of the Maricopa County Air Pollution Control Rules and Ordinances with special attention given to the fugitive dust requirements. The Contractor shall pay any penalties imposed upon MCDOT where the violation is a direct result of actions or inactions by the Contractor, the contractor's employees or subcontractors.

2.7 (107.2) PERMITS

2.7.1 (107.2.1) AZPDES (NPDES) Construction General Permit Requirements, add the following:

2.7.1.1 Work assignments will not usually be subject to the Arizona Pollutant Discharge Elimination System (AZPDES) general permit requirements for construction sites under the Arizona Department of Environmental Quality (ADEQ), the AZPDES Construction General Permit. If a work assignment is subject to AZPDES permit requirements, payment terms will be negotiated.

2.8 (107.5) SAFETY, HEALTH, AND SANITATION PROVISIONS

2.8.1 (107.5.5) Safety Plan, add the following:

2.8.1.1 The Contractor's Safety Plan shall be submitted prior to commencement of work. The Contractor may submit a safety plan for all work performed under this contract. Prior to the commencement of work on each work assignment, the Contractor shall as a minimum review the Safety Plan for accuracy and completeness, then submit a revised plan incorporating any needed changes or submit confirmation that the safety plan on record is current and accurate. CONTRACTOR SAFETY PLAN GUIDELINES are available on the MCDOT website at:
<http://www.mcdot.maricopa.gov/manuals/home.htm>

2.9 SECTION 108 COMMENCEMENT, PROSECUTION AND PROGRESS

2.9.1 (108.1) NOTICE TO PROCEED, add the following:

2.9.1.1 Each work assignment will have a Notice to Proceed issued after a Pre-Construction Conference has been conducted and submittals in accordance with section 108.1.1 (Pre-Construction Conference) have been received by the Engineer.

2.9.2 (108.1.1) PRE-CONSTRUCTION CONFERENCE, add the following:

2.9.2.1 The Contractor shall submit to the Engineer during the pre-construction conference a copy of the dust control plan approved by the Maricopa County Air Quality Department.

2.9.3 (108.9) FAILURE TO COMPLETE ON TIME, add the following:

2.9.3.1 The liquidated damages provisions of section 108.9 apply to each work assignment of the Job Order Contract. The original work assignment amount shall be used in the column labeled "Original Contract Amount" of Table 108-1 to determine the Daily Charges.

2.10 SECTION 401 TRAFFIC CONTROL

2.10.1 (401.7) PAYMENT

2.10.1.1 Payment for Traffic Control will be based upon approved time and material invoices, in accordance with Section 109.5 in an amount not to exceed the ALLOWANCE established by mutual agreement between the Contractor and the County for each work assignment.

2.11 SECTION 415 FLEXIBLE METAL GUARDRAIL

2.11.1 (415.1) DESCRIPTION is replaced with the following:

2.11.1.1 This work shall consist of constructing new flexible metal guardrail, adjusting existing guardrail height, repairing guardrail, removing guardrail, or removing and reconstructing existing guardrail.

2.11.2 (415.3) CONSTRUCTION REQUIREMENTS:

2.11.2.1 (415.3.1) General: is replaced with the following:

2.11.2.1.1 Any section of guardrail that is removed for modification shall be replaced within five calendar days of the date the guardrail is removed, unless otherwise directed by the Engineer. At the end of each day, incomplete guardrail sections having an exposed end toward oncoming traffic shall have an appropriate temporary protective end treatment acceptable to the engineer, set securely in place together with approved overnight traffic control devices in place.

2.11.2.2 (415.3.3) Roadway Guardrail, add the following:

2.11.2.2.1 Pilot hole drilling shall be provided at no extra cost where needed. Depending on the soil conditions where guardrail is installed, the Engineer may require slurry (1 Sack CLSM mix in accordance with section 728) around some if not all guardrail posts. Payment for slurry shall be included in the unit costs listed in Exhibit A (Unit Price List attached in Appendix B).

2.11.2.2.2 Guardrail installations shall be classified as follows:

2.11.2.2.2.1 Driven – Normally encountered ground condition that allows posts to be driven into the ground.

2.11.2.2.2.2 Machine Dug – Ground conditions do not allow posts to be driven. Placement requires use of an auger or other special equipment. The Engineer shall determine if Machine Digging is required.

2.11.2.2.2.3 Hand Dug – Required when utilities are shown to be within two feet of the post location.

2.11.2.2.2.4 Soft Dig – Required when obstruction precludes use of auger or other equipment.

2.11.2.3 (415.3.7) Reconstruct Guardrail:

2.11.2.3.1 Existing guardrail, guardrail terminals, guardrail transitions, anchor assemblies, end terminal assemblies, and other guardrail systems, shall be removed and reconstructed at the locations shown on the project plans, and in accordance with the provisions specified for new guardrail.

2.11.2.3.2 When reconstruct guardrail is specified, posts shall be completely removed and the voids backfilled and compacted. When guardrail anchor assemblies are removed, the existing

concrete foundation shall be fully removed and the void backfilled and compacted.

- 2.11.2.3.3 All guardrail components requiring removal shall be removed in such a manner as to prevent damage to and minimize the loss of the components.
- 2.11.2.3.4 If any materials designated for reconstruction are deemed by the Engineer to be unsuitable for reuse or if the quantities of existing materials are insufficient to complete the work, the contractor shall furnish new materials in sufficient quantities to complete the work. New materials will be paid at the rate indicated in Exhibit B (Unit Price List).
- 2.11.2.3.5 Items designated to be reused, which are lost, damaged or destroyed as a result of the contractor's operations, shall be repaired or replaced by the contractor at no additional cost to the County.
- 2.11.2.3.6 Existing post, blocks, rail elements or hardware which are not required for guardrail reconstruction or which the Engineer deems unsuitable for reconstruction, shall be removed and disposed of by the Contractor.
- 2.11.2.3.7 Where new bolt-holes in rail elements are required, the holes shall be made by punching or drilling. Flame-cut bolt-holes will not be permitted.
- 2.11.2.4 (415.3.8) Adjust Guardrail Height:
 - 2.11.2.4.1 This work consists of adjusting guardrail by raising or lowering it to the proper height to conform to with the details shown on the plans, or as directed by the Engineer and as specified in the special provisions.
 - 2.11.2.4.2 Remove existing guardrail and appurtenances. Remove and reinstall posts at the proper height, or raise posts to the proper height and set firmly by working grout or other materials under the post in a manner satisfactory to the Engineer.
 - 2.11.2.4.3 Reinstall all guardrail components during the same day they are removed.
 - 2.11.2.4.4 Materials damaged by the Contractor's operations shall be replaced by the Contractor at no additional cost to the County.
- 2.11.2.5 (415.3.9) Removal of Guardrail:
 - 2.11.2.5.1 Undamaged guardrail, posts, and end treatments indicated for removal and not designated for project reuse shall be removed and delivered to a county yard that the inspector and/or project manager will approve. Damaged guardrail that is designated for salvage will be transported to a metal recycle bin in a county yard. Guardrail and posts designated for salvage or re-use that are damaged by the contractor's operations shall be replaced at the Contractor's expense.
 - 2.11.2.5.2 Payment for Guardrail Removal shall include transporting the salvaged materials to a county yard.

- 2.11.2.5.3 NW Yard 12975 West Bell Road
- 2.11.2.5.4 SW Yard 26449 West State Route 85 (Buckeye)
- 2.11.2.5.5 SE Yard 2919 West Durango Street
- 2.11.2.5.6 NE Yard 41835 North New River Road, Phoenix AZ 85087

2.11.3 (415.4) METHOD OF MEASUREMENT, add the following:

- 2.11.3.1 Reconstructed guardrail of the various types will be measured by the linear foot. The limits of measurement shall conform to MCDOT Detail 3016.
- 2.11.3.2 Removed Guardrail and Adjusted Guardrail Height will be measured by the linear foot.
- 2.11.3.3 Nested guardrail, types 1, 2, and 3, and guardrail transitions will be measured by the unit each, complete and accepted as shown on the project plans.

2.11.4 (415.5) PAYMENT, add the following:

- 2.11.4.1 The contractor will be paid for furnishing and reconstructing guardrail related components, and hardware to replace components deemed by the Engineer unsuitable for reuse, or to supplement insufficient existing quantities required for reconstruction of the various types of guardrail and for the construction of new guard rail and related components . Payment will be at the contract unit prices
- 2.11.4.2 The accepted quantities of adjusted guardrail will be paid for at the Contract unit price for the pay item Adjusted Guardrail Height. Payment will be compensation in full for all materials, equipment, labor and incidentals necessary to complete the work as specified.

2.12 SECTION 416 GUARDRAIL END TERMINALS

2.12.1 (416.1) DESCRIPTION is replaced with the following:

- 2.12.1.1 The work under this section shall consist of furnishing all materials and constructing new end treatments sections adjusting existing height extruder head assembly, repairing or replacing damaged end treatment components and in accordance with specified details and the requirements of these specifications. This work shall also include all the work and materials to delineate guardrail end treatment.

2.12.2 (416.2) MATERIALS: is replaced with the following:

- 2.12.2.1 All guardrail terminal sections and guardrail transition sections shall be compliant to NCHRP 350 Test Level 3, published by the Federal Highway Administration or compliant with an equivalent test level of the AASHTO 2009 Manual for Assessing Safety Hardware (MASH) unless otherwise specifically approved by the Engineer. End terminals shall be type ET-PLUS as supplied by Trinity Highway Products LLC, 2525 Stemmons Freeway, Dallas Texas, 75207. Manufacturer's specification and installation instructions shall be submitted to the Engineer for approval and shall be available at the worksite during installation and inspection. The following Trinity Highway Products ET-Plus Details shall be used for installation of extruder end terminals:

- 2.12.2.1.1 Detail # SS 612 for the installation of the 50.0 ft. section,
- 2.12.2.1.2 Detail # SS 611 for the installation of the 37.5 ft. section, and

2.12.2.1.3 Detail # SS 610 for the installation of the 25.0 ft. section (Test Level 2).

2.12.3 (416.4) MEASUREMENT is replaced with the following:

2.12.3.1 (416.4.1) Guardrail End Terminals: Measurement for furnishing materials for reconstructing existing and installing new ET-PLUS terminal section will be per each, complete in place, including 25.0 feet, 37.5 feet or 50 feet of guardrail, guardrail extruder, offset strut, anchor assembly, steel tubes, posts, hardware and delineation as required, excavation, backfill, and disposal of surplus material.

2.12.4 (416.5) PAYMENT is replaced with the following:

2.12.4.1 The contractor will be paid for furnishing and reconstructing ET Plus end terminal sections including all related items and hardware to replace components deemed by the Engineer unsuitable for reuse, or to supplement insufficient existing quantities required for reconstruction of the various types of end terminals and for the construction of new end terminal sections. Payment will be at the contract unit prices.

2.13 SECTION 417 CRASH CUSHIONS

2.13.1 (417.1) DESCRIPTION: is replaced with the following:

2.13.1.1 The work under this section shall consist of furnishing all materials and installing new crash cushions and repairing and upgrading existing systems with damaged components at the locations shown on the project plans in accordance with these specifications.

2.13.2 (417.2) MATERIALS: is replaced with the following:

2.13.2.1 All impact attenuation devices and transition components shall be compliant to NCHRP 350 Test Level 3, published by the Federal Highway Administration or compliant with an equivalent test level of the AASHTO 2009 Manual for Assessing Safety Hardware (MASH) unless otherwise specifically approved by the Engineer. Attenuation devices shall be TRACC™ Crash Cushions as supplied by Trinity Industries, 2525 Stemmons Freeway, Dallas Texas, 75207 unless otherwise approved by the Engineer.

2.13.2.2 Manufacturer's specification and installation instructions shall be submitted to the Engineer for approval and shall be available at the worksite during installation and inspection.

2.13.2.3 The following Trinity Highway Products TRACC system shall be used for new installation of crash cushions:

2.13.2.4 Short TRACC

2.13.2.5 TRACC

2.13.2.6 Wide TRACC

2.13.2.7 Foundation of all TRACC systems will be 6" Reinforced concrete Pad as per manufacture's specification and recommendation and approved by the engineer

2.13.3 (417.3) CONSTRUCTION REQUIREMENTS: is replaced with the following:

2.13.3.1 The construction of crash cushions shall include the assembly and erection of all component parts complete at the locations shown on the project plans and incompliance with the manufacturer's specifications. Information regarding

assembly and installation of the TRACC™ attenuating crash cushions may be obtained from Trinity Highway Products LLC 1-800-722-7976.

2.13.4 (417.4) MEASUREMENT: is replaced with the following:

2.13.4.1 Measurement for reconstructing existing crash cushions and for constructing new TRACC Crash Cushions will be by each for all types and as per manufactures approved plans and accepted by the Engineer.

2.13.5 (417.5) PAYMENT: is replaced with the following:

2.13.5.1 Payment for crash cushions will be for furnishing and reconstructing existing Crash Cushion Systems and related hardware to replace components deemed by the Engineer unsuitable for reuse, or to supplement insufficient existing quantities required for reconstruction of the various types of guardrail and for the construction of new Crash Cushion Systems and related components. Payment will be at the contract unit prices

2.13.6 STANDARD DETAILS

2.13.6.1 Maricopa County DOT Standard Details 3000 series are listed below and copies attached in Exhibit 2 - 14

- 2.13.6.1.1 3001 (Exhibit 2)
- 2.13.6.1.2 3002 (Exhibit 3)
- 2.13.6.1.3 3003 (Exhibit 4)
- 2.13.6.1.4 3005 (Exhibit 5)
- 2.13.6.1.5 3006 (Exhibit 6)
- 2.13.6.1.6 3007 (Exhibit 7)
- 2.13.6.1.7 3008-1 (Exhibit 8)
- 2.13.6.1.8 3008-2 (Exhibit 9)
- 2.13.6.1.9 3008-3 (Exhibit 10)
- 2.13.6.1.10 3010-1 (Exhibit 11)
- 2.13.6.1.11 3010-1 (Exhibit 12)
- 2.13.6.1.12 3012-1 (Exhibit 13)
- 2.13.6.1.13 3016 (Exhibit 14)

2.13.6.2 For access to 2011 Supplement to the MAG uniform standard specifications and details for public work construction please refer to:
http://www.mcdot.maricopa.gov/technical/eng-manuals/2012_Suppl.pdf

2.14 USAGE REPORT:

The Contractor shall furnish the County a quarterly usage report delineating the acquisition activity governed by the Contract. The format of the report shall be approved by the County and shall disclose the quantity and dollar value of each contract item by individual unit.

2.15 ACCEPTANCE:

Upon successful completion of the performance period, the system shall be deemed accepted and the warranty period begins. All documentation shall be completed prior to final acceptance.

2.16 FACILITIES:

During the course of this Contract, the County shall provide the Contractor's personnel with adequate workspace for consultants and such other related facilities as may be required by Contractor to carry out its obligation enumerated herein.

2.17 INVOICES AND PAYMENTS:

2.17.1 The Contractor shall submit one (1) legible copy of their detailed invoice before payment(s) can be made. At a minimum, the invoice must provide the following information:

- Company name, address and contact
- County bill-to name and contact information
- Contract Serial Number
- County purchase order number
- Invoice number and date
- Payment terms
- Date of service or delivery
- Quantity (number of days or weeks)
- Contract Item number(s)
- Description of Purchase (product or services)
- Pricing per unit of purchase
- Freight (if applicable)
- Extended price
- Mileage w/rate (if applicable)
- Arrival and completion time (if applicable)
- Total Amount Due

2.17.2 Problems regarding billing or invoicing shall be directed to the using agency as listed on the Purchase Order.

2.17.3 Payment shall be made to the Contractor by Accounts Payable through the Maricopa County Vendor Express Payment Program. This is an Electronic Funds Transfer (EFT) process. After Contract Award the Contractor shall complete the Vendor Registration Form located on the County Department of Finance Vendor Registration Web Site (www.maricopa.gov/finance/vendors).

2.17.4 EFT payments to the routing and account numbers designated by the Contractor will include the details on the specific invoices that the payment covers. The Contractor is required to discuss remittance delivery capabilities with their designated financial institution for access to those details.

2.18 TAX:

No tax shall be levied against labor. It is the responsibility of the Contractor to determine any and all taxes and include the same in proposal price.

2.19 DELIVERY:

Delivery is required F.O.B. Destination, freight pre-paid within thirty (30) days of receipt of a Purchase Order, to any delivery location within Maricopa County as specified by the County. Maricopa County reserves the right to obtain services on the open market in the event the Contractor fails to make delivery and any price differential will be charged against the Contractor.

2.20 PICK UP:

The County shall be responsible for picking up all purchased material.

2.21 FUEL COST PRICE ADJUSTMENT:

2.21.1 This provision provides for limited increased or decreased costs of motor fuels (fuels) used to perform services under this Contract. This provision does not apply to burner

fuel (i.e. propane, natural gas, fuel oil, used motor oil). It applies to motor fuel only. Fuel cost adjustments may be either positive or negative. A positive fuel cost adjustment will result in an increase in payments to Contractor while a negative fuel cost adjustment will result in a decrease in payments to Contractor.

- 2.21.2 This provision is intended to minimize risk to both parties to this Contract due to fuel cost fluctuations that may occur during the term of this Contract. This provision is not designed to estimate actual quantities of fuel used in providing services under this Contract, but to provide a reasonable basis for calculating a fuel cost adjustment based on average conditions.
- 2.21.3 Application of this provision will come into effect upon Contractor submittal of a fuel cost adjustment request. A request may be submitted only when the increased cost of fuel, established as a percentage of total contract price (base fuel cost) upon award of this Contract, exceeds ten (10%) percent of the base fuel cost. The Contractor may request a fuel surcharge no more than four (4) times annually, during the month(s) of March, June, September and December. The request must be submitted no later than the tenth (10th) of the month. Any surcharge shall be effective the first of the following month after receipt and approval. The date of County approval of a fuel cost adjustment request shall become the base date for any future Contractor adjustment requests.
- 2.21.4 Contractor shall include, as part of its price bid, the percentage of total contract price fuel represents (e.g., fuel cost equals 10% of Contractor cost) (see also, Attachment A, Vendor Information). This percentage will represent and establish the base fuel cost for this Contract. The base fuel cost shall be established as the due date for submission of proposals for this Contract. All subsequent fuel cost adjustments shall be based upon the date the County approves a Contractor's request for fuel cost adjustment (e.g. fuel cost adjustment approved by County on January 1, 2006, January 1, 2006 becomes base date for any next Contractor request for adjustment).
- 2.21.5 Fuel Cost Application Requirement. The Contractor must provide documentation including type of motor fuel and fuel invoices with price of the fuel used in providing services under this Contract, from the month bids were due and the month of the cost adjustment request, with any fuel cost adjustment application. The fuel cost adjustment application must be completed with all applicable data, and signed by the Contractor.
- 2.21.6 The fuel surcharge shall be based on the current quarterly index of the West Coast (PADD5) Diesel (On-Highway)-All Types or Reformulated Areas Gasoline compared to the previous quarterly index period as reported on the Energy Information Administration (EIA) website: <http://www.eia.doe.gov/>
- 2.21.7 The computation of the fuel surcharge amount shall be determined as follows:
- 2.21.8 The fuel cost component from Attachment A (Vendor Information) of the Contract with Maricopa County, multiplied by the percent of change indicated by the EIA report from the previous index period.
 - 2.21.8.1 Upon agreement by the County to the surcharge, the County shall issue written approval of the change prior to any adjusted invoicing submitted for payment.
 - 2.21.8.2 The surcharge shall be added as a separate line item to the invoice.

2.22 STRATEGIC ALLIANCE for VOLUME EXPENDITURES (\$AVE):

The County is a member of the \$AVE cooperative purchasing group. \$AVE includes the State of Arizona, many Phoenix metropolitan area municipalities, and many K-12 unified school districts. Under the \$AVE Cooperative Purchasing Agreement, and with the concurrence of the successful Respondent under this solicitation, a member of \$AVE may access a contract resulting from a

solicitation issued by the County. If you **do not** want to grant such access to a member of \$AVE, **please state so** in your proposal. In the absence of a statement to the contrary, the County will assume that you do wish to grant access to any contract that may result from this Request for Proposal.

2.23 INTERGOVERNMENTAL COOPERATIVE PURCHASING AGREEMENTS (ICPA's)

County currently holds ICPA's with numerous governmental entities throughout the State of Arizona. These agreements allow those entities, with the approval of the Contractor, to purchase their requirements under the terms and conditions of the County Contract. Please indicate on Attachment A, your acceptance or rejection regarding such participation of other governmental entities. Your response will not be considered as an evaluation factor in awarding a contract.

3.0 CONTRACTUAL TERMS & CONDITIONS:

3.1 CONTRACT TERM:

This Invitation for Bid is for awarding a firm, fixed price purchasing contract to cover a three (3) year term.

3.2 OPTION TO RENEW:

The County may, at their option and with the approval of the Contractor, renew the term of this Contract up to a maximum of Three (3) additional years (or at the County's sole discretion, extend the contract on a month to month basis for a maximum of six (6) months after expiration). The Contractor shall be notified in writing by the Office of Procurement Services of the County's intention to renew the contract term at least thirty (30) calendar days prior to the expiration of the original contract term.

3.3 PRICE ADJUSTMENTS:

Any requests for reasonable price adjustments must be submitted sixty (60) days prior to the Contract annual anniversary date. Requests for adjustment in cost of labor and/or materials must be supported by appropriate documentation. If County agrees to the adjusted price terms, County shall issue written approval of the change. The reasonableness of the request will be determined by comparing the request with the (Consumer Price Index) or by performing a market survey.

3.4 INDEMNIFICATION:

3.4.1 To the fullest extent permitted by law, Contractor shall defend, indemnify, and hold harmless County, its agents, representatives, officers, directors, officials, and employees from and against all claims, damages, losses and expenses, including, but not limited to, attorney fees, court costs, expert witness fees, and the cost of appellate proceedings, relating to, arising out of, or alleged to have resulted from the negligent acts, errors, omissions, mistakes or malfeasance relating to the performance of this Contract. Contractor's duty to defend, indemnify and hold harmless County, its agents, representatives, officers, directors, officials, and employees shall arise in connection with any claim, damage, loss or expense that is caused by any negligent acts, errors, omissions or mistakes in the performance of this Contract by the Contractor, as well as any person or entity for whose acts, errors, omissions, mistakes or malfeasance Contractor may be legally liable.

3.4.2 The amount and type of insurance coverage requirements set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph.

3.4.3 The scope of this indemnification does not extend to the sole negligence of County.

3.5 INSURANCE:

- 3.5.1 Contractor, at Contractor's own expense, shall purchase and maintain the herein stipulated minimum insurance from a company or companies duly licensed by the State of Arizona and possessing a current A.M. Best, Inc. rating of A+. In lieu of State of Arizona licensing, the stipulated insurance may be purchased from a company or companies, which are authorized to do business in the State of Arizona, provided that said insurance companies meet the approval of County. The form of any insurance policies and forms must be acceptable to County.
- 3.5.2 All insurance required herein shall be maintained in full force and effect until all work or service required to be performed under the terms of the Contract is satisfactorily completed and formally accepted. Failure to do so may, at the sole discretion of County, constitute a material breach of this Contract.
- 3.5.3 Contractor's insurance shall be primary insurance as respects County, and any insurance or self-insurance maintained by County shall not contribute to it.
- 3.5.4 Any failure to comply with the claim reporting provisions of the insurance policies or any breach of an insurance policy warranty shall not affect the County's right to coverage afforded under the insurance policies.
- 3.5.5 The insurance policies may provide coverage that contains deductibles or self-insured retentions. Such deductible and/or self-insured retentions shall not be applicable with respect to the coverage provided to County under such policies. Contractor shall be solely responsible for the deductible and/or self-insured retention and County, at its option, may require Contractor to secure payment of such deductibles or self-insured retentions by a surety bond or an irrevocable and unconditional letter of credit.
- 3.5.6 County reserves the right to request and to receive, within 10 working days, certified copies of any or all of the herein required insurance certificates. County shall not be obligated to review policies and/or endorsements or to advise Contractor of any deficiencies in such policies and endorsements, and such receipt shall not relieve Contractor from, or be deemed a waiver of County's right to insist on strict fulfillment of Contractor's obligations under this Contract.
- 3.5.7 The insurance policies required by this Contract, except Workers' Compensation, shall name County, its agents, representatives, officers, directors, officials and employees as Additional Insureds.
- 3.5.8 The policies required hereunder, except Workers' Compensation, shall contain a waiver of transfer of rights of recovery (subrogation) against County, its agents, representatives, officers, directors, officials and employees for any claims arising out of Contractor's work or service.
- 3.5.9 Commercial General Liability:

Commercial General Liability insurance and, if necessary, Commercial Umbrella insurance with a limit of not less than \$2,000,000 for each occurrence, \$2,000,000 Products/Completed Operations Aggregate, and \$4,000,000 General Aggregate Limit. The policy shall include coverage for bodily injury, broad form property damage, personal injury, products and completed operations and blanket contractual coverage, and shall not contain any provision which would serve to limit third party action over claims. There shall be no endorsement or modification of the CGL limiting the scope of coverage for liability arising from explosion, collapse, or underground property damage.

3.5.10 Automobile Liability:

Commercial/Business Automobile Liability insurance and, if necessary, Commercial Umbrella insurance with a combined single limit for bodily injury and property damage of not less than \$2,000,000 each occurrence with respect to any of the Contractor's owned, hired, and non-owned vehicles assigned to or used in performance of the Contractor's work or services under this Contract.

3.5.11 Workers' Compensation:

3.5.11.1 Workers' Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of Contractor's employees engaged in the performance of the work or services under this Contract; and Employer's Liability insurance of not less than \$1,000,000 for each accident, \$1,000,000 disease for each employee, and \$1,000,000 disease policy limit.

3.5.11.2 Contractor waives all rights against County and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by the Workers' Compensation and Employer's Liability or commercial umbrella liability insurance obtained by Contractor pursuant to this Contract.

3.5.12 Certificates of Insurance.

3.5.12.1 Prior to commencing work or services under this Contract, Contractor shall have insurance in effect as required by the Contract in the form provided by the County, issued by Contractor's insurer(s), as evidence that policies providing the required coverage, conditions and limits required by this Contract are in full force and effect. Such certificates shall be made available to the County upon ten (10) business days. **BY SIGNING THE AGREEMENT PAGE THE CONTRACTOR AGREES TO THIS REQUIREMENT AND FAILURE TO MEET THIS REQUIREMENT WILL RESULT IN CANCELLATION OF CONTRACT.**

3.5.12.1.1 In the event any insurance policy (ies) required by this contract is (are) written on a "claims made" basis, coverage shall extend for two years past completion and acceptance of Contractor's work or services and as evidenced by annual Certificates of Insurance.

3.5.12.1.2 If a policy does expire during the life of the Contract, a renewal certificate must be sent to County fifteen (15) days prior to the expiration date.

3.5.13 Cancellation and Expiration Notice.

Insurance required herein shall not be permitted to expire, be canceled, or materially changed without thirty (30) days prior written notice to the County.

3.6 PROCUREMENT CARD ORDERING CAPABILITY:

County may determine to use a procurement card that may be used from time-to-time, to place and make payment for orders under this Contract. Contractors without this capability may be considered non-responsive and not eligible for award consideration.

3.7 INTERNET ORDERING CAPABILITY:

It is the intent of County to use the Internet to communicate and to place orders under this Contract. Contractors without this capability may be considered non-responsive and not eligible for award consideration.

3.8 ORDERING AUTHORITY.

3.8.1 Respondents should understand that any request for purchase of materials or services shall be accompanied by a valid purchase order, issued by Office of Procurement Services, or by a Certified Agency Procurement Aid (CAPA).

3.8.2 Maricopa County departments, cities, other counties, schools and special districts, universities, nonprofit educational and public health institutions may also purchase from under this Contract at their discretion and/or other state and local agencies (Customers) may procure the products under this Contract by the issuance of a purchase order to the Respondent. Purchase orders must cite the Contract number.

3.8.3 Contract award is in accordance with the Maricopa County Procurement Code. All requirements for the competitive award of this Contract have been met. A purchase order for the products is the only document necessary for Customers to purchase and for the Respondent to proceed with delivery of materials available under this Contract.

3.8.4 Any attempt to represent any product not specifically awarded under this Contract is a violation of the Contract. Any such action is subject to the legal and contractual remedies available to the County, inclusive of, but not limited to, Contract cancellation, suspension and/or debarment of the Respondent.

3.9 REQUIREMENTS CONTRACT:

3.9.1 Contractors signify their understanding and agreement by signing a bid submittal, that the Contract resulting from the bid will be a requirements contract. However, the Contract does not guarantee any minimum or maximum number of purchases will be made. It only indicates that if purchases are made for the materials contained in the Contract, they will be purchased from the Contractor awarded that item. Orders will only be placed when the County identifies a need and proper authorization and documentation have been approved.

3.9.2 County reserves the right to cancel Purchase Orders within a reasonable period of time after issuance. Should a Purchase Order be canceled, the County agrees to reimburse the Contractor but only for actual and documentable costs incurred by the Contractor due to and after issuance of the Purchase Order. The County will not reimburse the Contractor for any costs incurred after receipt of County notice of cancellation, or for lost profits, shipment of product prior to issuance of Purchase Order, etc.

3.9.3 Contractors agree to accept verbal notification of cancellation from the Office of Procurement Services Procurement Officer with written notification to follow. By submitting a bid in response to this Invitation for Bids, the Contractor specifically acknowledges to be bound by this cancellation policy.

3.10 UNCONDITIONAL TERMINATION FOR CONVENIENCE:

Maricopa County may terminate the resultant Contract for convenience by providing sixty (60) calendar days advance notice to the Contractor.

3.11 TERMINATION FOR DEFAULT:

If the Contractor fails to meet deadlines, or fails to provide the agreed upon service/material altogether, a termination for default will be issued. The termination for default will be issued only

after the County deems that the Contractor has failed to remedy the problem after being forewarned.

3.12 TERMINATION BY THE COUNTY:

If the Contractor should be adjudged bankrupt or should make a general assignment for the benefit of its creditors, additionally if a receiver should be appointed on account of its insolvency, the County may terminate the Contract. If the Contractor should persistently or repeatedly refuse or should fail, except in cases for which extension of time is provided, to provide enough properly skilled workers or proper materials, or persistently disregard laws and ordinances, or not proceed with work or otherwise be guilty of a substantial violation of any provision of this Contract, then the County may terminate the Contract. Prior to termination of the Contract, the County shall give the Contractor fifteen- (15) calendar day's written notice. Upon receipt of such termination notice, the Contractor shall be allowed fifteen (15) calendar days to cure such deficiencies.

3.13 STATUTORY RIGHT OF CANCELLATION FOR CONFLICT OF INTEREST:

Notice is given that pursuant to A.R.S. § 38-511 the County may cancel any Contract without penalty or further obligation within three years after execution of the contract, if any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the County is at any time while the Contract or any extension of the Contract is in effect, an employee or agent of any other party to the Contract in any capacity or consultant to any other party of the Contract with respect to the subject matter of the Contract. Additionally, pursuant to A.R.S § 38-511 the County may recoup any fee or commission paid or due to any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the County from any other party to the contract arising as the result of the Contract.

3.14 OFFSET FOR DAMAGES;

In addition to all other remedies at Law or Equity, the County may offset from any money due to the Contractor any amounts Contractor owes to the County for damages resulting from breach or deficiencies in performance of the contract.

3.15 ADDITIONS/DELETIONS OF SERVICE:

3.15.1 The County reserves the right to add and/or delete materials to a Contract. If a service requirement is deleted, payment to the Contractor will be reduced proportionately, to the amount of service reduced in accordance with the bid price. If additional materials are required from a Contract, prices for such additions will be negotiated between the Contractor and the County.

3.15.2 The County reserves the right of final approval on proposed staff for all Task Orders. Also, upon request by the County, the Contractor will be required to remove any employees working on County projects and substitute personnel based on the discretion of the County within two business days, unless previously approved by the County.

3.16 SUBCONTRACTING:

3.16.1 The Contractor may not assign a Contract or Subcontract to another party for performance of the terms and conditions hereof without the written consent of the County. All correspondence authorizing subcontracting must reference the Bid Serial Number and identify the job project.

3.16.2 The Subcontractor's rate for the job shall not exceed that of the Prime Contractor's rate, as bid in the pricing section, unless the Prime Contractor is willing to absorb any higher rates. The Subcontractor's invoice shall be invoiced directly to the Prime Contractor, who in turn shall pass-through the costs to the County, without mark-up. A copy of the Subcontractor's invoice must accompany the Prime Contractor's invoice.

3.17 AMENDMENTS:

All amendments to this Contract shall be in writing and approved/signed by both parties. Maricopa County Office of Procurement Services shall be responsible for approving all amendments for Maricopa County.

3.18 ACCESS TO AND RETENTION OF RECORDS FOR THE PURPOSE OF AUDIT AND/OR OTHER REVIEW:

3.18.1 In accordance with section MCI 371 of the Maricopa County Procurement Code the Contractor agrees to retain all books, records, accounts, statements, reports, files, and other records and back-up documentation relevant to this Contract for six (6) years after final payment or until after the resolution of any audit questions which could be more than six (6) years, whichever is latest. The County, Federal or State auditors and any other persons duly authorized by the Department shall have full access to, and the right to examine, copy, and make use of, any and all said materials.

3.18.2 If the Contractor's books, records , accounts, statements, reports, files, and other records and back-up documentation relevant to this Contract are not sufficient to support and document that requested services were provided, the Contractor shall reimburse Maricopa County for the services not so adequately supported and documented.

3.19 AUDIT DISALLOWANCES:

If at any time it is determined by the County that a cost for which payment has been made is a disallowed cost, the County shall notify the Contractor in writing of the disallowance and the required course of action, which shall be at the option of the County either to adjust any future claim submitted by the Contractor by the amount of the disallowance or to require repayment of the disallowed amount by the Contractor forthwith issuing a check payable to Maricopa County.

3.20 VALIDITY:

The invalidity, in whole or in part, of any provision of the Contract shall not void or affect the validity of any other provision of the Contract.

3.21 RIGHTS IN DATA:

The County shall have the use of data and reports resulting from a Contract without additional cost or other restriction except as may be established by law or applicable regulation. Each party shall supply to the other party, upon request, any available information that is relevant to a Contract and to the performance thereunder.

3.22 RELATIONSHIPS:

In the performance of the services described herein, the Contractor shall act solely as an independent contractor, and nothing herein or implied herein shall at any time be construed as to create the relationship of employer and employee, partnership, principal and agent, or joint venture between the County and the Contractor.

3.23 CERTIFICATION REGARDING DEBARMENT AND SUSPENSION

3.23.1 The undersigned (authorized official signing for the Contractor) certifies to the best of his or her knowledge and belief, that the Contractor, defined as the primary participant in accordance with 45 CFR Part 76, and its principals:

3.23.1.1 are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal Department or agency;

- 3.23.1.2 have not within 3-year period preceding this Contract been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- 3.23.1.3 are not presently indicted or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
- 3.23.1.4 Have not within a 3-year period preceding this Contract had one or more public transaction (Federal, State or local) terminated for cause of default.
- 3.23.2 Should the Contractor not be able to provide this certification, an explanation as to why should be attached to the Contact.
- 3.23.3 The Contractor agrees to include, without modification, this clause in all lower tier covered transactions (i.e. transactions with subcontractors) and in all solicitations for lower tier covered transactions related to this Contract.
- 3.24 VERIFICATION REGARDING COMPLIANCE WITH ARIZONA REVISED STATUTES §41-4401 AND FEDERAL IMMIGRATION LAWS AND REGULATIONS:
 - 3.24.1 By entering into the Contract, the Contractor warrants compliance with the Immigration and Nationality Act (INA using e-verify) and all other federal immigration laws and regulations related to the immigration status of its employees and A.R.S. §23-214(A). The contractor shall obtain statements from its subcontractors certifying compliance and shall furnish the statements to the Procurement Officer upon request. These warranties shall remain in effect through the term of the Contract. The Contractor and its subcontractors shall also maintain Employment Eligibility Verification forms (I-9) as required by the Immigration Reform and Control Act of 1986, as amended from time to time, for all employees performing work under the Contract and verify employee compliance using the E-verify system and shall keep a record of the verification for the duration of the employee's employment or at least three years, whichever is longer. I-9 forms are available for download at USCIS.GOV.
 - 3.24.2 The County retains the legal right to inspect contractor and subcontractor employee documents performing work under this Contract to verify compliance with paragraph 3.24.1 of this Section. Contractor and subcontractor shall be given reasonable notice of the County's intent to inspect and shall make the documents available at the time and date specified. Should the County suspect or find that the Contractor or any of its subcontractors are not in compliance, the County will consider this a material breach of the contract and may pursue any and all remedies allowed by law, including, but not limited to: suspension of work, termination of the Contract for default, and suspension and/or debarment of the Contractor. All costs necessary to verify compliance are the responsibility of the Contractor.
- ~~3.25 VERIFICATION REGARDING COMPLIANCE WITH ARIZONA REVISED STATUTES §§35-391.06 AND 35-393.06 BUSINESS RELATIONS WITH SUDAN AND IRAN:~~
 - ~~3.25.1 By entering into the Contract, the Contractor certifies it does not have scrutinized business operations in Sudan or Iran. The contractor shall obtain statements from its subcontractors certifying compliance and shall furnish the statements to the Procurement Officer upon request. These warranties shall remain in effect through the term of the Contract.~~
 - ~~3.25.2 The County may request verification of compliance for any contractor or subcontractor performing work under the Contract. Should the County suspect or find that the Contractor~~

~~or any of its subcontractors are not in compliance, the County may pursue any and all remedies allowed by law, including, but not limited to: suspension of work, termination of the Contract for default, and suspension and/or debarment of the Contractor. All costs necessary to verify compliance are the responsibility of the Contractor.~~

3.26 CONTRACTOR LICENSE REQUIREMENT:

- 3.26.1 The Respondent shall procure all permits, insurance, licenses and pay the charges and fees necessary and incidental to the lawful conduct of his/her business, and as necessary complete any required certification requirements, required by any and all governmental or non-governmental entities as mandated to maintain compliance with and in good standing for all permits and/or licenses. The Respondent shall keep fully informed of existing and future trade or industry requirements, Federal, State and Local laws, ordinances, and regulations which in any manner affect the fulfillment of a Contract and shall comply with the same. Contractor shall immediately notify both Office of Procurement Services and the using agency of any and all changes concerning permits, insurance or licenses.
- 3.26.2 Respondents furnishing finished products, materials or articles of merchandise that will require installation or attachment as part of the Contract, shall possess any licenses required. A Respondent is not relieved of its obligation to possess the required licenses by subcontracting of the labor portion of the Contract. Respondents are advised to contact the Arizona Registrar of Contractors, Chief of Licensing, at (602) 542-1525 to ascertain licensing requirements for a particular contract. Respondents shall identify which license(s), if any, the Registrar of Contractors requires for performance of the Contract.

3.27 INFLUENCE

As prescribed in MC1-1202 of the Maricopa County Procurement Code, any effort to influence an employee or agent to breach the Maricopa County Ethical Code of Conduct or any ethical conduct, may be grounds for Disbarment or Suspension under MC1-902.

An attempt to influence includes, but is not limited to:

- 3.27.1 A Person offering or providing a gratuity, gift, tip, present, donation, money, entertainment or educational passes or tickets, or any type valuable contribution or subsidy,
- 3.27.2 That is offered or given with the intent to influence a decision, obtain a contract, garner favorable treatment, or gain favorable consideration of any kind.

If a Person attempts to influence any employee or agent of Maricopa County, the Chief Procurement Officer, or his designee, reserves the right to seek any remedy provided by the Maricopa County Procurement Code, any remedy in equity or in the law, or any remedy provided by this contract.

3.28 ADDITIONAL TRAINING

If MCDOT Foremen/ employees need assistance in repairs or require explanation of either the ET-2000 System/SKT system or other items/materials purchased from vendor, vendor shall come and educate those in charge of inspections on the differences and items that need attention and go over the sequence of repairs and the standard drawing (see Exhibit A). There will be no charge for this service.

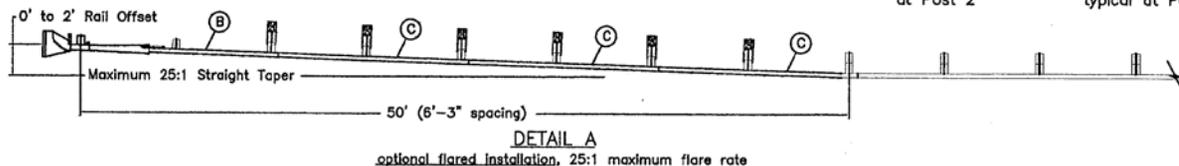
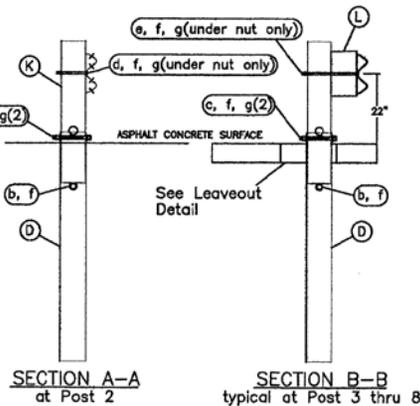
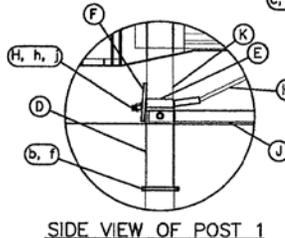
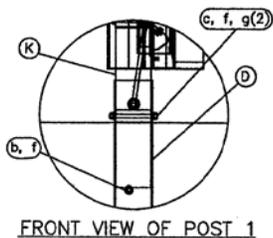
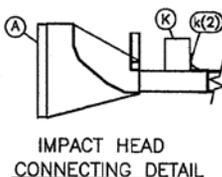
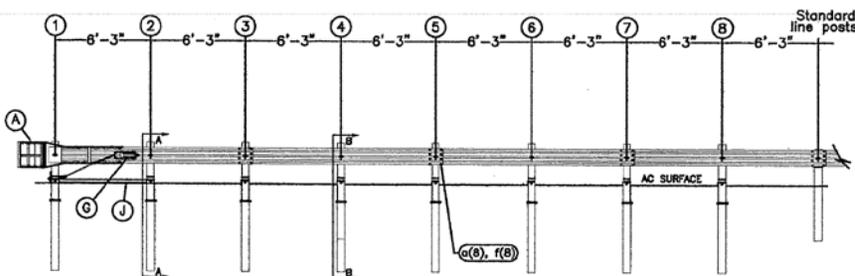
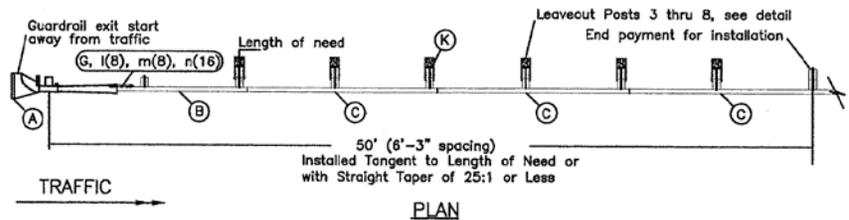
3.29 POST AWARD MEETING:

The Contractor may be required to attend a post-award meeting with the Using Agency to discuss the terms and conditions of this Contract. This meeting will be coordinated by the Procurement Officer of the Contract.

3.30 **PUBLIC RECORDS:**

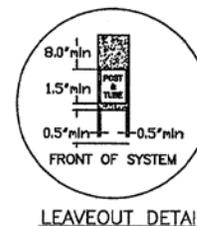
All Offers submitted and opened are public records and must be retained by the Records Manager at the Office of Procurement Services. Offers shall be open to public inspection after Contract award and execution, except for such Offers deemed to be confidential by the Office of Procurement Services. If an Offeror believes that information in its Offer should remain confidential, it shall indicate as confidential, the specific information and submit a statement with its offer detailing the reasons that the information should not be disclosed. Such reasons shall include the specific harm or prejudice which may arise. The Records Manager of the Office of Procurement Services shall determine whether the identified information is confidential pursuant to the Maricopa County Procurement Code.

EXHIBIT A



- GENERAL NOTES:
1. Breakaway posts are required with the Sequential Kinking Terminal.
 2. All bolts, nuts, cable assemblies, cable anchors and bearing plates shall be galvanized.
 3. The SKT can be flared at a rate of 25:1 to prevent the impact head from encroaching on the shoulder. The flare is not required and may be decreased or eliminated for specific installations.
 4. The soil tubes shall not protrude more than 4" above ground (measured along a 5' cord). Site grading may be necessary to meet this requirement.
 5. The soil tubes may be driven with an approved driving head. Soil tubes should not be driven with the post in the tube. If the tubes are placed in drilled holes, the backfill material must be satisfactorily compacted to prevent settlement.
 6. When rock is encountered during excavation, a 12 Dia. post hole, 20" into the rock may be used if approved by the engineer. Granular material will be placed in the bottom of the hole approx. 2.5" deep to provide drainage. The soil tubes will be field cut to length, placed in the hole and backfilled with adequately compacted material excavated from the hole.
 7. The breakaway cable assembly must be taut. A locking device, (vice-grips or channel-lock pliers) should be used to prevent the cable from twisting when tightening nuts.
 8. A special site evaluation should be considered prior to using the SKT where there is less than 25' between the outlet side of the SKT and any adjacent driving lane.
 9. The wood blockouts should be "toe-nailed" to the wood posts to prevent them from turning when the wood shrinks.
 10. Guardrail splice shall be overlapped in the direction of adjacent traffic.

Code	QTY	BILL OF MATERIALS	ITEM #
A	1	IMPACT HEAD	S3000
B	1	W-BEAM GUARDRAIL END SECTION, 12 GA., 12.5'	FS1303
C	3	W-BEAM GUARDRAIL, 12 GA., 12.5' RAIL ELEMENTS	G1203
D	8	FOUNDATION SOIL TUBE, 6" x 8" x 6'-0"	E731
E	1	PIPE SLEEVE	E740
F	1	BEARING PLATE, 8" x 8" x 5/8"	E750
G	1	CABLE ANCHOR BOX	S760
H	1	BCT CABLE ANCHOR ASSEMBLY	E770
J	1	GROUND STRUT	E780
K	8	5.5" x 7.5" x 45" WOOD POSTS	P650
L	6	6" x 8" x 14" TIMBER BLOCKOUT	P675
HARDWARE			
a	32	5/8" Dia. x 1 1/4" SPLICE BOLT	B580122
b	8	5/8" Dia. x 7 1/2" HEX BOLT	B580754
c	8	5/8" Dia. x 10" HEX BOLT	B581004
d	1	5/8" Dia. x 10" H.G.R. BOLT (Post 2 only)	B581002
e	8	5/8" Dia. x 18" H.G.R. BOLT (Posts 3-8)	B581802
f	55	5/8" Dia. H.G.R. NUT	N050
g	23	H.G.R. WASHER	W050
h	2	1" ANCHOR CABLE HEX NUT	N100
j	2	1" ANCHOR CABLE WASHER	W100
k	2	3/8" x 3" LAG SCREW	E350
l	8	CABLE ANCHOR BOX SHOULDER BOLTS	S858A
m	8	1/2" A325 STRUCTURAL NUTS	N055A
n	16	1 1/16" OD X 9/16" ID A325 STR. WASHER	W050A



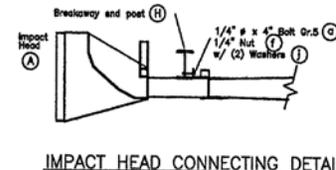
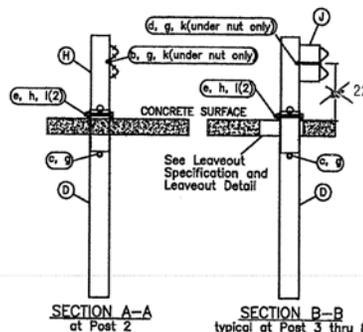
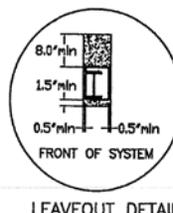
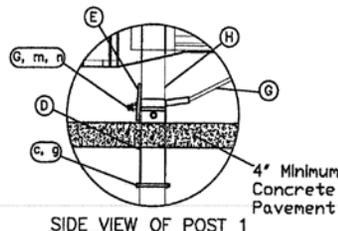
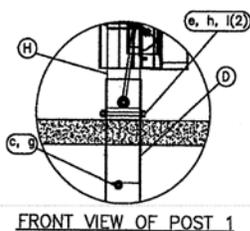
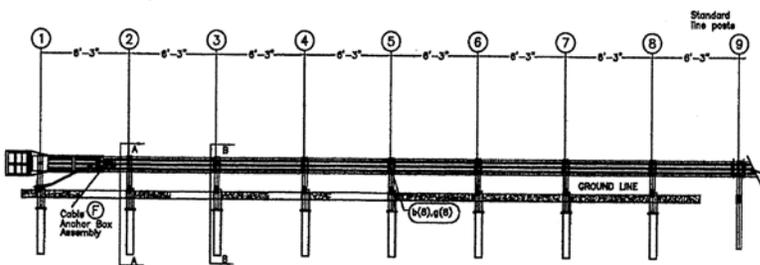
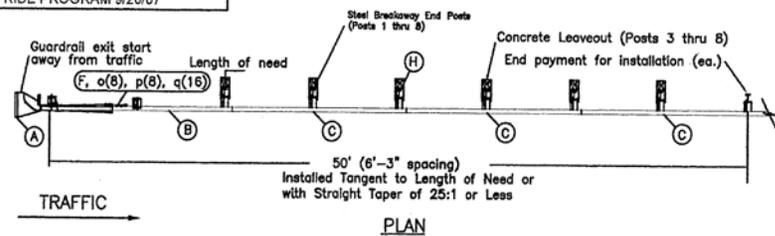
Leaveout Requirement:

For posts 3 through 8, leaveouts in the asphalt concrete pavement, as shown in Section B-B and LEAVEOUT DETAIL, around guardrail posts shall be provided where the asphaltic thickness exceeds 1.5" nominal (2" max) and where the asphalt extends more than 18" behind the posts. The leaveouts shall be used at the post locations indicated and the leaveout material shall consist of a 1-sack grout mix or other non-cohesive material as approved by the state.

 Road Systems, Inc. Big Spring, TX Phone 915-253-2436 or Fax 915-253-0761	SEQUENTIAL KINKING TERMINAL SKT-350 ASSEMBLY PAVING INSTALLATION	Item # A1
	Drawing Name SKT-W-BUS-AZ	Finish NONE

Exhibit A cont.

APPROVED AS NCHRP T3 TERMINAL VIA
ADOT PRIDE PROGRAM 9/20/07



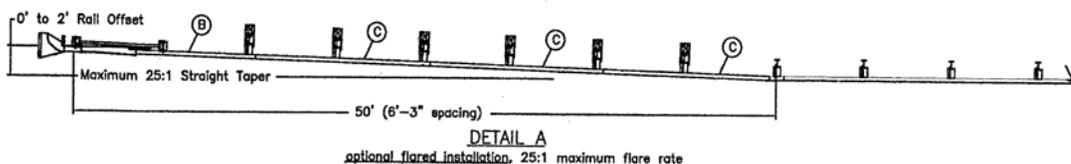
Concrete Leaveout Specification:

For posts 3 through 8, the paving surface shall have a leaveout that is a minimum of 1.5" in front, 0.5" beside, and 8" behind the breakaway posts to the full depth of the paving. After placement of the system, this opening shall be filled with a one-sack grout mix or alternate materials as approved by the State.

GENERAL NOTES:

1. Breakaway posts are required with the Sequential Kinking Terminal.
2. All bolts, nuts, cable assemblies, cable anchors and bearing plates shall be galvanized.
3. The SKT can be flared at a rate of 25:1 to prevent the impact head from encroaching on the shoulder. The flare is not required and may be decreased or eliminated for specific installations.
4. The soil tubes shall not protrude more than 4" above ground (measured along a 5' cord). Site grading may be necessary to meet this requirement.
5. The soil tubes may be driven with an approved driving head. Soil tubes should not be driven with the post in the tube. If the tubes are placed in drilled holes, the backfill material must be satisfactorily compacted to prevent settlement.
6. When rock is encountered during excavation, a 12 Dia. post hole, 20" into the rock may be used if approved by the engineer. Granular material will be placed in the bottom of the hole approx. 2.5' deep to provide drainage. The soil tubes will be field cut to length, placed in the hole and backfilled with adequately compacted material excavated from the hole.
7. The breakaway cable assembly must be taut. A locking device, (vice-grips or channel-lock pliers) should be used to prevent the cable from twisting when tightening nuts.
8. A special site evaluation should be considered prior to using the SKT where there is less than 25' between the outlet side of the SKT and any adjacent driving lanes.
9. Guardrail splice shall be overlapped in the direction of adjacent traffic.
10. Leaveout geometry is only recommended for wood or steel breakaway posts.

Code	QTY	BILL OF MATERIALS	ITEM #
A	1	IMPACT HEAD	S3000
B	1	W-BEAM GUARDRAIL END SECTION, 12 GA., 12.5'	SF1303
C	3	W-BEAM GUARDRAIL, 12 GA., 12.5' RAIL ELEMENTS	G1203
D	8	FOUNDATION SOIL TUBE, 6" x 8" x 6'-0"	E731
E	1	BEARING PLATE, 8" x 8" x 5/8"	E750
F	1	CABLE ANCHOR BOX	S760
G	1	BCT CABLE ANCHOR ASSEMBLY	E770
H	8	STEEL BREAKAWAY END POST	PB620
J	6	6" x 8" x 14" ROUTED TIMBER BLOCKOUT	P616
HARDWARE			
a	2	1/4" X 4" HEX BOLT Gr.5	B140404A
b	33	5/8" Dia. x 1 1/4" SPLICE BOLT	B580122
c	8	5/8" Dia. x 7 1/2" HEX BOLT	B580754
d	8	5/8" Dia. x 10" H.G.R. BOLT	B581002
e	8	3/4" Dia. x 10" HEX BOLT Gr. 5	B341004A
f	2	1/4" HEX NUT	N014
g	47	5/8" Dia. H.G.R. NUT	N050
h	8	3/4" HEX NUT	N030
j	4	1/4" WASHER	W014
k	7	5/8" WASHER	W050
l	16	3/4" WASHER	W030
m	2	1" ANCHOR CABLE HEX NUT	N100
n	2	1" ANCHOR CABLE WASHER	W100
o	8	CABLE ANCHOR BOX SHOULDER BOLTS	SB58A
p	8	1/2" A325 STRUCTURAL NUTS	N055A
q	16	1 1/16" OD X 9/16" ID A325 STR. WASHER	W050A



CONCRETE PAVEMENT INSTALLATION

<p>Road Systems, Inc. Big Spring, TX Phone: 409-255-9285 or Phone: 800-368-0781</p>	<p>SEQUENTIAL KINKING TERMINAL SKT-350 ASSEMBLY PAVING INSTALLATION</p>	<p>Sheet A1 Date 08/28/07</p>
	<p>Revisy Name SKT-S-BUS-AZ LEAVEOUT</p>	<p>None</p>