

# County of Santa Cruz

#### DEPARTMENT OF PUBLIC WORKS

701 OCEAN STREET, ROOM 410, SANTA CRUZ, CA 95060 (831) 454-2160 FAX (831) 454-2385 TDD (831) 454-2123

**AGENDA: JANUARY 8,2002** 

December 26,2001

SANTA CRUZ COUNTY BOARD OF SUPERVISORS 701 Ocean Street Santa Cruz, California 95060

SUBJECT: SALISPUEDES CREEK LEVEE STABILIZATION PROJECT

GEOTECHNICAL SERVICES CONTRACT

Members of the Board:

On August 3, 1999, your Board executed and authorized by Resolution No. 349-99 a contract with the Department of Housing and Community Development (HCD) for a State Disaster Recovery Initiative (DRI) Grant Agreement. This grant provides \$555,440 in funding for a repair project along the Salsipuedes Creek levee. The proposed project consists of installing approximately 700 linear feet of sheet piles into the existing western Salsipuedes Creek levee, downstream of State Highway 129 crossing, to eliminate a series of seeps and re-establish the levee integrity. The Department of Public Works is acting as the grantee for this project and is providing the design plans, inspection services, and portions of the required engineering.

The project requires deep soils exploration and sample testing, which are services that cannot be provided by the Public Works Department. Additionally, the professional skills of a licensed geotechnical engineer will be needed for seepage analysis. There are presently no geotechnical engineers on the Public Works staff, and it is the intent of the Public Works Department to hire a **firm** to provide these needed services and design recommendations. Attached is an independent contractor agreement in the amount of \$33,969 with Haro, Kasunich & Associates to provide geotechnical services for the Salsipuedes levee project. Sufficient funds can be made available from the Pajaro Storm Drain Maintenance district contingencies to cover this contract.

It is therefore recommended that the Board of Supervisors take the following action:

1. Approve the attached AUD 74 transferring \$36,347 fi-om contingencies for this contract.

### SANTA CRUZ COUNTY BOARD OF SUPERVISORS Page -2-

- 2. Approve the attached independent contractor agreement with Haro, Kasunich & Associates in the amount not to exceed \$33,969.
- 3. Authorize the Director of Public Works to sign the agreement on behalf of the County.

Yours truly,

THOMAS L. BOLICH Director of Public Works

DWS:mg

Attachments

RECOMMENDED FOR APPROVAL:

County Administrative Officer

copy to: Public Works

### **COUNTY OF SANTA CRUZ**

0374 0373

### REQUEST FOR TRANSFER OR REVISION OF BUDGET APPROPRIATIONS AND/OR FUNDS

Dep	art	ment: PU	BLIC WORKS							Date: JANUARY 8, 2002
TO:		Board of	Supervisors /	<b>County</b> Adr	ninistrati	ive Off	icer/	Distric	t Board	
I her	ehy	request you	r approval of the	following tran	sfer of bu	dget app	oropriat	ions <b>a</b> nd,	or funds in the	fiscal year ending June 30, 49 2002
Г			AUDITORS	USE ONLY				1 t	BATCH #	
	C OC	UMENT #	AM	DUNT	L/N	T/C	HASH		DATE	Keyed By:
JE	5_					-1-1	1	]		
		T/C	INDEX	SUBOBJECT	USER CO	DE		AMO	DUNT	ACCOUNT DESCRIPTION *
	T	0,2,1_6	12 <sub>1</sub> 2 <sub>1</sub> 2 <sub>1</sub> 4 <sub>1</sub> 5	6,6,1,0				3,6	3,4,7,0,0	STRUCTURES AND IMPORT
T R A	0	<u> </u>								
N S F E	<u> </u>	0,2,2 6	5,2,2,2,4,5	9,6,9,5				3 6	3 4 7 °0 0	CONTINGENCIES
R	F R O						.			
	_									
STA Nam		Lization Agma	TO MAKE FU	nds availa	ABLE TO	FUND	CONTI	RACT W	2	ASSISTANT DIRECTOR OF
		AROI. D. Controller's Controller, b	11 1:	ertify that unend				vailable in		nslfunds and in the amounts indicated abor
			re Officer's Action		lecommen				Approved	Not Recommended or Approve
Stat	e of	California	} As the Clea	k of the Board	of Supervi	sors <b>of</b> t	he Cou ervisors	nty <b>of</b> Sa	ınta Cruz, <b>I</b> do he	ereby certify that the foregoing request for County Administrative Officer by an ord
ows.	:ab	С	_		, 19		Ву _			, Deputy Cle
		* Desc:				#	-	Budge	t Transfer	A-C Review
	⁄h∶te-l	n: Board of Superv Auditor-Contro		AGENDA DAT	istrative Offic	ITEM I	NO.		nental Control CoPY	040

AUD7: (REV 12/94)

#### INDEPENDENT CONTRACTOR AGREEMENT

THIS CONTRACT is entered into this 8TH day of JANUARY, 2002, by and between the COUNTY OF SANTA CRUZ, hereinafter called COUNTY, and HARO, KASUNICH & ASSOCIATES hereinafter called CONTRACTOR. The parties agree as follows:

- 1. <u>DUTIES</u>. CONTRACTOR agrees to accomplish the following result: TO PROVIDE SEEPAGE ANALYSIS **AND** DESIGN RECOMMENDATIONS, SOIL INVESTIGATIONS, SAMPLING AND TESTING.
- 2. <u>STANDARDS OF PERFORMANCE</u>. The standard of care for all professional engineering and related services performed or furnished by CONTRACTOR under this Agreement will be the care and skill ordinarily used by members of CONTRACTOR'S profession practicing under similar circumstances at the same time and in the same locality. CONTRACTOR makes no warranties, express or implied, under this Agreement or otherwise, in connection with CONTRACTOR'S services. Interpretations and recommendations by CONTRACTOR will be based solely on information available to or developed by CONTRACTOR. COUNTY recognizes that subsurface conditions may vary from those observed at specific locations where borings, surveys, or other site explorations are made, and that site conditions may change with time.
- 3. <u>COMPENSATION</u>. In consideration for CONTRACTOR accomplishing said result, COUNTY agrees to pay CONTRACTOR as follows: PROGRESS PAYMENTS NOT TO EXCEED \$33,969 **IN** A MANNER DESCRIBED IN SCOPE OF WORK
- **4.** <u>TERM.</u> The term of this contract shall be: FROM BOARD APPROVAL TO JUNE 30,2002.
- 5. <u>EARLY TERMINATION</u>. Either party hereto may terminate this contract at any time by giving 30 days written notice to the other party.
- 6. <u>INDEMNIFICATION FOR DAMAGES, TAXES AND CONTRIBUTIONS</u>. CONTRACTOR shall exonerate, indemnify, defend, and hold harmless COUNTY (which for the purpose of paragraphs 5 and 6 shall include, without limitation, its officers, agents, employees and volunteers) from and against:
- A. To the fullest extent permitted by law, CONTRACTOR shall indemnify and hold harmless COUNTY. COUNTY'S officers, directors, partners, and employees from and against any and all costs, losses, and damages caused solely by the negligent acts or omission of CONTRACTOR'S or CONTRACTOR'S officers, directors, partners, employees, and CONTRACTOR'S consultants in the performance and furnishing of CONTRACTORS services under this Agreement.
- B. To the fullest extent permitted by law, COUNTY shall indemnify and hold harmless CONTRACTOR, CONTRACTOR'S officers, directors, partners, employees, and CONTRACTOR'S Consultants from and against any and all costs, losses and damages

caused'solelyby the negligent acts or omission of COUNTY or COUNTY'S officers, directors, partners, employees, and COUNTY'S consultants with respect to this Agreement or the Project.

- C. To the fullest extent permitted by law, CONTRACTOR'S total liability to COUNTY and anyone claiming by, through, or under COUNTY for all costs, losses, or damages caused in part by the negligence of CONTRACTOR and in part by the negligence of COUNTY or any other negligent entity or individual, shall not exceed the percentage share that CONTRACTOR'S negligence bears to the total negligence of COUNTY, CONTRACTOR and all other negligent entities and individuals.
- D. Any and all Federal, State and Local taxes, charges, fees, or contributions required to be paid with respect to CONTRACTOR and CONTRACTOR'S officers, employees and agents engaged in the performance of this Agreement (including, without limitation, unemployment insurance, social security and payroll tax withholding).
- 7. <u>INSURANCE</u>. CONTRACTOR, at its sole cost and expense, for the full term of this Agreement (and any extensions thereof), shall obtain and maintain at a minimum compliance with all of the following insurance coverage(s) and requirements. Such insurance coverage shall be primary coverage as respects COUNTY and any insurance or self-insurance maintained by County shall be excess of CONTRACTOR'S insurance coverage and shall not contribute to it.

If CONTRACTOR utilizes one or more subcontractors in the performance of this Agreement, CONTRACTOR shall obtain and maintain Independent Contractor's Insurance as to each subcontractor or otherwise provide evidence of insurance coverage for each subcontractor equivalent to that required of CONTRACTOR in this Agreement, unless CONTRACTOR and COUNTY both initial here \_\_\_\_\_/\_\_\_

#### A. Types of Insurance and Minimum Limits

(1)	Worker's Compensation in the minimum statutorily
required coverage amounts. This	insurance coverage shall not be required if the
CONTRACTOR has no employee	es and certifies to this fact by initialing here

- (3) Comprehensive or Commercial General Liability Insurance coverage in the minimum amount of \$1,000,000 combined single limit, including coverage for: (a) bodily injury, (b) personal injury, (c) broad-form property damage, (d) contractual liability, and (e) cross-liability.

-2- 040

(4) Professional Liability Insurance in the minimum amount of \$1,000,000.00 combined single limit, if, and only if, this Subparagraph is initialed by CONTRACTOR and COUNTY

#### B. Other Insurance Provisions

- (1) If any insurance coverage required in this Agreement is provided on a "Claims Made" rather than "Occurrence" form, CONTRACTOR agrees to maintain the required coverage for a period of three (3) years after the expiration of this Agreement (hereinafter "post agreement coverage") and any extensions thereof. CONTRACTOR may maintain the required post agreement coverage by renewal or purchase of prior acts or tail coverage. This provision is contingent upon post agreement coverage being both available and reasonably affordable in relation to the coverage provided during the term of this Agreement. For purposes of interpreting this requirement, a cost not exceeding 100% of the last annual policy premium during the term of this Agreement in order to purchase prior acts or tail coverage for post agreement coverage shall be deemed to be reasonable.
- (2) All required Automobile and Comprehensive or Commercial General Liability Insurance shall be endorsed to contain the following clause:

"The County of Santa Cruz, its officials, employees, agents and volunteers are added as an additional insured as respects the operations and activities of, or on behalf of, the named insured performed under Agreement with the County of Santa Cruz."

(3) All required auto and commercial insurance policies shall be endorsed to contain the following clause:

"This insurance shall not be canceled until after thirty (30) days prior written notice has been given to:

PETER COTA-ROBLES COUNTY OF SANTA CRUZ DEPARTMENT OF PUBLIC WORKS 701 OCEAN STREET, ROOM 410 SANTA CRUZ, CA 95060"

(4) CONTRACTOR agrees to provide its insurance broker(s) with a full copy of these insurance provisions and provide COUNTY on or before the effective date of this Agreement with Certificates of Insurance for all required coverages. All Certificates of Insurance shall be delivered or sent to:

PETER COTA-ROBLES COUNTY OF SANTA CRUZ DEPARTMENT OF PUBLIC WORKS 701 OCEAN STREET, ROOM 410 SANTA CRUZ, CA 95060

- 8. <u>EOUAL EMPLOYMENT OPPORTUNITY</u>. During and in relation to the performance of this Agreement, CONTRACTOR agrees as follows:
- A. The CONTRACTOR shall not discriminate against any employee or applicant for employment because of race, color, religion, national origin, ancestry, physical or mental disability, medical condition (cancer related), marital status, pregnancy, sex, sexual orientation, age (over 18), veteran status or any other non-merit factor unrelated to job duties. Such action shall include, but not be limited to the following: recruitment; advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training (including apprenticeship), employment, upgrading, demotion, transfer. The CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notice setting forth the provisions of this non-discrimination clause.
- B. If this Agreement provides compensation in excess of \$50,000 to CONTRACTOR and if CONTRACTOR employs fifteen (15) or more employees, the following requirements shall apply:
- advertisements for employees placed by or on behalf of the CONTRACTOR, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, ancestry, physical or mental disability, medical condition (cancer related), marital status, pregnancy, sex, sexual orientation, age (over 18), veteran status, or any other non-merit factor unrelated to job duties. In addition, the CONTRACTOR shall make a good faith effort to consider Minority/Women/Disabled Owned Business Enterprises in CONTRACTOR's solicitation of goods and services. Definitions for Minority/Women/Disabled Business Enterprises are available from the COUNTY General Services Purchasing Division.
- (2) The CONTRACTOR shall furnish COUNTY Equal Employment Opportunity Office information and reports in the prescribed reporting format (PER 4012) identifying the sex, race, physical or mental disability and job classification of its employees and the names, dates and methods of advertisement and direct solicitation efforts made to subcontract with Minority/Women/Disabled Business Enterprises.
- (3) In the event of the CONTRACTOR'S non-compliance with the non-discrimination clauses of this Agreement or with any of the said rules, regulations, or orders said CONTRACTOR may be declared ineligible for further agreements with the COUNTY.
- (4) The CONTRACTOR shall cause the foregoing provisions of this Subparagraph 7B. to be inserted in all subcontracts for any work covered under this Agreement by a subcontractor compensated more than \$50,000 and employing more than fifteen (15) employees, provided that the foregoing provisions shall not apply to contracts or subcontracts for standard commercial supplies or raw materials.

9. <u>INDEPENDENT CONTRACTOR STATUS</u>. CONTRACTOR and COUNTY have reviewed and considered the principal test and secondary factors below and agree that CONTRACTOR is an independent contractor and not an employee of COUNTY. CONTRACTOR is responsible for all insurance (workers compensation, unemployment, etc.) and all payroll related taxes. CONTRACTOR is not entitled to any employee benefits. COUNTY agrees that CONTRACTOR shall have the right to control the manner and means of accomplishing the result contracted for herein.

<u>PRINCIPAL TEST</u>: The CONTRACTOR rather than COUNTY has the right to control the manner and means of accomplishing the result contracted for.

SECONDARY FACTORS: (a) The extent of control which, by agreement, COUNTY may exercise over the details of the work is slight rather than substantial; (b) CONTRACTOR is engaged in a distinct occupation or business; (c) In the locality, the work to be done by CONTRACTOR is usually done by a specialist without supervision, rather than under the direction of an employer; (d) the skill required in the particular occupation is substantial rather than slight; (e) The CONTRACTOR rather than the COUNTY supplies the instrumentalities, tools and work place; (f) The length of time for which CONTRACTOR is engaged is of limited duration rather than indefinite; (g) The method of payment of CONTRACTOR is by the job rather than by the time; (h) The work is part of a special or permissive activity, program, or project, rather than part of the regular business of COUNTY; (i) CONTRACTOR and COUNTY believe they are creating an independent contractor relationship rather than an employer-employee relationship; and (j) The COUNTY conducts public business.

It is recognized that it is not necessary that all secondary factors support creation of an independent contractor relationship, but rather that overall there are significant secondary factors which indicate that CONTRACTOR is an independent contractor.

By their signatures to this Agreement, each of the undersigned certifies that it is his or her considered judgment that the CONTRACTOR engaged under this Agreement is in fact an independent contractor.

- 10. <u>CONTRACTOR</u> represents that its operations are in compliance with applicable County planning, environmental and other laws or regulations.
- 11. <u>CONTRACTOR</u> is responsible to pay prevailing wages and maintain records as required by Labor Code Section 1770 and following.
- 12. <u>NONASSIGNMENT</u>. CONTRACTOR shall not assign this agreement without the prior written consent of the COUNTY.
- 13. <u>RETENTION AND AUDIT OF RECORDS</u>. CONTRACTOR shall retain records pertinent to this Agreement for a period of not less than five (5) years after final payment under this Agreement or until a final audit report is accepted by COUNTY, whichever occurs first. CONTRACTOR hereby agrees to be subject to the examination and audit by the Santa Cruz County Auditor-Controller, the Auditor General of the State of California, or the designee of either for a period of five (5) years after final payment under this Agreement.

- 14. <u>PRESENTATION OF CLAIMS</u>. Presentation and processing of any or all claims arising out of or related to this Agreement shall be made in accordance with the provisions contained in Chapter 1.05 of the Santa Cruz County Code, which by this reference is incorporated herein.
- 15. <u>ACKNOWLEDGMENT</u>. CONTRACTOR shall acknowledge in all reports and literature that the Santa Cruz County Board of Supervisors has provided funding to the CONTRACTOR.
- 16. <u>ATTACHMENTS</u>. This Agreement includes the following attachments: ATTACHMENT "A" HARO & KASUNICH PROPOSED SCOPE OF WORK FOR GEOTECHNICAL SERVICES, SALSIPUEDES CREEK LEVEE REHABILITATION PROJECT LETTER DATED REVISED DECEMBER 20,2001, AND ATTACHMENT "B" REQUEST FOR GEOTECHNICAL SERVICES FOR THE SALSIPUEDES CREEK LEVEE REHABILITATION PROJECT DATED SEPTEMBER 17,2001.

IN WITNESS WHEREOF, the parties hereto have set their hands the day and year first above written.

COUNTY OF SANTA CRUZ	CONTRACTOR HARO KASUNICH & ASSOCIATES		
By:	By: Address:1 16 EAST LAKE AVENUE WATSONVILLE, CA 95076		
APPROVED AS TO FORM:  By: Chief Assistant County Counsel	Telephone: (831) 722-4175 FAX: (831) 722-3202 E-MAIL hkageo@aol.com		
DWS:mg			
DISTRIBUTION: Auditor-Controller Contractor .Public Works			

A	CORD CERTI	FICATE OF LIAE	BILITY I	NSURAI	NCE 0380	DATE (MM/DD/YY) 05/30/2000
KBK	Insurance Agency 6 Freedom Boulevard	FAX (831)724-1089	ONLY AND HOLDER.	CONFERS NO RIGHTS CERTIFICATI	ED AS A MATTER OF II GHTS UPON THE CER E DOES NOT AMEND, I FORDED BY THE POLI	NFORMATION TIFICATE EXTEND OR
1	O. Box 310 sonville, CA 95077	ssociate Inc.			AFFORDING COVERA	
	Haro-Kasunich And A	ssociate Inc.	INSURER A:	ALLIED INSU	RANCE GROUP	
	116 East Lake Ave	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	INSURER B:	STATE FUND		
	Watsonville, CA 950	076 / JUN 2001	INSURER C.	Zurich		
		T PINTER D	INSURER D:			
20115	ERAGES	PUBLIC WORKS SEPT SANTA CRIZ. CA.	INSURER E:			
THE	POLICIES OF INSURANCE LISTED REQUIREMENT, TERM OR CONDI	SANTA CRUZ, CA.  BELOW HAVE BEEN ISSUED TO THE INS TION OF ANY CONTRACT OR OTHER DO RDED BY THE POOLOTES DESCRIBED HER N MAY HAVE BEEN REDUCED BY PAID CL	CUMENT WITH RE	SPECT TO WHICH T	THIS CERTIFICATE MAY B	E ISSUED OR
SR I	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIN	MITS
- [	GENERAL LIABILITY		DATE(MINIDDA ( I)	I DATE (MINIDOLI )	EACH OCCURRENCE	\$
	COMMERCIAL GENERAL LIABILITY				FIRE DAMAGE (Any one fire	) \$
	CLAIMS MADE OCCUR				MED EXP (Any one person)	\$
L					PERSONAL & ADV INJURY	\$
_					GENERAL AGGREGATE	S
19	BEN'L AGGREGATE LIMIT APPLIES PER:				PRODUCTS - COMPIOP AG	G \$
-	POLICY PRO- JECT LOC AUTOMOBILE LIABILITY X ANY AUTO	.CP780607760	04/25/2001	04/25/2002	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,00
<u>.</u>	ALL OWNED AUTOS SCHEDULED AUTOS				BODILY INJURY (Per person)	\$
	MON-OWNED AUTOS				@ODILY INJURY (Per accident)	, s
-					PROPERTY DAMAGE (Per accident)	\$
	GAFAGE LIABILITY		4	-	AUTO ONLY - EA ACCIDEN	г \$
F	ANY AUTO				OTHER THAN EA ACT AUTO ONLY	cc s
	EXCESS LIABILITY				EACHOCCURRENCE	\$
F	OCCUR CLAIMS MADE				AGGREGATE	\$
	_				-	\$
	DEDUCTIBLE					\$
	RETENTION \$				WO OTATU A 18T	\$
	NOF:KERS COMPENSATION AND EMF LOYERS' LIABILITY	,58242700	05/07/2001	05/07/2002	X WC STATU- OT TORY LIMITS	
3	ENI EGTERG EIABIETT				EL EACH ACCIDENT	\$ 1,000,0
-					E L DISEASE. EA EMPLOY	
+	OTHER	RU960975	04/12/2001	04/12/20024	\$1 000 000 An	ı⊤ s 1,000,00 ınual Aggregate
c P	orler rofessional	R0300373	04/12/2001	0-1,1-2-0-2-	3	per claim
ESCE	BIDTION OF ODER ATIONS // OCATIONS	HOLECIEVOLLICIONE ADDED DVENDODCEMO	NTIADEALA DONIE	NONE		
ESCR	RIPTION OF OPERATIONS/LOCATIONS/V	IICLES/EXCLUSIONS ADDED BY ENDORSEME	ENT/SPECIAL PROVIS	SIONS		
		Limitations of This poli as Additional Named Insur				
ERI	TIF CATE HOLDER AD	DITIONAL INSURED; INSURER LETTER	CANCELLA	TION		
	·		P		CRIBED POLICIES BE CANCE	LLED BEFORE THE
			1		ISSUING COMPANY WILL EN	
					O THE CERTIFICATE HOLDER	
	COUNTY OF SANTA CD	JZ PUBLIC WORKS DEPARTMEN			CE SHALL IMPOSE NO OBLIG	
_	701 OCEAN STREET, I		OF ANY RUN		Y ITS AGENTS OR REPRESE	NTATIVES.
()	SIN A CRUZ, CA 9500		AUTHORIZED I	EPRÉSENTATIVE	6 100	
V				My C	ange)	D CODDODATION
ACO	RD 25-S (7/97)		1 '	1 1	©ACOR	D CORPORATION 1

# SINCE 1908

INSURANCE 1006 Freedom Blvd. • P.O. SOX J.J Watsonville, CA 35077 PHONE (631)724-1085 FAX (831) 724-1063

### OF LIAB'ILITY INSURANCE 0302

DATE (MM/DD/YY) 02/01/2001

THIS CERTIFICATE SSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

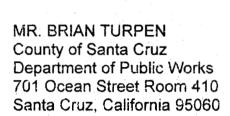
**INSURERS AFFORDING COVERAGE** 

0381

INSURED		<del></del>	· m h o :	Mutuel C	14 2		
Haro Kasunich & Ass	ociates Inc		INSURER A: Lumbermens Mutual Casualty Co.				
c/o KBK P 0 Box 310			INSURER B:				
1	5077	INSURER C:		716			
,			INSURER D:				
20/504050		INSURER E:		<del></del>	·		
COVERAGES	DELOW HAVE BEEN JOSHED TO THE	NOUDED NAMED A		LIOV DEDICO INDICATED A			
ANY REQUIREMENT, TERM OR CON MAY PERTAIN, THE INSURANCE AFFO POLICIES. AGGREGATE LIMITS SHOWN	BELOW HAVE BEEN ISSUED TO THE I IDITION OF ANY CONTRACT OR OTHER ORDED BY THE POLICIES DESCRIBED H I MAY HAVE BEEN REDUCED BY PAID CLA	DOCUMENT WITH HEREIN IS SUBJEC NIMS.	RESPECT TO WHICE TO ALL THE TER	CH THIS CERTIFICATE MA RMS, EXCLUSIONS AND CO	Y BE ISSUED OR		
TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE	:POLICY EXPIRATION L_DATE (MM/OD/YY	LIMI	TS		
A GENERAL LIABILITY	7RD66044401	02/18/01		EACH OCCURRENCE	\$1,000,000		
X COMMERCIAL GENERAL LIABILITY	<u> </u>		}	FIRE DAMAGE (Any one fire			
CLAIMS MADE X OCCUR			-	MED EXP (Any one person)	s10,000		
				PERSONAL & ADV INJURY	\$1,000,000		
				GENERAL AGGREGATE	\$2,000,000		
GEN' . AGGREGATE LIMIT APPLIESPER:				PRODUCTS -COMP/OP AGG			
X POLICY PRO- LOC	-						
AUT DMOBILE LIABILITY				COMBINED SINGLE LIMIT			
ANY AUTO				(Eaaccident)			
9LL OWNED AUTOS				BODILY INJURY			
SCHEDULED AUTOS				per person]	S		
HIRED AUTOS				BODILY INJURY			
JON-OWNED AUTOS				(Peraccident)	\$		
				PROPERTY DAMAGE per accident)	1		
GAR/IGE LIABILITY				AUTO ONLY- EA ACCIDEN	s		
INY AUTO				E.	15		
				OTHER THAN	· -		
EXCF SS LIABILITY				EACH OCCURRENCE	S		
OCCUR CLAIMS MADE	=			AGGREGATE	\$,		
					\$		
DEDUCTIBLE		ļ			s		
FIETENTION S					s		
WORKERS COMPENSATION AND				WCSTATU*	<del></del>		
EMPLOYERS' LIABILITY				C.L. EACH ACCIDENT	f		
				E.L.DISEASE-EAEMPLOYEE	s		
				E.L. DISEASE - POLICY LIMIT			
OTHER							
DESCRIPTION OF OPERATIONS/LOCATION COunty of Santa Cru	SIVEHICLES/EXCLUSIONS ADDED BYEND	ORSEMENT/SPECIA	L PROVISIONS	are addition			
insurade for Genera	al Liability <b>per</b> CG2	onts and	emproyees hed	are addition	ıaı		
Thisdrads for delicit	ii Liability <b>per cg</b> 2	OLO attac	iicu.				
1							
CERTIFICATE HOLDER AD	DITIONAL INSURED; INSURER LETTER:	CANCELLATI	ION				
~		SHOULD ANY OF	THE ABOVE DESCRIBE	ED POLICIES BE CANCELLED B	EFORE THE EXPIRATION		
County of Santa Cru	·Z						
Pullic Works Depart		DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 3.0 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL					
76 Ocean Street #4				Y OF ANY KIND UPON THE INS			
Santa Cruz, CA 950	60	REPRESENTAT			ONERLIS AGENTS OR		
		- $        -$	REPRESENTATIVE		040		
1		- Syna	rdelli-Co	CU	<b>V F V</b>		
ACORD 25-S (7/97)1 of 1	#M54790	<b>O</b> , , sa			CORPORATION 1988		

CONSULTING GEOTECHNICAL & COASTAL ENGINEERS

14 November 2001 Revised 20 December 2001 Proposal P01-248





DUPLICATE

Subject:

PROPOSED SCOPE OF WORK FOR GEOTECHNICAL SERVICES

Salsipuedes Creek Levee Rehabilitation Project

Santa Cruz County, California

Dear Mr. Turpen:

Haro, Kasunich & Associates is pleased to resubmit this proposal for the Salsipuedes Creek Levee Rehabilitation Project. Discussions with Mr. Peter Cota-Robles and Mr. David Sims indicate now (as before) the primary focus of the study is analysis of the levee seepags patterns, evaluation of **the** potential failure under existing conditions and evaluation of the levee, post-construction of a seepage cut-off wall. The objective to evaluate embankment stability on a detailed basis has been scaled back (per your instructions) to a general analysis considering the post construction condition. As discussed, your objective is to enhance the relative stability of the outboard side of the levee in cutting off lateral seepage during periods of maximum flow in the creek. It is understood the soil conditions within the inboard side of the levee would not be altered and therefore remain subject to the same potential consequences as now exist (i.e. piping failure, embankment slipout, erosion, etc.) due to undefined miscellaneous man-made or natural imperfections including gopher holes, rotted roots, rotted wood, etc.

The proposed scope of work and associated fee estimate as described herein was developed through a review of the following documents, provided by your office:

- Letter of 17 September 2001
- Plan/Profile Sheet of Salsipuedes West Levee
- Discussions with Mr. Cota-Robles and Mr. Sims revising the goals and redefining the objectives of the geotechnical study.

This proposal redefines specific tasks requested to be performed as part of the geotechnical study. Requests by your designers, other consultants, and/or other responsible parties for additional information would result in modifications to our proposed scope of work.

We propose to utilize senior and staff engineers who have experience in quantitative slope stability issues and landslide repair to perform the proposed geotechnical study. Joseph Haro, Principal Engineer, and Elizabeth Mitchell, Senior Engineer, will manage the project and be responsible for the work performed. Mr. Haro and Mrs. Mitchell will be assisted by Greg Bloom

040

Attachment "A"

Mr. Brian Turpen
POI-248
Salsipuedes Creek Levee Rehabilitation Project
14 November 2001
Revised 20 December 2001
Page 2

in the field exploration activities and engineering analysis. Resumes of the key project team members are enclosed.

Haro, Kasunichand Associates is committed to completing our work expeditiously in order to meet the project schedule. Efforts have been made to ensure that our staff members who will be involved with this project are ready to start work upon authorization to proceed. We will make available additional experienced staff, if needed, to assist the project team in completing our work to meet the needs of the project schedule.

The letter by David Sims provides a timeline that requires the work to be completed as follows:

- Commencement upon Board approval (8 January 2002)
- Preliminary soil boring profiles ASAP to expedite C.O.E. review
- Draft report deadline of 31 January 2002
- Final report deadline of 15 February 2002

Enclosed are Exhibits A through E, which outline the following:

EXHIBIT A \* Proposed Scope of Work

**EXHIBIT B - Standard Fee Schedule** 

**EXHIBIT C - Additional, Excluded and Client-Furnished Services** 

**EXHIBIT D - Relevant Projects Information** 

EXHIBIT E - Resume's For Haro, Kasunich & Associates Project Members

**EXHIBIT F - Terms For Geotechnical Engineering Services** 

**EXHIBIT G - Authorization To Proceed With Geotechnical Engineering Services** 

We look forward to working with you on this interesting and challenging project. If you have any questions, please call our office.

Very truly yours,

ΉÅRO, KĄSĮUNICH AND ASSOCIATES, INC.

G.E/ 382

JAH/dk

Copies:

4 to Addressee

Geotechnical Services Proposal
Salsipuedes Creek Levee Rehabilitation Project
14 November 2001
Revised 20 December 2001

#### **EXHIBIT A**

### Proposed Scope of Work For Geotechnical Services Salsipuedes Creek Levee Rehabilitation Project

#### PROJECT DESCRIPTION

The project site is located on the west side of Salsipuedes Creek, just south of the Riverside Road Bridge an approximate 700 lineal foot section of levee in Watsonville, California. The site is comprised of a moderately steep embankment levee that was constructed as part of the flood plain project of the Pajaro River. The existing embankment is about 20 feet in height and slopes at a gradient of approximately 2.5 to 1 (horizontal to vertical), although some portions of the slope appear steeper.

We understand, the existing embankment over the years has experienced piping type failures, during periods of maximum flow in the creek. These failures have significantly impacted the levee but not caused it to be breached. Historical grading in this area, has occurred mostly as a result of emergency repair due to bank sloughing.

The purpose of our study will be to quantitatively evaluate shallow slipout potential for the outboard side of the levee embankment. Based on the results of our analysis, we are to develop geotechnical-related recommendations for maintaining short and long-term stability of the outboard side of the embankment, and to discuss the consequences of each option.

#### **SCOPE OF WORK**

#### Task **I**\_

#### **Preliminary Administration and Design-Team Meeting**

Haro, Kasunich & Associates will meet with relevant design team members to review the project mission and objectives as outlined herein. We will develop a general understanding of the project philosophy and our integration into the design team. This has been completed by the field and office meetings to date.

#### Task 2.

#### **Literature Review And Research**

We will perform a general review of available literature and maps germane to the area to help interpret geotechnical conditions that will be encountered at the project site. This information, as appropriate, will be used in developing geotechnical design parameters. Available in-house preliminary and design-level geotechnical reports from the immediate vicinity of the project site will also aid in the planning of the field exploration and in the regional geotechnical evaluation for the project.

Geotechnical Services Proposal Salsipuedes Creek Levee Rehabilitation Project 14 November 2001 Revised 20 December 2001

## Task 3. Field Exploration

Haro, Kasunich & Associates will retain a geotechnical-related drilling company to perform the necessary drilling operations to obtain soil data and selected soil samples. The drilling operation will include eight (8) test borings drilled to depths of 25 and 40 feet or refusal, whichever is less. The borings will be drilled along the top of the levee. Depending on accessibility constraints, weather and site conditions permitting, both truck-mounted and portable drilling rigs will be employed in the field investigation.

In-situ testing and sampling will be performed at selective depths. The samples will be sealed and returned to our laboratory for testing. Soil profiles will be developed during drilling, and modified as required based on the laboratory index property results as discussed below.

It is the **CLIENT'S** responsibility to provide access to the (outboard) toe of the embankment area. It is understood that we would be granted free access to the project site for all necessary equipment and personnel, and that the Client has notified any and all possessors of the project site, whether they be lawfully or unlawfully in possession.

### Task 4. <u>Laboratory Testing</u>

The laboratory testing program will focus on qualitative and quantitative determination of the soil characteristics. As part of the soil characterization, moisture content, dry density, Atterberg Limits and grain size distribution will be determined. Shear strength properties of selective soil samples will be quantitatively determined from direct shear testing of undisturbed and remolded specimens. Modified proctor compaction tests will be performed to evaluate the man-made embankment consistency.

Permeability tests of both the previous (cohesionless soils) and less pervious (cohessive soils) strata as encountered in the test borings. Corrosivity tests of selective soil samples within the upper 20 feet will also be performed.

# Task 5. <u>Geotechnical Enaineering Analyses</u>

Data obtained from the field and laboratory tasks will be used to perform the necessary embankment seepage flow analyses. During this phase of the investigation, Haro, Kasunich & Associates will maintain close communication (eitherverbally or via technical memorandum) with other members of the project team to: provide rapid dissemination of relevant information; 2) assess the approach to future phases of the project; and 3) if necessary, schedule additional subsurface work to provide needed information.

0387

Geotechnical Services Proposal Salsipuedes Creek Levee Rehabilitation Project 14 November 2001 Revised 20 December 2001

#### Task 6.

### Quantitative Seepage Analysis and Evaluation of Consequence of Seepage Flow

Using field measurements and the field and laboratory investigation findings we will develop a subsurface cross section of the existing slope geometry. This cross section will be used in a quantitative analysis to identify possible failure mechanisms as well as existing and potential slide geometry. As discussed on 5 December 2001, the level of analysis is scaled back to evaluating the outboard side of the levee embankment on a static loading basis (general analysis) to review the impact of the cut-off wall to the relative stability of the levee (outboard side) embankment. This analysis will include a flow net method or equivalent method.

# Task 7. Draft Report Preparation

HKA will prepare a draft report with accompanying graphics that will present geotechnical information relevant to the project. This data will be used to address the geotechnical issues pertinent to the project as described on Page 2, item 5 of your letter. A final report under Task 8 will be developed once the designers and reviewers comments have been addressed.

# Task 8. <u>Preparation of Design-Level Geotechnical Reports</u>

Haro, Kasunich & Associates will review the findings with the Team and preliminary conclusions drawn from the draft geotechnical report, design discuss the technical issues associated with the project, and discuss alternatives and/or mitigating measures. On the basis of the comments made, we will prepare a design-level geotechnical report addressing our conclusions and recommendations, and design parameters.

#### FEE SCHEDULE 1 APRIL 2001

CONSULTING GEOTECHNICAL & COASTAL ENGINEERS

The following schedule presents the rates for professional services and laboratory tests. # desired, services other than construction observation and testing can be contracted on a negotiated fixed fee basis. Hours for professional and technical services are charged portal-to-portal from our office. Services during construction such as testing and observation of grading require both professional and technical services. Depending on the score and duration of the construction project, budgets can be estimated. Minimum fee for any project is \$500.00.

#### PROFESSIONAL SERVICES

Principal Engineer	\$150.00 per nour
Senior Engineer	\$125.00 per hour
Engineering Geologist	\$120.00 per hour
Staff Engineer	\$105.00 per hour
Staff Geologist	\$ 90.00 per hour
CAD Technician/Designer	\$ 90.00 per hour
Computer Technician/Engineer Assistant	\$ 90.00 per hour

Arbitration, Deposition, Hearings and Court Appearance, including travel time to and from, \$275.00 per hour. Preparation and Consultation at applicable hourly rate.

Consultation meetings and telephone consultation will be billed at the hourly rate indicated.

#### PERSONNEL CHARGES (FIELDAND LABORATORY)

Drafting	\$45.00 per hour
Technical Assistant	\$60.00 per hour
Technician	\$62.50 per hour
Staff Technician	\$67.00 per hour
Senior Technician	\$72.50 per hour
Prevailing Wage Technician (StraightTime) (PWT)	\$77.50 per nour
Weekdays (in excess of 8 hours/day) add to personnel charges	\$19.00 per nour
Saturdays (initial 8 hours; add to personnel charges	\$19.00 per hour
Saturdays (in excess of 8 hours) add to personnel charges	\$38.00 per hour
Sundays and Holidays add to personnel charges	\$38.00 per hour

- Prevailing Wage Overtime Hourly Rates will be charged at 2 times (Saturdays) and 2.5 times for Sundays and Holidays of PWT.
- Field services are billed portal-to-portal in accordance with the following minimum charges:
  - 2 hours minimum charge for inspections, sampling, testing operations or show-up time; Per diem will be billed cost plus 20% but not less than \$85.00/day per person.

#### **MILEAGE AND INCIDENTAL EXPENSES**

Auto Mileage (within 30 miles of our office) No Charge Auto Mileage (beyond 30 miles of our office) \$ 0.35/mile Clerical Administration \$40.00 per hour

Incidental expenses, such as consultant's fee, special services, equipment rental, aerial photographs, out-of-town travel, etc., are reimbursable at cost plus 15%.

#### DRILLING AND SAMPLING

Drilling rig truck mounted with crew and engineer supervision:

Mobilization \$290.00 per hour \$290.00 per hcur Straight Time Overtime \$310.00 per hour Double 'Time On Request

For crawler-mounted or rotary-wash type drilling rigs, the rate is cost plus 15%.

Drilling is charged at 4 hours minimum. Time is charged portal-to-portal from yard.

Casing, Shelby Tubes and any special sampling or subcontract equipment will be charged at cost plus 19

<del>9389</del>

#### FIELD TESTS

Plate bearing load, pile load and vane shear tests; piezometer and slope indicator installations; and other special tests will be charged at standard engineering and personnel rates plus cost of and including 15% surcharge for special equipment/personnel.

#### **LABORATORY TESTS**

Prevailing Wage Laboratory Technician, per hour				
Sample Preparation, per hour	\$ 55.00			
Sieve Analysis, pit run with 200 wash, ASTM D-422, per test	\$ 65.00			
Percent Passing#200 Sieve (wash)	\$ 45.00			
Short Hydrometer Analysis (without Sp. Gr.) ASTM C-422	\$ 90.00			
Specific Gravity (Sand and Gravel) ASTM D-854	\$ 60.00			
Specific Gravity (Clay) ASTM 0-854	\$ 75.00 ,			
Moisture Determination and/or Unit Weight, ASTM D-2216	\$ 13.00			
Sand Equivalent	\$ 85.03			
Atterberg Limits: a. Plasticity Index, ASTM D-4318	<b>.\$95.</b> 00			
b. Shrinkage Limit, ASTM D-427	\$120.00			
Unconfined Compression, ASTM D-2166	\$ 45.00			
Swell Test, HUD (FHA) Procedure	\$150.00			
Direct Shear (quick), per point	\$ 50.00			
Residual Direct Shear, per point	\$1 <b>i</b> 5.00			
Consolidation, per load increment, ASTM D-2335	\$ 50.00			
R-value, ASTM <b>D-2844</b>	\$160.00			
R-value, Cement, Lime or other additives, ASTM D-2844	\$175.00			
Compaction Curves: aStandard.ASTM D-698	\$125.00			
b. Modified, 4" mold, ASTM D-1557	\$150.00			
c. Mcdified, 6" mold, ASTM D-1557	\$185.00			
d. Impact, California State Highway	\$150.00			
e. 1 Point Verification	\$ 50.00			

PH, Resistivity, Soluble Chlcride and Sulfide as quoted Triaxial, permeability and other special tests at hourly rates or **as** quoted.

#### INVOICES

Invoices will be submitted at the completion of work or at approximately monthly intervals. Invoices are payable upon presentation. Invoices 30 days past due will be subject to a service charge of 1.5 percent monthly interval.

#### **TERMS AND CONDITIONS**

No warranty of any kind, express or implied, is made or intended in connection with the work to be performed by us or by the proposal for consulting or other services, or by the furnishing of oral or written reports of findings made by us.

Services performed **by** us under this Agreement will **be** conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. Client recognizes that subsurface conditions may **vary** from those encountered at the location where borings or tests are made by the Consultant and that the data, interpretations and recommendations of the Cocsultant are based solely on the information available to him. The Consultant will be responsible for those data, interpretations and recommendations, but shall not be responsible for the interpretation by others of the information developed.

Where these General Terms and Conditions conflict with our Standard Geotechnical Terms and Conditions and they are included as special provisions for services requested, the latter shall apply.

#### **CHANGES**

This Fee Schedule is subject to change without notification.



290

Geotechnical Services Proposal
Salsipuedes Creek Levee Rehabilitation Project
14 November 2001
Revised 20 December 2001

# EXHIBIT C ADDITIONAL, EXCLUDED AND OWNER-FURNISHED SERVICES

#### **ADDITIONAL SERVICES**

The following services can be provided when specifically requested and are **excluded** from the scope of work provided herein.

- a) Labor and equipment to perform additional geotechnical study should the initially collected field data be insufficient to address specific site conditions and/or requirements set by your designers, consultants and/or other responsible parties.
- b) Presentations and consultation meetings that may be required during public agency review and approval phases of the project. Consultation meetings, conferences, telephone consultation and/or other items regarding the project not specifically detailed in this proposal are also considered extra services. Such items are difficult to estimate at present and have not been included herein. Work requested by responsible parties that is outside the scope of services will be billed as "extra" on a time and expense basis under purview of this proposal, unless another proposal is specifically requested.
- c) Geotechnical consultation and/or observation services during earthwork and foundation construction. Construction observation will be undertaken on an "as required" basis as requested by the Client or his representatives, and will be provided at additional cost. Although a fee estimate for these services can be provided upon request following review of the final grading and foundation plans, in principle such services will be provided on a "time and expenses" basis.
- d) Geotechnical investigations beyond that described herein.
- e) Any items of work not specifically covered elsewhere in this PROPOSAL.

#### SERVICES NOT A PART OF OUR SERVICES

The following services are specifically not included as part of our services:

- a) Land/topographic surveys and design plansfor grading or drainage improvements.
- b) Geologic study and/or evaluation.
- c) <u>Hazardous</u> material testing and/or evaluation, should any be encountered.
- d) Consideration regarding requirements and impacts of construction with respect to construction in easements and streets, utility conflicts, side drain pipes, connection to existing facilities, or maintenance of existing services.

Geotechnical Services Proposal Salsipuedes Creek Levee Rehabilitation Project 14 November 2001 Revised 20 December 2001

- e) Underground utility conflict review is specifically excluded.
- f) Draft specifications and contract documents.

#### **OWNER-FURNISHED SERVICES**

It is specifically requested and understood that the Client will furnish the following:

- a) Right of entry, including right of passage through adjacent properties.
- b) Topographic survey of the project site and adjacent areas, prepared by a licensed surveyor showing NGVD elevations at 1" = 20' scale.
- c) Access to the project site.
- d) All available data, maps, drawings, and reports pertinent to the referenced site, including locations of all easements adjoining the project site.
- e) Location of all underground utilities. Before beginning the subsurface exploration, we will inform Underground Service Alert (USA) of our planned drilling. If the information obtained is insufficient, it will be necessary to hire a professional underground locator service, at the Client's expense, to mark existing underground utilities in the vicinity of the proposed boring locations.

7370

Geotechnical Services Proposal Salsipuedes Creek Levee Rehabilitation Project 14 November 2001 Revised 20 December 2001

# EXHIBIT D Proposed Cost Estimate Salsipuedes Creek Levee Rehabilitation

The cost estimate for these services was prepared in accordance with the work element structure expressed by the tasks described in Exhibit **A.** The time expected to spend on **each task** is estimated based on the information available to us at this time. The actual time and/or expenses spent on any one task may vary from those indicated below.

### TASK 1. Preliminary/Contract Administration, Design Team Meeting Site Reconnaissance and Team Site Meeting

8 hours @ \$150.00/hr. = \$1,200.00 4 hours @ \$125.00/hr. = \$ 500.00

\$ 1,700.00

#### TASK 2. Literature Review and Research Work

**4** hours @ \$150.00/hr = \$600.00 12 hours @ \$125.00/hr = \$1,500.00

\$2,100.00

#### TASK 3. Geotechnical Field Exploration

Independent Utility Locator,

4 hours @ \$103.50/hr = \$ 414.00

Solid Flight Drilling Rig:

Drilling, sampling

16 hours @ \$335.00/hr. = \$5,360.00 Grout Test Holes = \$600.00

\$6.374.00

### TASK 4. Laboratory Testing

Lump Sum

\$4,205.00

### TASK 5. Geotechnical Engineering Analysis

8 hours @ \$150.00/hr = \$1,200.00 24 hours @ \$125.00/hr = \$3,000.00

\$4,200.00

### **TASK 6.** Quantitative Seepage Analysis and Evaluation

Consequences of Seepage Flow

24 hours @ \$150.00/hr = \$ 3,600.00 24 hours @ \$ 125.00/hr = \$ 3,000.00 20 hours **CAD** Technician \$90.00/hr. = \$ 1,800.00

\$8,400.00

**Geotechnical Services Proposal** Salsipuedes Creek Levee Rehabilitation Project **14 November 2001** Revised 2Q December 2001

TASK 7. **Draft Report Preparation, Submit Draft Report** 

> 8 hours @ \$150.00/hr = \$1,200.00 12 hours @ \$125.00/hr = \$1,500.00 8 hours @ \$80.00/hr. = \$ 640.00 \$ 320.00 8 hours @ \$40.00/hr. = Reproduction and Non-Technical Assistance **\$** 150.00

> > \$3,810.00

TASK 8. Preparation of Design Level Geotechnical Report, Review Comments

> 8 hours @ \$150.00/hr. = \$1,200.00 12 hours @ \$125.00/hr. = \$1,500.00

12 hours @ \$40.00/hr. = \$ 480.00 \$3,180.00

> **Total Cost Estimate** \$33,969.00





### **County of Santa Cruz**

#### **DEPARTMENT OF PUBLIC WORKS**

701 OCEAN STREET, ROOM 410, SANTA CRUZ, CA 950604070 (831) 454-2160 FAX (831) 454-2385 TDD (831) 454-2123

September 17, 2001

THOMAS L. BOLICH
DIRECTOR OF PUBLIC WORKS

HARO, KASUNICH AND ASSOCIATES 116 East Lake Avenue Watsonville, CA. 95076

SUBJECT: GEOTECHNICAL SERVICES FOR THE SALSIPUEDES CREEK LEVEE REHABILITATION PROJECT

The County of Santa **Cruz** Department of Public Works would like to consider retaining your services for the Salsipuedes Creek Levee Rehabilitation Project, as informally discussed at our recent field meeting on August 21, 2001. The nature of the site problem, scope of the requested services, and project limitations are as outlined below. Please review this information and provide us with a proposal and soils investigation.

#### Site Problem

. The west bank of Salsipuedes Creek has experienced water seepage during high flow events. This seepage has threatened the integrity of the levee, raising a potential flood risk to surrounding structures. The nature of this seepage has been evidenced by the appearance of piping/boils on the outboard banks and levee toe as well as softened levee sections. Portions of this levee have been recently improved through emergency programs by the Corps of Engineers. A remaining section, between the Highway 129 bridge and the streamjunction with the Pajaro River, has not been completely treated for seepage problems. This approximate 700-foot reach of the west bank is the project area of concern. This reach was built by the Corps of Engineers, and by agreement is maintained by the Public Works Department. The County has repaired the softened sections of this project reach and resurfaced the levee, bringing the top up to a uniform elevation and minimum section; however, additional work is required to fully address the seepage problems in this reach.

#### Scope of Reauested Services

Provide geotechnical soils and foundation investigations to quantify site conditions for the purposes of seepage analysis and treatment recommendations to solve the above described problem. Such analysis and recommendations are to be based on the collected data and engineering calculations performed.

040 Attach ment "B"

\

#### **Specific items**

- 1. Soils/foundation investigations borings with mapped/profiled logs at approximately 200-foot spacings, estimate four to eight locations.
- 2. Permeability tests both pervious and less pervious strata as encountered by borings and relevant to seepage analysis and recommended treatment.
- 3. Corrosivity tests as applicable to chosen materials.
- **4.** Seepage analysis quantified comparison of existing vs. proposed conditions flow net method or equivalence.

#### Includes:

- A. Soil flow rates
- B. Soil uplift forces at downstream emergence (piping **risk**)
- C. Evaluation of inboard slope stability upon rapid creek draw-down as affected by proposed project measure increased risk?
- 5. Recommended treatment method(s)
  - **A.** Define extent
  - B. Materials and design properties
  - C. Construction method and feasibility
  - D. Limitations of recommended method to achieve protection

While sheet piling was discussed as the primary means to affect repair, other options that you deem feasible should be considered where they fit within project limitations, and are advantageous in function and cost.

Presentation of services is to be in a docket format, with such illustrations, graphs, tables, etc., as are necessary to communicate content to the Public Works Department. This is not intended to include construction drawings or specifications, or any other construction related documents used to execute the project. The Public Works Department will provide, in advance, a survey of the surface topography, a topographic plan map, cross sections and profile of the project reach for use by your firm.

0396

#### **Project Limitation**

Recommended improvement methods should be achievable from within the confines of the top width of the levee, and its full length from the bridge abutment to the rip-rapped inboard slope near the streamjunction. Environmental restrictions prevent disturbance of the riparian corridor, which has been defined to include the levee slopes on each side. Overhead power lines, a buried gas line, a drainage outfall, and overhead tree limbs are known to exist within the project area, and may present certain limitations.

A maximum budget of approximately \$680,000.00 for construction has been provided to accomplish the entirety of the project.

We look forward to hearing from you regarding your interest in providing these services, and hope that we can cooperatively remedy the seepage situation.

Yours truly,

THOMAS L. BOLICH Director of Public Works

Bv

Brian Turpen Assistant Director of Public Works

DWS:abc

# COUNTY OF SANTA CRUZ REQUEST FOR APPROVAL OF AGREEMENT

TO:	Board of Supervisors	FROM:		PUPAZC W	ORKS	(Department)
	County Administrative Office Auditor Controller	BY:	Affiliation certific	s that approprie	ations/revenues are	(Signature) /0/3//Q(Date) e available
AGREE	EMENTTYPE (Check One)		Expenditure Agr	eement/X	Revenue Agree	ement 🗆
The Fic	oard of Supervisors is hereby request	ed to approve the	attached agreeme	ent and authorize	e <b>the</b> execution of s	same.
1. Sei	d agreement is between theCC	UNTY OF SAND	'A CRUZ PUBL	IC WORKS		(Department/Agency)
and	HARO KASUNICH AND ASSOC	LIATES 116 EA	AST LAKE AVE	NUE, WATSON	WILLE, CA 9	5076 (Name/Address)
2. The	e agreement will provide <b>GEOTECHN</b>	ICAL SERVICE	S FOR THE S	ALSIPUEDES	CREEK LEVEE	STABILIZATION
FF	ROJECT.					
3. Per	riod of the agreement is fromBOAF	RD OF APPROVA	AL (JAN 8)	_ toJUNE	30, 2002	
	ticipated Cost is \$33,96.00				•	ual Rate 🗓 Not to Exceed
Re	marks:CONTRACT \$33,969.00;	OVERHEAD @	7% \$2377.83	; TOTAL \$30	5,346.83	
	Section III Board letter red Section IV Revenue Agree	required, will be <b>li</b> quired ment	sted under Item 8			·
6. Ao	propriations/Revenues are available	and are budgeted	in <u>622245 🎜 <b>2</b></u>	4837; 366	(Index) <u>66</u> :	10 (Sub <b>object</b> )
	NOTE: IF APPRO	PRIATIONS ARE IN	ISUFFICIENT, ATT	ACHED COMPLI	ETED AUD-74 OR A	UD-60
Appro	priations available and	ve been encumb		tract No: I Adam J. Auditor-Controll	2681 Sile Propurty	Date: 1/2/02_
•	sal and accounting detail reviewed a					•
		,	, , , , , , , , , , , , , , , , , , , ,	,		(Department/Agency
Date:			Ву:			( <i>a apan amang,</i> 1301.0)
DWS:	abc			County Administ	rative Office	
Distri	ibution: Board of Supervisors - White Auditor Controller – Canary Auditor-Controller – Pink Department – Gold	proved by said	a Cruz ex-offici mia, do hereby ce I Board of Supervis	rtify that the fore	egoing request for	s of <b>the</b> County of Santa <b>Cruz,</b> approval of agreement was ap ty Administrative Office <b>by</b> an 20
_	ADM - 29 (8/01) Title I, Section 300 Proc Man	By: Deputy Cle	erk			
AUE	ITOR-CONTROLLER USE ONLY					
CO_	Shock No. 15 America	11			Verend D	
	beingent No. JE Amount	Line	s H/T	<b>L</b>	Keyed By	Date
- ICI.	Auditor Description	——— <del>&gt;</del> Am	ount	Index	Sub object	User Code