



**REGULAR MEETING AGENDA
PAJARO DUNES GEOLOGIC HAZARD ABATEMENT DISTRICT
BOARD ROOM, Pajaro Dunes, 2661 Beach Road, Watsonville, CA 95076**

Director David Ferrari will be joining by phone from:

W Seattle Hotel
1112 4th Ave
Seattle, WA
98101

Please inquire at the front desk for the appropriate room number

Saturday, September 21st, 2019 9:00 a.m.

A. OPEN SESSION CALL TO ORDER – PLEDGE OF ALLEGIANCE

Roll Call

John Cullen, Secretary
David Ferrari, Community Liaison
Jim Griffin, Director

Jack Feinstein, Director
Sarah Mansergh, Clerk

B. MEMBER COMMENTS

Matters under the jurisdiction of the Board and not on the posted agenda, may be addressed by members of the public before the Board for consideration. However, California law prohibits the Board from taking action on any matter which is not on the posted agenda unless it is determined to be an emergency by the Board of PDGHAD. Any person wishing to address the Board during the Member Comment period shall be permitted to be heard for up to 3 minutes, A) individuals may speak only once and B) the Board is unable to address any owner comments in depth, but may choose to direct the Clerk to follow-up on the matter for a future meeting.

C. PRESIDENT’S REMARKS

The President will use this opportunity to inform the public of issues affecting the District and other items of a general nature not otherwise provided for on this agenda.

- Tentative Meeting Calendar 2019
November 9th
December 14th

D. CONSENT CALENDAR

All matters listed on the Consent Calendar are considered to be routine by the Board of Directors and will be enacted by one motion at the appropriate time. There will be no separate discussion on these

items. If discussion is desired, that item will be removed from the Consent Calendar and will be considered separately.

1. Approval of minutes May 28th, 2019

E. TREASURER'S REPORT

2. Financial Reports
 - Financial Report through August 31st, 2019
 - Warrant listing

F. MEETING reports

3. Meetings attended by Directors at District expense since the last meeting of the Board (per AB1234 requirements). Such reports may be made orally or in writing.

G. NEW BUSINESS

4. ITEM – Discuss approval of master contract for engineering services and resolution designating a new engineer of record.

- a. Board report
- b. Public comment
- c. Board discussion
- d. Board action /direction

5. ITEM – Presentation and review of 2019 seawall inspection report and document review report from CE&G Engineering.

- a. Board report
- b. Public comment
- c. Board discussion
- d. Board action /direction

6. ITEM-Appointment of new Board member

- a. Board report
- b. Public comment
- c. Board discussion
- d. Board action /direction

7. ITEM-Discuss continuation of the line of credit with Santa Cruz County Bank

- a. Board report
- b. Public comment
- c. Board discussion
- d. Board action /direction

H. DIRECTORS COMMENTS AND CONCERNS

Members of the Board of Directors may address items of concern at this time, and may request that items be placed on future agendas in accordance with the By-laws of the Board.

I. ADJOURNMENT

The next Meeting of the Board of Directors is scheduled for November 9th, 2019, at 9:00 a.m. at the offices of the Pajaro Dunes Geologic Hazard Abatement District, Board Room, Pajaro Dunes, 2661 Beach Road, Watsonville, CA 95076. Individuals who require special accommodations are requested to contact the District Clerk by calling (831) 818-9253, no less than 72 hours prior to the meeting or in the case of a Special Meeting, as soon as possible after the Agenda is posted. For copies of the agenda will be available 72 hours prior to the meeting and may be obtained by contacting the District agenda and board packet e-mail pdghad@gmail.org or (831) 761-7744. All meetings are noticed and conducted in accordance with the Ralph M. Brown Act.

PDGHAD

**REGULAR MEETING AGENDA
PAJARO DUNES GEOLOGIC HAZARD ABATEMENT DISTRICT
BOARD ROOM, Pajaro Dunes, 2661 Beach Road, Watsonville, CA 95076**

Saturday, May 18th, 2018 8:30 a.m.

A. OPEN SESSION CALL TO ORDER – PLEDGE OF ALLEGIANCE

Roll Call

Robert Moore, President-not present
John Cullen, Secretary-present
David Ferrari, Community Liaison-present
Jim Griffin, Director-not present

Jack Feinstein, Director-present
Sarah Mansergh, Clerk-not present

Also present: Mike Rodriquez (Attorney), Wendy Cumming (accountant) and Dan Peluso (CE&G Engineer)

B. MEMBER COMMENTS

Matters under the jurisdiction of the Board and not on the posted agenda, may be addressed by members of the public before the Board for consideration. However, California law prohibits the Board from taking action on any matter which is not on the posted agenda unless it is determined to be an emergency by the Board of PDGHAD. Any person wishing to address the Board during the Member Comment period shall be permitted to be heard for up to 3 minutes, A) individuals may speak only once and B) the Board is unable to address any owner comments in depth, but may choose to direct the Clerk to follow-up on the matter for a future meeting.

C. PRESIDENT'S REMARKS

The President will use this opportunity to inform the public of issues affecting the District and other items of a general nature not otherwise provided for on this agenda.

- Tentative Meeting Calendar 2019
~~August 10th~~-Moved to August 3rd
November 9th
December 14th

D. CONSENT CALENDAR

All matters listed on the Consent Calendar are considered to be routine by the Board of Directors and will be enacted by one motion at the appropriate time. There will be no separate discussion on these items. If discussion is desired, that item will be removed from the Consent Calendar and will be considered separately.

1. Approval of minutes April 13th, 2019

John C moves to approve. David F. seconds. All approve.

E. TREASURER'S REPORT

2. Financial Reports
 - Financial Report through March 30th, 2019
 - Warrant listing

Presented Financial report through April 30th, 2019. John C moved to approve the financials, David Ferrari seconded and all approve.

F. MEETING reports

3. Meetings attended by Directors at District expense since the last meeting of the Board (per AB1234 requirements). Such reports may be made orally or in writing. NONE

G. NEW BUSINESS

4. ITEM – Resolution to approve new contract for engineering services and designating a new engineer of record.
 - a. Board report
 - b. Public comment
 - c. Board discussion
 - d. Board action /direction

Discussed Dan Peluso's background with the District and the future plans of the District per the repairs. Dan P will be doing the annual inspections. John asked that Dan review the most recent R&M plan and update the report for the current conditions and that we will need to resubmit our permit with the Coastal Commission (CCC). Also discussed removal of boulders from the beach with a question about their current location.

John C moves to approve the contract. David F seconds and all approve.

Items requested for the next meeting from Dan P.:

- 1) Review ARUP plan
- 2) Update ARUP plan
- 3) Complete CCC permit request

Dan P. will work to complete these and will also provide cost estimates for the year.

5. ITEM-Review 2018/2019 pending expenditures and funding of account with County for permitting process.
 - a. Board report
 - b. Public comment
 - c. Board discussion

d. Board action /direction

Discussion included available funds of about \$50,000 plus \$24,000 for the seawall inspections. John C moves to approve the adjusted FY19 budget to allocate \$55,000 to CE&G for engineering services and \$20,000 to County for permitting account. David F. seconds. All approve

6. ITEM – Review and finalize 2019/2020 Budget

- a. Board report
- b. Public comment
- c. Board discussion
- d. Board action /direction

John C moves to approve the FY20 budget with the adjusted increase to engineering and County permitting as discussed above. Approved the Zone 2 budget as presented. David F. seconds. All approve.

H. DIRECTORS COMMENTS AND CONCERNS

Members of the Board of Directors may address items of concern at this time, and may request that items be placed on future agendas in accordance with the By-laws of the Board.

I. ADJOURNMENT

The next Meeting of the Board of Directors is scheduled for August 10th, 2019, at 9:00 a.m. at the offices of the Pajaro Dunes Geologic Hazard Abatement District, Board Room, Pajaro Dunes, 2661 Beach Road, Watsonville, CA 95076. Individuals who require special accommodations are requested to contact the District Clerk by calling (831) 818-9253, no less than 72 hours prior to the meeting or in the case of a Special Meeting, as soon as possible after the Agenda is posted. For copies of the agenda will be available 72 hours prior to the meeting and may be obtained by contacting the District agenda and board packet e-mail pdghad@gmail.org or (831) 761-7744. All meetings are noticed and conducted in accordance with the Ralph M. Brown Act.

Pajaro Dunes Geologic Hazard Abatement District

Balance Sheet

As of August 31, 2019

Aug 31, 19

ASSETS

Current Assets

Checking/Savings

100000 · SCCB Zone 1 - 3957	38,664
100001 · SCCB Zone 2 - 3965	105,841
100002 · SCCB Z1 Emerg - 1877	165,724
100003 · SCCB LTD- 0208	49,110
100400 · Union Bank Bond Holding	<u>305,613</u>

Total Checking/Savings 664,952

Accounts Receivable

120000 · Assessments Receivable	<u>159,465</u>
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Total Accounts Receivable 159,465

Other Current Assets

121500 · Prepaid Insurance	13,690
121600 · Prepaid Expenses	<u>45,786</u>

Total Other Current Assets 59,476

Total Current Assets 883,893

Fixed Assets

150000 · Riverwall	3,000,000
160000 · Accumulated Depreciation	<u>-1,466,666</u>

Total Fixed Assets 1,533,334

TOTAL ASSETS 2,417,227

LIABILITIES & EQUITY

Liabilities

Current Liabilities

Accounts Payable

200000 · Accounts Payable	<u>-7,738</u>
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Total Accounts Payable -7,738

Other Current Liabilities

220000 · Accrued Interest	35,647
255000 · Unearned Revenue	<u>10,675</u>

Total Other Current Liabilities 46,322

Total Current Liabilities 38,584

Long Term Liabilities

285000 · Bonds Payable Z2	1,240,000
286000 · Bonds Payable Discount Z2	-52,250
286500 · Amort. Bond Discount Z2	<u>30,121</u>

Total Long Term Liabilities 1,217,871

Total Liabilities 1,256,455

Equity

30000 · Opening Balance Equity	608,448
32000 · Retained Earnings	520,105
Net Income	<u>32,219</u>

Total Equity 1,160,772

TOTAL LIABILITIES & EQUITY 2,417,227

Note ~ GHAD owns \$15k of rock that is stored at Granite Rock

Pajaro Dunes Geologic Hazard Abatement District
Profit & Loss Budget vs. Actual
 July through August 2019

	Zone 1				Zone 2			
	Jul - Aug 19	Budget	\$ Over Budget	% of Budget	Jul - Aug 19	Budget	\$ Over Budget	% of Budget
Ordinary Income/Expense								
Income								
410000 · Assessment Income	22,658	22,658		100%	39,425	39,425		100%
410020 · Emergency Reserve Fund	29,167	29,167		100%				
Total Income	<u>51,825</u>	<u>51,825</u>		<u>100%</u>	<u>39,425</u>	<u>39,425</u>		<u>100%</u>
Expense								
610155 · Postage and Mailings	66	200	-134	33%				
615115 · Office Expense		50	-50					
61518 · Clerk	462	1,400	-938	33%	138	433	-295	32%
615415 · Accounting	1,073	3,000	-1,927	36%				
615416 · Assessment Admin. Expense	2,154	6,000	-3,846	36%	280	1,039	-759	27%
615617 · Website Maintenance		250	-250					
615655 · Dues		250	-250					
616500 · Legal Fees	200	3,000	-2,800	7%				
617250 · Seawall Inspections	2,506	6,000	-3,494	42%				
619010 · Technical Consulting Costs	6,708	7,000	-292	96%				
628500 · Insurance Expense	2,500	2,500	0	100%				
629030 · SBA Repayment to PHA Z2			0		15,476	15,476		100%
650000 · Bank Service Charges	9		9			83	-83	
750000 · Depreciation Expense Z2					16,666	16,666	0	100%
Total Expense	<u>15,678</u>	<u>29,650</u>	<u>-13,972</u>	<u>53%</u>	<u>32,560</u>	<u>33,697</u>	<u>-1,137</u>	<u>97%</u>
Net Ordinary Income	<u>36,147</u>	<u>22,175</u>	<u>13,972</u>	<u>163%</u>	<u>6,865</u>	<u>5,728</u>	<u>1,137</u>	<u>120%</u>
Other Income/Expense								
Other Income								
410070 · Interest & Penalty Income	128		128	100%	105	25	80	420%
Total Other Income	<u>128</u>		<u>128</u>	<u>100%</u>	<u>105</u>	<u>25</u>	<u>80</u>	<u>420%</u>
Other Expense								
855000 · Interest Expense					10,679	10,679		100%
955500 · Interest Bond Discount					348		348	100%
Total Other Expense					<u>11,027</u>	<u>10,679</u>	<u>348</u>	<u>103%</u>
Net Other Income	<u>128</u>		<u>128</u>	<u>100%</u>	<u>-10,922</u>	<u>-10,654</u>	<u>-268</u>	<u>103%</u>
Net Income	<u><u>36,275</u></u>	<u><u>22,175</u></u>	<u><u>14,100</u></u>	<u><u>164%</u></u>	<u><u>-4,057</u></u>	<u><u>-4,926</u></u>	<u><u>869</u></u>	<u><u>82%</u></u>

Pajaro Dunes Geologic Hazard Abatement District
Profit & Loss Budget vs. Actual
 July through August 2019

TOTAL

	<u>Jul - Aug 19</u>	<u>Budget</u>	<u>\$ Over Budget</u>	<u>% of Budget</u>
Ordinary Income/Expense				
Income				
410000 · Assessment Income	62,083	62,083		100%
410020 · Emergency Reserve Fund	29,167	29,167		100%
Total Income	<u>91,250</u>	<u>91,250</u>		<u>100%</u>
Expense				
610155 · Postage and Mailings	66	200	-134	33%
615115 · Office Expense		50	-50	
61518 · Clerk	600	1,833	-1,233	33%
615415 · Accounting	1,073	3,000	-1,927	36%
615416 · Assessment Admin. Expense	2,434	7,039	-4,605	35%
615617 · Website Maintenance		250	-250	
615655 · Dues		250	-250	
616500 · Legal Fees	200	3,000	-2,800	7%
617250 · Seawall Inspections	2,506	6,000	-3,494	42%
619010 · Technical Consulting Costs	6,708	7,000	-292	96%
628500 · Insurance Expense	2,500	2,500		100%
629030 · SBA Repayment to PHA Z2	15,476	15,476		100%
650000 · Bank Service Charges	9	83	-74	11%
750000 · Depreciation Expense Z2	16,666		16,666	100%
Total Expense	<u>48,238</u>	<u>63,347</u>	<u>-15,109</u>	<u>76%</u>
Net Ordinary Income	43,012	27,903	15,109	154%
Other Income/Expense				
Other Income				
410070 · Interest & Penalty Income	233	25	208	932%
Total Other Income	<u>233</u>	<u>25</u>	<u>208</u>	<u>932%</u>
Other Expense				
855000 · Interest Expense	10,679	10,679		100%
955500 · Interest Bond Discount	348		348	100%
Total Other Expense	<u>11,027</u>	<u>10,679</u>	<u>348</u>	<u>103%</u>
Net Other Income	<u>-10,794</u>	<u>-10,654</u>	<u>-140</u>	<u>101%</u>
Net Income	<u><u>32,218</u></u>	<u><u>17,249</u></u>	<u><u>14,969</u></u>	<u><u>187%</u></u>

Pajaro Dunes Geologic Hazard Abatement District
Bank Account Activity
As of August 31, 2019

<u>Type</u>	<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Debit</u>	<u>Credit</u>	<u>Balance</u>
100000 - SCCB Zone 1 - 3957						-3,557.31
Deposit	07/11/2019		County of Santa Cruz	45,574.89		42,017.58
Bill Pmt -Check	08/27/2019	1365	Jarvis, Fay, Doport & Gibson, LLP		200.00	41,817.58
Bill Pmt -Check	08/27/2019	1366	Sarah Mansergh		462.19	41,355.39
Bill Pmt -Check	08/27/2019	1367	Wendy L. Cumming, CPA		3,292.37	38,063.02
Transfer	08/29/2019			600.54		38,663.56
Total 100000 - SCCB Zone 1 - 3957				46,175.43	3,954.56	38,663.56
100001 - SCCB Zone 2 - 3965						21,829.28
Deposit	07/11/2019		County of Santa Cruz	93,026.19		114,855.47
Bill Pmt -Check	08/27/2019	1317	Pajaro Dunes Geologic Abatement District		858.80	113,996.67
Bill Pmt -Check	08/27/2019	1318	Pelican Home Owner's Association		7,738.00	106,258.67
Bill Pmt -Check	08/27/2019	1319	Sarah Mansergh		138.06	106,120.61
Bill Pmt -Check	08/27/2019	1320	Wendy L. Cumming, CPA		279.88	105,840.73
Total 100001 - SCCB Zone 2 - 3965				93,026.19	9,014.74	105,840.73
100002 - SCCB Z1 Emerg - 1877						105,641.87
Deposit	07/11/2019		County of Santa Cruz	60,691.77		166,333.64
Check	07/31/2019				9.00	166,324.64
Transfer	08/29/2019				600.54	165,724.10
Total 100002 - SCCB Z1 Emerg - 1877				60,691.77	609.54	165,724.10
100003 - SCCB LTD- 0208						49,101.58
Deposit	07/31/2019			4.17		49,105.75
Deposit	08/31/2019			4.17		49,109.92
Total 100003 - SCCB LTD- 0208				8.34	0.00	49,109.92
100400 - Union Bank Bond Holding						304,754.13
Bill	07/30/2019		Pajaro Dunes Geologic Abatement District	858.80		305,612.93
Total 100400 - Union Bank Bond Holding				858.80	0.00	305,612.93
TOTAL				200,760.53	13,578.84	664,951.24

**CONSULTING SERVICES AGREEMENT BETWEEN
THE PAJARO DUNES GEOLOGIC HAZARD ABATEMENT DISTRICT AND**

THIS AGREEMENT for consulting services is made by and between the Pajaro Dunes Geologic Hazard Abatement District ("District") and _Cal Engineering and Geology, Inc.____("Consultant") (together referred to as the "Parties") as of __September 21st, 2019____ (the "Effective Date").

Section 1. SERVICES. Subject to the terms and conditions set forth in this Agreement, Consultant shall provide to District the services described in the Scope of Work attached as Exhibit 'A', and incorporated herein, at the time and place and in the manner specified therein. In the event of a conflict in or inconsistency between the terms of this Agreement and Exhibit 'A', the Agreement shall prevail.

- 1.1 **Term of Services.** The term of this Agreement shall begin on the Effective Date and shall end upon satisfactory completion of all work as described in the Scope of Work attached as Exhibit 'A', as determined by the District in its sole discretion, unless the term of the Agreement is otherwise terminated or extended, as provided for in Section 8. Notwithstanding the foregoing, the term of this Agreement shall not extend past _____. The time provided to Consultant to complete the services required by this Agreement shall not affect the District's right to terminate the Agreement, as referenced in Section 8.
- 1.2 **Standard of Performance.** Consultant shall perform all services required pursuant to this Agreement according to the standards observed by a competent practitioner of the profession in which Consultant is engaged.
- 1.3 **Assignment of Personnel.** Consultant shall assign only competent personnel to perform services pursuant to this Agreement. In the event that District, in its sole discretion, at any time during the term of this Agreement, desires the reassignment of any such persons, Consultant shall, immediately upon receiving notice from District of such desire of District, reassign such person or persons.
- 1.4 **Time.** Consultant shall devote such time to the performance of services pursuant to this Agreement as may be reasonably necessary to meet the standard of performance provided in Section 1.1 above, and to satisfy Consultant's obligations hereunder.

Section 2. COMPENSATION. District hereby agrees to pay Consultant a sum not to exceed \$_____ notwithstanding any contrary indications that may be contained in Consultant's proposal, for services to be performed and reimbursable costs incurred under this Agreement. In the event of a conflict between this Agreement and Consultant's proposal, attached as Exhibit A, regarding the amount of compensation, the Agreement shall prevail. District shall pay Consultant for services rendered pursuant to this Agreement at the time and in the manner set forth herein. The payments specified below shall be the only payments from District to Consultant for services rendered pursuant to this Agreement. Consultant shall submit all invoices to District in the manner specified herein. Except as specifically authorized by District in writing, Consultant shall not bill District for duplicate services performed by more than one person.

Consultant and District acknowledge and agree that compensation paid by District to Consultant under this Agreement is based upon Consultant's estimated costs of providing the services required hereunder,

including salaries and benefits of employees and subcontractors of Consultant. Consequently, the parties further agree that compensation hereunder is not intended to include the costs of contributions to any pensions and/or annuities to which Consultant and its employees, agents, and subcontractors may be eligible. District therefore has no responsibility for such contributions beyond compensation required under this Agreement.

- 2.1 **Invoices.** Consultant shall submit invoices, not more often than once a month during the term of this Agreement, based on the cost for services performed and reimbursable costs incurred prior to the invoice date. Invoices shall contain the following information:
- Serial identifications of progress bills; i.e., Progress Bill No. 1 for the first invoice, etc.;
 - The beginning and ending dates of the billing period;
 - A Task Summary containing the original contract amount, the amount of prior billings, the total due this period, the balance available under the Agreement, and the percentage of completion;
 - The total number of hours of work performed under the Agreement by Consultant and each employee, agent, and subcontractor of Consultant performing services hereunder, including a brief description of work that was completed;
 - The Consultant's signature;
 - Consultant shall give separate notice to the District when the total number of hours worked by Consultant and any individual employee, agent, or subcontractor of Consultant reaches or exceeds 800 hours within a 12-month period under this Agreement and any other agreement between Consultant and District. Such notice shall include an estimate of the time necessary to complete work described in Exhibit A and the estimate of time necessary to complete work under any other agreement between Consultant and District, if applicable.
- 2.2 **Monthly Payment.** Unless otherwise agreed to by the Parties in writing, District shall make monthly payments, based on invoices received, for services satisfactorily performed, and for authorized reimbursable costs incurred. District shall have 30 days from the receipt of an invoice that complies with all of the requirements above to pay Consultant.
- 2.3 **Final Payment.** District shall pay the last 10% of the total sum due pursuant to this Agreement within 60 days after completion of the services and submittal to District of a final invoice, if all services required have been satisfactorily performed.
- 2.4 **Total Payment.** District shall pay for the services to be rendered by Consultant pursuant to this Agreement. District shall not pay any additional sum for any expense or cost whatsoever incurred by Consultant in rendering services pursuant to this Agreement. District shall make no payment for any extra, further, or additional service pursuant to this Agreement.

In no event shall Consultant submit any invoice for an amount in excess of the maximum amount of compensation provided above either for a task or for the entire Agreement, unless the Agreement is modified prior to the submission of such an invoice by a properly executed change order or amendment.

- 2.5 **Payment of Subcontractors.** Consultant is solely responsible for payment to all subcontractors that complete work under the terms of this Agreement.
- 2.6 **Reimbursable Expenses.** Any reimbursable expense that District agrees to pay Consultant shall be specifically described and authorized in a manner as set forth in Exhibit 'A'.
- 2.7 **Payment of Taxes.** Consultant is solely responsible for the payment of employment taxes incurred under this Agreement and any similar federal or state taxes.
- 2.8 **Payment upon Termination.** In the event that the District or Consultant terminates this Agreement pursuant to Section 8, the District shall compensate the Consultant for all outstanding costs and reimbursable expenses incurred for work satisfactorily completed as of the date of written notice of termination. Consultant shall maintain adequate logs and timesheets to verify costs incurred to that date.
- 2.9 **Authorization to Perform Services.** The Consultant is not authorized to perform any services or incur any costs whatsoever under the terms of this Agreement until receipt of authorization from the Contract Administrator.

Section 3. FACILITIES AND EQUIPMENT. Except as set forth herein, Consultant shall, at its sole cost and expense, provide all facilities and equipment that may be necessary to perform the services required by this Agreement. District shall make available to Consultant only the facilities and equipment listed in this section, and only under the terms and conditions set forth herein.

District shall furnish physical facilities such as conference space, as may be reasonably necessary for Consultant's use while consulting with District employees and/or officials and reviewing records and the information in possession of the District. The location, quantity, and time of furnishing those facilities shall be in the sole discretion of District. In no event shall District be obligated to furnish any facility that may involve incurring any direct expense, including but not limited to computer, long-distance telephone or other communication charges, vehicles, and reproduction facilities.

Section 4. INSURANCE REQUIREMENTS. Before beginning any work under this Agreement, Consultant, at its own cost and expense, unless otherwise specified below, shall procure the types and amounts of insurance listed below against claims for injuries to persons or damages to property that may arise from or in connection with the performance of the work hereunder by the Consultant and its agents, representatives, employees, and subcontractors. Consistent with the following provisions, Consultant shall provide proof satisfactory to District of such insurance that meets the requirements of this section and under forms of insurance satisfactory in all respects, and that such insurance is in effect prior to beginning work to the District. Consultant shall maintain the insurance policies required by this section throughout the term of this Agreement. Consultant shall not allow any subcontractor to commence work on any subcontract until Consultant has obtained all insurance required herein for the subcontractor(s) and provided evidence that such insurance is in effect to District. Verification of the required insurance shall be submitted and made part of this Agreement prior to execution. Consultant shall maintain all required insurance listed herein for the duration of this Agreement.

- 4.1 **Workers' Compensation.** Consultant shall, at its sole cost and expense, maintain Statutory Workers' Compensation Insurance and Employer's Liability Insurance for any

and all persons employed directly or indirectly by Consultant. The Statutory Workers' Compensation Insurance and Employer's Liability Insurance shall be provided with limits of not less than \$1,000,000 per accident. In the alternative, Consultant may rely on a self-insurance program to meet those requirements, but only if the program of self-insurance complies fully with the provisions of the California Labor Code. Determination of whether a self-insurance program meets the standards of the Labor Code shall be solely in the discretion of the Contract Administrator. The insurer, if insurance is provided, or the Consultant, if a program of self-insurance is provided, shall waive all rights of subrogation against the District and its officers, officials, employees, and volunteers for loss arising from work performed under this Agreement.

4.2 **Commercial General and Automobile Liability Insurance.**

4.2.1 **General requirements.** Consultant, at its own cost and expense, shall maintain commercial general and automobile liability insurance for the term of this Agreement in an amount not less than \$1,000,000 per occurrence, combined single limit coverage for risks associated with the work contemplated by this Agreement. If a Commercial General Liability Insurance or an Automobile Liability form or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to the work to be performed under this Agreement or the general aggregate limit shall be at least twice the required occurrence limit. Such coverage shall include but shall not be limited to, protection against claims arising from bodily and personal injury, including death resulting therefrom, and damage to property resulting from activities contemplated under this Agreement, including the use of owned and non-owned automobiles.

4.2.2 **Minimum scope of coverage.** Commercial general coverage shall be at least as broad as Insurance Services Office Commercial General Liability occurrence form CG 0001 (most recent edition) covering comprehensive General Liability on an "occurrence" basis. Automobile coverage shall be at least as broad as Insurance Services Office Automobile Liability form CA 0001 (most recent edition), Code 1 (any auto). No endorsement shall be attached limiting the coverage.

4.2.3 **Additional requirements.** Each of the following shall be included in the insurance coverage or added as a certified endorsement to the policy:

- a. The Insurance shall cover on an occurrence or an accident basis, and not on a claims-made basis.
- b. District, its officers, officials, employees, and volunteers are to be covered as insureds as respects: liability arising out of work or operations performed by or on behalf of the Consultant; or automobiles owned, leased, hired, or borrowed by the Consultant.
- c. For any claims related to this Agreement or the work hereunder, the Consultant's insurance covered shall be primary insurance as respects the District, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the District, its officers, officials,

employees, or volunteers shall be excess of the Consultant's insurance and shall not contribute with it.

- d. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party, except after 30 days' prior written notice has been provided to the District.

4.3 Professional Liability Insurance.

4.3.1 General requirements. Consultant, at its own cost and expense, shall maintain for the period covered by this Agreement professional liability insurance for licensed professionals performing work pursuant to this Agreement in an amount not less than \$1,000,000 covering the licensed professionals' negligent errors and omissions. Any deductible or self-insured retention shall not exceed \$250,000 per claim.

4.3.2 Claims-made limitations. The following provisions shall apply if the professional liability coverage is written on a claims-made form:

- a. The retroactive date of the policy must be shown and must be before the date of the Agreement.
- b. Insurance must be maintained and evidence of insurance must be provided for at least five years after completion of the Agreement or the work, so long as commercially available at reasonable rates.
- c. If coverage is canceled or not renewed and it is not replaced with another claims-made policy form with a retroactive date that precedes the date of this Agreement, Consultant must purchase an extended period coverage for a minimum of five years after completion of work under this Agreement, to the extent available at commercially reasonable rates. .

4.4 All Policies Requirements.

4.4.1 Acceptability of insurers. All insurance required by this section is to be placed with insurers with a Bests' rating of no less than A: V.

4.4.2 Verification of coverage. Prior to beginning any work under this Agreement, Consultant shall furnish District with complete copies of all policies delivered to Consultant by the insurer, including complete copies of all endorsements attached to those policies. All copies of policies and endorsements shall show the signature of a person authorized by that insurer to bind coverage on its behalf. If the District does not receive the required insurance documents prior to the Consultant beginning work, it shall not waive the Consultant's obligation to provide them. The District reserves the right to require complete copies of all required insurance policies at any time.

4.4.3 Deductibles and Self-Insured Retentions. Consultant shall disclose to and obtain the written approval of District for the self-insured retentions and deductibles before beginning any of the services or work called for by any term of this Agreement. At the option of the District, and for policies other than professional liability, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the District, its officers, employees, and volunteers; or the Consultant shall provide a financial guarantee satisfactory to the District guaranteeing payment of losses and related investigations, claim administration and defense expenses.

4.4.4 Wasting Policies. No policy required by this Section 4 except professional liability shall include a "wasting" policy limit (i.e., limit that is eroded by the cost of defense).

4.4.5 Waiver of Subrogation. Except under the professional liability policy, Consultant hereby agrees to waive subrogation which any insurer or contractor may require from vendor by virtue of the payment of any loss. Consultant agrees to obtain any endorsements that may be necessary to affect this waiver of subrogation.

The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the entity for all work performed by the consultant, its employees, agents, and subcontractors.

4.4.6 Subcontractors. Consultant shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.

4.5 Remedies. In addition to any other remedies District may have if Consultant fails to provide or maintain any insurance policies or policy endorsements to the extent and within the time herein required, District may, at its sole option exercise any of the following remedies, which are alternatives to other remedies District may have and are not the exclusive remedy for Consultant's breach:

- Obtain such insurance and deduct and retain the amount of the premiums for such insurance from any sums due under the Agreement;
- Order Consultant to stop work under this Agreement or withhold any payment that becomes due to Consultant hereunder, or both stop work and withhold any payment, until Consultant demonstrates compliance with the requirements hereof; and/or
- Terminate this Agreement.

Section 5. INDEMNIFICATION AND CONSULTANT'S RESPONSIBILITIES.

Consultant shall indemnify, , and hold harmless District and its officers, officials, employees, and volunteers from and against any and all liability, loss, damage, claims, expenses, and costs (including without

limitation, reimbursement of reasonable attorney's fees and costs and fees of litigation) (collectively, "Liability") to the extent caused by Consultant's negligent performance of the Services or its negligent failure to comply with any of its obligations contained in this Agreement, except such Liability caused by the negligence or willful misconduct of District. With regard to any claim alleging Consultant's negligent performance of professional services, Consultant's defense obligation under this indemnity paragraph means only the reimbursement of reasonable defense costs to the proportionate extent of its actual indemnity obligation hereunder.

. The Consultant must respond within 30 days, to the tender of any claim for defense and indemnity by the District, unless this time has been extended by the District.

Notwithstanding the forgoing, to the extent this Agreement is a "construction contract" as defined by California Civil Code Section 2782, as may be amended from time to time, such duties of consultant to indemnify shall not apply when to do so would be prohibited by California Civil Code Section 2782.

In the event that Consultant or any employee, agent, or subcontractor of Consultant providing services under this Agreement is determined by a court of competent jurisdiction or the California Public Employees Retirement System (PERS) to be eligible for enrollment in PERS as an employee of District, Consultant shall indemnify, defend, and hold harmless District for the payment of any employee and/or employer contributions for PERS benefits on behalf of Consultant or its employees, agents, or subcontractors, as well as for the payment of any penalties and interest on such contributions, which would otherwise be the responsibility of District.

Section 6. STATUS OF CONSULTANT.

6.1 **Independent Contractor.** At all times during the term of this Agreement, Consultant and any subcontractors shall be an independent contractor and shall not be an employee of District. District shall have the right to control Consultant only insofar as the results of Consultant's services rendered pursuant to this Agreement and assignment of personnel pursuant to Subparagraph 1.3; however, otherwise District shall not have the right to control the means by which Consultant accomplishes services rendered pursuant to this Agreement. Notwithstanding any other District, state, or federal policy, rule, regulation, law, or ordinance to the contrary, Consultant and any of its employees, agents, and subcontractors providing services under this Agreement shall not qualify for or become entitled to, and hereby agree to waive any and all claims to, any compensation, benefit, or any incident of employment by District.

6.2 **Consultant Not an Agent.** Except as District may specify in writing, Consultant or its subcontractors shall have no authority, express or implied, to act on behalf of District in any capacity whatsoever as an agent. Consultant shall have no authority, express or implied, pursuant to this Agreement to bind District to any obligation whatsoever.

Section 7. LEGAL REQUIREMENTS.

7.1 **Governing Law.** The laws of the State of California shall govern this Agreement.

- 7.2 **Compliance with Applicable Laws.** Consultant and any subcontractors shall comply with all laws applicable to the performance of the work hereunder.
- 7.3 **Other Governmental Regulations.** To the extent that this Agreement may be funded by fiscal assistance from another governmental entity, Consultant and any subcontractors shall comply with all applicable rules and regulations to which District is bound by the terms of such fiscal assistance program.
- 7.4 **Licenses and Permits.** Consultant represents and warrants to District that Consultant and its employees, agents, and any subcontractors have all licenses, permits, qualifications, and approvals of whatsoever nature that are legally required to practice their respective professions. Consultant represents and warrants to District that Consultant and its employees, agents, any subcontractors shall, at their sole cost and expense, keep in effect at all times during the term of this Agreement any licenses, permits, and approvals that are legally required to practice their respective professions.
- 7.5 **Nondiscrimination and Equal Opportunity.** Consultant shall not discriminate, on the basis of a person's race, religion, color, national origin, age, physical or mental handicap or disability, medical condition, marital status, sex, or sexual orientation, against any employee, applicant for employment, subcontractor, bidder for a subcontract, or participant in, recipient of, or applicant for any services or programs provided by Consultant under this Agreement. Consultant shall comply with all applicable federal, state, and local laws, policies, rules, and requirements related to equal opportunity and nondiscrimination in employment, contracting, and the provision of any services that are the subject of this Agreement, including but not limited to the satisfaction of any positive obligations required of Consultant thereby.

Consultant shall include the provisions of this Subsection in any subcontract approved by the Contract Administrator or this Agreement.

Section 8. TERMINATION AND MODIFICATION.

- 8.1 **Termination.** District may cancel this Agreement at any time and without cause upon written notification to Consultant.

Consultant may cancel this Agreement upon 20 days' written notice to District and shall include in such notice the reasons for cancellation.

In the event of termination, Consultant shall be entitled to compensation for services performed to the effective date of termination; District, however, may condition payment of such compensation upon Consultant delivering to District any or all documents, photographs, computer software, video and audio tapes, and other materials provided to Consultant or prepared by or for Consultant or the District in connection with this Agreement.

- 8.2 **Extension.** District may, in its sole and exclusive discretion, extend the end date of this Agreement beyond that provided for in Subsection 1.1. Any such extension shall require a written amendment to this Agreement, as provided for herein. Consultant understands and

agrees that, if District grants such an extension, District shall have no obligation to provide Consultant with compensation beyond the maximum amount provided for in this Agreement. Similarly, unless authorized by the Contract Administrator, District shall have no obligation to reimburse Consultant for any otherwise reimbursable expenses incurred during the extension period.

8.3 **Amendments.** The parties may amend this Agreement only by a writing signed by all parties.

8.4 **Assignment and Subcontracting.** District and Consultant recognize and agree that this Agreement contemplates personal performance by Consultant and is based upon a determination of Consultant's unique personal competence, experience, and specialized personal knowledge. Moreover, a substantial inducement to District for entering into this Agreement was and is the professional reputation and competence of Consultant. Consultant may not assign this Agreement or any interest therein without the prior written approval of the Contract Administrator. Consultant shall not subcontract any portion of the performance contemplated and provided for herein, other than to the subcontractors noted in the proposal, without prior written approval of the Contract Administrator.

8.5 **Survival.** All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating liability between District and Consultant shall survive the termination of this Agreement.

8.6 **Options upon Breach by Consultant.** If Consultant materially breaches any of the terms of this Agreement, District's remedies shall include, but not be limited to, the following:

8.6.1 Immediately terminate the Agreement;

8.6.2 Retain the plans, specifications, drawings, reports, design documents, and any other work product prepared by Consultant pursuant to this Agreement;

8.6.3 Retain a different consultant to complete the work described in Exhibit A not finished by Consultant; or

8.6.4 Charge Consultant the difference between the cost to complete the work described in Exhibit 'A' that is unfinished at the time of breach and the amount that District would have paid Consultant pursuant to Section 2 if Consultant had completed the work.

Section 9. KEEPING AND STATUS OF RECORDS.

9.1 **Records Created as Part of Consultant's Performance.** All reports, data, maps, models, charts, studies, surveys, photographs, memoranda, plans, studies, specifications, records, files, or any other documents or materials, in electronic or any other form, that Consultant prepares or obtains pursuant to this Agreement and that relate to the matters covered hereunder shall be the property of the District. Consultant hereby agrees to deliver those documents to the District upon termination of the Agreement. It is understood and agreed that the documents and other materials, including but not limited to

those described above, prepared pursuant to this Agreement are prepared specifically for the District and are not necessarily suitable for any future or other use. District and Consultant agree that, until final approval by District, all data, plans, specifications, reports and other documents are confidential and will not be released to third parties without prior written consent of both parties.

- 9.2 **Consultant's Books and Records.** Consultant shall maintain any and all ledgers, books of account, invoices, vouchers, canceled checks, and other records or documents evidencing or relating to charges for services or expenditures and disbursements charged to the District under this Agreement for a minimum of three (3) years, or for any longer period required by law, from the date of final payment to the Consultant to this Agreement.
- 9.3 **Inspection and Audit of Records.** Any records or documents that Section 9.2 of this Agreement requires Consultant to maintain shall be made available for inspection, audit, and/or copying at any time during regular business hours, upon oral or written request of the District. Under California Government Code Section 8546.7, if the amount of public funds expended under this Agreement exceeds \$10,000.00, the Agreement shall be subject to the examination and audit of the State Auditor, at the request of District or as part of any audit of the District, for a period of three (3) years after final payment under the Agreement.

Section 10 MISCELLANEOUS PROVISIONS.

- 10.1 **Attorneys' Fees.** If a party to this Agreement brings any action, including an action for declaratory relief, to enforce or interpret the provision of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees in addition to any other relief to which that party may be entitled. The court may set such fees in the same action or in a separate action brought for that purpose.
- 10.2 **Venue.** In the event that either party brings any action against the other under this Agreement, the parties agree that trial of such action shall be vested exclusively in the state courts of California in the County of Santa Cruz or in the United States District Court for the Northern District of California.
- 10.3 **Severability.** If a court of competent jurisdiction finds or rules that any provision of this Agreement is invalid, void, or unenforceable, the provisions of this Agreement not so adjudged shall remain in full force and effect. The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision of this Agreement.
- 10.4 **No Implied Waiver of Breach.** The waiver of any breach of a specific provision of this Agreement does not constitute a waiver of any other breach of that term or any other term of this Agreement.
- 10.5 **Successors and Assigns.** The provisions of this Agreement shall inure to the benefit of and shall apply to and bind the successors and assigns of the parties.

10.6 **Use of Recycled Products.** Consultant shall prepare and submit all reports, written studies and other printed material on recycled paper to the extent it is available at equal or less cost than virgin paper.

10.7 **Conflict of Interest.** Consultant may serve other clients, but none whose activities within the corporate limits of District or whose business, regardless of location, would place Consultant in a "conflict of interest," as that term is defined in the Political Reform Act, codified at California Government Code Section 81000 *et seq.*

Consultant shall not employ any District official in the work performed pursuant to this Agreement. No officer or employee of District shall have any financial interest in this Agreement that would violate California Government Code Sections 1090 *et seq.*

Consultant hereby warrants that it is not now, nor has it been in the previous 12 months, an employee, agent, appointee, or official of the District. If Consultant was an employee, agent, appointee, or official of the District in the previous twelve months, Consultant warrants that it did not participate in any manner in the forming of this Agreement. Consultant understands that, if this Agreement is made in violation of Government Code § 1090 *et seq.*, the entire Agreement is void and Consultant will not be entitled to any compensation for services performed pursuant to this Agreement, including reimbursement of expenses, and Consultant will be required to reimburse the District for any sums paid to the Consultant. Consultant understands that, in addition to the foregoing, it may be subject to criminal prosecution for a violation of Government Code § 1090 and, if applicable, will be disqualified from holding public office in the State of California.

10.8 **Solicitation.** Consultant agrees not to solicit business at any meeting, focus group, or interview related to this Agreement, either orally or through any written materials.

10.9 **Contract Administration.** This Agreement shall be administered by _____ ("Contract Administrator"). All correspondence shall be directed to or through the Contract Administrator or his or her designee.

10.10 **Notices.** Any written notice to Consultant shall be sent to:

Cal Engineering & Geology
6455 Almaden Expwy., Suite 100
San Jose, CA 950120

Any written notice to District shall be sent to:

District Clerk,
Pajaro Dunes Geologic Hazard Abatement District
2661 Beach Rd. Building #1
Watsonville, CA 95076

10.11 **Integration.** This Agreement, including the Scope of Work attached hereto and incorporated herein as Exhibit 'A' as described below represents the entire and integrated

agreement between District and Consultant and supersedes all prior negotiations, representations, or agreements, either written or oral.

10.12 Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be an original and all of which together shall constitute one agreement.

The Parties have executed this Agreement as of the Effective Date.

**PAJARO DUNES GEOLOGIC
ABATEMENT DISTRICT**

Attest:

District Clerk

Approved as to Form:

Michael F. Rodriguez, District Counsel

EXHIBIT 'A'

SCOPE OF WORK, BUDGET

CONSULTANT shall provide the following services to District:

Provide the District with Assistance in Permit Processing

- Assist District in preparing and submitting application, supporting documents and related correspondence for a seawall revetment plan to Santa Cruz Planning Department
- Assist District in preparing responses to questions about District revetment plan
- Attend meetings as requested between District and County Staff and/or Planning Commission
- Assist District with the preparation and submission of a permit application for seawall revetment to the California Coastal Commission (CCC)
- Attend meetings as requested between District and CCC Staff

Design Services

- Provide design services to update seawall repair design in response to reviewers comments

Cost Distribution and Engineer's Report

- Evaluate suitability of current District cost allocation formula and confirm or develop new or modified allocation formula if necessary
- Prepare and submit engineer's report to support assessments

Annual Inspection of Seawall

- Site visit to evaluate seawall and preparation of annual inspection report that includes photographic documentation of wall conditions

Emergency Services

- Site visits and inspection in response to reported damage
- Emergency engineering site response to storm events
- Coordination with Board, District consultants and suppliers for emergency repairs
- Monitoring of emergency repair work

General Services

- Attend Board meetings as requested
- Serve as District's "Engineer of Record" for purposes of submission of documents and other work requiring confirmation of engineer's review

All services referenced above will be billed on a time and materials basis, consistent with the rates presented in Exhibit B. (Or the rates can be incorporated into this document.)



SCHEDULE OF CHARGES FOR 2019

1. **Professional Services.** These are “all-up” rates, and include direct salary cost, overhead, general and administrative costs not separately accounted for, and profit. They shall remain in effect through December 31, 2019. Ongoing work continuing beyond December 31, 2019 will be invoiced at the applicable new year’s rate.

Personnel	Rate
Principal Engineer/Geologist	\$235 per hour
Associate Engineer/Geologist	\$210 per hour
Senior Engineer/Geologist	\$195 per hour
Project Engineer/Geologist	\$155 per hour
Staff Engineer/Geologist	\$140 per hour
Technician (Straight rate prevailing wage)	\$125 per hour
Senior GIS/CADD Specialist	\$135 per hour
UAS Manager	\$150 per hour
Project Assistant	\$ 90 per hour
Administration/Clerical	\$ 80 per hour
Special Inspector (Straight rate prevailing wage)	\$130 per hour
Deposition/Court Testimony (minimum 4 hours)	\$390 per hour

Laboratory Tests	Fee
Concrete Compressive Strength Testing	\$ 38 per test
Moisture Content (ASTM D 2216)	\$ 22 per test
Moisture & Density (ASTM D 4318)	\$ 30 per test
Atterberg Limits (ASTM D 4318)	\$196 per test
Compaction Curve, 4" mold (ASTM D 1557)	\$249 per test
Compaction Curve, 6" mold (ASTM D 1557)	\$308 per test
Wash over #200 Sieve (ASTM D 1140)	\$ 69 per test
Sieve Analysis with #200 Wash (ASTM D 422)	\$143 per test
Sieve & Hydrometer (ASTM D 422)	\$223 per test

Reimbursables	Rate
Mileage	\$0.75 per mile
Nuclear Gauge	\$ 55 per day
Inclinometer	\$190 per day
Vane Shear Device	\$109 per day

2. **Travel Time.** Travel time will be charged at regular hourly rates, not to exceed eight (8) hours per day.
3. **Expenses.** All direct costs will be billed at actual cost plus 10%, unless there is explicit agreement otherwise. Direct costs include:
- Third party services – Fees for subcontracted third party services (including drilling and backhoe services, special consultant fees, permits, special equipment rental, overnight mail or messenger services and other similar project related costs)
 - Travel expenses, including airfares, hotel, meals, ground transportation, and miscellaneous expenses.
 - Reproduction costs, including photocopy, blueprints, graphics, photo prints or printing.
4. **Subconsultants.** To the extent that it becomes necessary to use subconsultants, Client will be invoiced at cost plus 10% to cover insurance liability and other overhead costs.
5. **Terms of Payment.** Billings are payable upon presentation and are past due thirty (30) days from invoice date. All services and other direct costs are invoiced on a monthly basis. A finance charge of 1.5% (one and one-half percent) per month, or the maximum amount allowed by law, will be charged on past due accounts. The amount of any excise, value added, sales, or gross receipts tax that may be imposed shall be added to the compensation described above. In the event that Client fails to pay within sixty (60) days of receipt of invoice, Client agrees that such non-payment will be considered a breach of this agreement. Client further agrees that any court and or legal fees incurred in order to collect payment for past due invoices shall be their responsibility.
6. **Accounting.** The cost of normal accounting services for invoicing has been considered in the overhead expense which is included in the above hourly rates. Additional requirements for invoice verification, such as copies of time sheets, detailed expense records, and supplemental daily work justification will be billed on an hourly basis.

**BOARD OF DIRECTORS
PAJARO DUNES GEOLOGIC HAZARD ABATEMENT DISTRICT**

**Resolution Authorizing the Board President to Execute an Agreement for
Engineering Services and Designating a New Engineer of Record**

Resolution No. 2019-01

WHEREAS, in order to fulfill the District's primary obligation to provide and maintain structures that protect homes and property within the District from impacts associated with proximity to natural sources of water, the District has an ongoing need for engineering services; and

WHEREAS, the District currently has a non-exclusive contract for such services with ARUP; and

WHEREAS, procuring the services of an engineering firm with local contacts and with knowledge of the approval procedures imposed by local entities with jurisdiction over the District's activities is important to the District's prospective efforts; and

WHEREAS, Dan Peluso, principal engineer for Cal Engineering & Geology, Inc., who was previously involved in ARUP's preparation of various revetment plans for the District's Seawall, and who has had previous experience with Santa Cruz County Planning and the California Coastal Commission, has indicated a willingness to provide engineering services for the District.

NOW THEREFORE, BE IT HEREBY RESOLVED that the Board of Directors of the Pajaro Dunes Geologic Hazard Abatement District authorizes its President to execute a contract with Cal Engineering & Geology, Inc. for engineering services, on a task order basis, in a form to be prepared and/or approved by District Counsel.

BE IT FURTHER RESOLVED that the Board hereby designates Cal Engineering & Geology, Inc. as its Engineer of Record and directs staff to take any and all efforts necessary to formally establish and memorialize this designation.

BE IT FURTHER RESOLVED that the Board hereby directs Staff to take any and all efforts necessary to terminate the District's contract for services with ARUP, including preparation of a letter expressing the District's gratitude for years of good service.

PASSED AND ADOPTED by the Board of Directors of the Pajaro Dunes Geologic Hazard Abatement District of the County of Santa Cruz, State of California, this 13th day of April, 2019, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

President , Board of Directors

ATTEST _____
Sarah Mansergh, Clerk of the Board

MEMORANDUM

To: Sarah Mansergh, Clerk of the Board
Pajaro Dunes GHAD
2661 West Beach Road
Watsonville, California 95076

From: Dan Peluso, P.E., G.E.
Cal Engineering & Geology, Inc.
6455 Almaden Expressway, Suite 100
San Jose, California 95120

Date: September 12, 2019

RE: Seawall Document Review and Project Status
Pajaro Dunes Resort
Santa Cruz County, California
CE&G Document 190780.002

1.0 INTRODUCTION

This memorandum presents a summary of the project history since 2014, which was the timeframe of the last involvement on the project by Dan Peluso, a summary of a review of relevant documents, and a discussion of the anticipated next steps required to advance the project design and permitting. This memo was prepared at the request of the Pajaro Dunes Geologic Hazards Assessment District (PDGHAD). This memo does not present a discussion pertaining to an engineer's report or project funding.

2.0 DEVELOPEMENT DESCRIPTION & HISTORY OF REPAIR DESIGN

The Pajaro Dunes community includes private single-family residences, including detached residences as well as groups of townhouses and condominiums. These buildings were constructed along a narrow strip of land bounded by the Pacific Ocean on the southwest and by the Pajaro River on the northeast and southeast. The development is protected by an approximately 6,000-foot-long seawall constructed of large riprap along the ocean-side of the development and a steel sheet pile wall approximately 715 feet long along the inland Pajaro River side of the development.

The rock revetment has been repeatedly damaged by coastal erosion, occurring during relatively severe winter storms since its original construction at least two times: in 2002/2003 and in 2004. Following each damaging storm event, emergency repairs were implemented in the form of placing riprap in selected areas along the revetment. We are not aware of storm damage to the river wall.

The Pajaro Dunes development has in the past utilized the engineering services of Haro Kasunich & Associates (HKA) and Arup North America, Ltd. (Arup) for annual inspections as well as engineering design of repair alternatives. Key staff at HKA had worked on the original design and construction of the revetment since before the rock revetment was constructed in the late 1980s. HKA also prepared a number of seawall replacement concept designs, most of which required encroachment onto State Park lands and all of which were prohibitively expensive. More recently, Arup conducted a risk assessment of the seawall against coastal erosion and storm surge, followed by preparation of repair and maintenance recommendations and initial repair design for a segment of the seawall. This repair design has undergone initial reviews by stakeholder agencies, including the California Coastal Commission and the Santa Cruz County Planning Department.

Most of the communications with agency officials we are aware of has been with the California Coastal Commission (Ryan Moroney, Sharif Traylor) and Santa Cruz County Planning Department (Kathleen Molloy, Carolyn Burke, Jeff Nolan). Other agency stakeholders include the following agencies and individuals:

- Deidre Whalen, Monterey Bay National Marine Sanctuary
- Grace Kato, State Lands Commission
- Chris Spohrer and Todd Allen, California State Parks

We understand there are some new staff at the Santa Cruz County Planning Department, including Jeff Nolan, County Geologist, who replaced Joe Hanna upon his retirement. It is possible the new staff may have different and more favorable requirements for permit approval.

3.0 SELECTED RELEVANT DOCUMENTS

Below is a chronologic listing of the available documents provided and reviewed by CE&G that are relevant to permitting and repair of the seawall, with a brief description included:

May 2012 – A report by Arup dated May 14, 2012, presents a risk assessment of the seawall and a cost-benefit analysis of previous seawall repair/replacement design concepts prepared by HKA. This report concluded that a rigorous maintenance and repair approach was the most cost-effective means of repairing and maintaining the seawall.

August 2013 – A report and preliminary design plans dated August 30, 2013, were prepared by Arup. The submittal presents a repair scheme focused on the most vulnerable segments of the central portion of the seawall.

January 2014 – Letter by the California Coastal Commission (CCC) presenting their review of the Arup 2013 repair design, as well as provided comments and requests for additional information.

March 2014 – Letter by Santa Cruz County Planning Department (SCCPD) dated March 17, 2014, summarizing review comments by County staff. The review comment list is fairly extensive, including additional engineering analyses. This letter prompted the June 2014 meeting with County staff and Bill Lyons and Dan Peluso.

June 2014 – Notes by Arup dated June 11, 2014, summarizing key discussion points from meeting with Santa Cruz County Planning (SCCPD) Staff.

September 2014 – Status memo prepared by Arup dated September 9, 2014.

September 2014 – Letter by SCCPD dated September 17, 2014, presenting follow-up review comments by County staff. The letter reiterates requests for extensive additional engineering analysis.

November 2014 – Letter dated November 13, 2014, by Arup that provides a status of the project review by the CCC and SCCPD. The letter also summarizes items requested by SCCPD that had yet to be provided.

March 2015 – A report by Arup dated March 27, 2015, presents a revised repair design, initial phase.

April 2015 – Two letters by Arup, one to State Parks and one to State Lands Commission, requesting support for repair of portions of the seawall.

May 2015 – Letter by the CCC dated May 22, 2015, presenting their staff review of additional information submitted by Arup, and requests for additional information, including written correspondence from other agencies noted above stating approval of the repair approach.

November 2015 – Letter by State Parks Department dated November 5, 2015, stating support for temporary access across the beach to accomplish the seawall repair and recover buried riprap.

November 2015 – Report by Arup dated November 20, 2015, submitting requested additional information to the CCC.

December 2015 – Letter from CCC dated December 16, 2015, presents a summary a previously requested additional information that had not yet been provided. This letter is attached for reference.

January 2016 – A letter by Arup dated January 12, 2016, to Santa Cruz County Planning Department presents a summary of a change in the repair concept and a request to meet with County Planning staff. **The change presented was to permit a greater length of repair than previously submitted.** This letter is attached for reference.

January 2016 – Letter from California State Lands Commission dated January 29, 2016, that acknowledges the previous request for project support and provides a determination that no lease is required for the proposed repairs. **This letter essentially provides the requested project support.**

We are not aware of additional correspondence or design submittals prepared after January 2016 that pertains to seawall repairs. Thus, over three years have passed since that time and it is our understanding that the seawall repair and obtaining approval for repairs has not advanced.

4.0 RECOMMENDED NEXT STEPS

We recommend the following steps be taken next to work towards repair of selected portions of the seawall and recovery of buried riprap on the State Parks property (beach):

1. Because of some staff changes at the County Planning Department, an in-person meeting with PDGHAD Board Member(s) and Dan Peluso should plan to meet with

County Staff to discuss the most recent information request. One of the aims should be to convince them to rescind some of the more onerous requirements, including a wave run-up study, which doesn't seem appropriate for a facility repair. A listing of the missing items is presented in the attached November 13, 2014, letter by Arup.

2. Following the most recent document request from the California Coastal Commission, the additional requested information should be compiled and provided for their review. The requested additional information is listed in the attached December 16, 2015, letter by CCC.
3. Based on the review comments from the CCC and the SCCPD, I believe the CCC comments will be easier to generate/compile and the requirements of the County will require considerably more effort.

5.0 LIMITATIONS

CE&G has performed its services in a manner consistent with the level of care and skill ordinarily exercised by a member of the same profession currently practicing in the same location under similar circumstances. No warranty or representation, either expressed or implied, is included or intended hereunder.

6.0 CLOSURE

We trust this report provides you with the information necessary to proceed. If you have any questions, please contact us

Sincerely,

CAL ENGINEERING & GEOLOGY, INC.



Dan Peluso, G.E. 2367
Principal Engineer

Attachments:

- November 13, 2014, letter by Arup with highlights
- December 16, 2015, letter by CCC with highlights

Your ref
Our ref 217563
File ref 4-01

ARUP

Mr. Michael Rodriquez
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United States of America
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jeff.dunn@arup.com
www.arup.com

November 13, 2014

Dear Mr. Rodriquez

Pajaro Dunes GHAD Comments on County of Santa Cruz Planning Department September 17, 2014 Letter

As requested by Mr. Bill Lyons in his e-mail, dated October 20, 2014, we have completed a review of the subject letter on the Review of Geotechnical/Coastal Engineering Reports for Pajaro Dune (sic) GHAD Zone 1. The letter is presented in three sections of comments:

1. Review of the Haro, Kasunich and Associates (HKA) Report, dated February 2008
2. Risk Assessment of Seawall Mitigation alternatives
3. Un-answered comments for previous review of the Arup repair design, dated March 17, 2014

Based upon our review we have the following comments.

Comment 1. On page 2 of 7 of the letter there is an acknowledgment that the County has not been involved in discussions between the State Parks, the Pajaro Dunes GHAD (PDGHAD), and the Coastal Commission Staff over the proposed work. Thus they have not been party to discussions and the direction that the work has been moving in and restrictions to activities that have been imposed by these other agencies.

Comment 2. The letter notes that the HKA report was prepared to support enhancement of the sea wall with construction of a sheet pile wall. The letter makes no comment related to the adequacy of the modifications proposed by HKA, but notes that a number of analyses indicated in the report and that support its conclusions are not sufficient though HKA assumed “conservative” estimates of hazard properties. Included in the analyses deemed to be insufficient or commented on are:

1. Sand deficit analysis;
2. Sea level rise;
3. Beach scour episodes;
4. Wave run-up analyses; and
5. Size of quarry stone.

Comment 3. The County notes very different conclusions between the HKA report and the Arup risk assessment, but does not side with one report or the other. Instead in the 3rd paragraph of section 2.1.1 it is stated that both the Arup and HKA reports do not appear to have sufficient data, analysis, and conclusions to support the conclusions of their risk analysis.

Comment 4. The County indicates that appropriate analyses and selected mitigation of the seawall must be supported by more rigorous analyses that:

1. Follow design standards of the Local Coastal Plan, the County Grading and Geologic Hazards Codes, and the FEMA coastal development standards;
2. Account for sea level rise and climate change based on the “best Science” identified by the Coastal Commission;
3. Deals with existing fugitive rock on State Property and prevents further migration of rock; and
4. Provides a maintenance heuristic, including objective inspection and repair selection criteria.

Comment 5. There is also a listing of un-answered comments from a previous review letter, dated March 17, 2014. These include the following:

1. Providing a transfer of responsibility for the geotechnical engineer and engineering geologist for the work of HKA to Arup;
2. Submittal of an engineering geology report that addresses costal conditions as required by County Code Section 16.20.115 *Shoreline protection structures*;
3. Providing back-up material that has been requested for the slope stability analyses referenced in the Arup repair design;
4. Performing wave run-up analyses considering level rise and accurately defining the oceanographic conditions that affect the replacement sea walls;
5. Performing erosion analyses of dense beach sand;
6. Preparing design calculations for sizing of rock for the replaced riprap seawalls;
7. Providing further information related to factor of safety against sea wall stability and potential for collapse during extreme erosive storm conditions; and
8. Evaluating the proposed replacement with regard to stability against overtopping of the wall.

In summary, the County calls into question the conclusions of both HKA and Arup and requests a significant amount of additional work and design standard compliance to support the conclusions of both the risk assessment and details of the repair design. Arup notes that to date our discussions with other agencies have not questioned these items or requested submittal of significant additional information. It would have been much better if the County had provided input previously rather than at this time when the process toward mitigation through annual inspection and targeted repair had been selected. Completion of the supplemental analyses requested will add significant engineering cost to the project. The County seems to be attempting to reopen the issue of potential needed extensive modification of the seawall rather than just commenting on the proposed repair scheme presented in the Arup August 30, 2013 report.

It is our opinion that the PJGHAD should push for permitting and implementation of the planned emergency repairs in the design submittal with the current minor modifications. If further analyses and more extensive mitigation design should turn out to be appropriate and necessary that can be implemented at a later time.

One other item to note, based upon discussions with geotechnical colleagues at another firm who have done work for other GHADs, is that given the provisions of the enabling legislation that allows for the formation of GHADs, it may be that the County does not have jurisdiction over the subject seawall and protection facilities. We have not looked into this possibility, as it is something potentially better evaluated by legal counsel.

Should you have any questions or wish to discuss this matter further, please contact the undersigned at (415) 963-3860.

Yours sincerely



R. Jeffrey Dunn, PhD, PE, GE, DGE
Principal

cc Bill Lyons
Wendy Cumming
Bob Moore

CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
PHONE: (831) 427-4863
FAX: (831) 427-4877
WEB: WWW.COASTAL.CA.GOV



December 16, 2015

Mr. Jeffrey Dunn
ARUP
560 Mission Street, Suite 700
San Francisco CA 94105

Subject: *Coastal Development Permit Application Number 3-13-1361 (Seawall Repairs) in Pajaro Dunes development, Santa Cruz County*

Dear Mr. Peluso:

On November 24, 2015, we received additional information regarding the above-referenced coastal development permit (CDP) application that you submitted on behalf of the Pajaro Dunes Geologic Hazards Abatement District (PDGHAD). The originally proposed project included deepening and reconstructing the toe of the revetment adjacent to lots 97, 98, and 99, which are located in the southern end of the Pajaro Dunes development, and restacking the existing riprap in these locations to its original configuration. Information submitted on April 28, 2015 included an expansion of the project to include additional revetment work adjacent to lots 94, 95, 100, 101, 102, 103, 104, 107, 1, 3, 6, 8, and 9. The latest set of application materials request that the project now be limited to repairing the revetment only in the locations where riprap is buried and required to be removed (i.e. the 445 tons of rip rap located on State Parks property), and using that riprap to repair the revetment protecting lots 97 through 104.

Commission staff acknowledges and appreciates the steps the PDGHAD has taken to submit the necessary documentation and fulfill all of the CDP application requirements. We have reviewed the materials that you have submitted to date and are in need of additional information to adequately analyze the proposed project for Coastal Act conformance. Please note that the following additional information and materials are required to facilitate our analysis of the application and enable us to file the application as complete.

Please submit the following:

- 1. Project Description.** The revised project description separates the proposed project into two separate parts but the application appears to only be seeking approval for the development identified in Part 1 of the project. Please clarify whether the application is seeking approval for both parts, or just Part 1 identified in the project description. The application materials also note that the project proposes a "deepening of the wall toe" and the use of "Triton marine baskets." Please submit two sets of full sized plans depicting the proposed project, including these features.
- 2. Proof of Applicant's Legal Interest in the Property:** According to the application form submitted, the project Applicant is listed as Pajaro Dunes GHAD. Please provide evidence

that the Applicant has legal authority to apply for this proposed project, including, but not limited to legal evidence of the GHAD's formation in 1998.

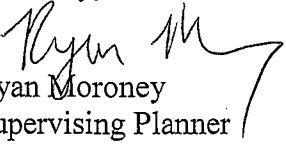
3. **Geologic and Geotechnical Reports:** The proposed project appears to rely on geologic reports from 2008, which are not specific to the proposed development activities. Our May 22, 2015 letter requested an updated geologic and geotechnical report specific to the proposed project, and identified specific information required to process your application. Your November 20, 2015 letter asserts that this information does not seem necessary or appropriate given the scope of the project. We respectfully disagree and reiterate our original request of May 22, 2015. Moreover, based on the project description, and specifically the fact that the project seeks a deepening of the wall toe and installation of Triton marine baskets, we would likely not view this project as repair and maintenance as those terms or defined in the Coastal Act in implementing regulations. The geologic and geotechnical reports should describe why these project elements are necessary, and what alternatives have been evaluated. Finally, we may have additional informational requirements once we receive the above reports and erosion rate and sand content information.
4. **State Lands Commission:** Your letter indicates that you are in contact with the State Lands Commission (SLC) regarding this project. Please provide written evidence from the SLC that no approval is needed.
5. **Appendix B (Local Agency Review Form):** Your letter indicates that you are in contact with the County regarding its review of the proposed project. Please submit a completed Appendix B form (enclosed), and return the completed form to our office.
6. **Updated Biotic Report.** We have received the updated biotic report dated October 14, 2015. Please provide a copy in electronic format for review by the Commission's staff ecologist. We may have additional informational requirements once the materials are reviewed by our technical staff.

When submitting items related to the requested material as outlined, please refer to the CDP application number listed above for the Pajaro Dunes seawall repairs project (3-13-1361). We will hold this application for six months from today's date (i.e., until June XX, 2016) pending receipt of these materials. After all of the above-listed materials have been received, the Pajaro Dunes GHAD application will again be reviewed and will be filed if it contains materials sufficient for a thorough and complete review (Government Code Section 65943(a)). Please note that there may be additional materials necessary for filing purposes depending upon the nature of the information provided pursuant to the above-listed materials, particularly the permit history, geotechnical and project plan information. Please submit all of the requested materials at the same time. If all of the above-listed materials are not received within six months, then CDP Application 3-13-1361 will be considered withdrawn and will be returned to you. This submittal deadline may be extended for good cause if such request is made prior to June XX, 2016.

Jeffrey Dunn
CDP 3-13-1361 (Pajaro Dunes Seawall Repair)
December 16, 2015
Page 3

I look forward to working with you on this project. Please do not hesitate to contact me at (831) 427-4863 if you have any questions regarding the application and the above information requests.

Sincerely,


Ryan Moroney
Supervising Planner
Central Coast District Office

cc: Sharif Traylor, Enforcement Officer, California Coastal Commission
Grace Kato, State Lands Commission (via email)
Chris Spohrer, California State Parks (via email)

Enclosure (Appendix B – Local Agency Review Form)

MEMORANDUM

To: Sarah Mansergh, Clerk of the Board
Pajaro Dunes GHAD
2661 West Beach Road
Watsonville, California 95076

From: Dan Peluso, P.E., G.E.
Cal Engineering & Geology, Inc.
6455 Almaden Expressway, Suite 100
San Jose, California 95120

Date: September 6, 2019

RE: Annual Inspection of Rock Revetment and River Wall
Pajaro Dunes Resort
Santa Cruz County, California
CE&G Document 190780.001

1.0 INTRODUCTION

This report presents the results of observations from our annual inspection of the rock revetment (seawall) and river wall at the subject property. The inspection services presented in this report were undertaken at the request of the Pajaro Dunes Geologic Hazards Assessment District (PDGHAD). This report presents a summary of our first annual inspection report of the rock revetment and river wall. Three previous annual inspections were performed by Arup. The results of the previous annual inspections are presented in their reports, dated January 9, 2012; April 29, 2013; and November 7, 2014.

2.0 DEVELOPEMENT DESCRIPTION

The Pajaro Dunes community includes private single-family residences, including detached residences as well as groups of townhouses and condominiums. These buildings were constructed along a narrow strip of land bounded by the Pacific Ocean on the southwest and by the Pajaro River on the northeast and southeast. We understand development of the community began in the 1960s and continued into the 1970s. Following several episodes of severe coastal erosion in the 1970s and 1980s, approximately 6,000 feet of rock revetment was constructed in three segments between 1986 and 1988 along the

ocean-side of the development. In addition, there is a steel sheet pile wall approximately 715 feet long that was constructed along the inland Pajaro River side of the development in 2003. This steel sheet pile wall is referred to as the “river wall”.

Over a 50-foot width adjacent to the rock revetment, buildings occupy over 50 percent of the land area. The effect of this high density of roofscapes is to concentrate rainwater flows at the roof perimeters, where downspouts are located. No special measures to divert rainfall inland have been implemented to date.

The rock revetment is comprised of approximately 110,000 tons of riprap. The top of the revetment varies in elevation from 19.5 to 22.0 feet above mean sea level and the base of the revetment is at elevation -2.0 feet mean sea level (NGVD 1929). The rock revetment has been repeatedly damaged by coastal erosion, occurring during relatively severe winter storms since its original construction at least two times: in 2002/2003 and in 2004. Following each damaging storm event, emergency repairs were implemented in the form of placing riprap in selected areas along the revetment. The repaired area in 2003 measured a total length of approximately 420 feet of revetment using approximately 675 tons of riprap. The repaired area in 2004 measured a total length of approximately 55 feet of revetment using approximately 185 tons of riprap. In relation to the overall length of the revetment, both of these storm events would appear to us to have caused limited damage, affecting a total of approximately 8 percent of the overall revetment length and less than 1 percent of the overall volume of riprap comprising the revetment. We are not aware of storm damage to the river wall.

The Pajaro Dunes development has in the past utilized the engineering services of Haro Kasunich & Associates (HKA) and Arup North America, Ltd. (Arup) for annual inspections as well as engineering design of repair alternatives. Key staff at HKA had worked on the original design and construction of the revetment since before the rock revetment was constructed in the late 1980s. More recently, Arup prepared repair and maintenance recommendations and initial repair design for a segment of the seawall. This repair design has undergone initial reviews by stakeholder agencies.

A California Coastal Commission letter dated May 9, 2007, notes their request for a photographic record of the revetment, which should as a minimum include photographs of the entire length of the revetment. We consider this request as guidance for the scope of this annual inspection.

3.0 SUMMARY OF OBSERVATIONS

3.1 GENERAL

The purpose of the annual inspection is to observe and document the condition of the existing rock revetment (seawall) and river wall adjacent to the Pajaro Dunes Resort property. This will provide a basis for evaluating the impact of future coastal erosion. The current report contains the most recent inspection results for the rock revetment and the river wall.

3.2 SITE OBSERVATIONS

We performed our inspection on July 2, 2019. Our site observations included taking photographs of the rock revetment and river wall at the Pajaro Dunes development. Our inspection generally included observing and photographing the revetment and river wall from the beach-side of the residences, as well as photographing other features of the revetment and river wall. A site plan showing the approximate location of the photos (referenced by photograph number) is presented in Figures 2A and 2B. Selected photos are appended to this memorandum.

The revetment is approximately 6,000 feet long and is relatively straight for most of its length, except on the south end, where it curves around the “Pelican” portion of the development and terminates after turning inland for a distance of about 200 feet. At this point, a sheet pile wall also referred to as “the river wall”, trends for about 500 feet around the Pelican townhouses, curves around the townhouses and terminates about 200 feet up the slough. The sheet piles are 58 feet deep, with 5 feet above ground.

The revetment ranges in height between about 10 to 15 feet above the beach. The top of the revetment varies in elevation from approximately 19.5 to 22 feet above mean sea level (NGVD 1929 Datum). Some of the revetment on the north end is covered with about 1 to 2 feet of sand. We understand that the sand covering of the revetment was part of the original construction and that coastal erosion has removed a lot of the sand.

3.3 SOME KEY OBSERVATIONS

The greatest issues regarding the revetment and its performance during prior storm events still exist in the vicinity of previous emergency repairs to the rock revetment. These emergency repairs consisted of placement of riprap at the exposed toe of the seawall to help stabilize the seawall during severe coastal erosion events. As previously discussed by Arup (2014), the revetment wall near various lots including lots 15, 54, 55, 56, 59, 98, and 99 was either more prone to erosion or was already showing signs of erosion. During our

site reconnaissance, Lots 54, 59, 90, and 99 showed minimal changes from the previous annual inspections by Arup. Lots 55 and 56 had lost a considerable amount of sand from around the rip rap, and lot 15 appeared to have less rip rap at its base. The sand erosion at lot 98 has created a knickpoint, which is encroaching on to the property. The above-mentioned lots may be affected as the revetment wall moves and is eroded further.

We understand this damage to the rock revetment resulted from coastal erosion during storms in late 2002/early 2003 and also in early 2004, during which a 400-foot-wide section of the revetment was affected in the vicinity of Lots 98 through 104 and a 135-foot-wide section was affected in the vicinity of Lots 15, 54, and 55, inclusive. Apparently, during this storm event, much of the beach was severely eroded and the toe of the revetment was exposed and under-cut along these sections. The sand cover in this section has been eroded such that only the top portion of the revetment wall is still covered with sand. This sand layer may eventually be completely removed by erosion.

We did not observe damage to the river wall adjacent to the Pelican Point townhouses. In each of the site visits, both recent and in past years, the condition of the river wall and adjacent beach area has remained relatively constant, as shown in the photos appended. However, as shown in the photos, we understand that this accumulation of sand at the mouth of the Pajaro River has created a flooding hazard in some years by impeding high winter river flows.

3.4 MONITORING

We recommend the condition of the revetment be observed on a regular (annually or as required) basis and after major storm events especially after significant changes are noted by residents.

We recognize some houses are in a more vulnerable position due to their proximity to the top of the revetment. Thus, if the revetment is severely damaged by coastal erosion during a storm event, the homes that are closest to or directly over the revetment will likely have a higher probability of being damaged.

3.5 CONCLUSIONS AND DISCUSSION

Based on observations made during our inspection, we offer the following solutions to be considered in future efforts to mitigate the effects of coastal erosion:

1. During the inspection, we did not identify areas of the rock revetment requiring immediate maintenance or corrective action.

2. As noted in previous inspection reports, the revetment adjacent to Lots 97 thru 104 and Lots 15, 54, and 55, inclusive, should receive maintenance at the discretion of PDGHAD in the form of disassembling and re-assembling the rock revetment. This work is not of an urgent nature and can be done in the normal course of business. The reconstruction of the existing rock revetment in this area will require, as a minimum, approval from the California Coastal Commission and access permission from the State of California Parks Department. In addition, design plans and specifications have been prepared, which may require updates. In terms of previous expenditures that we are aware of by PDGHAD for seawall maintenance, this is considered a small to moderate expense.
3. Control of runoff discharged from downspouts for residences adjacent to the rock revetment should be considered to minimize seepage below the rock revetment that may cause migration of the finer soils below the revetment. This is considered a relatively small expense.

4.0 LIMITATIONS

CE&G has performed its services in a manner consistent with the level of care and skill ordinarily exercised by a member of the same profession currently practicing in the same location under similar circumstances. No warranty or representation, either expressed or implied, is included or intended hereunder.

This report was prepared by CE&G at the request of and for the benefit of Pajaro Dunes GHAD ("PDGHAD") in CE&G's contractual capacity as geotechnical engineer. The limited purpose of the report is to present CE&G's observations of the condition of the existing rock revetment and steel sheet pile river wall at the subject site. This report is limited to this purpose and does not address the structural stability of the buildings; serviceability of the buildings; or the current or intended functions of the buildings. CE&G did not conduct geotechnical or structural reviews of the buildings. This report shall not expand CE&G's liability to parties outside of its contractual obligations.

5.0 CLOSURE

We trust this report provides you with the information necessary to proceed. If you have any questions, please contact us

Sincerely,

CAL ENGINEERING & GEOLOGY, INC.



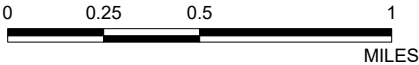
Dan Peluso, G.E. 2367
Principal Engineer

Attachment A. Photo Documentation



BASEMAP REFERENCE

1. ORTHOIMAGERY FROM SANTA CRUZ COUNTY, 2016.
2. STREET CENTERLINES FROM CALTRANS CALIFORNIA ROAD SYSTEM, DOWNLOADED ON 15 MAY 2016.



M:\2019\190780-PajaroDunesGHAD-SeawallMonitoring\GIS\ArcGIS\190780-Fig1-SiteLocations.mxd: 8/28/2019: kdrozynska



6455 Almaden Expwy.
Suite 100
San Jose, CA 95120
Phone: (408) 440-4542

PAJARO DUNES SEAWALL
ANNUAL INSPECTION OF ROCK REVETMENT AND RIVER WALL
SANTA CRUZ COUNTY, CALIFORNIA

SITE LOCATION MAP

190780

SEPTEMBER 2019

FIGURE 1



MATCHLINE - SEE FIGURE 2B

BASEMAP REFERENCE

1. PHOTOGRAPHS TAKEN ON 07/02/2019.
2. PARCEL DATA FROM COUNTY OF SANTA CRUZ GEOGRAPHIC INFORMATION SERVICES, ACCESSED ONLINE ON 08/03/2018.
3. ORTHOIMAGERY FROM SANTA CRUZ COUNTY (2016).

LEGEND

86 ● PHOTO NUMBER AND LOCATION



6455 Almaden Expwy.
Suite 100
San Jose, CA 95120
Phone: (408) 440-4542

PAJARO DUNES SEAWALL
ANNUAL INSPECTION OF ROCK REVETMENT AND RIVER WALL
SANTA CRUZ COUNTY, CALIFORNIA

PHOTO LOCATION MAP (1 OF 2)

190780

SEPTEMBER 2019

FIGURE 2A

M:\2019\190780-PajaroDunesGHAD-SeawallMonitoring\GIS\ArcGIS\190780-Fig2-PhotoLocations.mxd, 8/28/2019, kdrozynska

M:\2019\190780-PajaroDunesGHAD-SeawallMonitoring\GIS\ArcGIS\190780-Fig2-PhotoLocations.mxd, 8/28/2019, kdrozynska

MATCHLINE - SEE FIGURE 2A



BASEMAP REFERENCE

1. PHOTOGRAPHS TAKEN ON 07/02/2019.
2. PARCEL DATA FROM COUNTY OF SANTA CRUZ GEOGRAPHIC INFORMATION SERVICES, ACCESSED ONLINE ON 08/03/2018.
3. ORTHOIMAGERY FROM SANTA CRUZ COUNTY (2016).

LEGEND

86 ● PHOTO NUMBER AND LOCATION



6455 Almaden Expwy.
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PAJARO DUNES SEAWALL
ANNUAL INSPECTION OF ROCK REVETMENT AND RIVER WALL
SANTA CRUZ COUNTY, CALIFORNIA

PHOTO LOCATION MAP (2 OF 2)

190780

SEPTEMBER 2019

FIGURE 2B



Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9



Photo 10



Photo 11



Photo 12



Photo 13



Photo 14



Photo 15



Photo 16



Photo 17



Photo 18



Photo 19



Photo 20



Photo 21



Photo 22



Photo 23



Photo 24



Photo 25



Photo 26



Photo 27



Photo 28



Photo 29



Photo 30



Photo 31



Photo 32



Photo 33



Photo 34



Photo 35



Photo 36



Photo 37



Photo 38



Photo 39



Photo 40



Photo 41



Photo 42



Photo 43



Photo 44



Photo 45



Photo 46



Photo 47



Photo 48



Photo 49



Photo 50



Photo 51



Photo 52



Photo 53



Photo 54



Photo 55



Photo 56



Photo 57



Photo 58



Photo 59



Photo 60



Photo 61



Photo 62



Photo 63



Photo 64



Photo 65



Photo 66



Photo 67



Photo 68



Photo 69



Photo 70



Photo 71



Photo 72



Photo 73



Photo 74



Photo 75



Photo 76



Photo 77



Photo 78



Photo 79



Photo 80



Photo 81



Photo 82



Photo 83



Photo 84



Photo 85



Photo 86



Photo 87

APPLICATION FOR APPOINTMENT TO THE PAJARO DUNES GEOLOGIC HAZARD ABATEMENT DISTRICT

Instructions

If you are interested in serving on the Pajaro Dunes Geologic Hazard Abatement District Board of Directors, please send this application or send a CV/resume and letter of interest to:

PDGHAD District Clerk
pdghad@gmail.com

or

2661 Beach Rd. Building #1
Watsonville CA 95076

Contact Sarah Mansergh, District Clerk, at 831-818-9253 with any questions.

Your application will be reviewed and you will be contacted shortly for a phone interview. Board appointments will be made at the February 2nd regular meeting.

Thank you for your interest.

.....
Pajaro Dunes Geologic Hazard Abatement District

DATE: 8/23/2019

NAME: Raphael Shannon Kraw

RESIDENCE ADDRESS: 50 Shearwater & 76 Puffin Lane

BUSINESS OR MAILING ADDRESS: 605 Ellis St., Ste. 200, Mountain View, CA 94043

PHONE (DAYTIME): 415.310.4200 PHONE (EVENING): 415.310.4200

EDUCATION			
Institution	Major	Degree	Year
Hastings College of the Law		Juris Doctor	

WORK / VOLUNTEER EXPERIENCE				
Organization	Address	Position	From	To
McCarthy, Jonson and Miller LC	San Francisco	President	1978	2014
Kraw Law Group, APC	Mountain View	Of Counsel	2015	Present

STATEMENT OF QUALIFICATIONS:

Please briefly describe your qualifications and why you are interested in serving on the Board of Directors.

I was admitted to the CA Bar in 1978. Please find the attached brief description regarding my work.

I have spent my career representing labor organizations and multiemployer benefit trusts.

My clients are highly regulated entities with complex issues, both in their operations (financial, real estate, contracts, and providing benefits) and compliance with their regulatory structures. I am very experienced in working with groups who need to reach consensus to operate effectively.

I have not in the past served in any elected position, but am familiar with the Brown Act and other requirements.

I am a homeowner at Pajaro Dunes, do not have any problem understanding technical information, and am very interesting in the GHAD issues.