## REPORT ON <br> DRAFT PAJARO DUNES GEOHAZARD ABATEMENT DISTRICT (PDGHAD) ENGINEERS REPORT ISSUE NO 04 SANTA CRUZ COUNTY, CALIFORNIA

by
Haley \& Aldrich, Inc.
San Jose, California
for
PAJARO DUNES GEOHAZARD ABATEMENT DISTRICT
Santa Cruz County, California

File No. 0207516-000
March 2024

PAJARO DUNES GEOHAZARD ABATEMENT DISTRICT<br>2661 West Beach Road<br>Santa Cruz County, California 95076<br>Attention: Sarah Mansergh<br>Subject: DRAFT PDGHAD Engineers Report Issue No 04 Pajaro Dunes<br>Santa Cruz County, California

Ladies and Gentlemen:

The undersigned submits this Engineer's Report as directed by the Board of the Pajaro Dunes Geologic Hazard Abatement District (PDGHAD) pursuant to Section 54703 et seq. of the California Government Code. This report provides updated assessment amounts that will be the subject of a 2024/2025 assessment election. The assessment comprises one component/project: A "Rock Revetment Return to Original Condition" Expense Reserve to establish a source of funding to return the existing rock revetment to its original design geometry. The work items will include the following:

- Removal of rock material temporarily added to State Park Lands during the early 2000s,
- Removal of rock material temporarily added to Pajaro Dunes property during the early 2000s and
- Restacking of existing revetment rock material.

Maintaining the original design of the revetment is an activity required under the PDGHAD "Operation and Maintenance Manual." The work or project is considered part of the repair and maintenance of the revetment and is referred to within this report as "Rock Revetment Return to Original Condition".

The project costs, which are the subject of this report, are briefly described in Section 1. This Report includes five parts, as follows:

1. Description of the return to original condition project costs.
2. An estimate of the cost for work on the rock revetment.
3. An assessment of the estimated cost to repair and maintain the rock revetment for each benefited parcel of land within the assessment district.
4. A statement of the previously applied and utilized method by which the amount is proposed to be assessed against each parcel.
5. Rock Revetment Maintenance Plans- showing all of the parcels of real property directly impacted by the proposed work and within this assessment district.
6. Costs and work outlined in this report DO NOT include ongoing maintenance, annual inspections, or other activities outside the specific project described herein.

This detailed Engineer's Report was prepared under Article XIII D of the California Constitution by Dan Peluso, a Senior Principal Engineer at Haley \& Aldrich, Inc. (Haley \& Aldrich), a registered professional engineer licensed by the State of California.


Signature and Stamp pending finalization-which will not occur until this document is voted on and approved by the PDGHAD

Sincerely yours,
HALEY \& ALDRICH, INC.

Dan Peluso, P.E., G.E.
 SubmittalText.docx
List of Tables ..... iii
List of Appendices ..... iii

1. Description of Pajaro Dunes Rock Revetment Return to Original Conditions Project Expenses ..... 1
1.1 SITE DESCRIPTION ..... 1
1.1.1 Pajaro Dunes Development ..... 1
1.1.2 Existing Revetment Configuration ..... 1
1.1.3 Existing Revetment Damage ..... 2
1.2 PROJECT DESCRIPTION ..... 2
2. Cost Estimate ..... 3
3. Cost Allocation Method ..... 6
4. Cost Allocation ..... 8
5. Parcels Map \& Revetment Project Plan ..... 18

## List of Tables

## Table No.

I

II
Summary of Annual Assessments - Fiscal Years 2024/2025 to 2034/2035 (10years)

Proposed Assessment and Fiscal Years 2024/2025 to 2034/2035 GHAD Budget by Benefit Categories

## List of Appendices

Appendix Title

A Rock Revetment Project Plans

## 1. Description of Pajaro Dunes Rock Revetment Return to Original Conditions Project Expenses

The content of this Section of the Engineer's Report and all following sections is being submitted pursuant to Article XIII D, Section 4 of the California Constitution.

A description of the improvement to be maintained or repaired with monies to be deposited in a "Rock Revetment Return to Original Condition Cost/Expenses and Reserve Fund" related to improvements in District Zone 1 (the District) is described in this section. The cost estimation presented in this report addresses the costs necessary to maintain and repair the rock revetment seawall (Zone 1) located at the Pajaro Dunes community in Watsonville, California, due to Santa Cruz County (the County) and State Park requirement for the District to remove rock placed during the 2002-2004 emergency storm response and to maintain the rock revetment design conditions.

The improvements addressed in this report are for the approximately 6,000-foot-long rock revetment on the ocean side of the development, comprised of approximately 110,000 tons of riprap, that was installed between 1986 and 1988. The rock revetment is located in PDGHAD Zone 1. Therock revetment has been partially damaged by several storm events by coastal erosion during relatively severe winter storms such as those that occurred from 2002 to 2004. Following each damaging storm event, emergency repairs were implemented by placing riprap in selected areas along the revetment.

Funds in the aforesaid Rock Revetment Maintenance and Repair Reserve Fund will not be used for maintenance or repair of the other major improvement in the District, the steel sheet pile river wall approximately 715 feet long constructed along the Pajaro River adjacent to the Pelican Point condominiums. The river wall is located in PDGHAD Zone 2, and is not addressed within this report.

District expenses include costs for permits, pre- and post-construction condition and biologic surveys, contracted removal of early 2000s rock and restacking, construction management, stair repairs, and construction costs associated with standards of practice, professional services (such as those necessary for the District accountant, clerk, and Negal counsel), assessment calculations, District elections, board and District public outreach in support of the improvements referenced below.

### 1.1 SITE DESCRIPTION

### 1.1.1 Pajaro Dunes Development

The Pajaro Dunes community comprises private single-family residences, including detached residences and groups of townhouses and condominiums. These buildings were constructed along a narrow strip of land bounded by the Pacific Ocean on the southwest, the Pajaro River on the southeast, and Watsonville Slough on the northeast. Development of the community began in the late 1960s.

### 1.1.2 Existing Revetment Configuration

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, a steel sheet pile wall approximately 715 feet long was constructed along
the inland Pajaro River side of the development in 2003. This steel sheet pile wall is called the "river wall."

The 6,000-foot-long rock revetment is comprised of approximately 110,000 tons of rock slope protection (RSP). In general, the rocks vary between 1 foot and 3 feet as measured in their longest dimension. The average rock is estimated to weigh about 8 tons.

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 29); this is at approximate elevation +0.7 feet (NAVD 88). The revetment face is sloped between $1.5 \mathrm{H}: 1 \mathrm{~V}$ (horizontal: vertical) and $2.0 \mathrm{H}: 1 \mathrm{~V}$. The toe of the rock revetment was constructed adjacent to the property line, separating the Pajaro Dunes development from the State of California Park Lands.

Pedestrian access from Pajaro Dunes properties to the beach within the limits of the project is provided by four timber boardwalks constructed in common areas between lots 4 and 5, 10 and 11, 93 and 94, and 98 and 99. The boardwalks lead to timber stairs that descend over the rock slope protection revetment to the beach below.

### 1.1.3 Existing Revetment Damage

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. A 400-footwide 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 . During the 2004 storm event, much of the beach became severely eroded, the toe of the revetment became exposed, and portions of the revetment were undermined along these sections.

Following each damaging storm event, emergency repairs were implemented by plấing rock slope protection (RSP) 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 RSP. The repaired area in 2004 measured a total length of approximately 55 feet of/revetment using approximately 185 tons of RSP.

The California State Parks Department gave permission to the Pajaro Dunes GHAD to temporarily place rock slope protection on State Parks' property fronting lots 98 to 103 with the understanding that the rocks would be removed as part of a future permanent repair. One of the objectives of this project is to remove the encroaching rock slope protection and utilize it in the revetment repair.

### 1.2 PROJECT DESCRIPTION

This project will focus on repairing damage to a nearły 1,900 -foot-long segment of rock revetment along the western property boundary of lots 1 to 12 , lots 94 to 103 , and lot 107 , as well as removing rocks encroaching on State property fronting lots 98 to 103. The rock revetment is located in and protects all properties in the District, designated as Zone 1. The Pajaro Dunes development and the approximate location of the proposed repair area are shown in Sheet 2, Site Plan (Appendix A).

The repair will be focused on returning the rock revetment to the original design configuration to reduce the potential for movement resulting from settlement and instability caused by coastal erosion undermining the revetment during large storm events.

## 2. Cost Estimate

An estimate of the costs to return the rock revetment to its original condition is described in this section. An assessment election is being conducted to establish a Rock Revetment Return to Original Condition Reserve Fund at the Pajaro Dunes development.

Rock Revetment Return to Original Condition -Construction will consist of the following items:

- Permitting and County/State requirement adherence (Biological studies and monitoring);
- LiDAR and detailed observation documentation, pre- and post-construction surveying of the nine homes with High Proximity to the work zone, planned directly within the PDGHAD right of way;
- Detailed observation documentation, Pre- and post-construction surveying of the 19 parcels within the planned work zone and directly within the PDGHAD right of way;
- Removal and replacement of up to seven timber boardwalks and stairs that pose an impediment to construction activities;
- Removal and stockpiling of existing rocks placed on the State Beach property as part of a previous emergency repair effort during 2003 and 2004 storm events, currentlyconcealed beneath beach sand, for subsequent project repair use.; and
- The stockpiled rocks and out-of-place rocks on the existing revetmentwill be placed on top of the existing rock revetment in over-steepened areas to restore the pre-construction top-surface configuration (gradient) of the revetment. Stacked revetment rocks shall bepplaced in a way that attains three-point bearing contact with the underlying rocks.

The amount of the Reserve Fund is based on estimates of costs provided by Haley \& Aldrich, the District's consulting engineer, and the engineer of record for this project. Costs associated with unknown variables (e.g., biological mitigation measures, inclement weather, and high tides.) may occur. As such, an additional $15 \%$ of the estimated cost has been added to the totatcost presented here to allow the ability to respond to these conditions and continue with planned work.

Table 1 presents the maximum assessment for Zone 1 and a breakdown of the project cost required to complete the project. The costs assume three to six months of permitting and preparation, with fieldwork carried out over a three-month period in late 2024 or 2025.

It is understood that the PDGHAD will acquire the total budget through a loan secured by the proposed assessment, and the assessment value will then be applied to all of the properties in Zone 1 based on the PDGHAD fixed percentage assignment (see subsequent sections of the report). The assessment payments will include the cost of a loan of $\$ 2,300,000$, with a $9 \%$ annual interest rate. Payment of the total loan amount will be spread out over 10 years.

It is worth noting that The Rock Revetment Return to Original Condition Expense Reserve Fund is capped at $\$ 3,526,300.00$. The District may only collect a maximum of $\$ 3,526,300.00$ over the established 10year assessment period. The Fund will also be kept in a separate account from other District funds.

Table 1. Maximum Assessment Rock Revetment- Return to Original Conditions and Proposed Fiscal Years 2024/2025 Assessment Levy

| Item No. | Estimated Cost | Description | Cost Criteria / Basis |
| :---: | :---: | :---: | :---: |
| 1 | \$ 1,029,898 | Construction | Cost estimate for completion of rock removal work provided by District and only includes the following: <br> - Provide a shoring plan by a licensed engineer prior to commencing work <br> - Excavate existing rock and move as shown on plans. <br> - After all rock is placed, contractor will backfill all voids with sand. <br> - No import of rock or sand is included. The price assumes both rock and sand are on site for our use. <br> - Traffic control for contractor's work (limited to flagman and signage) when mobilizing and demobilizing equipment. <br> - All items of work to be performed based on one mobilization <br> - Notify underground service alert <br> - Permits will be by the owner <br> - Dust control, including water based on using onsite-source |
| 2 | \$ 68,729 | Construction Management | Scope and purpose: Overall project management; coordinate efforts with the general contractor, County, and PDGHAD; HASP preparation, Weekly virtual meetings ( 1.5 hours per 4 weeks, for 3 months); dispatch; client communications ( $\sim 2-4$ hrs for every week offield time). <br> -An estimated level of effort is provided for the RF1 responses and submittal reviews. <br> -Prepare Final Testing/Conformance Letter. |
| 3 | \$ 230,000 | Construction preparation, SWIPP, PostConstruction Activities etc.* | Mobilization (Multiple contractors) Water Pollution Control Traffic Control Site Access and Staging Clearing and Grubbing |
| 4 | \$ 288,800 | Remove \& Replace Beach Access Stairs | Remove and Replace Beach Access Stairs (7estimated in total at $\$ 37,500$. each |
| 5 | \$ 161,385 |  | Scope and purpose: Geotechnical inspectors are needed on-site fulltime for 3 Months ( 12 weeks), M-F at1Ohrs/day, and are assumed to work two Saturdays a month during full-time work ( 6 days). All inspector rates include time for a senior technical staff member to review the inspector's submittals and work products. Expenses include per diem and truck day rate expenses. |
| 6 | \$ 12,000 | Biological Assessment | In the months immediately preceding construction, the Site will need to be assessed for protected plants, birds, and any other sensitive habitat or endangered species. This will inform the areas requiring protective measures and potential monitoring. This report will need to be reviewed by the County. Cost estimated by doubling the 6 k estimate provided 4 years ago. |
| 7 | \$8,000. Unknown (8k to 172k possible) | Biological Monitoring* | Areas identified as requiring protection and monitoring may need to be observed by a full-time on-site biologist (dependent on the type of sensitive habitat or endangered species identified, works proximity to them, and any specific County or State requirements for monitoring). Full-time cost may match Construction observation cost as a "highest cost" scenario. |
| 8 | \$ 4,050 | County Permit \& Inspections | Estimated from building permit estimating tool provided by Santa Cruz County |



## 3. Cost Allocation Method

The District comprises two zones. Zone 1 is responsible for the maintenance of the rock revetment and all costs and expenses associated therewith, and includes all properties of the District. Its boundaries coincide with the boundaries of the entire Pajaro Dunes development. Zone 2 is responsible for the maintenance of the sheet pile river wall and all costs and expenses associated therewith and includes all members of the Pelican Homeowners Association, a subdivision of the Pajaro Dunes development. The boundaries of Zone 2 coincide with the boundaries of the Pelican Point Condominium Project. The project does not include an assessment for any of the purposes for which Zone 2 was formed.

The rock revetment improvement is to be maintained and operated as a result of the formation of the Pajaro Dunes Geologic Hazards Abatement District. Said rock revetment has been installed within or in areas in close proximity to the developed residential lots and condominiums.

All costs associated with the Rock Revetment Return to Original Conditions expenses associated with the Zone 1 improvements shall be spread to all parcels in Zone 1 on a prorated development unit basis.

Additionally, all costs associated with the newly proposed Expenses and Reserve Fund shall be spread, in the manner referenced below, between all units in Zone 1. There will be no separate and additional assessment for the establishment of this Fund levied upon the Zone 2 units; all property owners located in Zone 1 will pay their proportionate share of the cost of the Fund via the Zone 1 assessment.

As a result of the foregoing, the developed residential lots in Zone 1 will receive $100 \%$ of the special benefits associated with the establishment of a fund to return the revetment to its original condition These special benefits include enhanced neighborhood health, safety, and beautification, and improved quality of life, generated when the improvements provide protection against erosion from ocean and wave action and flooding. These benefits only occur when the improvements are in place, operable, safe, and maintained. The establishment of a fund for Rock Revetment Return to Original Condition will provide protection of improved property, enhanced comfort, and increase the desirability of the immediate surroundings of the residential units in the District.

A statement of the method by which the amount proposed to be assessed against each parcel was determined is described in this section. The cost allocation among various members of the PDGHAD was established when the District was created by the County Board of Supervisors on October 27, 1998. In the cost-allocation scheme, the major groups, Houses, Pelican Point Condominiums, and Cypress Grove Townhouses, share the costs based on the length of the seawall in the front of their respective areas. Per this cost-allocation scheme, in Zone 1, the cost shares for the Houses are $75.45 \%$, Cypress Grove Townhouses are $11.85 \%$, Pelican Point Condominiums are $10.18 \%$, and the Pajaro Dunes Homeowners Association (Association) for the stairways is $2.53 \%$.

Since the Pelican Point and Cypress Grove groups are condominium associations, they each share their portions of the costs equally among their members. In Zone 1, of the portion allocated to the houses, the front-row houses pay $64.12 \%$, the second-row houses pay $7.57 \%$, and the back-row houses pay $3.76 \%$. In addition, the shares for the front-row houses vary by a factor of two to one, depending on the width of the lot. The estimated GHAD budget for Fiscal Years 2024/2025-2034/2035 by benefit categories is presented in Table 2-Assessment Assessment Roll -Fiscal Year 2024 to 2035 (10 years), in Section 4 of this report.

In summary, based on the foregoing, this Engineer's Report makes the following findings:
i. The tables for Zone 1 correctly state the proportionate special benefit derived by each identified parcel in relationship to the total cost of services.
ii. No assessment is imposed on any parcel that exceeds the reasonable cost of the proportional benefit conferred on that parcel.
iii. The only benefits assessed are special, and any general benefits have been excluded.
iv. No parcel owned by any governmental agency, the state of California, or the United States receives any special benefit from the proposed assessment.


## 4. Cost Allocation

This section presents the assessments for costs to each benefited parcel of land within assessment district Zones 1 for Fiscal Years 2024/2025 to 2034/2035, a 10-year annual assessment. A list of the Assessor's Parcel Numbers for the individual lots and condominiums at the development is shown in Table 3. If approved, the lien date for the described assessments will be that prescribed by the law. This table apportions the proposed assessment for Fiscal Years 2024/2025 to 2034/2035.

Table 2. Summary of Annual Assessments - Fiscal Years 2024/2025 to 2034/2035 (10 years)

| House/ <br> Plot \# | Unit | Unit Type | Assessor's Parcel Number | Zone 1 Allocation Factor | Zone 1 Total <br> Payment ${ }^{(1)}$ | Total Annual Payment ${ }^{(1)}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H 1 | 1001 | Row 1 Houses | 052-281-05 | 0.0096800 | 34,121.22 | \$ 3,412.12 |
| H 2 | 1002 | Row 1 Houses | 052-281-06 | 0.00991 | 34,931.95 | \$ 3,493.20 |
| H 3 | 1003 | Row 1 Houses | 052-281-07 | 0.00991 | 34,931.95 | \$ 3,493.20 |
| H 4 | 1004 | Row 1 Houses | 052-281-08 | 0.01198 | 42,228.54 | \$ 4,222.85 |
| H 5 | 1005 | Row 1 Houses | 052-281-09 | 0.00998 | 35,178.70 | \$ 3,517.88 |
| H 6 | 1006 | Row 1 Houses | 052-281-10 | 0.00991 | 34,931.95 | \$ $3,493.20$ |
| H 7 | 1007 | Row 1 Houses | 052-281-11 | 0.01062 | 37,434.65 | \$ 3,743.46 |
| H 8 | 1008 | Row 1 Houses | 052-281-12 | 0.00921 | 32,464.51 | \$ 3,246.45 |
| H 9 | 1009 | Row 1 Houses | 052-281-13 | 0.00921 | 32,464.51 | \$ 3,246.45 |
| H 10 | 1010 | Row 1 Houses | 052-281-14 | 0.00991 | 34,931.95 | \$ 3,493.20 |
| H 11 | 1011 | Row 1 Houses | 052-281-15 | 0.01062 | 37,434,65 | \$ 3,743.46 |
| H 12 | 1012 | Row 1 Houses | 052-281-16 | 0,01133 | 39,937,34 | \$ 3,993.73 |
| H 13 | 1013 | Row 1 Houses | 052-281-17 | 0.01091 | 38,456,87 | \$ 3,845.69 |
| H 14 | 1014 | Row 1 Houses | 052-281-18 | 0.01247 | 43,955.75 | \$ 4,395.57 |
| H 15 | 1015 | Row 1 Houses | 052-281-19 | 0.01416 | 49,912.86 | \$ 4,991.29 |
| H 16 | 1016 | Row 2 Houses | 052-281-20 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 17 | 1017 | Row 3,4 \& 5 <br> Houses | 052-281-21 | $0.0009400$ | 3,313.42 | \$ 331.34 |
| H 18 | 1018 | Row 2 Houses | 052-281-22 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 19 | 1019 | Row 2 Houses | 052-281-24 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 20 | 1020 | Row 2 Houses | 052-281-25 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 21 | 1021 | Row 3,4 \& 5 Houses | $052-281-26$ | $0.0009400$ | 3,313.42 | \$ 331.34 |
| H 22 | 1022 | Row 3,4 \& 5 <br> Houses | $052-281-27$ | 0.0009400 | 3,313.42 | \$ 331.34 |
| H 23 | 1023 | Row 3,4 \& 5 Houses | 052-281-28 | 0.0009400 | 3,313.42 | \$ 331.34 |
| H 24 | 1024 | Row 3,4 \& 5 Houses | 052-281-29 | 0.0009400 | 3,313.42 | \$ 331.34 |
| H 25 | 1025 | Row 3,4 \& 5 Houses | 052-281-30 | 0.0009400 | 3,313.42 | \$ 331.34 |
| H 26 | 1026 | Row 3,4 \& 5 Houses | 052-281-32 | 0.0009400 | 3,313.42 | \$ 331.34 |


| House/ <br> Plot \# | Unit | Unit Type | Assessor's <br> Parcel Number | Zone 1 <br> Allocation <br> Factor | Zone 1 Total <br> Payment ${ }^{(1)}$ |
| :--- | :---: | :--- | ---: | ---: | ---: |
| H 27 | 1027 | Rotal Annual <br> Payment $^{(1)}$ |  |  |  |
| H 28 | 1028 | Row 2 Houses | $052-281-34$ | 0.0009400 | $3,313.42$ |


| House/ <br> Plot \# | Unit | Unit Type | Assessor's Parcel Number | Zone 1 <br> Allocation Factor | Zone 1 Total <br> Payment ${ }^{(1)}$ | Total Annual Payment ${ }^{(1)}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H 64 | 1064 | Row 2 Houses | 052-601-03 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 65 | 1065 | Row 3,4 \& 5 Houses | 052-601-04 | 0.0009400 | 3,313.42 | \$ 331.34 |
| H 66 | 1066 | Row 3,4 \& 5 <br> Houses | 052-601-05 | 0.0009400 | 3,313.42 | \$ 331.34 |
| H 67 | 1067 | Row 2 Houses | 052-601-06 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 68 | 1068 | Row 1 Houses | 052-291-20 | 0.0085 | 29,961.82 | \$ 2,996.18 |
| H 69 | 1069 | Row 1 Houses | 052-291-21 | 0.0085 | 29,961.82 | \$ 2,996.18 |
| H 70 | 1070 | Row 1 Houses | 052-291-22 | 0.0085 | 29,961.82 | \$ 2,996.18 |
| H 71 | 1071 | Row 1 Houses | 052-291-24 | 0.0085 | 29,961.82 | \$ 2,996.18 |
| H 72 | 1072 | Row 1 Houses | 052-291-25 | 0.0085 | 29,961.82 | \$ 2,996.18 |
| H 73 | 1073 | Row 1 Houses | 052-291-26 | 0.0085 | 29,961.82 | \$ 2,996.18 |
| H 74 | 1074 | Row 1 Houses | 052-291-27 | 0.0085 | 29,961.82 | \$ 2,996.18 |
| H 75 | 1075 | Row 1 Houses | 052-291-29 | 0.0085 | 29,961.82 | \$ 2,996.18 |
| H 76 | 1076 | Row 1 Houses | 052-291-30 | 0.0085 | 29,961.82 | \$ 2,996.18 |
| H 77 | 1077 | Row 1 Houses | 052-291-31 | 0.0085 | 29,961.82 | \$ 2,996.18 |
| H 78 | 1078 | Row 1 Houses | 052-291-32 | 0.0085 | 29,961.82 | \$ 2,996.18 |
| H 79 | 1079 | Row 1 Houses | 052-291-34 | 0.0085 | 29,961.82 | \$ 2,996.18 |
| H 80 | 1080 | Row 1 Houses | 052-291-35 | 0.0085 | 29,961.82 | \$ 2,996.18 |
| H 81 | 1081 | Row 2 Houses | 052-292-01 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 82 | 1082 | Row 2 Houses | 052-292-02 | 0.00172 | 6,062.86 | \$ 606,29 |
| H 83 | 1083 | Row 2 Houses | 052-292-03 | 0.00172 | 6,062.86 | $\$ 606.29$ |
| H 84 | 1084 | Row 2 Houses | 052-292-04 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 85 | 1085 | Row 2 Houses | 052-292-05 | 40,00172 | 6,062.86 | \$ 606.29 |
| H 86 | 1086 | Row 2 Houses | 052-292-06 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 87 | 1087 | Row 2 Houses | 052-292-07 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 88 | 1088 | Row 2 Houses | 052-292-08 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 89 | 1089 | Row 2 Houses | 052-292-09 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 90 | 1090 | Row 1 Houses | 052-321-01 | 0.01034 | 36,447.67 | \$ 3,644.77 |
| H 91 | 1091 | Row 1 Houses | 052-321-02 | 0.00906 | 31,935.77 | \$ 3,193.58 |
| H 92 | 1092 | Row 1 Houses | 052-321-03 | 0.01048 | 36,941.16 | \$ 3,694.12 |
| H 93 | 1093 | Row 1 Houses | 052-321-04 | 0.00878 | 30,948.80 | \$ 3,094.88 |
| H 94 | 1094 | Row 1 Houses | 052-321-05 | 0.01034 | 36,447.67 | \$ 3,644.77 |
| H 95 | 1095 | Row 1 Houses | 052-321-06 | 0.00977 | 34,438.47 | \$ 3,443.85 |
| H 96 | 1096 | Row 1 Houses | 052-321-07 | 0.00991 | 34,931.95 | \$ 3,493.20 |
| H 97 | 1097 | Row 1 Houses | 052-321-08 | 0.00991 | 34,931.95 | \$ 3,493.20 |
| H 98 | 1098 | Row 1 Houses | 052-321-09 | 0.00887 | 31,266.04 | \$ 3,126.60 |
| H 99 | 1099 | Row 1 Houses | 052-321-10 | 0.00906 | 31,935.77 | \$ 3,193.58 |
| H 100 | 1100 | Row 1 Houses | 052-321-11 | 0.00991 | 34,931.95 | \$ 3,493.20 |
| H 101 | 1101 | Row 1 Houses | 052-321-12 | 0.0100 | 35,213.95 | \$ 3,521.39 |
| H 102 | 1102 | Row 1 Houses | 052-321-13 | 0.00917 | 32,323.51 | \$ 3,232.35 |
| H 103 | 1103 | Row 1 Houses | 052-321-14 | 0.00935 | 32,958.00 | \$ 3,295.80 |


| House/ Plot \# | Unit | Unit Type | Assessor's Parcel Number | Zone 1 Allocation Factor | Zone 1 Total <br> Payment ${ }^{(1)}$ | Total Annual Payment ${ }^{(1)}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H 104 | 1104 | Row 1 Houses | 052-321-15 | 0.00991 | 34,931.95 | \$ 3,493.20 |
| H 105 | 1105 | Row 1 Houses | 052-321-16 | 0.0102 | 35,954.18 | \$ 3,595.42 |
| H 106 | 1106 | Row 1 Houses | 052-321-17 | 0.00935 | 32,958.00 | \$ 3,295.80 |
| H 107 | 1107 | Row 1 Houses | 052-321-18 | 0.00878 | 30,948.80 | \$ 3,094.88 |
| H 108 | 1108 | Row 2 Houses | 052-321-19 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 109 | 1109 | Row 2 Houses | 052-321-20 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 110 | 1110 | Row 2 Houses | 052-321-21 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 111 | 1111 | Row 2 Houses | 052-321-22 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 112 | 1112 | Row 2 Houses | 052-321-23 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 113 | 1113 | Row 3,4 \& 5 Houses | 052-321-24 | 0.0009400 | 3,313.42 | \$ 331.34 |
| H 114 | 1114 | Row 2 Houses | 052-321-25 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 115 | 1115 | Row 2 Houses | 052-321-26 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 116 | 1116 | Row 2 Houses | 052-321-27 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 117 | 1117 | Row 2 Houses | 052-321-28 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 118 | 1118 | Row 2 Houses | 052-321-29 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 119 | 1119 | Row 2 Houses | 052-321-30 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 120 | 1120 | Row 2 Houses | 052-321-31 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 121 | 1121 | Row 2 Houses | 052-321-32 | 0.00172 | 6,062.86 | \$ 606.29 |
| H 122 | 1122 | Row 3,4 \& 5 Houses | 052-321-33 | 0.0009400 | $(3,313.42$ | $\$ \quad 331,34$ |
| H 123 | 1123 | Row 3,4 \& 5 <br> Houses | 052-321-34 | $0.0009400$ |  |  |
| H 124 | 1124 | Row 3,4 \& 5 Houses | 052-321-35 | $0.0009400$ | $3,313.42$ | $\$ \quad 331.34$ |
| H 125 | 1125 | Row 3,4 \& 5 <br> Houses | 052-321-36 | $0.000940$ | 3,313.42 | \$ 331.34 |
| H 126 | 1126 | Row $3,4 \& 5$ Houses | 052-321-37 | 0.0009400 | 3,313.42 | \$ 331.34 |
| H 127 | 1127 | Row 3,4 \& 5 <br> Houses | 052-321-38 | $0.0009400$ | 3,313.42 | \$ 331.34 |
| H 128 | 1128 | Row 3,4 \& 5 <br> Houses | $052-321-39$ | $0.0009400$ | 3,313.42 | \$ 331.34 |
| H 129 | 1129 | Row 3,4 \& 5 <br> Houses | $052-321-40$ | 0.0009400 | 3,313.42 | \$ 331.34 |
| H 130 | 1130 | Row 3,4 \& 5 Houses | $052-321-41$ | 0.0009400 | 3,313.42 | \$ 331.34 |
| H 131 | 1131 | Row 3,4 \& 5 <br> Houses | 052-321-42 | 0.0009400 | 3,313.42 | \$ 331.34 |
| H 132 | 1132 | Row 3,4 \& 5 <br> Houses | 052-321-43 | 0.0009400 | 3,313.42 | \$ 331.34 |
| H 133 | 1133 | Row 3,4 \& 5 <br> Houses | 052-321-50 | 0.0009400 | 3,313.42 | \$ 331.34 |
| H 134 | 1134 | Row 3,4 \& 5 <br> Houses | 052-321-49 | 0.0009400 | 3,313.42 | \$ 331.34 |


| House/ Plot \# | Unit | Unit Type | Assessor's Parcel Number | Zone 1 Allocation Factor | Zone 1 Total <br> Payment ${ }^{(1)}$ |  | tal Annua ayment ${ }^{(1)}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H 135 | 1135 | Row 3,4 \& 5 <br> Houses | 052-321-48 | 0.0009400 | 3,313.42 | \$ | 331.34 |
| H 136 | 1136 | Row 3,4 \& 5 Houses | 052-321-47 | 0.0009400 | 3,313.42 | \$ | 331.34 |
| H 137 | 1137 | Row 3,4 \& 5 <br> Houses | 052-321-46 | 0.0009400 | 3,313.42 | \$ | 331.34 |
| H 138 | 1138 | Row 3,4 \& 5 Houses | 052-321-45 | 0.0009400 | 3,313.42 | \$ | 331.34 |
| H 139 | 1139 | Row 3,4 \& 5 <br> Houses | 052-321-44 | 0.0009400 | 3,313.42 | \$ | 331.34 |
| H 140 | 1140 | Row 1 Houses | 052-591-07 | 0.0085 | 29,961.82 | \$ | 2,996.18 |
| H 141 | 1141 | Row 1 Houses | 052-591-08 | 0.00903 | 31,830.03 | \$ | 3,183.00 |
| H 142 | 1142 | Row 2 Houses | 052-591-06 | 0.00172 | 6,062.86 |  | 606.29 |
| H 143 | 1143 | Row 2 Houses | 052-591-05 | 0.00172 | 6,062.86 |  | 606.29 |
| H 144 | 1144 | Row 1 Houses | 052-301-70 | 0.01712 | 60,346.63 | \$ | 6,034.66 |
| H 145 | 1145 | Row 1 Houses | 052-301-69 | 0.00993 | 35,002.45 |  | 3,500.25 |
| H 146/CY24 | 1146 | Row 1 Houses | 052-301-68 | 0.00977 | 34,438.47 |  | 3,443.85 |
| H 147 | 1147 | Row 3,4 \& 5 <br> Houses | 052-301-62 | 0.0009400 | 3,313.42 |  | $331.34$ |
| H 148 | 1148 | Row 3,4 \& 5 Houses | Common area pay direct to PDGHAD | 0.0009400 |  |  | $331.34$ |
| H 149 | 1149 | Row 3,4 \& 5 Houses | $\begin{gathered} \text { Common area } \\ \text { pay direct to } \\ \text { PDGHAD } \\ \hline \end{gathered}$ |  |  |  | $331.34$ |
| H 150 | 1150 | Row 3,4 \& 5 Houses | Common area paydirect to PDGHAD |  | $3,313,42$ | \$ | 331.34 |
| H 151 | 1151 | Row 3,4 \& 5 Houses | Common area pay direct to RDGHAD | $0.0009400$ | $3,313.42$ | \$ | 331.34 |
| P 1 | 2001 | Pelican Point Condominiums | $052-341-10$ | $0.00117$ | 4,124.16 | \$ | 412.42 |
| P 2 | 2002 | Pelican Point Condominiums | $052-341-02$ | $0.00117$ | 4,124.16 | \$ | 412.42 |
| P 3 | 2003 | Pelican Point Condominiums | $052-341-03$ | 0.00117 | 4,124.16 | \$ | 412.42 |
| P 4 | 2004 | Pelican Point Condominiums | 052-341-04 | 0.00117 | 4,124.16 | \$ | 412.42 |
| P 5 | 2005 | Pelican Point Condominiums | 052-341-05 | 0.00117 | 4,124.16 | \$ | 412.42 |
| P 6 | 2006 | Pelican Point Condominiums | 052-341-06 | 0.00117 | 4,124.16 | \$ | 412.42 |
| P 7 | 2007 | Pelican Point Condominiums | 052-341-07 | 0.00117 | 4,124.16 | \$ | 412.42 |
| P 8 | 2008 | Pelican Point Condominiums | 052-341-08 | 0.00117 | 4,124.16 | \$ | 412.42 |


| House/ <br> Plot \# | Unit | Unit Type | Assessor's Parcel Number | Zone 1 <br> Allocation Factor | Zone 1 Total Payment ${ }^{(1)}$ |  | Annua ment ${ }^{(1)}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| P 9 | 2009 | Pelican Point Condominiums | 052-341-09 | 0.00117 | 4,124.16 | \$ | 412.42 |
| P 10 | 2010 | Pelican Point Condominiums | 052-352-01 | 0.00117 | 4,124.16 | \$ | 412.42 |
| P 11 | 2011 | Pelican Point Condominiums | 052-352-02 | 0.00117 | 4,124.16 | \$ | 412.42 |
| P 12 | 2012 | Pelican Point Condominiums | 052-352-03 | 0.00117 | 4,124.16 | \$ | 412.42 |
| P 13 | 2013 | Pelican Point Condominiums | 052-352-04 | 0.00117 | 4,124.16 | \$ | 412.42 |
| P 14 | 2014 | Pelican Point Condominiums | 052-362-01 | 0.00117 | 4,124.16 | \$ | 412.42 |
| P 15 | 2015 | Pelican Point Condominiums | 052-362-02 | 0.00117 | 4,124.16 |  | $412.42$ |
| P 16 | 2016 | Pelican Point Condominiums | 052-362-03 | 0.00117 | 4,124.16 |  | $412.42$ |
| P 17 | 2017 | Pelican Point Condominiums | 052-362-04 | 0.00117 | 4,124.16 |  | $412.42$ |
| P 18 | 2018 | Pelican Point Condominiums | 052-362-05 | 0.00117 | 4,124.16 |  | $412.42$ |
| P 19 | 2019 | Pelican Point Condominiums | 052-362-06 | 0.00117 | $4,124,16$ | \$ | $412.42$ |
| P 20 | 2020 | Pelican Point Condominiums | 052-362-07 | 0.00117 | $( \}_{4,124,16}$ |  | $412.42$ |
| P 21 | 2021 | Pelican Point Condominiums | 052-342-01 | $0.00117$ | $4,124,16$ |  | $412.42$ |
| P 22 | 2022 | Pelican Point Condominiums | $052-342-02$ | $0.00117$ | $4,124,16$ | \$ | 412.42 |
| P 23 | 2023 | Pelican Point Condominiums | 052-342-03 | $0.00117$ | $4,124.16$ | \$ | 412.42 |
| P 24 | 2024 | Pelican Point Condominiums | 052-342-04 | $0.00117$ | 4,124.16 | \$ | 412.42 |
| P 25 | 2025 | Pelican Point Condominiums | 052-343-01 | $0.00117$ | 4,124.16 | \$ | 412.42 |
| P 26 | 2026 | Pelican Point Condominiums | $052-343-02$ | $0.00117$ | 4,124.16 | \$ | 412.42 |
| P 27 | 2027 | Pelican Point Condominiums | $052-343-03$ | 0.00117 | 4,124.16 | \$ | 412.42 |
| P 28 | 2028 | Pelican Point Condominiums | 052-343-05 | 0.00117 | 4,124.16 | \$ | 412.42 |
| P 29 | 2029 | Pelican Point Condominiums | 052-343-06 | 0.00117 | 4,124.16 | \$ | 412.42 |
| P 30 | 2030 | Pelican Point Condominiums | 052-343-07 | 0.00117 | 4,124.16 | \$ | 412.42 |
| P 31 | 2031 | Pelican Point Condominiums | 052-343-08 | 0.00117 | 4,124.16 | \$ | 412.42 |
| P 32 | 2032 | Pelican Point Condominiums | 052-343-09 | 0.00117 | 4,124.16 | \$ | 412.42 |




| House/ <br> Plot \# | Unit | Unit Type | Assessor's Parcel Number | Zone 1 <br> Allocation Factor | Zone 1 Total <br> Payment ${ }^{(1)}$ | Total Annual Payment ${ }^{(1)}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| P 81 | 2081 | Pelican Point Condominiums | 052-364-01 | 0.00117 | 4,124.16 | \$ 412.42 |
| P 82 | 2082 | Pelican Point Condominiums | 052-364-02 | 0.00117 | 4,124.16 | \$ 412.42 |
| P 83 | 2083 | Pelican Point Condominiums | 052-364-03 | 0.00117 | 4,124.16 | \$ 412.42 |
| P 84 | 2084 | Pelican Point Condominiums | 052-364-04 | 0.00117 | 4,124.16 | \$ 412.42 |
| P 85 | 2085 | Pelican Point Condominiums | 052-332-01 | 0.00117 | 4,124.16 | \$ 412.42 |
| P 86 | 2086 | Pelican Point Condominiums | 052-332-02 | 0.00117 | 4,124.16 | \$ 412.42 |
| P 87 | 2087 | Pelican Point Condominiums | 052-332-03 | 0.00117 | 4,124.16 | $\$ 412.42$ |
| CY 1 | 3001 | Cypress Grove Townhomes | 052-301-49 | 0.00515 | $18,146.29$ | $\$ \quad 1,814,63$ |
| CY 2 | 3002 | Cypress Grove Townhomes | 052-301-48 | 0.00515 | 18,146.29 |  |
| CY 3 | 3003 | Cypress Grove Townhomes | 052-301-47 | 0.00515 | 18,146.29 | $\text { \$ } 1,814.63$ |
| CY 4 | 3004 | Cypress Grove Townhomes | 052-301-46 | 0.00515 | $18,146,29$ | $\$ \quad 1,814.63$ |
| CY 5 | 3005 | Cypress Grove Townhomes | 052-301-45 | 0.00515 | $(18,146.29$ | $\$ \quad 1,814.63$ |
| CY 6 | 3006 | Cypress Grove <br> Townhomes | 052-301-44 | $0.00515$ | $18,146.29$ | \$ 1,814.63 |
| CY 7 | 3007 | Cypress Grove Townhomes | $052-301-43$ | $0.00515$ | $18,146.29$ | \$ 1,814.63 |
| CY 8 | 3008 | Cypress Grove Townhomes | 052-301-42 | $0.00515$ | $18,146.29$ | \$ 1,814.63 |
| CY 9 | 3009 | Cypress Grove Townhomes | 052-301-41 | $0.00515$ | $18,146.29$ | \$ 1,814.63 |
| CY 10 | 3010 | Cypress Grove Townhomes | 052-301-40 | $0.00515$ | 18,146.29 | \$ 1,814.63 |
| CY 11 | 3011 | Cypress Grove Townhomes | 052-301-38 | $0.00515$ | 18,146.29 | \$ 1,814.63 |
| CY 12 | 3012 | Cypress Grove <br> Townhomes | $052-301-37$ | 0.00515 | 18,146.29 | \$ 1,814.63 |
| CY 13 | 3013 | Cypress Grove <br> Townhomes | $052-301-36$ | 0.00515 | 18,146.29 | \$ 1,814.63 |
| CY 14 | 3014 | Cypress Grove <br> Townhomes | 052-301-31 | 0.00515 | 18,146.29 | \$ 1,814.63 |
| CY 15 | 3015 | Cypress Grove <br> Townhomes | 052-301-30 | 0.00515 | 18,146.29 | \$ 1,814.63 |
| CY 16 | 3016 | Cypress Grove <br> Townhomes | 052-301-29 | 0.00515 | 18,146.29 | \$ 1,814.63 |
| CY 17 | 3017 | Cypress Grove <br> Townhomes | 052-301-28 | 0.00515 | 18,146.29 | \$ 1,814.63 |


(1) Assessments are subject to a $1 \%$ County Collection Fee in addition to the listed amounts. Table values provided by PDGHAD.
(2) Rounding error lead to a $\$ 378.89$ difference, and is the responsibility of the PQGHAD

Table 3. Proposed Assessment and Fiscal Years 2024/2025 to 2034/2035 GHAD Budget by Benefit Categories

| Category | Proportional <br> Benefit | Assessment <br> Amount | No. of Units |
| :--- | ---: | ---: | ---: |
| Zone 1 | $64.133 \%$ | $\$ 2,260,637$ | 67 |
| Row 1 Houses | $7.545 \%$ | $\$ 265,955$ | 44 |
| Row 2 Houses | $3.772 \%$ | $\$ 132,960$ | 40 |
| Row 3,4 \& 5 Houses | $11.8400 \%$ | $\$ 417,350$ | 23 |
| Cypress Grove Townhomes | $10.180 \%$ | $\$ 358,837$ | 87 |
| Pelican Point Condominiums | $2.531 \%$ | $\$ 89,202$ | 1 |
| PDA Stairs | $100,0 \%$ | $\mathbf{\$ 3 , 5 2 4 , 9 2 0}$ | $\mathbf{2 6 2}$ |
| Zone 1 Total: |  |  |  |

Table 2 -Proposed Assessment and Fiscal Years 2024/2025 to 2034/2035 GHAD Budget by Benefit Categories. Table values provided by PDGHAD.

## 5. Parcels Map \& Revetment Project Plan

Stamped and County reviewed Rock Revetment Project Plans (Appendix A), which outline the proposed work location and approach. All the parcels of real property within this assessment district, including the major groups, Houses, Pelican Point Condominiums, and Cypress Grove Townhouses, are presented in the attached Rock Revetment Project Plans (Appendix A).



GENERAL NOTES
STANDARD SPECIFICATIONS
ALL MATERIALS AND CONSTRUCTION METHODS SHALL COMPLY WTH
THE REQUREMENTS OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD SPECIFICATISNS 2018
TRANSPORTATION (CALTRANS) STANDARD SPECIFICATIONS, 2018
EDITION, UNLESS OTHERWISE NOTED ON THESE PLANS.
2. PERMITS

THE OWNER WLL BE RESPONSIbLE FOR OBTAINING ALL REQUIRED
PERMITS.
3. TRAFFIC CONTROL AND PUBLIC SAFETY

THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FENCING, FLAGGING, AND OTHER DEVICES NECESSARY FOR TRAFFIC CONTROL AND PUBLIC SAFETY.
4. EXISTING FACILITIES

EXISTING SITE IMPROVEMENTS TO REMAIN MAY INTERFERE WITH THE EXISTING SITE IMPROVEMENTS TL REMAIN MA INTERFERE WITH THE
WORK. THESE FACILITES SHALL BE PROTECTED OR REMOVED AND REPLACED WITH LIKE KIND AND QUALITY AT THE CONTRACTOR'S
EXPENSE.
. Site information
THE CONTRACTOR SHALL BE RESPONSBLE FOR LOCATING ALL ABOVE
GROUND AND UNDERGROUND FACIITIES WHICH MAY BE AFFECTED BY GROUND AND UNDERGROUND FACILITIES WHICH MAY BE AFFECTED B HIS OPERATIONS. THE CONTRACTOR SHALL CONTACT OWNERS OF
THESE FACILTES AND SHLL PROTECT FALIITIES AND MAINTAN THESE FACILTIIIS AND SHALL PROTECT FACLITTES AND MAINTAIN
SERVCE DURING CNSTRUCTON. THE CONTRACTOR SHALL CONTAC
UNDERGROND SERVICE ALERT (USA) AT (80) $642-2444$ AT UNDERGROUND SERVICE ALERT (USA) AT ( 800 ) $642-2444$ AT LEAS
THREE WORKING DAYS PRIOR TO CONSTRUCTIN.
DIMENSIONS AND LIMITS OF WORK SHOWN ON THE PLANS ARE ENCOUNTERED. CONTRACTOR SHALL VERIFY ALL EXISTING
DIMENSIONS AND SITE CONDITONS PRIOR TO THE START
 THOSE SHOWN O THE TPANCS SHETWEEN ACTUAL CONDITIONS AND
THE ATENTION OF THE ENGINEER. BMEDIATELY BROUGHT TO
6. INSPECTIONS
engineering inspections wil be carried out by cal ENGINEERING \& GEOLOGY, INC. (925) 935-9771. THE CONTRACTOR
SHALL COORDINATE WITH THE ENGINER AT LEAST TWO WORKING SHALL COORD NATE WHTH' TNE ENGINEER AT LEAST TWO WORKING
DAYS PRIOR TO ALL REQURED INSPECTIONS
staging restoration
STAGING AREAS SHALL BE RESTORED TO THEIR PRE-CONSTRUCTION CONDITION. CON TRACTOR SHALL DOCUMENT THE PRE-CONSTRUCTION
CONDITION OF ALL STAGING AREAS AND ACCESS ROUTES PRIOR TO CONDITION OF ALL STAGING AREAS AND ACCESS ROUTES PRIOR TO
CONSTRUCTION. PAVEMENT AREAS SHALL BE RESTORED BY REMOVIN AND REPLACING THE DAMAGED PAVEMENT WITH ${ }^{3}$ A AC (TYPE A)
8. TOTAL ROCK

PLANNED TOTAL ROCK MATERIAL TO POTENTALLY BE MOVED FOR THE PROJECT EQUALS 1,135 TONS OR 841 CUBIC YARDS (ASSUMING

## PAJARO DUNES GHAD

ROCK REVETMENT MAINTENANCE LOTS 1-12, 15, 54-55, 94-103, AND 107

PAJARO DUNES RESORT
WATSONVILLE, CALIFORNIA
AUGUST 2023


DESCRIPTION OF WORK
THE WORK SHALL CONSIST IN GENERAL OF PROVIDING ALL MATERIAL MAINTENANCE PROJECT. WORK SHALL INCLUDE, BUT NOT BE LIMITED MOBILIZATION, WATER POLLUTION CONTROL, TRAFFIC CONTROL,
ESTABLISHING SITE ACCESS AND STAGING AREAS, CIEARING AND GRUBBING, EXCAVATION SHORING AS REQURED, TEMPORARY EXCAVATION and backill in sand, and relocating and stacking existing buried revetment rocks.
CONTRACTOR LICENSE
THE CONTRACTOR SHALL POSSESS A VALID CLASS a license at the
TME THE CONTRACT IS aWARDED.

INDEX OF SHEETS

1. TITLE SHEET

TYPICAL SECTION
SITE ACCESS AND STAGing areas
SITE ACCESS AND STAGING AREAS SECTIONS

## STANDARD PLANS

THE FOLLOWING STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

```
A10A ABBREVIATIONS (SHEET 1 OF 2)
lloll
```

| 785 Ygnacio Valley Road Walnut Creek, CA 94596 Phone: (925) 935-9771 | PAJARO DUNES GHAD |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | ROCK REVETMENT MAINTENANCE PAJARO DUNES RESORT, WATSONVILLE, CALIFORNIA TITLE SHEET |  |  |  |
| D. ${ }_{\text {cked }}$ Peluso | $\xrightarrow{\text { ROJECT NO. }} 190780$ | $\stackrel{\text { AATE }}{\text { dugust } 29,2023}$ | ${ }_{1}^{\text {SHEET No. }}$ |  |













NOTES

- Proposed revetment design slope may be lowered up TO 24" (TYP.) BELOW THE ORGINAL REVETMENT DESIGN
SLOPE (TOWADS SLOPE (TOWARD LOTS) FOR SELECTED SECTIONS. CONERACTOR MAY SOUREE THE MATERILL REMEMANING IN
FRONT OF THE PROPOSED REVETMENT SLOPE, IF NEEDED. FRONT OF THE PROPOSED REVETMENT SLOPE, IF NEEDED.
SEE SOUCCING PRIORITY LST BELOW. 2. TEERE SOUCLILG PRIRARIIY LIST BELOW. EACH LOT

PLACEMENT PRIORITY
1ST: PROPERTIES WITH SLOPES THAT ARE 1.5:1 OR STEEPER 2ND: PROPERTIES WITH SLOPES THAT ARE 1.7:1 OR STEEPER 3RD: PROPERTIES WITH SLOPES THAT ARE 2.0:1 OR STEEPER

100\% SUBMITTAL NOT FOR CONSTRUCTION
AUGUST 2023


Reas requiring rock place
Rock avallable for sourcing


## PAJARO DUNES GHAD

 ROCK REVETMENT MAINTENANCE DUNES RESORT, WATSONVILE, CAASECTIONS (1 OF 7)





Notes

- proposed revetment design slope may be lowered up TO 24" (TYP.) BELOW THE ORGINAL REVETMENT DESIG
SLOPE (TOWARDS LOTS) FOR SELECTED SECTIONS. SOPE (TOWARDS LOTS) FOR SELECTED SECTIONS.
CONTRACTOR MAY SOURE THE MATERIAL REMAING IN
FRONT OF THE PROOOSED REVETMENT SLPE FRON OF THE PROPOSED REVETMENT SLOPE, IF NEEDED.
SEE SORCCING PRIORTY LIST BELOW.
THERE WLL BE VARIABILITY IN CROSS SECTIONS ACROSS EACH LOT
SOURCING PRIORITY
1ST: MATERIAL FROM STATE PROPERTY PLACED DURING EmERGENCY REPAIR (2004).
2ND: MATERIAL FROM PROPERTIES WITH 2.0:1 SLOPES 3RD: MATERIAL FROM PROPERTIES WITH 1.7:1 SLOPES 4TH: MATERIAL FROM PROPERTES WITH 1.5:1 SLOPES

PLACEMENT PRIORITY
1ST: PROPERTIES WITH SLOPES THAT ARE 1.5:1 OR STEEPER 2ND: PROPERTES WITH SLOPES THAT ARE 1.7:1 OR STEEPER 3RD: PROPERTIES WITH SLOPES THAT ARE 2.0:1 OR STEEPER

100\% SUBMITTAL NOT FOR CONSTRUCTION

AUGUST 2023

rock avilabl for souran


PAJARO DUNES GHAD ROCK REVETMENT MAINTENANCE pajaro dunes resort, watsonville, cal SECTIONS (2 OF 7)




| OFFSET |
| :---: |
| SECTION |
| STA $6+55$ |




100\% SUBMITTAL NOT FOR CONSTRUCTION

AUGUST 2023

PLACEMENT PRIORITY
1ST: PROPERTIES WITH SLOPES THAT ARE 1.5:1 OR STEEPER 2ND: PROPERTIES WITH SLOPES THAT ARE 1.7:1 OR STEEPER 3RD: PROPERTIES WITH SLOPES THAT ARE 2.0:1 OR STEEPER
proposed revetment design slope may be lowered TO 24" (TYP.) BELOW THE ORGINAL REVETMENT DESIGN SLOPE (TOWARDS LOTS) FOR SELECTED SECTIONS. FRONT OF THE PROPOSED REVETAENT SLOPE, IF NEEDED.
FE
SEE SOURCING PRIORITY LIST BELOW.
THEEE WLL BE VARIABILITY IN CROSS SECTIONS ACROSS
-
IST: MATERIAL FROM STATE PROPERTY PLACED DURING EmERGENCY REPAIR (2004).
2ND: MATERIAL FROM PROPERTES WITH 2.0:1 SLOPES
3RD: MATERIAL FROM PROPERTIES WITH 1.7:1 SLOPES
4TH: MATERIAL FROM PROPERTIES WITH 1.5:1 SLOPES
NOTES




Notes
proposed revetment design slope may be lowered up TO 24" (TYP.) BELOW THE ORGINAL REVETMENT DESIGN SLOPE (TOWARDS LOTS) FOR SELECTED SECTIONS. CONRACTOR MAY SOURC THE MATEDRAL R RMANING IN
CRONT OF THE PROPOSED REVETMENT SLOPE, IF NEEDED. FRONT OF THE PROPOSED REVETMENT SLOPE, IF NEEDED.
SEE SOURCING PRIORITY LIST BELOW. SEE SE WILL BE VARIABILITY IN CROSS SECTIONS ACROSS EACH LOT
SOURCING PRIORITY
1ST: MATERIAL FROM STATE PROPERTY PLACED DURING EmERGENCY REPAIR (2004).
2ND: MATERIAL FROM PROPERTIES WITH 2.0:1 SLOPES
3RD: MATERIAL FROM PROPERTIES WITH 1.7:1 SLOPES
4TH: MATERIAL FROM PROPERTIES WITH 1.5:1 SLOPES

PLACEMENT PRIORITY
1ST: PROPERTIES WITH SLopes that ARE 1.5:1 OR STEEPER 2ND: PROPERTIES WITH SLOPES THAT ARE 1.7:1 OR STEEPER 3RD: PROPERTIES WITH SLOPES THAT ARE 2.0:1 OR StEEPER

100\% SUBMITTAL NOT FOR CONSTRUCTION

AUGUST 2023


| OFFSET |
| :---: |
| SECTION |
| STA $9+50$ |


areas requiring rock placem
rock avallable for sourcing







| OFFSET |  |
| :---: | :---: |
| SECTION | LOT |
| STA1 |  |
| STA | $14+40$ |

$\underset{40}{-10}$


reas requiring rock place
rock avallable for sourcing
PAJARO DUNES GHAD ROCK REVETMENT MAINTENANCE pajaro dunes resort, watsonville, cal SECTIONS (5 OF 7)

100\% SUBMITTAL NOT FOR CONSTRUCTION

AUGUST 2023
PLACEMENT PRIORITY
1ST: PROPERTES WITH SLopes that ARE 1.5:1 OR STEEPER 2ND: PROPERTIES WITH SLOPES THAT ARE 1.7:1 OR STEEPER 3RD: PROPERTIES WITH SLOPES THAT ARE 2.0:1 OR STEEPER
proposed revetment design slope may be lowered TO 24" (TYP.) BELOW THE ORGLNL REVETMEN DESIG SLOPE (TOWARDS LOTS) FOR SELECTED SECTIONS
CONTRACTOR MAY SOURCE THE MATERIAL REMAINING FRONT OF THE PROPOSED REVETMENT SLOPE, IF NEEDED.
SEF SOURCING PRRORTT UST BELOW THERE WLL BE VARIABILITY IN CROSS SECTIONS ACROSS EACH LOT
SOURCING PRIORITY
1ST: MATERIAL FROM STATE PROPERTY PLACED DURING EmERGENCY REPAIR (2004).
2ND: MATERIAL FROM PROPERTES WITH 2.0:1 SLOPES
3RD: MATERIAL FROM PROPERTIES WITH 1.7:1 SLOPES
4TH: MATERIAL FROM PROPERTIES WITH 1.5:1 SLOPES





| OFFSET |
| :---: |
| SECTION |
| STA $17+15\left(\begin{array}{c}\text { LOT } \\ 97 \\ 9\end{array}\right)$ |

${ }_{40}-10$



LEGEND
ock Aval able for sourcing

PAJARO DUNES GHAD ROCK REVETMENT MAINTENANCE AJARO DUNES RESORT, WATSONVILLE, CALIFORNIA SECTIONS ( 6 OF 7)

100\% SUBMITTAL NOT FOR CONSTRUCTION

AUGUST 2023 2. THERE WILL BE VARIABILITY IN CROSS SECTIONS ACROSS soman prory

IST: MATERIAL FROM STATE PROPERTY PLACED DURING EmERGENCY REPAIR (2004).
2ND: MATERIAL FROM PROPERTES WITH 2.0:1 SLOPES
3RD: MATERIAL FROM PROPERTIES WITH 1.7:1 SLOPES
4TH: MATERIAL FROM PROPERTES wITH 1.5:1 SLOPES

PLACEMENT PRIORITY
1ST: PROPERTIES WITH SLOPES THAT ARE 1.5:1 OR STEEPER 2ND: PROPERTIES WITH SLOPES THAT ARE 1.7:1 OR STEEPER 3RD: PROPERTES WITH SLOPES THAT ARE 2.0:1 OR STEEPER
TO 24" (TYP.) BELOW THE ORGINAL REVETMENT DESICN TIOPE (TTYWARDS LOTS) FOR SELECTED SECTIONS. CONE (ACTOR MAY SOUREE THE MATERILL REMANSING IN
FRONT OF THE PROPOSED REVETMENT SLOPE, IF NEEDED. FRONT OF THE PROPOSED REVETMENT SLOPE, IF NEEDED.
SEE SOURCING PRIORITY LIST BELOW.
NOTES



## NOTES

proposed revetment design slope may be lowered up TO 24" (TYP.) EELOW THE ORGINAL REVETMENT DESIGN SLOPE (TOWARDS LOTS) FOR SELECTED SECTIONS. CONTRACTOR MAY SOUREE THE MATERILL REMAINING IN
FRONT OF THE PROPOSED REVETMENT SLOPE, IF NEEDED. FRONT OF THE PROPOSED REVETMENT SLOPE, IF NEEDED.
SEE SORCCING PRORITY LIST BEOWW. 2. THERE WILL BE VARIABILITY IN CROSS SECTIONS ACROSS EACH LOT

PLACEMENT PRIORITY
1ST: PROPERTIES WITH SLOPES THAT ARE 1.5:1 OR STEEPER 2ND: PROPERTES WITH SLOPES THAT ARE 1.7:1 OR STEEPER 3RD: PROPERTIES WITH SLOPES THAT ARE 2.0:1 OR STEEPER

100\% SUBMITTAL NOT FOR CONSTRUCTION
AUGUST 2023


## 785 Ygnacio Valley Road Walut Creek, CA 94596 Phone: 9255 935-9771

PAJARO DUNES GHAD ROCK REVETMENT MAINTENANCE pajaro dunes resort, Watsonvilee, callifornia
SECTIONS (7 OF 7)

