



CITY OF PACIFIC GROVE
300 Forest Avenue, Pacific Grove, California 93950

AGENDA REPORT

To: Honorable Mayor and Members of City Council

From: Daniel Gho, Public Works Director

Meeting Date: January 6, 2016

Subject: Agreement with Haro, Kasunich and Associates, Inc. for Preparation of Coastal Bluff Protection Services

CEQA: Does not Constitute a "Project" per California Environmental Quality Act (CEQA) Guidelines

RECOMMENDATION

Approve a resolution authorizing the City Manager to enter into an agreement with Haro, Kasunich and Associates, Inc. for the study of coastal erosion at Esplanade Park and Sea Palm Park for a cost not to exceed \$55,749 plus a 10% contingency and authorize the City Manager to make minor improvements to the agreement as issues arise of which the City was not aware when the agreement was negotiated.

DISCUSSION

In 2004 the City identified 18 locations along the recreation trail in need of coastal engineering. These areas, except for one location, were east of Lovers Point along the recreation trail, and had been constructed in 2007. Since 2007 no coastal protection activities have occurred, but coastal erosion has been evident, primarily west of Lovers Point.

City staff conducted visual surveys of the coastline from Lovers Point to Esplanade Park and has determined 6 locations need initial studies to determine the best course of action. Three locations along the coast, adjacent to Esplanade Park, show significant signs of erosion, with the coastline threatening to undermine Ocean View Blvd. In the same locations the walking trail is virtually eliminated for stretches of 50+ feet. Pedestrians must walk in the roadway. These three locations are deemed the highest priority.

Three other areas have also been identified between Sea Palm Park and Lovers Point, but are not as high a priority, as the coastline is still many feet away from the roadway and the walking trail is not immediately threatened by erosion.

Outside expertise is needed to analyze the geological, geotechnical, oceanographic, and environmental constraints associated with the locations, and to recommend solutions. Staff contacted two geotechnical firms and met them in the field to discuss the locations and let them visually inspect the coastline.

This agreement is only be the first step in a three-step process. Step one includes topographic surveys, engineering, exploratory drilling, laboratory testing, mapping, alternative analysis, and the development of conceptual design plans to be used for Coastal Commission permitting.

The Coastal Commission requires alternative means of protecting areas from coastal erosion be evaluated prior to selecting the best method. The Coastal Commission will require an evaluation of all alternatives, including what would occur if nothing was done, coastal armoring, either with seawalls or riprap, an evaluation whether improvements that are threatened can be relocated landward (“retreat”) to avoid the necessity of armoring, and trail realignment or relocation. Haro, Kasunich and Associates will provide in-depth analysis of each of these alternatives as part of their study.

The second step will be to develop construction drawings once a development permit is issued; the third step will be to implement the recommended actions, which may include seawall construction, installation of riprap, or instituting infrastructure retreat or relocation. The second and third steps will be presented to the City Council for its approval at a future meeting.

The City received only two qualified proposals for the task noted above:

Haro, Kasunich and Associates, Inc. (both sets of locations)	\$55,749
Cotton, Shires and Associates, Inc. (only the Esplanade Park locations)	\$38,900

Cotton, Shires and Associates, Inc. prepared the proposal for only the three Esplanade Park locations as they wanted to receive feedback from City staff before expending time and effort on preparing a proposal for the remaining three locations at Sea Palm Park. The comparison of just the Esplanade Park locations has Haro, Kasunich and Associates at \$27,582, and Cotton, Shires and Associates at \$38,900. City Staff did not feel it was necessary to have Cotton, Shires and Associates expend their time to develop the proposal for the remaining three locations.

FISCAL IMPACT

The funding for seawall construction has been allocated in Capital Fund 61 in the 2015/16 Fiscal Year Capital Improvement budget.

ATTACHMENTS

1. Resolution
2. Pictures of the Locations
3. Proposal with Scope of Work for Haro, Kasunich and Associates, Inc.

RESPECTFULLY SUBMITTED:



DANIEL GHO,
Public Works Director

REVIEWED BY:



THOMAS FRUTCHEY,
City Manager

RESOLUTION NO. 15-____

**AUTHORIZING THE CITY MANAGER TO ENTER INTO AN AGREEMENT
WITH HARO, KASUNICH AND ASSOCIATES, INC. FOR THE
PREPARATION OF COASTAL BLUFF PROTECTION SERVICES**

FINDINGS

1. The City solicited bids for the Preparation of Coastal Bluff Protection Services
2. The City received two quotes for the Preparation of Coastal Bluff Protection Services
3. Haro, Kasunich and Associates, Inc. is credentialed, experienced, and uniquely qualified to provide professional geotechnical engineering
4. The funding is allocated through Capital Fund 61 in the 2015/16 Fiscal Year Capital Improvement budget.
5. This action does not constitute a "Project" per California Environmental Quality Act (CEQA) Guidelines

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE
CITY OF PACIFIC GROVE:**

1. The foregoing Findings set forth above, and by this reference incorporates each as an integral part of this Resolution.
2. The City Manager is authorized to execute all documents and to perform all other necessary City acts to enter into an agreement with Haro, Kasunich and Associates, Inc. for the study of Coastal Erosion at Esplanade Park and Sea Palm Park for a sum not to exceed \$55,749 plus a 10% contingency
3. This Resolution shall become effective immediately following passage and adoption hereof.

PASSED AND ADOPTED BY THE COUNCIL OF THE CITY OF PACIFIC GROVE this 6th day of January, 2016, by the following vote:

AYES:

NOES:

ABSENT:

APPROVED:

BILL KAMPE, Mayor

ATTEST:

SANDRA KANDELL, Deputy City Clerk

APPROVED AS TO FORM:

DAVID C. LAREDO, City Attorney









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24 September 2015

CITY OF PACIFIC GROVE
Public Works Department
Attn: Daniel Gho, P. E.
2100 Sunset Drive
Pacific Grove, CA 93950

Reference: Recent Coastal Erosion Areas at Edge of Public Access Pathway
Areas near Esplanade Park
Pacific Grove, CA

Subject: Proposal for Services
Coastal Bluff Protection

Dear Mr. Gho:

At your request we have prepared a proposal to assist with coastal bluff protection for three recent coastal erosion areas at the edge of the Pacific Grove Recreational Trail, near Esplanade Street. Moses Cuprill (P. E.) and Mark Foxx (C. E. G.) have visited the site, and Haro Kasunich and Associates Inc. have worked at numerous other locations along Pacific Grove Recreational Trail for the City of Pacific Grove. We were the geologists, geotechnical engineers and civil engineers who designed the coastal protection at 18 locations along the Trail in 2004, which was then constructed in 2007.

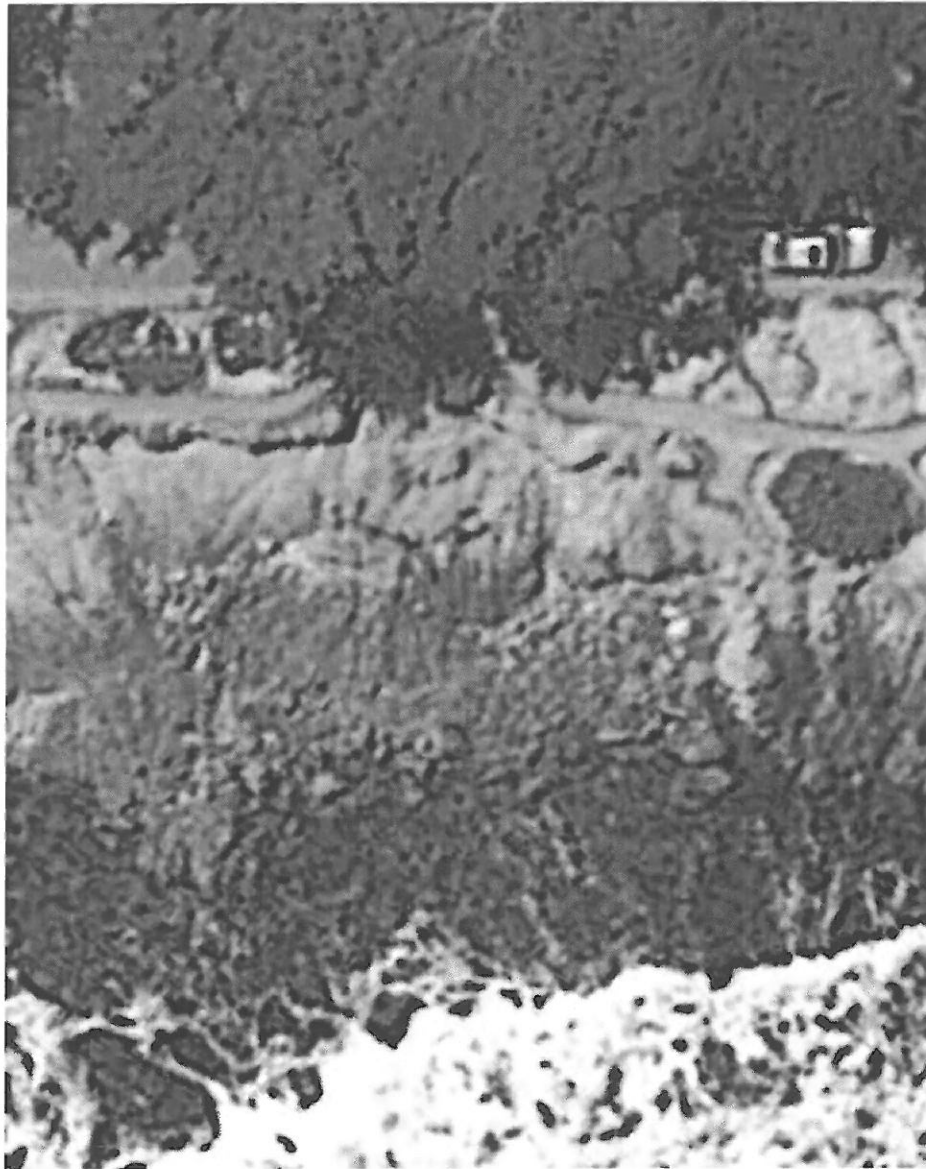
The purpose of our study is to assist you with the work necessary to obtain permits to provide coastal protection for the public access trail and the adjacent roadway. We recommend construction of seawalls and retaining structures that are sculpted, textured and colored to resemble adjacent natural rock outcrops; this will minimize visual impacts associated with bluff protection.

We have looked at 3 areas, which we have tentatively named Esplanade West, Esplanade Central and Esplanade East.

The Esplanade West Area is directly seaward of Esplanade Park. At Esplanade West the upper 6 feet of bluff has receded landward due to repeated ocean wave impact. The upper portion of the coastal bluff has a nearly vertical slope within the terrace deposits; and the public access path is on the verge of being undermined. A sloping bedrock platform extends seaward of this upper bluff face, 6 to 8 feet below the path elevation. The area of concern is about 15 feet wide. Below are photographs that show the Esplanade West area:



**Esplanade West Oblique View looking South
(courtesy of www.californiacoastline.org)**



Esplanade West Area Aerial View looking South
(Area is Obscured by Shadows)
(courtesy of Google Earth Pro)

Esplanade Central and East are immediately adjacent to each other about 100 to 180 feet towards Monterey from Esplanade West.

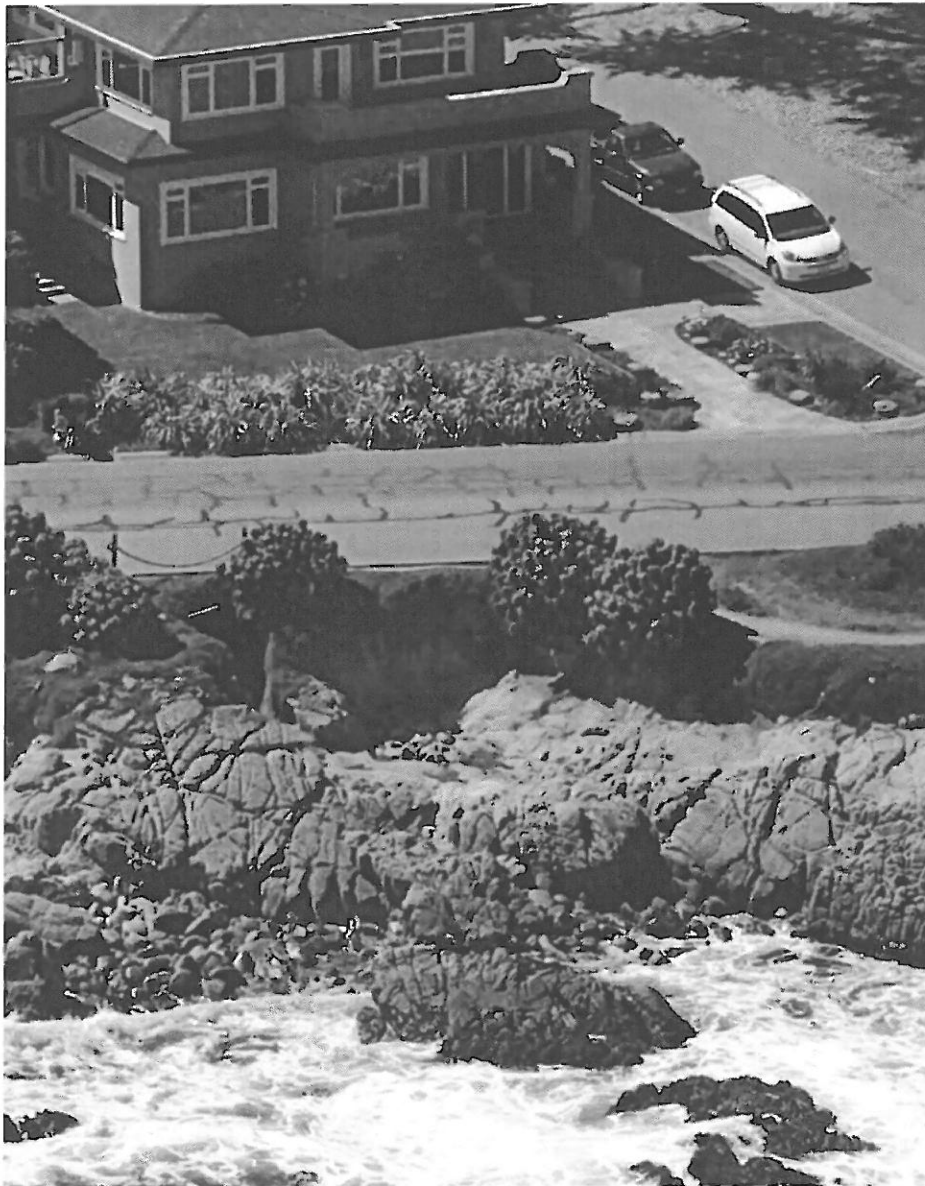
At Esplanade East a narrow eroded gully approximately 5 to 8 feet wide exists. The bluff has receded landward due to repeated ocean wave impact. The upper

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portion of the coastal bluff has a nearly vertical slope within the terrace deposits; and the public access path is being undermined. A water line has been damaged by erosion and has been patched. A few pieces of rip-rap were placed in the gully during winter 2015 to reduce the rate of erosion. A sloping bedrock platform extends seaward of this upper bluff face, 6 to 8 feet below the path elevation.

At Esplanade Central a broad eroded gully approximately 5 to 8 feet wide exists. The bluff has receded landward due to repeated ocean wave impact that flows up a notch in the bedrock platform. The upper portion of the coastal bluff has a nearly vertical slope within the terrace deposits; and the public access path is being undermined. A sloping bedrock platform extends seaward of this upper bluff face, 6 to 10 feet below the path elevation. The total area of concern is about 75 feet wide.

Below are photographs that show the Esplanade East and Esplanade Central areas:



Esplanade East and Esplanade Central Oblique View looking South
Water line is visible in Esplanade East
(courtesy of www.californiacoastline.org)

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**Esplanade East and Esplanade Central Aerial View looking South
(courtesy of Google Earth Pro)**

We understand that at this time the City prefers to pursue permits for retaining walls that are faced with artificial rock, similar to the previous structures we (HKA) designed. We will Phase our work for efficiency, and to allow you to gain support for the final projects that are selected for construction. Our services will include surveying, geologic analysis, geotechnical evaluation, oceanographic assessment, civil engineering and structural engineering.

Phase One Work:

The first step in analyzing the geologic, geotechnical, oceanographic and environmental constraints will be to have a topographic map prepared by a

surveyor who is experienced in surveying coastal bluff geomorphology. We (HKA) will arrange for and assist with such a survey. Haro Kasunich and Associates Inc. will then conduct a geotechnical investigation to develop design criteria for the proposed structures.

The California Coastal Commission requires that alternative means of protecting areas from coastal erosion be evaluated prior to selecting the best method. In general, the Coastal Commission prefers that bluff armoring (in the form of seawalls or retaining walls) be avoided whenever possible. As such they require an analysis of what will occur if nothing is done, and an evaluation whether whatever improvement is threatened can be relocated landward to avoid the necessity of armoring. Haro Kasunich and Associates Inc. can prepare a brief Alternatives Analysis that includes the following alternatives; A. No Project, B. Relocate Trail, C. Rip-rap revetment, and D. Retaining wall, and briefly addresses the following factors:

Alternatives analysis – this analysis should include a detailed explanation as to why the proposed long term solution is the least damaging “feasible” shoreline protective measure in terms of impacts to coastal resources, including public access, sand supply and visual resources. Feasible, as defined in the Coastal Act means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

With the geotechnical design criteria complete, Haro Kasunich and Associates Inc. will prepare conceptual design plans for the coastal erosion areas that are threatening the trail. These will include plan view wall alignments, schematic cross sections and elevation views of the proposed structures. The intent is to provide consultation and prepare plans for the structures, as necessary for Coastal Development Permit submittal.

Our present work will include the following tasks:

- 1) Administration and file review
- 2) Coordination of topographic survey. We will coordinate preparation of a survey with an experienced coastal bluff surveyor. The City can contract directly with our selected surveyor, or we can utilize them as a subcontractor (your choice).
- 3) Site visits
- 4) Preparation of a geologic sketch map
- 5) Preparation of three geologic profiles

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- 6) Subsurface exploration. Three exploratory borings will be drilled to evaluate soil density, strength, consistency and variability. A specialized limited access drill rig will be utilized for this project.
- 7) Laboratory testing of selected soil samples.
- 8) Drafting of field data and preparation of schematic conceptual plans for both a vertical bluff-top wall and a bluff-top rip-rap revetment.
- 9) Alternatives analysis including the elements discussed by the California Coastal Commission above.
- 10) Preparation of a focused geologic and geotechnical report addressing the proposed project.
- 11) Preparation of conceptual design plans.

Substantial effort is required to perform this study. We estimate that the following effort will be required:

Administration and File Review (lump sum):	\$ 1,500.00
Topographic Survey:	TBD
Engineering Geologist: 48 hours at \$185/hour	\$ 8,880.00
Coastal Engineer: 10 hours at \$190/hour	\$ 1,900.00
Senior Engineer: 32 hours at \$165/hour	\$ 5,280.00
Exploratory Drilling: 10 hours at \$402/hour	\$ 4,020.00
Laboratory Testing (lump sum):	\$ 900.00
AutoCad Technician: 24 hours at \$98/hour	<u>\$ 2,352.00</u>
Total:	\$24,832.00

Plus topographic survey cost

Phase Two Work:

Once a design is settled on that a Coastal Development Permit has been issued for, we can provide consultation and prepare final design plans for those designs, including structural design details and structural design plans, as necessary for Building Permit submittal, as an Extra Service; or if you prefer by submittal of an amendment to this proposal.

OWNER-FURNISHED SERVICES

It is understood that the Owner would furnish the following:

- A. Right of entry.
- B. All available data, maps, drawings, photos and reports pertinent to the referenced site.

EXTRA SERVICES

Telephone Consultations and Meetings

Consultation meetings and telephone consultation regarding the project not specifically detailed in this proposal are considered Extra Services.

Post-permit submittal responses to regulatory agency comments are considered Extra Services.

Once a design is settled on that a Coastal Development Permit has been issued for, we can provide consultation and prepare final design plans for those designs, including structural design details and structural design plans, as necessary for Building Permit submittal, as an Extra Service; or if you prefer by submittal of an amendment to this proposal.

Extra Services will be billed on a "time and material" basis in accordance with our current Fee Schedule (21 July 2014), or in accordance with a supplement to this proposal.

TERMS AND CONDITIONS

It is understood that we would be granted free access to the site for all necessary equipment and personnel, and that the Client has notified any and all possessors of the project site, whether they be lawfully or unlawfully in possession.

Services performed by us under this Agreement will be conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. The Client recognizes that subsurface conditions may vary from those encountered at the location where borings or tests are made by the Consultant; and that the data, interpretations, and recommendations of the Consultant are based solely on the information available to him.

COMPENSATION FOR SERVICES

Our services will be provided in accordance with the rates and terms shown on our attached Standard Fee Schedule. Our proposed estimated cost to perform the outlined Scope of Services will be \$24,832.00.

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Additional charges can be incurred should the scope of services be altered or unforeseen circumstances arise during the study. Should unforeseen circumstances arise, they will be brought to your attention for action.

THE AGREEMENT

This **AGREEMENT** is made by and between **HARO, KASUNICH AND ASSOCIATES, INC.**, hereinafter referred to as **ENGINEER**, and **THE CITY OF PACIFIC GROVE**, hereinafter referred to as **CLIENT**.

The **AGREEMENT** between the parties consists of these **TERMS**, and any exhibits or attachments noted in this **PROPOSAL**. Together these elements will constitute the entire **AGREEMENT**, superseding any and all prior negotiations, correspondence, or agreements, either written or oral. Any changes to this **AGREEMENT** must be mutually agreed to in writing.

BILLING AND PAYMENT

CLIENT will pay **ENGINEER** the estimated amount indicated in this **PROPOSAL** or, if no lump sum amount is indicated, in accordance with the schedule of fees and other equipment charges, as shown in this **PROPOSAL** and its attachments. Invoices will be submitted to **CLIENT** by **ENGINEER**, and will be due and payable upon presentation. If **CLIENT** objects to all or any portion of any invoice, **CLIENT** will so notify **ENGINEER** in writing within fourteen (14) calendar days of the invoice date, identify the cause of disagreement, and pay when due that portion of the invoice not in dispute. The parties will immediately make every effort to settle the disputed portion of the invoice. In the absence of written notification described above, the balance as stated on the invoice will be paid.

Invoices are delinquent if payment has not been received within thirty (30) days from date of invoice. **CLIENT** will pay an additional charge of 1½ (1.5) percent per month (or the maximum percentage allowed by law, whichever is lower) on any delinquent amount, excepting any portion of the invoice amount in dispute and resolved in favor of **CLIENT**. Payment thereafter will first be applied to accrued interest and then to the principle unpaid amount. All time spent and expenses incurred (including any attorney's fees) in connection with collection of any delinquent amount will be paid by **CLIENT** to **ENGINEER** per **ENGINEER's** current fee schedules. In the event **CLIENT** fails to pay **ENGINEER** within sixty (60) days after invoices are rendered, **CLIENT** agrees that **ENGINEER** will have the right to consider the failure to pay the **ENGINEER's** invoice as a breach of this **AGREEMENT**.

TERMINATION

This **AGREEMENT** may be terminated by either party seven (7) days after written notice in the event of any breach of any provision of this **AGREEMENT** or in the

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event of substantial failure of performance by the other party, or if the **CLIENT** suspends the work for more than three (3) months. This **AGREEMENT** may also be terminated if **CLIENT** suspends work for a period of less than three (3) months if the right to so terminate is specified in this **PROPOSAL**.

In the event of termination, **ENGINEER** will be paid for services performed prior to the date of termination plus reasonable termination expenses including the cost of completing analysis, records and reports necessary to document job status at the time of termination.

Should you have any question regarding the scope of services and/or require further comments, please call our office. If the above proposal meets with your approval, please sign and return a copy.

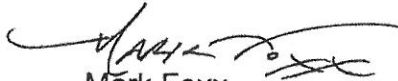
We appreciate this opportunity to be of service to you on this project.

Respectfully submitted,

HARO, KASUNICH & ASSOCIATES, INC.



Moses Cuprill
C. E. 78904



Mark Foxx
C. E. G. 1493

MEC/MF/dk

Enclosure: Fee Schedule

Copies: 1 to Addressee by email
1 to file

Accepted by: _____ Date: _____

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24 September 2015

CITY OF PACIFIC GROVE
Public Works Department
Attn: Daniel Gho, P. E.
2100 Sunset Drive
Pacific Grove, CA 93950

Reference: Recent Coastal Erosion Areas at Edge of Public Access Pathway
Areas near Sea Palm Street
Pacific Grove, CA

Subject: Proposal for Services
Coastal Bluff Protection

Dear Mr. Gho:

At your request we have prepared a proposal to assist with coastal bluff protection for three recent coastal erosion areas at the edge of the Pacific Grove Recreational Trail, seaward of Sea Palm Street. Moses Cuprill (P. E.) and Mark Foxx (C. E. G.) have visited the site, and Haro Kasunich and Associates Inc. have worked at numerous other locations along Pacific Grove Recreational Trail for the City of Pacific Grove. We were the geologists, geotechnical engineers and civil engineers who designed the coastal protection at 18 locations along the Trail in 2004, which was then constructed in 2007.

The purpose of our study is to assist you with the work necessary to obtain permits to provide coastal protection for the public access trail and the adjacent roadway. We recommend construction of seawalls and retaining structures that are sculpted, textured and colored to resemble adjacent natural rock outcrops; this will minimize visual impacts associated with bluff protection.

We have looked at 3 areas, which we have tentatively named Sea Palm West, Sea Palm Central and Sea Palm East.

The Sea Palm West Area is immediately adjacent to the beach access stairs at Sea Palm Park. At Sea Palm West the bluff has receded landward due to repeated ocean wave impact. Both the areas immediately upcoast and downcoast of the Sea Palm West Area are armored. At the top of the bluff, the public access path is on the verge of being undermined. The bluff extends down to the back edge of the beach. The area upcoast (toward Monterey) was protected with an artificial rock seawall in 2007; at the same time, the beach access stairs were supported with artificial rock where they were undermined. The area of concern is about 30 feet wide. Below are photographs that show the Sea Palm West area:



**Sea Palm West Oblique View looking South
(courtesy of www.californiacoastline.org)**



Sea Palm West Area Aerial View looking South
(courtesy of Google Earth Pro)

The Sea Palm Central area is about 200 feet towards Monterey from the Sea Palm Park beach stairs.

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At the Sea Palm Central Area the bluff has receded landward due to repeated ocean wave impact. At the top of the bluff, the public access path is on the verge of being undermined. The bluff extends down to the back edge of the beach. It may be possible to realign the trail since the bluff edge is approximately 25 feet from the adjacent roadway. A case can be made that public access is better served by protecting the trail in its present location than by relocating the trail closer to roadway traffic.

The bluff has receded landward due to repeated ocean wave impact that flows up a cobble beach and impacts the bluff. The upper portion of the coastal bluff has a very steep slope within the terrace deposits; and the public access path is being undermined. Some bedrock is exposed in the lower portion of the bluff face. We will evaluate whether it is better to support a coastal protection structure on the bedrock part way up the bluff face, or whether to extend protection to beach level. The area of concern is about 30 feet wide.

Below are photographs that show the Sea Palm Central area:



**Sea Palm Central Oblique View looking South
(courtesy of www.californiacoastline.org)**



**Sea Palm Central Aerial View looking South
(courtesy of Google Earth Pro)**

The Sea Palm East area is about 400 feet towards Monterey from the Sea Palm Park beach stairs.

At the Sea Palm East Area the bluff has receded landward due to repeated ocean wave impact. At the top of the bluff, the public access path is undermined. A failing short wooden retaining wall supports the trail. The bluff extends down to the back edge of the beach. It may be possible to realign the trail since the bluff edge is approximately 35 feet from the adjacent roadway. A case can be made that public access is better served by protecting the trail in its present location that by

relocating the trail closer to roadway traffic.

The bluff has receded landward due to repeated ocean wave impact that flows up a cobble beach and impacts the bluff. The upper portion of the coastal bluff has a very steep slope within the terrace deposits; and the public access path is undermined. Bedrock is exposed in the lower portion of the bluff face, where a broad bedrock platform is present. We anticipate a coastal protection structure will be located on the bedrock, and it may be possible to step a structure up the bluff face rather than utilize a vertical wall. The area of concern is about 15 feet wide. Below are photographs that show the Sea Palm East area:



**Sea Palm East Oblique View looking South
(courtesy of www.californiacoastline.org)**



**Sea Palm East Aerial View looking South
(courtesy of Google Earth Pro)**

We understand that at this time the City prefers to pursue permits for retaining walls that are faced with artificial rock, similar to the previous structures we (HKA) designed. We will Phase our work for efficiency, and to allow you to gain support for the final projects that are selected for construction. Our services will include surveying, geologic analysis, geotechnical evaluation, oceanographic

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assessment, civil engineering and structural engineering.

Phase One Work:

The first step in analyzing the geologic, geotechnical, oceanographic and environmental constraints will be to have a topographic map prepared by a surveyor who is experienced in surveying coastal bluff geomorphology. We (HKA) will arrange for and assist with such a survey.

Haro Kasunich and Associates Inc. will then conduct a geotechnical investigation to develop design criteria for the proposed structures.

The California Coastal Commission requires that alternative means of protecting areas from coastal erosion be evaluated prior to selecting the best method. In general, the Coastal Commission prefers that bluff armoring (in the form of seawalls or retaining walls) be avoided whenever possible. As such they require an analysis of what will occur if nothing is done, and an evaluation whether whatever improvement is threatened can be relocated landward to avoid the necessity of armoring. Haro Kasunich and Associates Inc. can prepare a brief Alternatives Analysis that includes the following alternatives; A. No project, B. Relocate Trail., C. Rip-rap revetment, and D. Retaining wall, and briefly addresses the following factors:

Alternatives analysis – this analysis should include a detailed explanation as to why the proposed long term solution is the least damaging “feasible” shoreline protective measure in terms of impacts to coastal resources, including public access, sand supply and visual resources. Feasible, as defined in the Coastal Act means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

Where there is room to relocate the trail inland, we will prepare plan view sketches of possible trail realignments that will protect the trail by virtue of the setback. This will allow discussion of the pros and cons of “relocating the threatened structure” with the Coastal Commission staff. The intent is to provide consultation and prepare plans for the structures, as necessary for Coastal Development Permit submittal.

Our present work will include the following tasks:

- 1) Administration and file review

- 2) Coordination of topographic survey. We will coordinate preparation of a survey with an experienced coastal bluff surveyor. The City can contract directly with our selected surveyor, or we can utilize them as a subcontractor (your choice).
- 3) Site visits
- 4) Preparation of a geologic sketch map
- 5) Preparation of three geologic profiles
- 6) Subsurface exploration. Three exploratory borings will be drilled to evaluate soil density, strength, consistency and variability. A specialized limited access drill rig will be utilized for this project.
- 7) Laboratory testing of selected soil samples.
- 8) Drafting of field data and preparation of schematic conceptual plans for both a vertical bluff-top wall and a bluff-top rip-rap revetment.
- 9) Alternatives analysis including the elements discussed by the California Coastal Commission above.
- 10) Preparation of a focused geologic and geotechnical report addressing the proposed project.
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Substantial effort is required to perform this study. We estimate that the following effort will be required:

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Total: **\$24,832.00**
Plus topographic survey cost

Phase Two Work:

Once a design is settled on that a Coastal Development Permit has been issued for, we can provide consultation and prepare final design plans for those designs, including structural design details and structural design plans, as necessary for Building Permit submittal, as an Extra Service; or if you prefer by submittal of an amendment to this proposal.

OWNER-FURNISHED SERVICES

It is understood that the Owner would furnish the following:

- A. Right of entry.
- B. All available data, maps, drawings, photos and reports pertinent to the referenced site.
- C. Topographic Survey

EXTRA SERVICES

Telephone Consultations and Meetings

Consultation meetings and telephone consultation regarding the project not specifically detailed in this proposal are considered Extra Services.

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The **AGREEMENT** between the parties consists of these **TERMS**, and any exhibits or attachments noted in this **PROPOSAL**. Together these elements will constitute the entire **AGREEMENT**, superseding any and all prior negotiations, correspondence, or agreements, either written or oral. Any changes to this **AGREEMENT** must be mutually agreed to in writing.

BILLING AND PAYMENT

CLIENT will pay **ENGINEER** the estimated amount indicated in this **PROPOSAL** or, if no lump sum amount is indicated, in accordance with the schedule of fees and other equipment charges, as shown in this **PROPOSAL** and its attachments. Invoices will be submitted to **CLIENT** by **ENGINEER**, and will be due and payable upon presentation. If **CLIENT** objects to all or any portion of any invoice, **CLIENT** will so notify **ENGINEER** in writing within fourteen (14) calendar days of the invoice date, identify the cause of disagreement, and pay when due that portion of the invoice not in dispute. The parties will immediately make every effort to settle the disputed portion of the invoice. In the absence of written notification described above, the balance as stated on the invoice will be paid.

Invoices are delinquent if payment has not been received within thirty (30) days from date of invoice. **CLIENT** will pay an additional charge of 1½ (1.5) percent per month (or the maximum percentage allowed by law, whichever is lower) on any

delinquent amount, excepting any portion of the invoice amount in dispute and resolved in favor of **CLIENT**. Payment thereafter will first be applied to accrued interest and then to the principle unpaid amount. All time spent and expenses incurred (including any attorney's fees) in connection with collection of any delinquent amount will be paid by **CLIENT** to **ENGINEER** per **ENGINEER's** current fee schedules. In the event **CLIENT** fails to pay **ENGINEER** within sixty (60) days after invoices are rendered, **CLIENT** agrees that **ENGINEER** will have the right to consider the failure to pay the **ENGINEER's** invoice as a breach of this **AGREEMENT**.

TERMINATION

This **AGREEMENT** may be terminated by either party seven (7) days after written notice in the event of any breach of any provision of this **AGREEMENT** or in the event of substantial failure of performance by the other party, or if the **CLIENT** suspends the work for more than three (3) months. This **AGREEMENT** may also be terminated if **CLIENT** suspends work for a period of less than three (3) months if the right to so terminate is specified in this **PROPOSAL**.

In the event of termination, **ENGINEER** will be paid for services performed prior to the date of termination plus reasonable termination expenses including the cost of completing analysis, records and reports necessary to document job status at the time of termination.

Should you have any question regarding the scope of services and/or require further comments, please call our office. If the above proposal meets with your approval, please sign and return a copy.

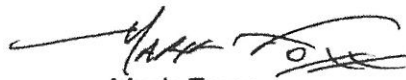
We appreciate this opportunity to be of service to you on this project.

Respectfully submitted,

HARO, KASUNICH & ASSOCIATES, INC.



Moses Cuprill
C. E. 78904



Mark Foxx
C. E. G. 1493

City of Pacific Grove
P15-127 B
Coastal Erosion Esplanade Park
24 September 2015
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Enclosure: Fee Schedule
Copies: 1 to Addressee by email
1 to file

Accepted by: _____ Date: _____