

ATTACHMENT 1

AGREEMENT FOR SERVICES OF INDEPENDENT CONTRACTOR

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THIS AGREEMENT (hereafter Agreement) is made by and between the County of Santa Barbara, a political subdivision of the State of California (hereafter COUNTY) and Revell Coastal, LLC with an address at 125 Pearl Street, Santa Cruz, CA 95060 (hereafter CONTRACTOR) wherein CONTRACTOR agrees to provide and COUNTY agrees to accept the services specified herein.

WHEREAS, CONTRACTOR represents that it is specially trained, skilled, experienced, and competent to perform the special services required by COUNTY and COUNTY desires to retain the services of CONTRACTOR pursuant to the terms, covenants, and conditions herein set forth;

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein, the parties agree as follows:

1. **DESIGNATED REPRESENTATIVE**

Glenn Russell, Ph.D. at phone number 805-568-2085 is the representative of COUNTY and will administer this Agreement for and on behalf of COUNTY. David Revell, Ph.D. at phone number 831-272-0227 is the authorized representative for CONTRACTOR. Changes in designated representatives shall be made only after advance written notice to the other party.

2. **NOTICES**

Any notice or consent required or permitted to be given under this Agreement shall be given to the respective parties in writing, by personal delivery or facsimile, or with postage prepaid by first class mail, registered or certified mail, or express courier service, as follows:

To COUNTY: Glenn Russell, Ph.D., Director, Planning and Development, 123 East Anapamu Street, Santa Barbara, CA 93101

To CONTRACTOR: David L. Revell, Ph.D., Principal, Revell Coastal, LLC, 125 Pearl Street, Santa Cruz, CA 95060

or at such other address or to such other person that the parties may from time to time designate in accordance with this Notices section. If sent by first class mail, notices and consents under this section shall be deemed to be received five (5) days following their deposit in the U.S. mail. This Notices section shall not be construed as meaning that either party agrees to service of process except as required by applicable law.

3. **SCOPE OF SERVICES**

CONTRACTOR agrees to provide services to COUNTY in accordance with EXHIBIT A attached hereto and incorporated herein by reference.

4. **TERM**

CONTRACTOR shall commence performance on July 22, 2015 and end performance upon completion, but no later than December 31, 2016 unless otherwise directed by COUNTY or unless earlier terminated.

5. **COMPENSATION OF CONTRACTOR**

In full consideration for CONTRACTOR's services, CONTRACTOR shall be paid for performance under this Agreement in accordance with the terms of EXHIBIT B attached hereto and incorporated herein by reference. Billing

shall be made by invoice, which shall include the contract number assigned by COUNTY and which is delivered to the address given in Section 2 NOTICES above following completion of the increments identified on EXHIBIT B. Unless otherwise specified on EXHIBIT B, payment shall be net thirty (30) days from presentation of invoice.

6. INDEPENDENT CONTRACTOR

It is mutually understood and agreed that CONTRACTOR (including any and all of its officers, agents, and employees), shall perform all of its services under this Agreement as an independent contractor as to COUNTY and not as an officer, agent, servant, employee, joint venturer, partner, or associate of COUNTY. Furthermore, COUNTY shall have no right to control, supervise, or direct the manner or method by which CONTRACTOR shall perform its work and function. However, COUNTY shall retain the right to administer this Agreement so as to verify that CONTRACTOR is performing its obligations in accordance with the terms and conditions hereof. CONTRACTOR understands and acknowledges that it shall not be entitled to any of the benefits of a COUNTY employee, including but not limited to vacation, sick leave, administrative leave, health insurance, disability insurance, retirement, unemployment insurance, workers' compensation and protection of tenure. CONTRACTOR shall be solely liable and responsible for providing to, or on behalf of, its employees all legally-required employee benefits. In addition, CONTRACTOR shall be solely responsible and save COUNTY harmless from all matters relating to payment of CONTRACTOR's employees, including compliance with Social Security withholding and all other regulations governing such matters. It is acknowledged that during the term of this Agreement, CONTRACTOR may be providing services to others unrelated to the COUNTY or to this Agreement.

7. STANDARD OF PERFORMANCE

CONTRACTOR represents that it has the skills, expertise, and licenses/permits necessary to perform the services required under this Agreement. Accordingly, CONTRACTOR shall perform all such services in the manner and according to the standards observed by a competent practitioner of the same profession in which CONTRACTOR is engaged. All products of whatsoever nature, which CONTRACTOR delivers to COUNTY pursuant to this Agreement, shall be prepared in a first class and workmanlike manner and shall conform to the standards of quality normally observed by a person practicing in CONTRACTOR's profession. CONTRACTOR shall correct or revise any errors or omissions, at COUNTY'S request without additional compensation. Permits and/or licenses shall be obtained and maintained by CONTRACTOR without additional compensation.

8. DEBARMENT AND SUSPENSION

CONTRACTOR certifies to COUNTY that it and its employees and principals are not debarred, suspended, or otherwise excluded from or ineligible for, participation in federal, state, or county government contracts. CONTRACTOR certifies that it shall not contract with a subcontractor that is so debarred or suspended.

9. TAXES

CONTRACTOR shall pay all taxes, levies, duties, and assessments of every nature due in connection with any work under this Agreement and shall make any and all payroll deductions required by law. COUNTY shall not be responsible for paying any taxes on CONTRACTOR's behalf, and should COUNTY be required to do so by state, federal, or local taxing agencies, CONTRACTOR agrees to promptly reimburse COUNTY for the full value of such paid taxes plus interest and penalty, if any. These taxes shall include, but not be limited to, the following: FICA (Social Security), unemployment insurance contributions, income tax, disability insurance, and workers' compensation insurance.

10. CONFLICT OF INTEREST

CONTRACTOR covenants that CONTRACTOR presently has no employment or interest and shall not acquire any employment or interest, direct or indirect, including any interest in any business, property, or source of income, which would conflict in any manner or degree with the performance of services required to be performed under this

Agreement. CONTRACTOR further covenants that in the performance of this Agreement, no person having any such interest shall be employed by CONTRACTOR.

A. CONTRACTOR must promptly disclose to COUNTY, in writing, any potential conflict of interest.

COUNTY retains the right to waive a conflict of interest disclosed by CONTRACTOR if COUNTY determines it to be immaterial, and such waiver is only effective if provided by COUNTY to CONTRACTOR in writing.

11. OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY

COUNTY shall be the owner of the following items incidental to this Agreement upon production, whether or not completed: all data collected, all documents of any type whatsoever, all photos, designs, sound or audiovisual recordings, software code, inventions, technologies, and other materials, and any material necessary for the practical use of such items, from the time of collection and/or production whether or not performance under this Agreement is completed or terminated prior to completion. CONTRACTOR shall not release any of such items to other parties except after prior written approval of COUNTY.

Unless otherwise specified in Exhibit A, CONTRACTOR hereby assigns to COUNTY all copyright, patent, and other intellectual property and proprietary rights to all data, documents, reports, photos, designs, sound or audiovisual recordings, software code, inventions, technologies, and other materials prepared or provided by CONTRACTOR pursuant to this Agreement (collectively referred to as "Copyrightable Works and Inventions"). COUNTY shall have the unrestricted authority to copy, adapt, perform, display, publish, disclose, distribute, create derivative works from, and otherwise use in whole or in part, any Copyrightable Works and Inventions. CONTRACTOR agrees to take such actions and execute and deliver such documents as may be needed to validate, protect and confirm the rights and assignments provided hereunder. CONTRACTOR warrants that any Copyrightable Works and Inventions and other items provided under this Agreement will not infringe upon any intellectual property or proprietary rights of any third party. CONTRACTOR at its own expense shall defend, indemnify, and hold harmless COUNTY against any claim that any Copyrightable Works or Inventions or other items provided by CONTRACTOR hereunder infringe upon intellectual or other proprietary rights of a third party, and CONTRACTOR shall pay any damages, costs, settlement amounts, and fees (including attorneys' fees) that may be incurred by COUNTY in connection with any such claims. This Ownership of Documents and Intellectual Property provision shall survive expiration or termination of this Agreement.

12. NO PUBLICITY OR ENDORSEMENT

CONTRACTOR shall not use COUNTY's name or logo or any variation of such name or logo in any publicity, advertising or promotional materials. CONTRACTOR shall not use COUNTY's name or logo in any manner that would give the appearance that the COUNTY is endorsing CONTRACTOR. CONTRACTOR shall not in any way contract on behalf of or in the name of COUNTY. CONTRACTOR shall not release any informational pamphlets, notices, press releases, research reports, or similar public notices concerning the COUNTY or its projects, without obtaining the prior written approval of COUNTY.

13. COUNTY PROPERTY AND INFORMATION

All of COUNTY's property, documents, and information provided for CONTRACTOR's use in connection with the services shall remain COUNTY's property, and CONTRACTOR shall return any such items whenever requested by COUNTY and whenever required according to the Termination section of this Agreement. CONTRACTOR may use such items only in connection with providing the services. CONTRACTOR shall not disseminate any COUNTY property, documents, or information without COUNTY's prior written consent.

14. RECORDS, AUDIT, AND REVIEW

CONTRACTOR shall keep such business records pursuant to this Agreement as would be kept by a reasonably prudent practitioner of CONTRACTOR's profession and shall maintain such records for at least four (4) years following the termination of this Agreement. All accounting records shall be kept in accordance with generally accepted accounting principles. COUNTY shall have the right to audit and review all such documents and records at any time during CONTRACTOR's regular business hours or upon reasonable notice. In addition, if this Agreement exceeds ten thousand dollars (\$10,000.00), CONTRACTOR shall be subject to the examination and audit of the California State Auditor, at the request of the COUNTY or as part of any audit of the COUNTY, for a period of three (3) years after final payment under the Agreement (Cal. Govt. Code Section 8546.7). CONTRACTOR shall participate in any audits and reviews, whether by COUNTY or the State, at no charge to COUNTY.

If federal, state or COUNTY audit exceptions are made relating to this Agreement, CONTRACTOR shall reimburse all costs incurred by federal, state, and/or COUNTY governments associated with defending against the audit exceptions or performing any audits or follow-up audits, including but not limited to: audit fees, court costs, attorneys' fees based upon a reasonable hourly amount for attorneys in the community, travel costs, penalty assessments and all other costs of whatever nature. Immediately upon notification from COUNTY, CONTRACTOR shall reimburse the amount of the audit exceptions and any other related costs directly to COUNTY as specified by COUNTY in the notification.

15. INDEMNIFICATION AND INSURANCE

CONTRACTOR agrees to the indemnification and insurance provisions as set forth in EXHIBIT C attached hereto and incorporated herein by reference.

16. NONDISCRIMINATION

COUNTY hereby notifies CONTRACTOR that COUNTY's Unlawful Discrimination Ordinance (Article XIII of Chapter 2 of the Santa Barbara County Code) applies to this Agreement and is incorporated herein by this reference with the same force and effect as if the ordinance were specifically set out herein and CONTRACTOR agrees to comply with said ordinance.

17. NONEXCLUSIVE AGREEMENT

CONTRACTOR understands that this is not an exclusive Agreement and that COUNTY shall have the right to negotiate with and enter into contracts with others providing the same or similar services as those provided by CONTRACTOR as the COUNTY desires.

18. NON-ASSIGNMENT

CONTRACTOR shall not assign or transfer this Agreement or any of its rights or obligations under this Agreement without the prior written consent of COUNTY and any attempt to so assign or transfer without such consent shall be void and without legal effect and shall constitute grounds for termination.

19. TERMINATION

A. **By COUNTY.** COUNTY may, by written notice to CONTRACTOR, terminate this Agreement in whole or in part at any time, whether for COUNTY's convenience, for nonappropriation of funds, or because of the failure of CONTRACTOR to fulfill the obligations herein.

1. **For Convenience.** COUNTY may terminate this Agreement in whole or in part upon thirty (30) days written notice. During the thirty (30) day period, CONTRACTOR shall, as directed by COUNTY, wind down and cease its services as quickly and efficiently as reasonably possible, without performing

unnecessary services or activities and by minimizing negative effects on COUNTY from such winding down and cessation of services.

2. **For Nonappropriation of Funds.** Notwithstanding any other provision of this Agreement, in the event that no funds or insufficient funds are appropriated or budgeted by federal, state or COUNTY governments, or funds are not otherwise available for payments in the fiscal year(s) covered by the term of this Agreement, then COUNTY will notify CONTRACTOR of such occurrence and COUNTY may terminate or suspend this Agreement in whole or in part, with or without a prior notice period. Subsequent to termination of this Agreement under this provision, COUNTY shall have no obligation to make payments with regard to the remainder of the term.
 3. **For Cause.** Should CONTRACTOR default in the performance of this Agreement or materially breach any of its provisions, COUNTY may, at COUNTY's sole option, terminate or suspend this Agreement in whole or in part by written notice. Upon receipt of notice, CONTRACTOR shall immediately discontinue all services affected (unless the notice directs otherwise) and notify COUNTY as to the status of its performance. The date of termination shall be the date the notice is received by CONTRACTOR, unless the notice directs otherwise.
- B. **By CONTRACTOR.** Should COUNTY fail to pay CONTRACTOR all or any part of the payment set forth in EXHIBIT B, CONTRACTOR may, at CONTRACTOR's option terminate this Agreement if such failure is not remedied by COUNTY within thirty (30) days of written notice to COUNTY of such late payment.
- C. Upon termination, CONTRACTOR shall deliver to COUNTY all data, estimates, graphs, summaries, reports, and all other property, records, documents or papers as may have been accumulated or produced by CONTRACTOR in performing this Agreement, whether completed or in process, except such items as COUNTY may, by written permission, permit CONTRACTOR to retain. Notwithstanding any other payment provision of this Agreement, COUNTY shall pay CONTRACTOR for satisfactory services performed to the date of termination to include a prorated amount of compensation due hereunder less payments, if any, previously made. In no event shall CONTRACTOR be paid an amount in excess of the full price under this Agreement nor for profit on unperformed portions of service. CONTRACTOR shall furnish to COUNTY such financial information as in the judgment of COUNTY is necessary to determine the reasonable value of the services rendered by CONTRACTOR. In the event of a dispute as to the reasonable value of the services rendered by CONTRACTOR, the decision of COUNTY shall be final. The foregoing is cumulative and shall not affect any right or remedy which COUNTY may have in law or equity.

20. **SECTION HEADINGS**

The headings of the several sections, and any Table of Contents appended hereto, shall be solely for convenience of reference and shall not affect the meaning, construction or effect hereof.

21. **SEVERABILITY**

If any one or more of the provisions contained herein shall for any reason be held to be invalid, illegal or unenforceable in any respect, then such provision or provisions shall be deemed severable from the remaining provisions hereof, and such invalidity, illegality or unenforceability shall not affect any other provision hereof, and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

22. REMEDIES NOT EXCLUSIVE

No remedy herein conferred upon or reserved to COUNTY is intended to be exclusive of any other remedy or remedies, and each and every such remedy, to the extent permitted by law, shall be cumulative and in addition to any other remedy given hereunder or now or hereafter existing at law or in equity or otherwise.

23. TIME IS OF THE ESSENCE

Time is of the essence in this Agreement and each covenant and term is a condition herein.

24. NO WAIVER OF DEFAULT

No delay or omission of COUNTY to exercise any right or power arising upon the occurrence of any event of default shall impair any such right or power or shall be construed to be a waiver of any such default or an acquiescence therein; and every power and remedy given by this Agreement to COUNTY shall be exercised from time to time and as often as may be deemed expedient in the sole discretion of COUNTY.

25. ENTIRE AGREEMENT AND AMENDMENT

In conjunction with the matters considered herein, this Agreement contains the entire understanding and agreement of the parties and there have been no promises, representations, agreements, warranties or undertakings by any of the parties, either oral or written, of any character or nature hereafter binding except as set forth herein. This Agreement may be altered, amended or modified only by an instrument in writing, executed by the parties to this Agreement and by no other means. Each party waives their future right to claim, contest or assert that this Agreement was modified, canceled, superseded, or changed by any oral agreements, course of conduct, waiver or estoppel.

26. SUCCESSORS AND ASSIGNS

All representations, covenants and warranties set forth in this Agreement, by or on behalf of, or for the benefit of any or all of the parties hereto, shall be binding upon and inure to the benefit of such party, its successors and assigns.

27. COMPLIANCE WITH LAW

CONTRACTOR shall, at its sole cost and expense, comply with all County, State and Federal ordinances and statutes now in force or which may hereafter be in force with regard to this Agreement. The judgment of any court of competent jurisdiction, or the admission of CONTRACTOR in any action or proceeding against CONTRACTOR, whether COUNTY is a party thereto or not, that CONTRACTOR has violated any such ordinance or statute, shall be conclusive of that fact as between CONTRACTOR and COUNTY.

28. CALIFORNIA LAW AND JURISDICTION

This Agreement shall be governed by the laws of the State of California. Any litigation regarding this Agreement or its contents shall be filed in the County of Santa Barbara, if in state court, or in the federal district court nearest to Santa Barbara County, if in federal court.

29. EXECUTION OF COUNTERPARTS

This Agreement may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, or as many of them as the parties shall preserve undestroyed, shall together constitute one and the same instrument.

30. AUTHORITY

All signatories and parties to this Agreement warrant and represent that they have the power and authority to enter into this Agreement in the names, titles and capacities herein stated and on behalf of any entities, persons, or firms represented or purported to be represented by such entity(ies), person(s), or firm(s) and that all formal requirements necessary or required by any state and/or federal law in order to enter into this Agreement have been fully complied with. Furthermore, by entering into this Agreement, CONTRACTOR hereby warrants that it shall not have breached the terms or conditions of any other contract or agreement to which CONTRACTOR is obligated, which breach would have a material effect hereon.

31. SURVIVAL

All provisions of this Agreement which by their nature are intended to survive the termination or expiration of this Agreement shall survive such termination or expiration.

32. PRECEDENCE

In the event of conflict between the provisions contained in the numbered sections of this Agreement and the provisions contained in the Exhibits, the provisions of the Exhibits shall prevail over those in the numbered sections.

33. SUBCONTRACTORS.

CONTRACTOR is authorized to subcontract with subcontractors identified in Contractor's Proposal. CONTRACTOR shall be fully responsible for all services performed by its subcontractor. CONTRACTOR shall secure from its subcontractor all rights for COUNTY in this Agreement, including audit rights.

34. HANDLING OF PROPRIETARY INFORMATION.

CONTRACTOR understands and agrees that certain materials which may be provided by COUNTY may be classified and conspicuously labeled as proprietary confidential information. That material is to be subject to the following special provisions:

- A. All reasonable steps will be taken to prevent disclosure of the material to any person except those personnel of CONTRACTOR working on the project who have a need to use the material.
- B. Upon conclusion of CONTRACTOR'S work, CONTRACTOR shall return all copies of the material direct to party providing such material. CONTRACTOR shall contact COUNTY'S Designated Representative to obtain the name of the specific party authorized to receive the material.

35. IMMATERIAL CHANGES.

CONTRACTOR and COUNTY agree that immaterial changes to the work program (time frame and mutually agreeable Statement of Work changes which will not result in a change to the total contract amount) may be authorized by Planning and Development Director, or designee in writing, and will not constitute an amendment to the Agreement.

36. NEWS RELEASES/INTERVIEWS.

CONTRACTOR agrees for itself, its agents, employees and subcontractors, it will not communicate with representatives of the communications media concerning the subject matter of this Agreement without prior written approval of the COUNTY Project Coordinator. CONTRACTOR further agrees that all media requests for communication will be referred to COUNTY'S responsible personnel.

Agreement for Services of Independent Contractor between the County of Santa Barbara and Revell Coastal, LLC.

IN WITNESS WHEREOF, the parties have executed this Agreement to be effective on the date executed by COUNTY.

ATTEST:

Mona Miyasato
County Executive Officer
Clerk of the Board

By: _____
Deputy Clerk

COUNTY OF SANTA BARBARA:

By: _____
Janet Wolf
Chair, Board of Supervisors

Date: _____

RECOMMENDED FOR APPROVAL:

Planning and Development
Department

By: *Dianne M. Blade*
Department Head
For Glenn Russell

CONTRACTOR:

Revell Coastal, LLC

By: *David Revell*
Authorized Representative

Name: David Revell, Ph.D.

Title: Principal

APPROVED AS TO FORM:

Michael C. Ghizzoni
County Counsel

By: *Michael C. Ghizzoni*
Deputy County Counsel

APPROVED AS TO ACCOUNTING FORM:

Robert W. Geis, CPA
Auditor-Controller

By: *Kate Rota*
Deputy

APPROVED AS TO FORM:

Risk Management

By: *[Signature]*
Risk Management

EXHIBIT A

STATEMENT OF WORK

The following tasks have been identified to be performed by the CONTRACTOR to support Phase II of the Santa Barbara County Coastal Resiliency Project:

Task 1. Project Kick-off Meeting

After commencement of the CONTRACTOR contract for coastal hazard modeling, the CONTRACTOR shall participate in a meeting to be held with Coastal Commission staff and County staff to clarify the County's objectives, exchange documents with the County staff, Commission staff, and CONTRACTOR, clarify the scope of work and schedule, and establish communication protocols.

Task 2. Modeling and Mapping Stakeholder Meetings

The County will lead a series of public project meetings with key stakeholders to discuss coastal hazard modeling. Key stakeholders include but are not limited to: staff from the incorporated Cities in Santa Barbara County, University of California, Santa Barbara, Caltrans, Southern Pacific Railroad, California State Parks, Santa Barbara County Association of Governments, California Coastal Conservancy, local Chambers of Commerce, Environmental Defense Center, Heal the Ocean, Surfrider, Citizens Planning Association, Urban Creeks Council, Santa Barbara Channelkeeper, and BEACON. Additionally, the County and staff from the incorporated Cities in Santa Barbara County and University of California, Santa Barbara meet periodically as part of a regional sea level rise working group to discuss local planning efforts dealing with sea level rise and other coastal hazards.

The CONTRACTOR will participate in up to four public project meetings and will provide input on the agenda and/or prepare presentations on technical information relevant to climate change modeling.

Deliverables:

- (1) Meeting minutes; and
- (2) Stakeholder contact list.

Task 3. Update Regional Resource Database

County staff, staff from the University of California, Santa Barbara (UCSB), and cooperating stakeholders are anticipated to provide social, economic, coastal armoring, water control structures (e.g. storm drains, tide gates, levees, culverts) and ecological resources data for their jurisdiction/authority/influence. The County will house the data and all data will be shared with the Coastal Commission including the update to the shoreline armoring data set.

The CONTRACTOR will acquire regional databases for social, economic, coastal armoring, water control structures and ecological resources from the County and will integrate the digital information into GIS and compile the individual jurisdictional information into a spatial data set. The County will coordinate with the Coastal Commission's mapping unit to obtain any useful data sets, and to determine protocols for developing LCP maps.

The following data will be obtained and integrated:

- *Infrastructure and asset data* – to be provided in digital form by local jurisdictions;
- *Habitat data* – to be provided in digital format by local jurisdictions, UCSB, or other national level data sets; and

- *Coastal armoring* – the CONTRACTOR will improve the 2006 Coastal Commission armoring data set with improved spatial location and crest elevations based on LIDAR or jurisdictional supplied survey data (see Task 4.1 for more details).

Deliverables:

- (1) Summary table of all acquired and relevant data sets; and
- (2) GIS shapefiles with metadata of the compiled spatially-explicit regional GIS database.

Task 4. Model and Map Coastal Hazards for Climate Scenarios

The NOAA SLR viewer shows some impacts to low lying areas in the County, but the lack of inclusion of coastal erosion and detailed hydraulic connectivity especially in areas of critical infrastructure require more detailed technical modeling analysis. The CONTRACTOR will model physical processes necessary to identify planning level changes to the extent feasible given existing data in future coastal erosion and coastal flooding hazards. The coastal hazard modeling will be based on the best available science on sea level rise, and will be consistent with the DRAFT guidance of sea level rise by the California Coastal Commission, and the final guidance once approved by the Commission. This will include modeling of at least three (3) sea level rise scenarios and three (3) planning horizons (plus existing conditions). The CONTRACTOR will follow a similar range of scenarios and planning horizons as those utilized in the Coastal Resilience Ventura Project and the coastal hazard modeling completed for Santa Barbara County’s south coast (Phase I). This same model was initially built as part of the 2009 Pacific Institute work, and has been substantially improved upon during the Coastal Resilience Ventura work and as part of the Monterey Bay Sea Level Rise Vulnerability Assessment. To accomplish the modeling and mapping tasks, there are several subtasks with interim deliverables that the CONTRACTOR will deliver:

4.1 Backshore Inventory

The CONTRACTOR will develop a backshore inventory that includes parameters necessary to drive the coastal hazards model. The inventory will be an update of the initial baseline developed for the Pacific Institute study (Revell et al 2011) and consistent with the Phase I Santa Barbara County Coastal Resilience Project. The inventory will be an offshore baseline segmented at a maximum of 500 meters (~1500 feet) spacing (“blocks”) to conduct the coastal modeling at a scale appropriate to decision making. In areas of smaller geological units or backshore type (e.g. pocket beaches), the block distance may be smaller. Each block will be assigned a set of parameters including backshore type (dune/cliff/inlet), presence of coastal armoring, geology, erosion rates, median/minimum toe elevations, dune/cliff crest elevation, beach slope, foreshore slope, and the 100-year total water level.

The CONTRACTOR will utilize available LIDAR including the State funded LIDAR (2010/11), the NOAA, NASA, USGS LIDAR (1997 and 1998), and potentially other relevant topographic data sets. The CONTRACTOR will also use readily available offshore depth data sets and interpolate between LIDAR and underwater depths, as appropriate. Readily available nearshore profile data from BEACON will be reviewed to inform the profile generation. The CONTRACTOR will analyze a range of beach profiles from multiple seasons, at 300-foot spacing along the shoreline, and extract the following information:

1. Beach slopes (important for calculating wave run-up);
2. Backshore toe elevation (important for calculating erosion potential); and
3. Crest elevation (important for calculating wave overtopping and flooding).

This geomorphic information will be included in the backshore inventory layer.

4.1.1 Erosion Rates

The CONTRACTOR will update the USGS National Assessment of Shoreline Change data (USGS 2006) for the study area using shoreline and cliff reference features extracted from the 2009-2011 State LIDAR data using the Digital Shoreline Analysis System from the USGS. This task will also compile existing erosion rates for sandy shorelines and cliff backed shorelines throughout the Phase II study area to provide ground-truth data for comparison with the updated USGS data.

4.1.2 Coastal Armoring Database

The CONTRACTOR will start with the Coastal Commission shoreline armoring data set (Dare 2006) available for both the Phase I and Phase II study reaches. We will solicit input on structures from stakeholders and receive and compile changes based on the jurisdictions input and any available surveyed data. The CONTRACTOR will spatially register all existing armoring (using Coastal Commission geodatabase methods for Monterey). The CONTRACTOR will QA, QC LIDAR data based on surveyed elevation data of parking lots from Cities and County (to try and correct any bias that would affect LIDAR measurements of crest elevations. Finally, the CONTRACTOR will attribute the crest elevation from LIDAR if surveyed data is unavailable.

Deliverables:

- (1) GIS shapefiles with metadata of backshore inventory attributed with geomorphic and erosion rate data¹;
- (2) Mean High Water shoreline and cliff edge extracted from the most recent LIDAR data;
- (3) Shapefiles for EXISTING CONDITIONS extents of cliff, dune, and coastal flooding hazards that include consideration for existing coastal armoring and water control infrastructure; and
- (4) Updated coastal armoring data shapefiles with spatially explicit location information with an attribute for the best available crest elevation.

4.2 Wave Transformations

The complex setting of the Santa Barbara County north coast with Point Arguello and the multitude of reefs north of Point Conception require that wave transformation modeling be conducted to provide accurate wave conditions along the variety of shoreline orientations.

The CONTRACTOR will leverage its existing wave transformation modeling initially developed for Santa Barbara County Phase I. This existing SWAN model will be further calibrated with available offshore buoy observations. This model uses the same fine-scale modeling grid previously developed by the USGS. The CONTRACTOR will work with the County staff to select the nearshore transformed wave data extraction points (also known as “model output points” or MOPs). Input wave data will consist of the USGS Global Climate Model (GCM) outputs consistent with details worked out with the USGS during Phase I. The CONTRACTOR will continue coordination with USGS during the ongoing COSMOS 3.0 work. This will also facilitate the incorporation of results into the existing web mapping decision support tool.²

Deliverables:

- (1) Output files for time series of total water levels; and
- (2) Output files for inland extent of wave run-up and maximum wave run-up elevations.

¹ _____

¹ Geomorphic data refers to the interpreted LIDAR data sets including toe and crest elevations, and beach slopes that are used in the modeling and analysis.

² www.coastalresilience.org

4.3 Mapping Future Coastal Hazards

The CONTRACTOR will model the impacts of storm waves and SLR onto the shoreline at 10-year time steps. The modeling will evaluate three scenarios (low, medium, and high) consistent with State and Federal guidance and the Coastal Commission's "DRAFT guidance on sea level rise," and the final guidance once approved by the Coastal Commission. These scenarios and modeling approaches will use a total water level approach and be consistent with the Phase I project and the methodology used in Coastal Resilience Ventura. These scenarios will include relevant tectonics, changes to wave climate, and sea level rise scenarios. Output GIS shapefiles will be generated for multiple planning horizons (2010, 2030, 2060, and 2100). The modeling, as mentioned above, will generate hazard zones which will include:

- Short-term, storm-induced erosion;
- Long-term or multi-year erosion;
- Coastal flooding from storms;
- Coastal inundation; and
- Wave impact zone.

In addition, a spatial aggregation method is used to provide spatial representation to the range of relative risk and uncertainties.

Deliverables:

- (1) GIS shapefiles and metadata for each of the coastal erosion, coastal inundation, coastal flooding, and wave impacts.

4.4 Mapping Coastal Hazards with Existing Armoring

Existing coastal armoring in Santa Barbara County will be represented geospatially with characteristics as described in Task 4.1.2. While the scope does not include armoring in the City of Santa Barbara, the CONTRACTOR anticipates integrating their deliverables with those developed by the City to provide a seamless mapping of future hazard scenarios. Hazard mapping will be provided for existing, 2030, 2060, and 2100 time horizons.

By 2060, the time span is long enough to result in degradation of coastal armoring if not adequately maintained. Also, higher sea levels and narrower beaches will likely increase the loadings on coastal structures, indicating that renovation or even reconstruction may be needed to accommodate increased loadings. Therefore, a qualitative assessment of armoring condition relative to future conditions loadings will be conducted. Hazard modeling and mapping can then proceed for the 2060 and 2100 time horizon. The CONTRACTOR will develop and apply a Seawall Index (SWI) that can provide a numeric ranking of structure capacity to prevent erosion. The CONTRACTOR anticipates building upon the work of Patrick et al, 2006 who developed the SWI for existing conditions. The CONTRACTOR will use available information developed in the base scope, including the future coastal hazards mapping, to assess the likelihood of structure failure. The CONTRACTOR will then review their assessment with the County, Coastal Commission staff, and local jurisdictions to modify the likelihood of failure based on their perception whether the individual structures would be maintained and improved to prevent failure or removed.

Deliverables:

- (1) GIS shapefiles and metadata for the suite of hazard zones with existing armoring representing the 2030, 2060 and 2100 planning horizons.

4.5 Spatial Aggregation/Relative Risk

Due to the wide range of uncertainties associated with sea level rise and increasing hazards a spatial aggregation method will be used provide to spatially represent the range of relative risk and uncertainties. This is done by calculating hazard extents for all of the scenarios by planning horizon. For each planning horizon, all of the hazards are overlapped and the number of overlaps are counted. The number of overlaps are attributed to this spatial aggregation layer and illustrate the relative risk based on the frequency of overlapping hazards.

Deliverables:

- (1) GIS shapefiles and metadata for two spatial aggregation/relative uncertainty layers (with and without armoring) for each planning horizon.

Task 4.6 Technical Methods Report

The methodology, specific methods and assumptions along with examples of the output data sets will be written up in a technical methods report.

Deliverables:

- (1) Technical methods report which describes the specific methods and assumptions for the modeling and mapping of the coastal erosion, tidal inundation, coastal flooding, and wave impact hazards.

Task 5. Prepare a Coastal Hazard Vulnerability Assessment

The databases (Task 3), mapping tools (Task 4), and social, economic, and ecological conditions analysis will be helpful in updating the County's Coastal Hazard Vulnerability Assessment for the north coast of Santa Barbara County. The CONTRACTOR will support the County to outline the vulnerability approach then to interpret the results of the modeling and mapping, and provide interpretative input and review of the resulting analysis to include in the update to the existing Vulnerability Assessment by the County. The report will include an assessment of vulnerability of all relevant Coastal Act resources to sea level rise. As part of the development of the Coastal Hazard Vulnerability Assessment, the County will share a scope of work, outline, and draft with the Coastal Commission staff for review during regular coordination meetings. The County and the Commission will work together through iterative exchange of comments to identify adaptation strategies and to develop the final report.

There will be a community engagement process that includes a project website, media outreach and news releases, social media outlets, and the identification of key stakeholders to review the County's Coastal Hazard Vulnerability Assessment. Stakeholder engagement is a crucial piece that will contribute to the Coastal Hazard Vulnerability Assessment, help identify adaptation strategies, and provide input on new and enhance existing LCP policies.

In addition to UCSB, potential stakeholder groups include but are not limited to: Caltrans, Southern Pacific Railroad, California State Parks, Santa Barbara County Association of Governments, California Coastal Conservancy, local Chambers of Commerce, Environmental Defense Center, Heal the Ocean, Surfrider, Citizens Planning Association, Urban Creeks Council, Santa Barbara Channelkeeper, and BEACON.

Deliverables:

- (1) Peer review, comments, and written guidance on the draft and final Update to the County of Santa Barbara Coastal Hazard Vulnerability Assessment.
- (2) Review of incorporation of stakeholder and Coastal Commission comments into Vulnerability Assessment.

David Revell, Ph.D. shall be the individual(s) personally responsible for providing all services hereunder. CONTRACTOR may not substitute other persons without the prior written approval of COUNTY's designated representative.

Suspension for Convenience. COUNTY may, without cause, order CONTRACTOR in writing to suspend, delay, or interrupt the services under this Agreement in whole or in part for up to 30 days. COUNTY shall incur no liability for suspension under this provision and suspension shall not constitute a breach of this Agreement.

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EXHIBIT B

PAYMENT ARRANGEMENTS

Periodic Compensation

- A. For CONTRACTOR services to be rendered under this Agreement, CONTRACTOR shall be paid a total contract amount, including cost reimbursements, not to exceed **\$142,000**. The Director of Planning and Development or designee is authorized to approve changes or additions in the services being performed under this contract in an amount not to exceed **\$10,000**. COUNTY will provide CONTRACTOR no compensation for such changes or additions in services being performed under this contract unless approved in advance and in writing by the COUNTY.
- B. Payment for services and /or reimbursement of costs shall be made upon CONTRACTOR's satisfactory performance, based upon the scope and methodology contained in **EXHIBIT A** as determined by COUNTY.
- C. Monthly, CONTRACTOR shall submit to the COUNTY DESIGNATED REPRESENTATIVE an invoice or certified claim on the County Treasury for the service performed over the period specified. These invoices or certified claims must cite the assigned Board Contract Number. COUNTY REPRESENTATIVE shall evaluate the quality of the service performed and if found to be satisfactory shall initiate payment processing. COUNTY shall pay invoices or claims for satisfactory work within 30 days of receipt of correct and complete invoices or claims from CONTRACTOR.
- D. COUNTY's failure to discover or object to any unsatisfactory work or billings prior to payment will not constitute a waiver of COUNTY's right to require CONTRACTOR to correct such work or billings or seek any other legal remedy.
- E. If CONTRACTOR fails to complete the requirements of Exhibit A, or fails to fulfill any other obligation of this Agreement prior to the Termination Date, the CONTRACTOR shall be liable for immediate repayment to the County of all amounts disbursed by the County under this Agreement, plus accrued interest (rate as set forth by the rate of interest earned on the Pooled Money Investment Account, which serves as a benchmark for setting interest rates in several provisions of state law, and is the rate that is used for purposes of this Contract.³) and any further costs related to the Project.

E_____

³ Umbach and Moller 2001. Available: <http://www.umbachconsulting.com/discussion/CaShortTerm.pdf>. Accessed 19 September 2014.
(Co of SB Std Terms Ver 10-17-2014)

EXHIBIT C

Indemnification and Insurance Requirements (For Professional Contracts)

INDEMNIFICATION

CONTRACTOR agrees to indemnify, defend (with counsel reasonably approved by COUNTY) and hold harmless COUNTY and its officers, officials, employees, agents and volunteers from and against any and all claims, actions, losses, damages, judgments and/or liabilities arising out of this Agreement from any cause whatsoever, including the acts, errors or omissions of any person or entity and for any costs or expenses (including but not limited to attorneys' fees) incurred by COUNTY on account of any claim except where such indemnification is prohibited by law. CONTRACTOR's indemnification obligation applies to COUNTY's active as well as passive negligence but does not apply to COUNTY's sole negligence or willful misconduct.

NOTIFICATION OF ACCIDENTS AND SURVIVAL OF INDEMNIFICATION PROVISIONS

CONTRACTOR shall notify COUNTY immediately in the event of any accident or injury arising out of or in connection with this Agreement. The indemnification provisions in this Agreement shall survive any expiration or termination of this Agreement.

INSURANCE

CONTRACTOR shall procure and maintain for the duration of this Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the CONTRACTOR, his agents, representatives, employees or subcontractors.

A. Minimum Scope of Insurance

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office (ISO) Form CG 00 01 covering CGL on an "occurrence" basis, including products-completed operations, personal & advertising injury, with limits no less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate.
2. **Automobile Liability:** ISO Form Number CA 00 01 covering any auto (Code 1), or if CONTRACTOR has no owned autos, hired, (Code 8) and non-owned autos (Code 9), with limit no less than \$1,000,000 per accident for bodily injury and property damage.
3. **Workers' Compensation:** as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.
4. **Professional Liability (Errors and Omissions)** Insurance appropriate to the CONTRACTOR'S profession, with limit of no less than \$1,000,000 per occurrence or claim, \$2,000,000 aggregate.

If the CONTRACTOR maintains higher limits than the minimums shown above, the COUNTY requires and shall be entitled to coverage for the higher limits maintained by the CONTRACTOR. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the COUNTY.

B. Other Insurance Provisions

The insurance policies are to contain, or be endorsed to contain, the following provisions:

1. **Additional Insured** – COUNTY, its officers, officials, employees, agents and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the CONTRACTOR including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the CONTRACTOR's insurance at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10 and CG 20 37 if a later edition is used).
2. **Primary Coverage** – For any claims related to this Agreement, the CONTRACTOR's insurance coverage shall be primary insurance as respects the COUNTY, its officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by the COUNTY, its officers, officials, employees, agents or volunteers shall be excess of the CONTRACTOR's insurance and shall not contribute with it.
3. **Notice of Cancellation** – Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the COUNTY.
4. **Waiver of Subrogation Rights** – CONTRACTOR hereby grants to COUNTY a waiver of any right to subrogation which any insurer of said CONTRACTOR may acquire against the COUNTY by virtue of the payment of any loss under such insurance. CONTRACTOR agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation, but this provision applies regardless of whether or not the COUNTY has received a waiver of subrogation endorsement from the insurer.
5. **Deductibles and Self-Insured Retention** – Any deductibles or self-insured retentions must be declared to and approved by the COUNTY. The COUNTY may require the CONTRACTOR to purchase coverage with a lower deductible or retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.
6. **Acceptability of Insurers** – Unless otherwise approved by Risk Management, insurance shall be written by insurers authorized to do business in the State of California and with a minimum A.M. Best's Insurance Guide rating of "A- VII".
7. **Verification of Coverage** – CONTRACTOR shall furnish the COUNTY with proof of insurance, original certificates and amendatory endorsements as required by this Agreement. The proof of insurance, certificates and endorsements are to be received and approved by the COUNTY before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the CONTRACTOR's obligation to provide them. The CONTRACTOR shall furnish evidence of renewal of coverage throughout the term of the Agreement. The COUNTY reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.
8. **Failure to Procure Coverage** – In the event that any policy of insurance required under this Agreement does not comply with the requirements, is not procured, or is canceled and not replaced, COUNTY has the right but not the obligation or duty to terminate the Agreement. Maintenance of required insurance coverage is a material element of the Agreement and failure to maintain or renew such coverage or to provide evidence of renewal may be treated by COUNTY as a material breach of contract.
9. **Subcontractors** – CONTRACTOR shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and CONTRACTOR shall ensure that COUNTY is an additional insured on insurance required from subcontractors.
10. **Claims Made Policies** – If any of the required policies provide coverage on a claims-made basis:

- i. The Retroactive Date must be shown and must be before the date of the contract or the beginning of contract work.
- ii. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of contract work.
- iii. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the CONTRACTOR must purchase "extended reporting" coverage for a minimum of five (5) years after completion of contract work.

11. **Special Risks or Circumstances** – COUNTY reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

Any change requiring additional types of insurance coverage or higher coverage limits must be made by amendment to this Agreement. CONTRACTOR agrees to execute any such amendment within thirty (30) days of receipt.

Any failure, actual or alleged, on the part of COUNTY to monitor or enforce compliance with any of the insurance and indemnification requirements will not be deemed as a waiver of any rights on the part of COUNTY.

