



Oregon State University

ROV Survey Services – PacWave South Environmental Monitoring Method Validation and Cable Inspection Feasibility

RFP #2026-021737

ADDENDUM NO. 2

ISSUE DATE: May 19, 2026

CONTRACT ADMINISTRATOR:

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This Addendum is hereby issued to inform you of the following revisions and or clarifications to the above-referenced RFP and/or the Contract Documents for the Project, to the extent they have been modified herein. Any conflict or inconsistency between this Addendum and the Solicitation Document or any previous addenda will be resolved in favor of this Addendum. Proposals shall conform to this Addendum. Unless specifically changed by this Addendum, all other requirements, terms and conditions of the Solicitation Document and or Contract Documents, and any previous addenda, remain unchanged and can be modified only in writing by OSU. The following changes are hereby made:

MODIFICATIONS:

Item 1 – Exhibit 2 – Sample Contract is modified to remove and replace Section I with the following. (Subsequent sections to be renumbered in a consecutive order with this modification).

I. CONTRACT TERM:

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This Contract is effective on the date of last signature and expires one (1) year from date of last

signature. OSU has the option to extend the term of this Contract for (x) _____additional (x) _____year terms based on the current terms and conditions. OSU may exercise this option to extend by providing written notice to Contractor prior to the expiration of the Contract.

Item 2 - Section 7.8.6 'Cost Proposal' is removed and replaced with the following:

Provide a complete 'Cost Proposal' based on the information provided in this RFP exclusive of any alternative approaches. The Proposer's cost proposal must include the necessary goods, labor and all other associated costs and services to perform the scope and deliverables to completion during a period of **1 year from the date of Notice to Proceed**, as described in this RFP.

The Cost proposal should include:

1. A single not to exceed amount for each Task in Section 1.6 'Scope of Work.'
2. A single not to exceed amount inclusive of all necessary costs to complete the work, as described in this RFP, in its entirety; and inclusive of an estimated 3 Standby Days, 3 Weather Days, and 3 Technical Delay days.
3. A table of by line items including Daily Standby Rate, Daily Weather Day rate, Daily Technical Delay Rate, and any other additional costs as used to prepare item 2 above.
4. Description of how Proposer intends to expense Owner for Fuel, Lube and Water.

Completed Cost Proposals shall be submitted with the proposal to be considered Responsive.

Formula for scoring Cost Points will be as follows: Lowest single not to exceed amount (Item #2 above) will receive full points with higher cost price related items receiving proportionally lower points according to this formula: $(\text{Low Cost} / \text{Cost}) \times \text{Points Available}$.

This Cost Proposal will become the initial contract amount for the awardee with additional services being added via amendment if/when applicable. In the event of a discrepancy between unit prices and extended (arithmetically calculated) prices, unit prices will prevail over extended prices.

QUESTIONS:

Item 3 –

Question: In preliminary review of the sample contract this project appears to have federal funding included as well as RESERVED wages. Has a determination been made by the state for this project and the required pay rates for ROV personnel?

Answer: The work to be performed under a resultant contract from this RFP is not considered construction/public improvement work and therefore BOLI wages should not apply. However, Consultant is responsible to perform all necessary due diligence to ensure compliance with any applicable Oregon Bureau of Labor and Industries prevailing wage laws.

Question: The due date for this project lands directly after the Memorial Day holiday and considering that the sample contract was only released in addendum 1 last week. Global would request an 10 business day, extension for the due date of this RFP to allow for review of the sample contract by our legal team.

- a. We also must engage our compliance and HR in this matter to insure we have our a suitable narrative for section 7.8.5 of the RFP.

Answer: It is preferred that we keep with the current solicitation schedule to allow for an earlier start work date.

Question: Task 1.1 in the RFP indicates that SPC's and semi-circular swaths are to be conducted at the 20m, 10m, and 1-2m distances around "*available structures, including anchors, moorings, connectors, and cables*". The Monitoring Plan (2018) describes a modified stationary point count method of holding the ROV stationary on the downstream side of a structure and then orienting the camera facing upstream for 1 minute. Would it be correct to assume that the SPC's required could use this modified method of 1 minute observations, and if not, what duration would be required?

Answer: Yes, the SPCs could use this 1-minute observation approach.

Question: Task 1.1, visibility is anticipated to be very low when performing the swath surveys at the ocean bottom, and the Monitoring Plan explains that a Tritech Gemini multibeam sonar unit (or similar, we assume) will be used to evaluate whether there are fish beyond the camera's visual field that may be avoiding the ROV. What is the maximum distance beyond the ROV, and the minimal visual field it would have, that you would require sufficient for sonar detection of fish?

Answer: At this exploratory phase, we are interested to know if there are fish that are not detectable via visual methods that are would be detected using sonar. One outcome of this survey will be to determine what is the detection range of various sensors.

Question: Task 1.2, biofouling presence, composition, and extent inspections are stated as required on the subsea structures. The Monitoring Plan explains the method to perform these inspections is that the structures are to be inspected following the 1-2m semi-circular swath survey of each structure, but also that, "*as practical, multiple (2-3) observations on different faces of the same component type will be made*". Do the methods in the Monitoring Plan for examining the subsurface structures apply for what is being asked in Task 1.2?

Answer: Yes.

Question: Task 1.3, the number of representative benthic transects, as well as their length, interval, direction, and origination points are not specified. The Monitoring Plan outlines the method of 3 transects, each of 100m length, inside each berth, with Figure 3 showing differing origination points depending on the configuration, but beginning at some structure and proceeding 100m upstream. Will these three 100m-long transects per berth be sufficient for what is required?

Answer: For this survey, we will want 3 transects per berth, not associated with structure, for baseline, as well as transects from the single anchors of 2 monitoring or marker buoys currently deployed in the site.

Question: Task 1.3, the Monitoring Plan makes mention of six reference transects outside of the Project Site, each at least 100m in length. Will these also be required, per the description in the RFP, and if so, what specifics can be offered as to their location relative to the relevant sites?

Answer: Yes, these will be required. The locations of these have not yet been determined but will be in consultation with the contractor to find suitably comparable bottom type. They will be within a mile of the offshore project site.

Question: Solicitation references BOLI Prevailing Wages as "reserved." Can OSU confirm whether prevailing wage requirements apply to this scope?

Answer: The work to be performed under a resultant contract from this RFP is not considered construction/public improvement work and therefore BOLI wages should not apply. However, Consultant is responsible to perform all necessary due diligence to ensure compliance with any applicable Oregon Bureau of Labor and Industries prevailing wage laws.

Question: What is the term of the contract presently being solicited: a single survey season, a fixed multi-year period, or the full statutory term tied to the FERC license? If multi-year, are renewal options exercisable at OSU's election, at the Contractor's election, or bilaterally?

Answer: Initial term of contract is one (1) year from date of the last signature with option for additional year renewals.

Question: EX 1. 'PacWave Monitoring Plan Organism Interactions'.pdf; contemplates a stepped survey cadence — semi-annual for the first three years, annual for the next seven, and triennial thereafter, subject to AMC consultation. Will the present procurement price apply only to the first three-year interval, the first ten-year interval, or some other span? Where the contract spans a cadence transition, what is the price-redetermination mechanism?

Answer: While the resulting data and recommendations will help inform long-term monitoring strategies and operational planning for the PacWave facility, this procurement does not include future monitoring activities. The scope of the current RFP is limited to evaluating whether the monitoring methodologies outlined in the monitoring plan are practical, effective, and achievable under real-world offshore conditions, and to identifying potential improvements or alternative approaches where appropriate.

Question: Would OSU prefer a single baseline offer with multiple additional service options?

Answer: See modification Item 2 to Section 7.8.6 above.

Question: The Solicitation requires inspection of at least two subsea export cables. Does OSU have a preferred set of cables, or will the selection be made in coordination with the awarded Contractor during project planning? Section 4.2.2/EX 1. 'PacWave Monitoring Plan Organism Interactions'.pdf; references rotating one of five cables per cruise. Will OSU select the cable for each cruise, or is the rotation predetermined?

Answer: Note: The original plan called for the installation of five subsea cables; however, only four were ultimately installed.

The final selection of cables to be inspected will be determined during project planning. At present, the preferred approach is to inspect the shortest cable (serving the southern test berth, Berth D) and the longest cable (serving the northern test berth, Berth A). From the punchouts to the subsea connectors, these cables are approximately 14,700 meters and 19,800 meters in length, respectively.

Question: Will any wave energy converters (WECs) be installed at PacWave South during the anticipated execution period? If so, should Task 1 environmental surveys be planned around deployed infrastructure, or be conducted as is?

Answer: No WECs will be installed at PacWave South in 2026. As a result, the surveys will instead be conducted on available corner marker buoys or monitoring instrumentation moorings to validate the proposed survey methodology.

Question: Will OSU provide cable alignment data — including coordinates, KP references, connector locations, and punch-out locations — prior to mobilization? If so, in what format (GIS layers, shapefiles, KMZ, or other)?

Answer: This information can be supplied as shapefiles and/or KMZs.

Question: Please confirm the number of focused infrastructure inspections required for conduit punch-outs and subsea connectors.

Answer: There are four conduit punchouts and four subsea connectors. In addition, there are 30 concrete mattress locations and six other areas of interest where more detailed inspections will be required.

Question: EX 1. 'PacWave Monitoring Plan Organism Interactions'; references a single pre-installation ROV survey prior to the first anticipated testing client. Has this survey already been performed under a prior engagement, and if so, will the resulting data be made available as the baseline dataset? If not yet performed, is it included within the present scope?

Answer: A pre-installation ROV survey has not been conducted. The present scope of work is meant to help determine if the planned pre-installation survey methodology is feasible.

Question: Section 4. 2. 4.2.1/EX 1. 'PacWave Monitoring Plan Organism Interactions'; references six reference transects outside the Project Site and within-berth transects. Are these transecting locations fixed by prior agreement with ODFW or the AMC, or is the Contractor expected to propose them?

Answer: The locations of these have not yet been determined but will be in consultation with the contractor to find suitably comparable bottom type. They will be within a mile of the offshore project site.

Question: For mooring configurations other than three- point configurations, please clarify whether the Contractor should propose alternative SPC arc geometry and station offsets, or whether OSU should prescribe them.

Answer: OSU is pleased to consult with the contractor on the approach for inspecting these. The current assets in the project site are on single point moorings.

Question: Please clarify the required ROV altitude, transit speed, and target swath width for band transects. SH

Answer: While this will vary with field conditions and equipment specifications, the preference for the transects is that the ROV maintains an altitude of 1-3 meters, a maximum transit speed of 1 knot, and a target camera swath of 2 meters.

Question: Please provide an operational definition of "litterfall" for annotation and reporting consistency.

Answer: Litterfall refers to the accumulation and deposition of biological material that falls, settles, or becomes trapped around the structure over time. This is anticipated from structures that are deployed at the sites for long periods of time. Current assets at the site are deployed for 6-8 months at a time. We do not expect significant litterfall but will be interested to see what has accumulated under deployed buoys.

Question: Can you please provide the as-built digital drawings of the alignment, depth, and location of the energy cable conduits and routes as well as any subsea infrastructure already installed on the lease site?

Answer: This information will be supplied as shapefiles and/or KMZs once the contract is awarded.

Question: What is the approximate position and depth where the cables exit the HDD conduit offshore? Can we put a tone tracker on the cable(s) and is there access to do this?

Answer: Approximate punchout locations are:

- Cable A: 44.46592525, -124.09961808
- Cable B: 44.46637333, -124.09965833
- Cable C: 44.46682673, -124.09977923

- Cable D: 44.46714590, -124.10000180

Approximate water depth is 15 meters.

Articulated pipe is installed on the cables as they exit the conduits. This would make the installation of a tone tracker at the punchout difficult. However, it may be possible to install a tone tracker on the cables at the shoreside Utility Connection and Monitoring Facility, or in the vault at Driftwood Beach State Park.

Question: Can you provide typical underwater visibility conditions at the lease site?

Answer: Low visibility conditions are around 1 to 1.5 meters. Good conditions are around 3 to 4 meters.

Question: For costing purposes, how many structures/stations would you like to have surveyed for the stationary point counts?

Answer: As many as six (6): 2 monitoring or marker buoys and 4 hydrophone landers.

Question: For costing purposes, what is the minimum number of representative benthic transects and lengths that should be surveyed?

Answer: We will want three 100m transects per berth (there are four test berths), not associated with structure, for baseline, as well as transects 100 m from the single anchors of the two oceanographic buoys currently deployed in the site. Six 100 m reference transects outside the site also will be required. The locations of these have not yet been determined but will be in consultation with the contractor to find suitably comparable bottom type. They will be within a mile of the offshore project site.

Question: Task 1 requires structure survey utilizing stationary point count observations and semi-circular swath surveys, Multiple offset survey passes, semi-circular observations around infrastructure, stationary observation periods, and video and sonar documentation.

Question (a): Can you provide the total number of anchors, cable interfaces, mattresses, moorings, and structures to be surveyed in this contract?

Answer (a): There are 4 conduit punchouts and four subsea connectors. In addition, there are 30 concrete mattress locations and 6 other areas of interest where more detailed inspections will be required related to the cable routing. In addition, as many as 6 structures within the site may be surveyed: (2 monitoring or marker buoys and 4 hydrophone landers).

Question (b): Can you provide the approx. distance between each asset to be surveyed/inspected?

Answer (b): The distances between assets vary, but some ranges are provided below:

- Conduit punchouts - 40 to 50 meters
- Subsea connectors - 800 to 1,300 meters
- Concrete mattresses – 8 to 230 meters (most <50 meters)
- Anchored buoys – 1,500 to 1,800 meters

Question (c): The scope references multiple offset survey passes. How many passes are expected to be completed for each area?

Answer (c): The number of passes has not yet been determined but will be in consultation with the contractor. For the purposes of this RFP, assume 3 offset survey passes are required.

Question (d): The scope of work contains the following requirement: "Representative benthic transects will be conducted to evaluate visibility limitations, navigation repeatability, organism detectability, survey efficiency, and operational feasibility under actual offshore environmental conditions."

How many transects, and how long will each transect be? Will transects cross over cables or other subsea assets? This will support providing a more realistic cost estimate.

Answer (d): The final selection of cables to be inspected will be determined during project planning. At present, the preferred approach is to inspect the shortest cable (serving the southern test berth, Berth D) and the longest cable (serving the northern test berth, Berth A). From the punchouts to the subsea connectors, these cables are approximately 14,700 meters and 19,800 meters in length, respectively.

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As many as 6 structures within the site may be surveyed: 2 monitoring or marker buoys and 4 hydrophone landers.

Question: Task 2 - Cable Route Inspection & Feasibility Assessment: Inspect a minimum of two subsea export cable routes utilizing ROV video and sonar systems. Using alignment information provided by OSU, the ROV will track cable alignment, maintain approximately 1–3 meter altitude above seabed, document exposed cable sections, observe free spans, identify scour conditions, record debris or entanglement hazards, and assess burial conditions. Based on the requirement to track the buried cables alignment, are proposers to include cable tracking sensors onboard the ROV for Task 2 scope of work?

Answer: A TSS tracking system is not required.

END OF ADDENDUM NO. 2