



Oregon State
University

Attention Technical Services Companies

If you are downloading the RFP from the website, continue to monitor the website for addenda. Failure to incorporate any addenda into your submittal may cause your submittal to be considered non-responsive.

Thank you.

OREGON STATE UNIVERSITY

REQUEST FOR PROPOSALS

192814

PACIFIC MARINE ENERGY CENTER SOUTH ENERGY TEST SITE (PMEC-SETS) MARINE GEOPHYSICAL & GEOTECHNICAL SURVEYS

ISSUE DATE: January 31, 2018

RFP CLOSING (DUE) DATE: February 28, 2018 at 10:00 am, Pacific Time

NO LATE RESPONSES WILL BE ACCEPTED

CONTRACT ADMINISTRATOR:

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SOLICITATION / SELECTION PROTESTS:

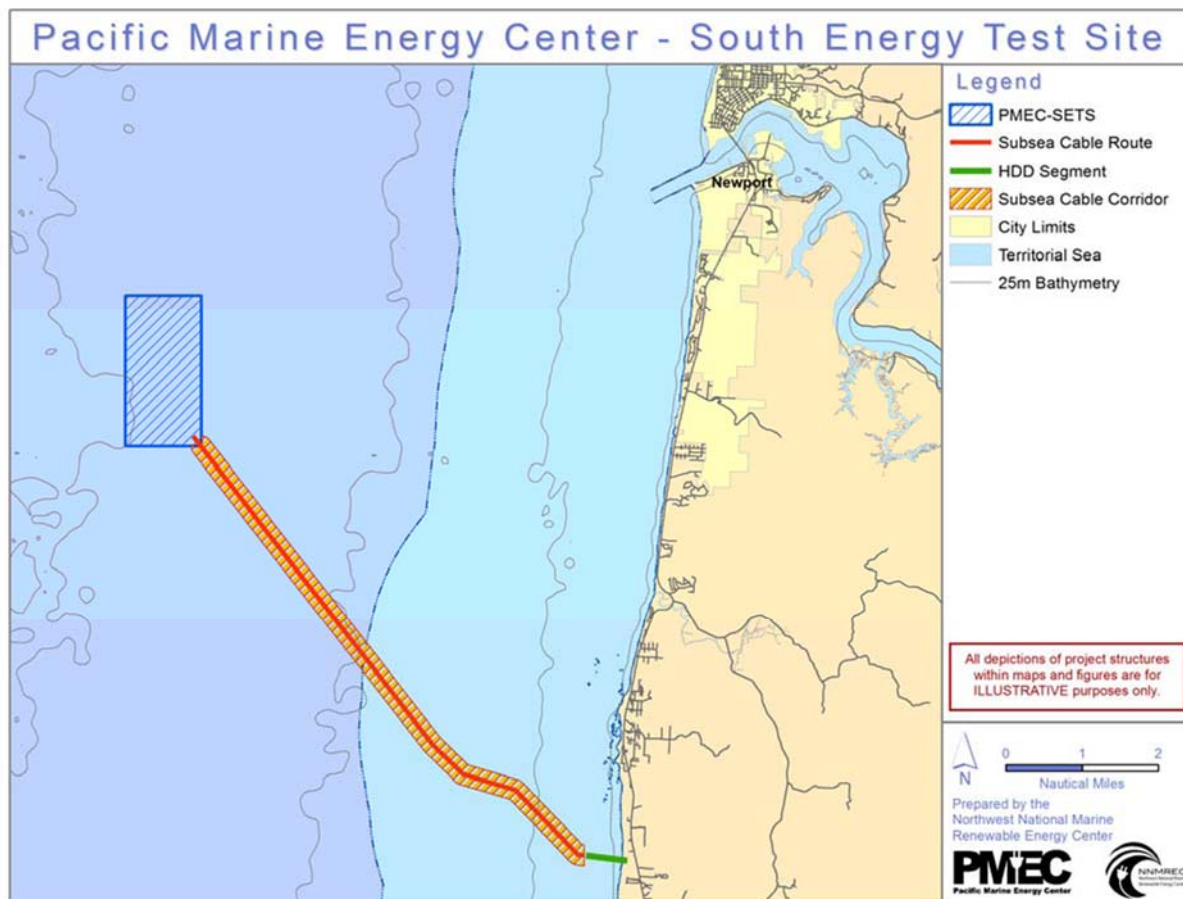
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1.0 Introduction

Oregon State University is seeking proposals from qualified, experienced teams for marine geophysical and geotechnical surveys in support of the development of a grid-connected, open-ocean, wave energy test site. The Pacific Marine Energy Center South Energy Test Site (PMEC-SETS) is to be located approximately 6 nautical miles (NM) offshore to the south of Newport, OR. Marine geophysical and geotechnical surveys are required along a potential subsea cable corridor(s) offshore to the future location of the wave energy test site, and within the 2 NM² area of PMEC-SETS itself (see graphic).

The technical services company is free to sub-contract as necessary to ensure a complete survey team.



OSU requires completion of a marine route survey along a route from the offshore test site to an HDD breakout point located approximately 800 meters off the Oregon coast, south of Newport. The primary survey goal is the identification of viable cable routes for buried installation of five subsea cables (four medium voltage power cables and one medium voltage data cable) along parallel routes in an economical manner, with minimal impact to the local environment.

A full Scope of Work can be found in Exhibit A. The general scope of work will include the following:

1. A marine survey (geophysical and geotechnical surveys) of the offshore PMEC-SETS area.
2. A marine survey (geophysical and geotechnical surveys) for the potential cable corridor from approximately 800 meters offshore and out to the PMEC-SETS area.

Data from these surveys will be used for:

1. Cable and route engineering
2. Geophysical, Geotechnical, and Geohazard review and permitting
3. Archaeological & Historic Property review, investigation and permitting

2.0 Project Description

Oregon State University intends to construct an offshore wave energy test site approximately 6 NM offshore, South of Newport, Oregon. The test site will be called the Pacific Marine Energy Center South Energy Test Site (PMEC-SETS). The development of PMEC-SETS is being led by OSU's Northwest National Marine Renewable Energy Center (NNMREC). Wave Energy Converters (WECs), located at the offshore test site, will be linked via four, medium voltage subsea power cables to an onshore Utility Connection and Monitoring Facility (UCMF), ultimately transmitting electrical power to the local electric utility grid. A fifth, low-voltage and data auxiliary cable will also be installed.

From the selected shore landing at Driftwood Beach State Recreation Site, south of Newport OR, horizontal directional drilling (HDD) will be used to install conduits for cable routing from land, under the beach and surf zone, out to approximately 10 m water depth. From this point the cables will be buried (1-2 meter) in the seabed where possible out to the wave energy test site. Where burial is not possible, alternative cable protection will be developed during detailed system engineering (separate from the marine survey scope of work).

- 2.1 The scope of work for this Request for Proposal can be found in the Exhibit A.

3.0 Federal Provisions

Work under the contemplated contract is federally funded. OSU has received federal funds from Department of Energy (DOE). Compliance with the following Federal Provisions, will be required:

1. *Equal Employment Opportunity*—All contracts shall contain a provision requiring compliance with E.O. 11246, "Equal Employment Opportunity," as amended by E.O. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and as supplemented by regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."
2. *Davis-Bacon Act, as amended (40 U.S.C. 276a to a-7)*—When required by Federal program legislation, all construction contracts awarded by the recipients and sub recipients of more than \$2000 shall include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 276a to a-7) and as supplemented by Department of Labor regulations (29 CFR part 5,

- “Labor Standards Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction”). Under this Act, contractors shall be required to pay wages to laborers and mechanics at a rate not less than the minimum wages specified in a wage determination made by the Secretary of Labor. In addition, contractors shall be required to pay wages not less than once a week. The recipient shall place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation and the award of a contract shall be conditioned upon the acceptance of the wage determination. The recipient shall report all suspected or reported violations to the Federal awarding agency.
3. *Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333)*—Where applicable, all contracts awarded by recipients in excess of \$2000 for construction contracts and in excess of \$2500 for other contracts that involve the employment of mechanics or laborers shall include a provision for compliance with sections 102 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333), as supplemented by Department of Labor regulations (29 CFR part 5). Under section 102 of the Act, each contractor shall be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than 1½ times the basic rate of pay for all hours worked in excess of 40 hours in the work week. Section 107 of the Act is applicable to construction work and provides that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.
 4. *Rights to Inventions Made Under a Contract or Agreement*—Contracts or agreements for the performance of experimental, developmental, or research work shall provide for the rights of the Federal Government and the recipient in any resulting invention in accordance with 37 CFR part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.
 5. *Clean Air Act (42 U.S.C. 7401 et seq.) and the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), as amended*—Contracts and sub grants of amounts in excess of \$100,000 shall contain a provision that requires the recipient to agree to Compliance with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401 et seq.) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251 et seq.). Violations shall be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).
 6. *Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)*— Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any

agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

7. *Debarment and Suspension (E.O.s 12549 and 12689)*— Contract awards that exceed the small purchase threshold and certain other contract awards shall not be made to parties listed on the nonprocurement portion of the General Services Administration's List of parties Excluded from Federal Procurement or Nonprocurement Programs in accordance with E.O.s 12549 and 12689, “Debarment and Suspension.” This list contains the names of parties debarred, suspended, or otherwise excluded by agencies, and contractors declared ineligible under statutory or regulatory authority other than E.O. 12549. Contractors with awards that exceed the small purchase threshold shall provide the required certification regarding its exclusion status and that of its principals.
8. Compliance with applicable provisions national policies prohibiting discrimination: Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d, et seq.), as implemented by 10 CFR Part 1040; Executive Order 11246 [3 CFR, 1964 1965 Comp., p. 339], as implemented by Department of Labor regulations at 41 CFR Part 60; Title IX of the Education Amendments of 1972 (20 U.S.C. 1681, et seq.); Age Discrimination Act of 1975 (42 U.S.C. 6101, et seq.), as implemented by Department of Health and Human Services regulations at 45 CFR part 90; Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), as implemented by Department of Justice regulations at 28 CFR Part 41 ; The Architectural Barriers Act of 1968 (42 U.S.C. 4151, et seq.).
9. Compliance with applicable provisions of the following national policies concerning live organisms: For human subjects, the Common Federal Policy for the Protection of Human Subjects, 10 CFR Part 745; 10 C.F.R. Part 745; 10 C.F.R. Part 600, App. A; Uniform Relocation Assistance and Land Acquisition Policies Act, 42 U.S.C. § 4601 et seq.; 49 C.F.R. Part 24; Trafficking Victims Protection Act of 2000, 22 U.S.C. § 7101 et seq. (see particularly § 7104(g)); 2 C.F.R. Part 175; 10 C.F.R. Part 600, Appendix A; 10 C.F.R. § 602.10(c)
10. Compliance with the following environmental laws and regulations: The Clean Water Act 10 C.F.R. Part 600, Federal Water Pollution Control Act (“Clean Water Act”), 33 U.S.C. § 1251 et seq.; 33 U.S.C. § 1368; Exec. Order No. 11,738, 38 Fed. Reg. 25,161 (Sept. 10, 1973); The Clean Air Act 10 C.F.R. Part 600, Appendix A; Air Pollution Control Act (“Clean Air Act”), 42 U.S.C. § 7401 et seq; The Resource Conservation and Recovery Act (RCRA), 10 C.F.R. §§ 600.116 and 600.149; Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq. (see particularly § 6962), 10 C.F.R. Part 600, App. A; Lead-Based Paint Poisoning Prevention Act, 42 U.S.C. § 4831(b).
11. Compliance with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271, et seq.).
12. Compliance with Protection of Wetlands and Floodplains, 10 C.F.R. Part 1022;

13. Compliance with Flood Disaster Protection Act of 1973, 42 U.S.C. § 4001 et seq.
14. Compliance with Coastal Zone Management Act, 16 U.S.C. § 1451 et seq.; 15 C.F.R. Part 930.
15. Compliance with Coastal Barriers Resource Act, 16 U.S.C. § 3501 et seq.
16. Compliance with the following lobbying laws, regulations, and policies: 10 C.F.R. Part 600, Appendix A; An Act to Prevent Pernicious Political Activities (“Hatch Act” of 1939), 5 U.S.C. §§ 1501-1508, 7324-7326; 10 C.F.R. Part 601; 31 U.S.C. § 1352.
17. Compliance with the following health and safety laws, regulations, policies, and requirements: The Public Health Service Act 10 C.F.R. Part 600, Appendix A; Title XIV, Public Health Service Act, 42 U.S.C. § 300f et seq; 10 C.F.R. Part 600, Appendix A; Drug Abuse Office and Treatment Act, 42 U.S.C. § 290dd; Comprehensive Alcohol Abuse and Alcoholism Prevent, Treatment and Rehabilitation Act of 1970, 42 U.S.C. § 290dd-1; Construction Work Hours and Safety Standards Act, 40 U.S.C. §3701 et seq.; 10 C.F.R. § 602.10(b); NIH Guidelines for Research Involving Recombinant DNA Molecules.
18. Compliance with the following domestic preference laws, regulations, and policies: 10 C.F.R. Part 600, Appendix A; Cargo Preference Act, 46 U.S.C. § 55305; 46 C.F.R. § 381.7; 10 C.F.R. Part 600, Appendix A; International Air Transportation Fair Competitive Practices Act (“Fly America Act”), 49 U.S.C. § 40118.
19. Compliance with the following project management laws, regulations, and policies: following project management laws, regulations, and policies: 10 C.F.R. Part 600, Appendix A; 31 U.S.C. § 3711; 10 C.F.R. Part 600, Appendix A; Single Audit Act, 31 U.S.C. § 7501 et seq; 10 C.F.R. § 600.31; 10 C.F.R. Part 733; 10 C.F.R. §§ 600.25 & 600.113; 2 C.F.R. Parts 180 & 901 (see particularly Subpart C Responsibilities of Participants” within each section); Paperwork Reduction Act, 44 U.S.C. § 3501 et seq; 2 C.F.R. Part 25.
20. Compliance with the following educational and cultural laws, regulations, and policies: 10 C.F.R. Part 600, Appendix A; Indian Self-Determination and Education Act, 25 U.S.C. § 450 et seq. (see particularly § 450e(b)).
21. Make a good faith effort to comply with the following policies: 10 C.F.R. Part 600, Appendix A; Exec. Order No. 12,138, 44 Fed. Reg. 29,637 (May 18, 1979) (“Creating a National Women’s Business Enterprise Policy and Prescribing Arrangements for Developing, Coordinating and Implementing a National Program for Women’s Business Enterprise”); 10 C.F.R. § 600.306; Metric Conversion Act of 1975, 15 U.S.C. § 205a et seq.; Exec. Order No. 12,770, 56 Fed. Reg. 35,801 (July 29, 1991) (“Metric Usage in Federal Government Programs”)
22. Compliance with applicable provisions of the following, national policies: Nondiscrimination in Federally Assisted Programs, 10 CFR part 1040 (45 FR 40514, June 13, 1980), as proposed to be amended by 46 FR 49546 (October 6, 1981). Nondiscrimination Provisions in Federally Assisted Construction Contracts, Part III of Executive Order 11246 (September 24, 1965), 3 CFR 1964—65 Comp., p. 345.

23. Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, as amended (42 U.S.C. 4581).
24. Drug Abuse Office and Treatment Act of 1972, as amended (21 U.S.C. 1174). Architectural Barriers Act of 1968, as amended (42 U.S.C. 4151 *et seq.*).
25. National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 *et seq.*), 40 CFR part 1500, as implemented by (45 FR 20694, March 28, 1980).
26. Sec. 306, Clean Air Act, as amended (42 U.S.C. 7606c).
27. Sec. 508, Federal Water Pollution Control Act of 1972 (33 U.S.C. 1251 *et seq.*); Executive Order 11738, September 12, 1973.
28. Title XIV, Public Health Service Act, as amended (42 U.S.C. 300f—*et seq.*).
29. Sec. 102(a), Flood Disaster Protection Act of 1973 (Pub. L. 93-234, 87 Stat. 975). 10 CFR part 1022, “Protection of Wetlands and Floodplains.”
30. Uniform Relocation Assistance and Land Acquisition Policies Act of 1970 (42 U.S.C. 4601 *et seq.*).
31. Coastal Zone Management Act of 1972, as amended (16 U.S.C. 1451 *et seq.*) (15 CFR part 930).
32. Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*). Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*).
33. Sec. 106, National Historic Preservation Act of 1966, as amended (16 U.S.C. 470f); Executive Order 11593, “Protection and Enhancement of the Cultural Environment,” May 13, 1971, 3 CFR 1971 Comp., p. 154; Archaeological and Historic Preservation Act of 1966 (16 U.S.C. 469 *et seq.*); Protection of Historic and Cultural Properties, 36 CFR part 800.
34. Wild and Scenic Rivers Act of 1968, as amended (16 U.S.C. 1271 *et seq.*). Protection of Human Subjects, 10 CFR part 745.
35. Federal Laboratory Animal Welfare Act (7 U.S.C. 2131 *et seq.*) (9 CFR parts 1, 2, and 3). Lead-Based Paint Prohibition (42 U.S.C. 4831(b)).
36. Sec. 7(b), Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e(b)). Cargo Preference Act of 1954 (46 U.S.C. 1241(b)) (46 CFR §381.7).
37. International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 1517). Executive Order 12138, “Creating a National Women's Business Enterprise Policy and Prescribing Arrangements for Developing, Coordinating, and Implementing a National Program for Women's Business Enterprise,” (May 18, 1979) 3 CFR 1979 Comp., p. 393.
38. Sec. 403(b), Power Plant and Industrial Fuel Use Act of 1978, (42 U.S.C. 8373(b)); Executive Order 12185 (December 17, 1979, 3 CFR 1979 Comp., p. 474).
39. Administrative and Fiscal Policy Requirements The Hatch Act (5 U.S.C. 1501-1508).
40. Federal Reports Act, as amended by the Paperwork Reduction Act of 1980, Pub. L. 96-511

(44 U.S.C. 3501 *et seq.*).

41. OMB Circular A-111, Jointly Funded Assistance to State and Local Governments and Nonprofit Organizations—Policies and Procedures.
42. Federal Claims Collection Act of 1966, Pub. L. 89-508, 89 Stat. 309 (31 U.S.C. 951 *et seq.*). OMB Circular A-88, Coordinating Indirect Cost Rates and Audit at Educational Institutions. OMB Circular A-73, Audit of Federal Operations and Programs.
43. Single Audit Act of 1984, Pub. L. 98-502.
44. OMB Circular A-128, Audits of State and Local Governments. [47 FR 44108, Oct. 5, 1982, as amended at 50 FR 42361, Oct. 18, 1985; 51 FR 4297, Feb. 4, 1986]

4.0 Timeline

The marine surveys cannot commence before 06/16/18 due to environmental permits but should be completed during the summer of 2018.

The final report should be completed by 08/15/2018. Please include a proposed timeline assuming that a Technical Services team could be under contract with OSU by the beginning of June 2018.

NOTE: While Contractors are not obligated to use it, OSU's Research Vessel *Pacific Storm* is currently available from 06/15/18 to 07/08/18 for these surveys (there may be some flexibility). Basic information about the vessel can be found at: <http://ceoas.oregonstate.edu/pacificstorm/>. Detailed information is available by contacting OSU's Ship Operations (Tel: 541-867-0295).

If the Contractor intends to use the *Pacific Storm* for the required work, OSU will arrange to cover the costs of the vessel directly. The Contractor would not be responsible for these costs.

5.0 Selection Process

This Request for Proposals selection process will be conducted pursuant to the terms of this RFP and OSU Standard 580-063-0020 (http://policy.oregonstate.edu/policy/UPSM/580-063_capital_construction), relating to the selection and retention of technical services companies. Once the proposal responses have been reviewed and scored, at Owners discretion the top ranking firms may be invited to participate in an interview. Interviews may be conducted via telephone or web conference, or in person.

6.0 Compensation

Compensation will be based on the following:

1. Lump sum for costs of mobilization and demobilization of survey equipment and personnel.
2. Cost per line-km for geophysical marine survey operations, including data processing and

survey reporting.

3. Cost per geotechnical survey point, including data processing and survey reporting.
4. Standby time rates.

A cost proposal and price information (Exhibit B) must be submitted with proposals and must include:

1. For the **Geophysical Survey**:

- Price per geophysical survey line-km, as described in Exhibit A, employing the “preferred” method (i.e. using a gradiometer). To include data analysis, interpretation and final report per line-km.

AND

- Price per geophysical survey line-km, as described in Exhibit A, employing the “alternative” method (i.e. using a magnetometer). To include data analysis, interpretation and final report per line-km.

2. For the **Geotechnical Survey**:

- Price per geotechnical survey point, as described in Exhibit A, employing the “preferred” method (i.e. sediment coring). To include data analysis, interpretation and final report per survey point.

AND

- Price per geotechnical survey point, as described in Exhibit A, employing the “optional” method (i.e. cone penetrometer testing). To include data analysis, interpretation and final report per survey point.

3. Pricing per standby time (per hour):

- Weather downtime rate – applicable for weather delays
- Vessel or equipment downtime rate.

NOTE: If using Contractor supplied vessel or equipment, Contractor is responsible for downtime due to vessel or equipment technical issues. However, if OSU is chartering the university’s *R/V Pacific Storm* for the Contractor (as discussed above and in Exhibit A), Contractor would receive standby rate payment if the vessel or its equipment is down.

4. Lump sum pricing for mobilization and demobilization.

The Contractor will only be reimbursed per these rates, upon written authorization of OSU prior to the start of work. The Contractor should provide criteria in their proposal that would constitute adverse weather conditions for the vessel and equipment being proposed.

NOTE: If OSU is chartering the university’s *R/V Pacific Storm* for the Contractor, do not include vessel costs in the cost proposal.

7.0 Evaluation Criteria:

Provide in writing the following information about your company's ability and desire to perform this work. Proposal responses will be rated based upon the weight assigned to each item as noted in the parenthesis at the end of each statement below. Please ensure you address each of the criteria listed below.

- 7.1.1 Provide a brief description of your company and your company's overall qualifications and experience in conducting operations similar in scope to this project. (5)
- 7.1.2 Provide information about your company's experience and capabilities in performing the specific type of marine survey work described in this RFP. List recent similar projects your company has completed or are currently contracted to complete, including methods of execution and the equipment being used. (10)
- 7.1.3 Provide your proposed work plan to fulfill the requirements described in the Scope of Work in Exhibit A. Section 5 of the Scope of Work outlines the proposal format. (30)
- 7.1.4 Provide complete and compliant schedules as described under Section 5.6 in the Scope of Work (Exhibit A) and as detailed in Sections 6 to 12 of Exhibit A. (10)
- 7.1.5 Identify key personnel along with those of sub-contractors to be assigned to this project. Include proposed key personnel's project experience, with specific examples and identify their roles in the projects. Indicate current availability, proposed percentage of project involvement per project phase and indicate whether the proposed team has worked together on previous projects. Highlight the individuals who participated in the project examples. (10)
- 7.1.6 Provide a proposed timeline to successfully complete the work during the specified time period including reporting. (10)
- 7.1.7 Provide a completed Exhibit B which is a cost proposal and price information, which must be submitted with proposal. Alterations to the document are not allowed except to complete requested information. Any alterations to the form will cause your proposal to be rejected as non responsive. (40)
- 7.1.8 Provide a description and identification of Minority Business Enterprise (MBE), Women Business Enterprise (WBE) or Emerging Small Business (ESB) certifications for your company and a description of your nondiscrimination practices. Provide historical information on MBE, WBE or ESB Joint Ventures, subcontracting or mentoring plan, and utilization history for projects completed by your company within the past three (3) years. Provide a narrative description of your current workforce diversity program/plan, and the plan for obtaining subcontracting, consulting, and supplier diversity for this Project. Include a description of the outreach program or plan, including a schedule of events and specific steps that will be taken to maximize broad based and inclusive participation and the plan to provide mentoring, technical or other business development services to subcontractors needing or requesting such services.

The selected company will provide the services with respect to diversity according to the

means and methods described in the workforce plan provided in the response, unless changes are requested and approved in writing in advance by OSU or are required by applicable laws, ordinances, codes, regulations, rules or standards. (10)

- 7.1.9 If interviews are conducted, a thirty (30)-minute presentation period, immediately followed by a separate thirty (30)-minute Q&A session. The interview points will be cumulative with the evaluation points. (25)

8.0 References

In addition to responding to the evaluation criteria above, provide the names, addresses and phone numbers of three professional references for work performed by your company on similar projects. Verify that the individuals identified have had direct contact with the referenced project, and the phone number is current. Do not include references from any company or individual included in your team for this Project or any OSU personnel. OSU may check with these references and with other references associated with past work of your company.

9.0 Selection Procedure and Timetable

The selection procedure described below will be used to evaluate the capabilities of interested companies to provide the professional services to OSU for this project.

Selection Procedure and Timetable with Interviews:

January 31, 2018	Issue RFP
February 28, 2018	RFP Response due 10:00am, Pacific Time
March 9, 2018	Notification of finalists
March 22, 2018	Interviews with Selection Committee
March 23, 2018	Estimated Notice of Intent to Award
May 1, 2018	Estimated Contract Execution

Selection Procedure and Timetable no Interviews:

January 31, 2018	Issue RFP
February 28, 2018	RFP Response due 10:00am, Pacific Time
March 12, 2018	Notice of Intent to Award
April 30, 2018	Estimated Contract Execution

Site Visit: No mandatory site visits are required as part of the selection process.

10.0 Evaluation Process

This RFP is the first step in a possible two-step process in the selection of the Contractor. The responses to this RFP will be evaluated by the selection committee, which will be comprised of University personnel who score qualification statements and rank finalists; and another group

of University personnel to serve as advisers but do not score qualifications or rank finalists. On the basis of this evaluation, the selection committee may limit the field of finalists to not more than five (5), finalists to be selected for final consideration through interviews of each finalist and further investigation of references. If the selection committee determines the initial scores provide a substantial gap between respondents, OSU may forgo the interview stage and award to the highest scoring respondent. OSU will utilize this RFP process to obtain information to enable selection of the most qualified respondent through evaluation of:

- a. The respondents' responses to evaluation criteria in section 7 of this document;
- b. Information obtained during an interview (if applicable) of the respondents by the selection committee; and
- c. The results of discussions with the respondents' references and others.

Each criterion in the first step of the evaluation process has been assigned a weight between five (5) and twenty-five (25) – see Section 7.0 above. Each member of the evaluation committee will rate each company in each criterion between one (1) and five (5) (five being the highest), and multiply that number by the weight assigned to the criterion. The evaluation committee members will then total the weighted score from all of the criteria to obtain the total score. The result of this total score will be used to rank all respondents. The top ranked companies (not more than five [5]) may be invited to participate in in telephone or online video conference interviews.

The evaluation committee will meet and compare the individual evaluation committee member rankings. The committee will discuss company strengths and weaknesses and the individual evaluation committee member scorings. The evaluation committee discussion will result in the consolidated ranking from which the finalists for interviews may be selected to participate in step two of the process.

If interviews are required by the selection committee, RFP responses will be used in preparation for those interviews. After all interviews are completed, the evaluation committee will discuss the strengths and weaknesses of the interviewed finalists. The committee will then rank the interviewed finalists in order of preference based on all information received, presented and heard during the interviews. The finalist that has the highest overall ranking will be deemed the Apparent Successful Respondent. Final ranking will be based on finalist's response to questions during the interview stage, and through that response, how well each finalist can meet the Project and University needs.

Interviews, if required, will include a thirty (30)-minute presentation period, immediately followed by a separate thirty (30)-minute Q&A session.

If, during the discussion, the selection committee determines the interviewed finalists are too close to rank, the university has no recent experience working with a finalist, or if the consolidated ranking indicates a tie, the committee will check the references provided by the respondent as required by this RFP. Information obtained from references may alter the committee's final ranking of finalists. Any alteration of final ranking will be based on committee's understanding of how well each company can meet the needs of the Project and University.

11.0 Responsibility Evaluation

OSU reserves the right to investigate each respondent's responsibility in accordance with the requirements of Division 61 of OSU Standard Chapter 580, and will consider information obtained from any source as part of its evaluation, at any time prior to execution of a contract. Submission of a signed proposal response constitutes the respondent's approval for OSU to obtain any information OSU deems necessary to conduct the evaluation including, but not limited to, credit reports and information discovered during reference checks.

Financial Information: OSU will notify respondents, in writing, of any financial documentation required, which may include recent profit-and-loss history; current balance statements; assets-to-liabilities ratio, including number and amount of secured versus unsecured creditor claims; availability of short and long-term financing; bonding capacity and credit information.

OSU may postpone the award or execution of a contract in order to complete its investigation and evaluation. Failure to promptly provide complete information requested will render the proposal response nonresponsive. Failure of a respondent to demonstrate responsibility will render it non-responsible and constitute grounds for proposal response rejection.

12.0 Submission

Submit **one (1)** hard copy versions of your written proposal response, along **with one (1) electronic version on a thumb drive** to be received by the closing date and time listed in this document to:

Attention: Shoshana Shabazz
Construction Contracts Administration
Oregon State University
644 SW 13th Street
Corvallis, OR 97333-4238

Your proposal response must be contained in a document **not to exceed fifteen (15) single sided pages or seven (7) double and one (1) single sided**, including the Exhibit B pricing sheet, pictures, charts, graphs, tables and text the respondent deems appropriate to be part of the review of the respondent's response. Resumes of key individuals proposed to be involved in this project are exempted from the fifteen (15)-page limit and should be **appended to the end of your response**. No supplemental information to the fifteen (15) page proposal response will be allowed. Appended resumes of the proposed key individuals, along with a transmittal letter, table of contents, front and back covers, and blank section/numerical dividers, etc., will not be counted in the fifteen (15) page limit.

Information should **be presented in the same order as the above evaluation criteria**. The **electronic proposal response should be sized appropriately for transfer (under 8 MB)**. The written response should be submitted in a **soft-bound** (comb or spiral, spiral preferred – no three-ring binders) format with page size of **8 ½ x 11 inches** with no fold-outs. The basic text information of the response should be presented in standard business font size, and reasonable margins. All information provided should be included in both written and electronic submittals.

Your proposal response must be signed by an officer of your company with the authority to

commit the company and contain contact information including email for communication purposes.

OSU may reject any proposal response not in compliance with all prescribed public bidding procedures and requirements, and may cancel this solicitation or reject for good cause all proposal responses upon a finding by OSU that it is in the public interest to do so.

Note that OSU will not accept proposal responses or queries that require OSU to pay the cost of production or delivery.

OSU is an AA/EEO employer.

Telephone, facsimile, or electronically transmitted submittals will not be accepted. Proposal responses received after the closing date and time will not be considered.

13.0 Questions

All questions and contacts with the OSU regarding any information in this RFP must be addressed in writing, fax or email to Shoshana Shabazz at the address, email or fax listed in this document no later than February 12, 2018 at 10:00 am Pacific Time.

14.0 Solicitation Protests

You may submit a written request for clarification or change or protest of particular solicitation provisions and specifications **and contract terms and conditions** (including comments on any specifications or terms that you believe limits competition) to the Chief Procurement Officer in care of Hanna Emerson at the address, email or fax listed in this document. Requests and protests must be received no later than February 6, 2018 at 10:00 am, Pacific Time. Requests or protests must state the reasons for the request or protest and any proposed changes to the solicitation provisions and specifications and contract terms and conditions. **Requested changes to contract terms and conditions may not be considered at contract award.**

15.0 Change or Modification

Any change or modification to the specifications or the procurement process will be in the form of an addendum to the RFP and will be made available in the form of an addendum posted to the OSU Business and Bid Opportunities (<http://bid.oregonstate.edu/>) website. No information published in any other manner will serve to change the RFP in any way, regardless of the source of the information. Any request for clarification or change or protest of anything contained in an addendum not received by the date and time stated in the addendum will not be considered.

16.0 Selection Protests

Any respondent to this RFP who claims to have been adversely affected or aggrieved by the selection of a competing respondent may submit a written protest of the selection to the Chief Procurement Officer in care of Shoshana Shabazz at the address given in the RFP within three days after notification of that selection. Any such protests must be received by Ms. Shabazz no later than three days after the notification of selection has been made in order to be considered.

The selection decision notification will be made by OSU via posting to the OSU Bid and Business Opportunities website (bid.oregonstate.edu).

17.0 Proprietary Information

OSU will retain this RFP, one copy of each proposal response received and an electronic copy of each proposal response received, together with copies of all documents pertaining to the award of a contract. These documents will be made a part of a file or record, which will be open to public inspection after OSU has announced an Apparent Successful Respondent or all proposal responses have been rejected. If a proposal response contains any information that you consider to be a trade secret under ORS 192.501(2), you must mark each trade secret with the following legend: **"This data constitutes a trade secret under ORS 192.501(2), and must not be disclosed except in accordance with the Oregon Public Records Law, ORS Chapter 192."**

The Oregon Public Records Law exempts from disclosure only bona fide trade secrets, and the exemption from disclosure applies only "unless the public interest requires disclosure in the particular instance."

Therefore, non-disclosure of documents or any portion of a document submitted as part of a proposal response may depend upon official or judicial determination made pursuant to the Public Records Law.

In order to facilitate public inspection of the non-confidential portion of the proposal response, material designated as confidential must accompany the proposal response, but must be readily separable from it. Prices, makes, model or catalog numbers of items offered, scheduled delivery dates, and terms of payment will be publicly available regardless of any designation to the contrary. Any proposal response marked as a trade secret in its entirety will be considered non-responsive and will be rejected.

18.0 Project Termination

OSU is seeking to award a consultant's agreement to a Technical Services company for geophysical and geotechnical surveys; however, OSU reserves the right to terminate the project and the agreement, at any phase in the project.

19.0 Insurance Provisions

During the term of the resulting contract, the successful respondent will be required to maintain in full force, at its own expense, from insurance companies authorized to transact the business of insurance in the state of Oregon, each insurance coverage/policy as set forth in the Agreement.

20.0 Additional Requirements

Pursuant to OSU Standard 580-061-0030, by submitting a proposal response, the respondent certifies that the respondent has not discriminated against Minority, Women or Emerging Small Business Enterprises in obtaining any required subcontracts.

Pursuant to OSU Standard 580-061-0040, respondents are hereby notified that policies applicable

to consultants and contractors have been adopted by OSU that prohibit sexual harassment and that respondents and their employees are required to adhere to OSU's policy prohibiting sexual harassment in their interactions with members of OSU's community.

Enclosures:

- Exhibit A Scope of Work
- Exhibit B Pricing Sheet **Note: The completed Exhibit B must be submitted in your proposal. Alterations to the document are not allowed except to complete requested information. Any alterations to the form will cause your proposal to be rejected as non responsive.**
- OSU Sample Consultant's Agreement

End of RFP

**Pacific Marine Energy Center
South Energy Test Site (PMEC- SETS)
Marine Geophysical & Geotechnical Surveys**

Scope of Work

for

Oregon State University

Northwest National Marine Renewable Energy Center

1. INTRODUCTION

1.1. Project Overview

The Northwest National Marine Renewable Energy Center (NNMREC) at Oregon State University (OSU) plans to install an offshore wave energy test site approximately 6.2 NM offshore, south of Newport, Oregon. The test site covers an offshore area 1 NM wide (~E-W) and 2 NM tall (~N-S) and will be called the Pacific Marine Energy Center South Energy Test Site, hereafter referred to as P MEC-SETS. Wave energy converters (WECs), located at the offshore test site, will be linked via four subsea and underground power cables to an onshore Utility Connection and Monitoring Facility (UCMF), ultimately transmitting electrical power to the local electric utility grid. NNMREC requires completion of a marine geophysical and geotechnical survey, as outlined in this Request for Proposals, covering the SETS test site offshore, a ½ NM buffer zone surrounding the SETS test site and along a route from the offshore test site to landfall along the Oregon coast. Coordinate tables for these areas are included in Appendix B of this document.

Primary survey goals include:

- Collection of geophysical and geotechnical data that will identify a viable buried subsea cable route for up to five cables along parallel routes in an economical manner, with minimal impact to the local environment using geophysical and geotechnical surveys.
 - The cable route corridor will run from an HDD conduit break out point in approximately 10 meters water depth, roughly ½ NM offshore, out to the P MEC-SETS area.
 - Cable corridor width will vary along the route, starting at 200 meters width at the 10-meter contour, up to 800-meters wide at the offshore berth.
 - Survey for potential cable routes and burial will include a ½ NM wide buffer zone, encompassing the 1x2 NM P MEC-SETS test berth area, covering 4 NM² total area.
- Characterization of the seabed within the 2 NM² P MEC-SETS area using geophysical and geotechnical surveys.
- Characterization of the seabed within a 4 NM² buffer zone around P MEC-SETS area using geophysical and geotechnical surveys.
- Collection of geophysical and geotechnical data in support of permitting activities associated with this project. (i.e. archeological, etc.).

A summary of the proposed route is given and shown schematically below.

The route begins in the parking lot of Driftwood Beach State Recreation Site, hereafter referred to as Driftwood, and proceeds offshore taking a northwesterly route to PMEC-SETS. The baseline RPL for this survey is approximately 10 NM (20 km) long from the beach manholes (BMHs) located in Driftwood to cable terminus in 65 to 80m depth along the Eastern edge of PMEC-SETS (Figure 1). Alternative cable routes include a western approach via the ½ NM (1 km) perimeter around PMEC-SETS.

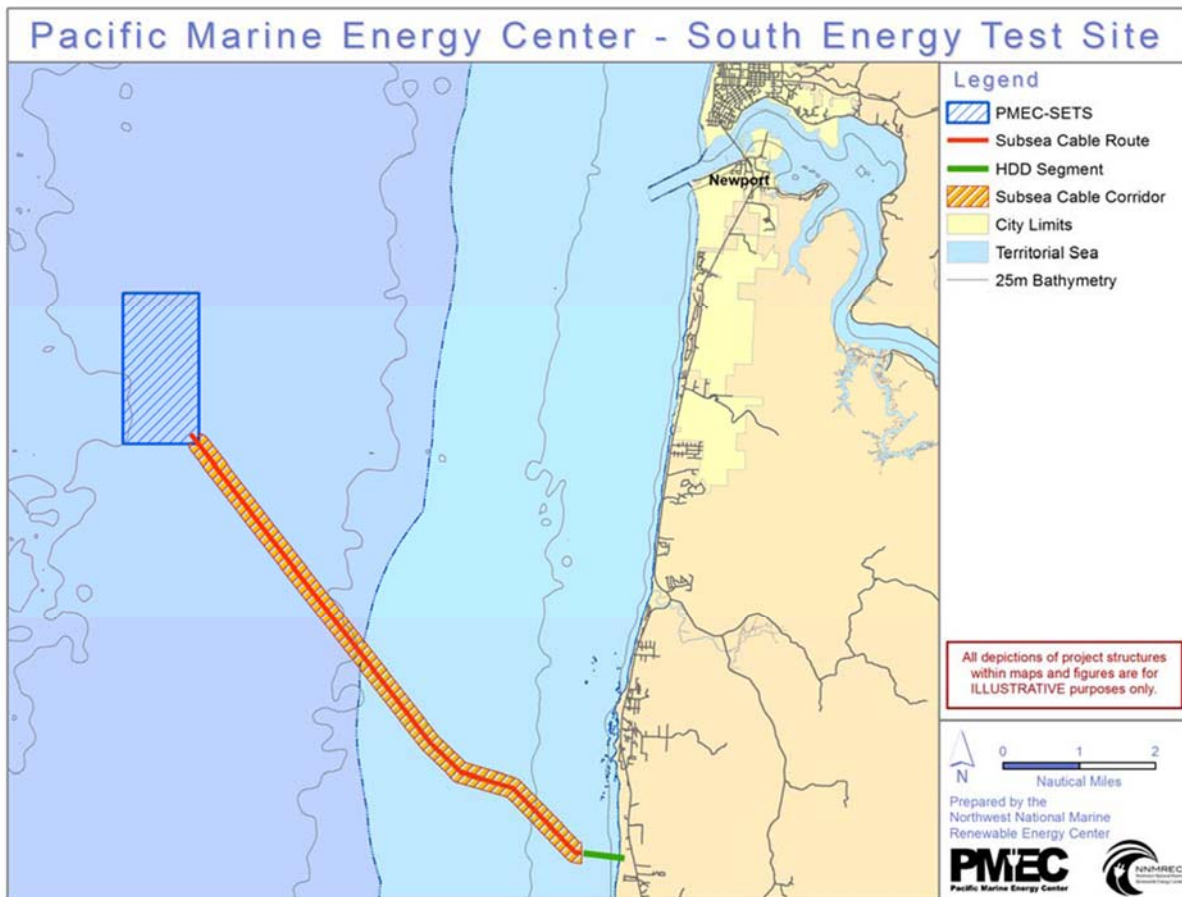


Figure 1 PMEC-SETS and Notional Subsea Cable Route

1.2. References

- IHO standards, Special Publication 44
 - http://www.iho.int/iho_pubs/standard/S-44_5E.pdf
- Guidelines for Providing Geophysical, Geotechnical, and Geohazard Information
 - Pursuant to 30 CFR Part 585

- BOEM, July 2015
- <https://www.boem.gov/note07132015/>
- Guidelines for Providing Archaeological and Historic Property Information
 - Pursuant to 30 CFR Part 585
 - BOEM, March 2017
 - <https://www.boem.gov/note07132015/>
- USACE Technical Manual for Hydrographic Surveys
- NOAA, Office of Coast Survey, Field Procedures Manual
 - http://www.nauticalcharts.noaa.gov/hsd/hydro_manual.html
- Geotechnical & Geophysical Investigations for Offshore and Nearshore Developments
 - International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE), September 2005
- Marine Soil Investigations, NORSOK Standard G-001, October 2004
- Recommended Practice DNV-RP-J301, Subsea Power Cables in Shallow Water Renewable Energy Application, DNV, 2014
- International Cable Protection Committee (ICPC) Recommendations 1 through 14
- ASTM D2488 Standard Practice for Description and Identification of Soils (Unified Soil Classification System)
 - Book of Standards, v04.08
- ASTM D2487 Standard Practice for Classification of Soil for Engineering Purposes
 - Book of Standards, v04.08

1.3. Desktop Study

NNMREC has previously prepared a Desktop Study (DTS), which considered several possible routes. An initial marine survey was performed to investigate the different route alternatives. Based on this work, this proposed route was determined to be the most feasible. The DTS report is available for download (see Appendix A).

1.4. Submarine Power Cable Technology

Installation of five cables are planned along the final route: four medium voltage export power cables; and a fifth, auxiliary power and data cable. Each of the medium voltage cables will be approximately 4 inches in diameter. HDD operations will be utilized to install individual conduits

for each of the cables. Offshore, the cables will be buried to a depth of 1-2 m using water-jetting, plowing or other similar techniques where possible. The entire route is within an active crab fishing area. In rocky or other areas where burial is not possible, alternative methods of cable protection will be utilized as needed.

2. SCOPE OF WORK

2.1. General

NNMREC needs data on the characteristics of the seabed along the submarine cable route as well as the P MEC-SETS test site area. The cable route survey is needed to establish an optimal cable route for installation of the cables between the landing site and the test site, as well as any routing around the berth facility. The test site survey is needed to provide WEC developers with site condition information for installation of their equipment and interconnection of their equipment with the cable(s).

NNMREC is seeking qualified bidders to conduct marine survey work covering:

1. A marine survey (geophysical and geotechnical surveys) for the potential cable corridor from the 10-meter water depth contour out to the P MEC-SETS area.
2. A marine survey (geophysical and geotechnical surveys) of the offshore 1 x 2 NM P MEC-SETS area, approximately 20 km NW of the shore landing site.
3. A marine survey (geophysical and geotechnical surveys) of a 1/2 NM Buffer zone around the P MEC-SETS area offshore.

Data from these surveys will be used for:

1. Cable and route engineering
2. Geophysical, Geotechnical, and Geohazard review and permitting
3. Archaeological & Historic Property review, investigation and permitting

Work will commence upon selection of the Technical Services team.

The marine surveys cannot commence before 06/16/18 due to environmental permitting restrictions but should be completed during the summer of 2018.

Sea conditions in this area vary dramatically throughout the year, with the summer months being the most conducive to marine survey activities. The Contractor will be required to process the survey data in near "real time" in sufficient detail to allow route development decisions to be made as the survey progresses. Processed geophysical data packages will also be required for timely submittal for initial archeological review as the survey progresses.

Preliminary archeological review and approval is required prior to any seabed disturbance during geotechnical survey operations. NNMREC intends to have technical representatives on board during all survey activities to assist in analysis, review and quick decision making.

Final reports should be completed within 30 days after completion of survey operations. Please include a proposed timeline assuming that a Technical Services team could be under contract with OSU by the beginning of June 2018 and work could commence on or after 06/16/18.

NOTE: While Contractors are not obligated to use it, OSU's Research Vessel *Pacific Storm* is currently available from 06/15/18 to 06/28/18 for these surveys (there may be some flexibility). Basic information about the vessel can be found at: <http://ceoas.oregonstate.edu/pacificstorm/>. Detailed information is available by contacting OSU's Ship Operations (Tel: 541-867-0295).

NOTE: Marine mammal activity in this area will limit marine operations to daylight hours. Marine mammal observers will be required on board.

A marine survey in the area was previously conducted. The survey data from this previous survey overlaps this survey area in some locations. The previous marine survey was unsuccessful in collecting core samples using a gravity core sampler.

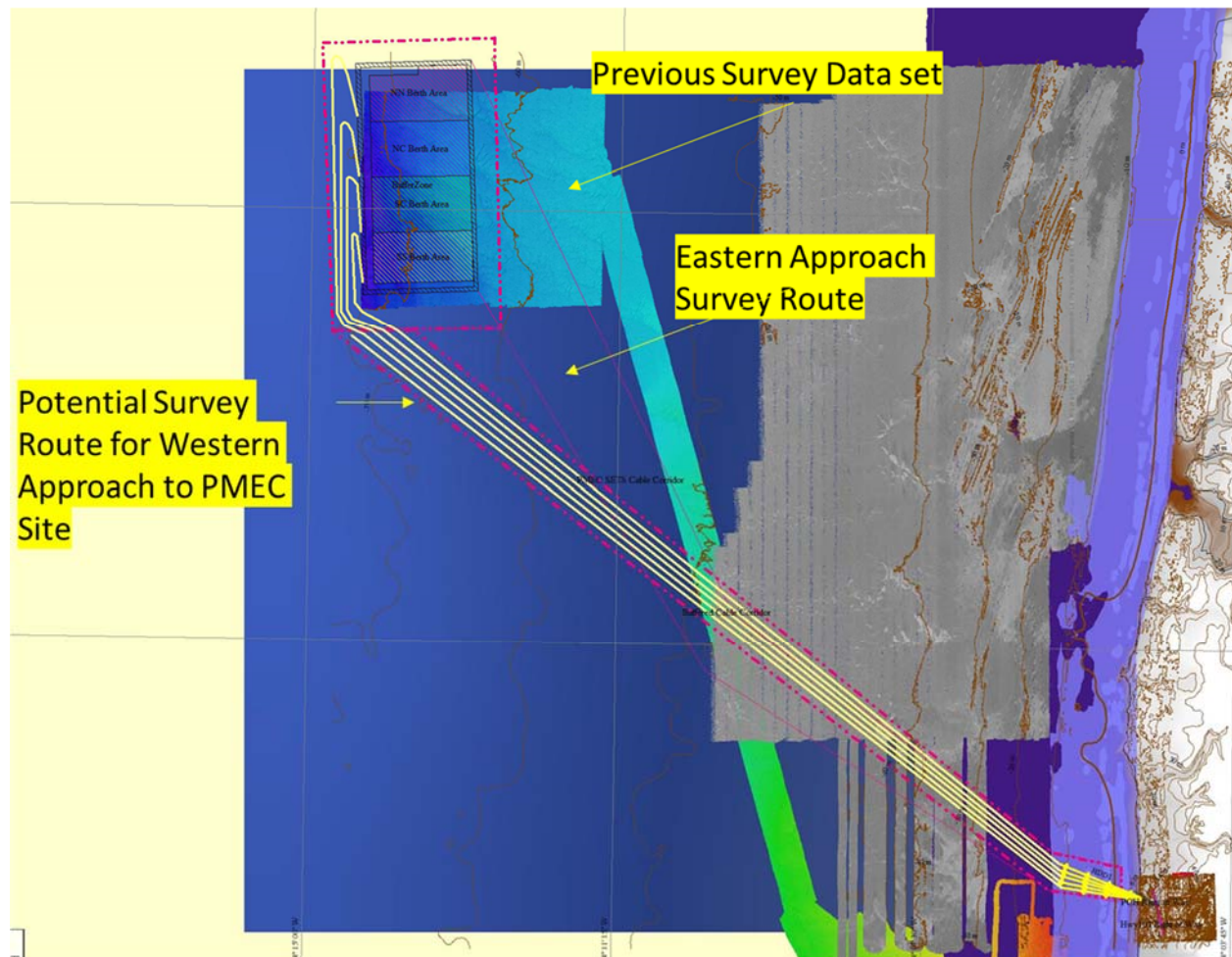


Figure 2 PMEC-SETS area, cable corridors and potential route development areas

2.2. Marine Survey Objectives and Scope

The geophysical and geotechnical marine route survey's primary objective is development of a safe and cost-effective route for installation and burial of 5 power cables from the 10m depth contour (HDD conduit break out), out to the P MEC-SETS area, and investigation of the sets area itself to gather information relevant to anchoring systems.

Two alternative cable routes are under consideration, an Eastern and a Western approach, as shown in Figure 2 above. One of these route options will be chosen as the primary option prior to survey operations. It is also possible that survey of both route options will be requested per the contract terms.

The P MEC-SETS area geophysical and geotechnical marine survey will provide similar information for the 2 NM² test berth area, suitable for site construction and installation of WEC systems and anchors/moorings.

To ensure flexibility, NNMREC also requires survey of a ½ NM wide, 4 NM² total area boundary zone encircling P MEC-SETS. Survey of this area will be of the same quality and resolution as the buried cable route area.

The marine survey will collect geophysical and geotechnical data along the proposed cable routes, from the HDD break out point to the offshore test berth area, and within a 3x2 NM area centered on P MEC-SETS.

Data and data formatting are also required to satisfy all permitting requirements. The Contractor shall identify seabed characteristics along the proposed routes and within the P MEC-SETS area.

The marine geophysical survey will cover a minimum total area of 8 NM², including the following areas:

- A nominal 6 NM² cable corridor (3/4 NM x 8 NM), proposed or adjusted
 - Note, cable corridor width varies along the route and is dependent on water depth
 - Cable corridor survey width will be 18 times water depth minimum
- 2 NM² wave energy test site area
- 4 NM² test site boundary zone

2.2.1. Geophysical Survey

Marine geophysical survey of these areas shall provide 60-meter total coverage (30 meters each side) with 50% overlap, resulting in 30-meter survey line centers over the entire area described.

Total survey distance for the areas described is approximately **1720 line-km** of survey. The survey operation will produce, at a minimum, the following:

- High resolution, multibeam bathymetry with 100% coverage.
- Sub-bottom profiles showing sediment depth and characteristics to a depth of 30-meters.
 - Water depth profiles matching the sub-bottom profile lines
- Sidescan sonar survey with 100% coverage.
 - Imagery resolution must be sufficient to detect and classify objects 0.5 meters in size minimum.
- Gradiometer (preferred) or Magnetometer (alternative) survey
 - Along all survey centerlines.

2.2.2. Geotechnical Survey

With approval from the NNMREC team's marine archaeologist for specific test points, marine geotechnical survey work will proceed, including some or all of the following tasks:

- Geotechnical investigation of the seabed composition via sediment core samples as approximately 60 test points to 5-meter depth below seabed.
 - Vibracore system will be required, as described in detail within.
 - Used to interpret geophysical data as well as identify sediment characteristics and physical properties.
 - Core testing to include Thermal Conductivity Measurement for each sample site.
- **As an alternative**, geotechnical investigation of the seabed soil strength at approximately 60 test points using a Cone Penetrometer Test (CPT) device capable of investigations to a minimum of 5 meters depth below seabed.
 - Used to determine the requirements for cable burial and anchoring in the selected seabed.
 - Further details within.

2.2.3. Final Report

- Final report including Interpretation and processing of all survey data.
 - All data interpreted to identify seabed obstructions, hazards, geographic relief, as well as seabed characteristics.
 - Interpretation based on all available data collected, including data from geotechnical survey operation core samples collected in the area (see below).

2.3. Marine Survey Requirements

2.3.1. Geophysical Marine Survey Requirements

Geophysical marine survey work from the 10m contour and further offshore over the areas described shall provide a detailed burial assessment along the submarine cable corridor and within the offshore test site and surrounding buffer zone. Resulting data shall provide details of sea bed morphology and shallow geology.

Data from these investigations should show any evidence of activities that might affect the cable(s) and test site, such as fishing scars from trawler boards, anchorage areas, crab pots, geologic faults, etc. The data shall also provide relevant data on the seabed materials and strength with regards to requirements for jet, plow or other means of cable burial. Finally, data will also be used for archeological review during the permitting process and is a primary driver of 30-meter survey line spacing and resolution requirements.

As described within the Survey Objectives, geophysical survey elements will be performed with 30-meter survey line center spacing over the full area described, resulting in an estimate of 1720 Line-km of geophysical survey. An estimated 60 geotechnical investigation sites are also assumed at present. Detailed requirements for each survey element follows.

2.3.1.1. Bathymetry

The survey shall collect sea floor bathymetry data to provide full and continuous, 100% coverage, high resolution data of the proposed cable corridor and wave energy test area. Multibeam Echo Sounder equipment shall be used for the bathymetric survey. All soundings and subsequent contours shall be reduced to local chart datum by observed tide.

2.3.1.2. Sub-Bottom Profiling

Continuous sub-bottom profiler data will be acquired along all survey lines. The sub-bottom profiler will be capable of penetration to a minimum of 30-meters with vertical bed separation resolution of 30-cm or better in the upper 10 to 15-meters of seabed.

2.3.1.3. Sidescan

Sidescan sonar survey of the seabed shall be collected along all geophysical survey lines with 100% overlapping coverage minimum. Backscatter data collected shall be suitable for use in determining geologic material characteristics of the surface of the seabed as well as identify any archeological objects of interest or other obstacles in the areas being surveyed.

2.3.1.4. Gradiometer (Preferred)

A gradiometer (two or more total field magnetometers operating in gradiometer configuration) is the preferred solution for detection of ferrous metals or other magnetically susceptible

materials. Data will be acquired along all survey lines to determine whether any ferrous objects exist along cable routes and in the test area, e.g., debris, wrecks.

2.3.1.5. Magnetometer (Alternative)

Use of a magnetometer solution will be considered in-lieu of a gradiometer solution if contractor is unable to offer a compliant gradiometer survey system.

2.3.2. Geotechnical Marine Survey Requirements

On completion of the geophysical survey operations and initial review by a marine archaeologist, a set of geotechnical investigation points will be identified by the survey team and NNMREC representatives. Geotechnical investigations will be performed to provide ground truth data points for proper interpretation of the sub-bottom profiling work and to evaluate the suitability of the seabed sediments for cable installation and/or anchor penetration in the test site area and along the cable route seaward of the 10 m HDD breakout zone. Two different investigations are under consideration and described within (core sampling and Cone Penetrometer testing).

Additional geotechnical tests or investigation methods may be proposed by the Contractor if the results of such tests may also assist in determining the type of burial method or equipment which would be required. The Contractor may also propose a modified sampling interval based on analysis of the subbottom profiler data, with a maximum distance between sample locations of 1-km. Initially a 500-meter sampling interval is assumed as the baseline, but this may be relaxed if it can be shown that the sediment characteristics do not vary significantly. NNMREC reserves the right to adjust or modify the sampling interval in accordance with the agreed contract pricing.

Table 1 – Planned Sediment Samples

Sample Area	Number of Sediment Samples
Proposed Cable Route	20
Wave Energy Test Area	20
Test Area Buffer Zone	20
Total Estimate	60

2.3.2.1. Sediment Core Sampling

Sediment core sampling may be performed at some or all of the selected test points. Sediment sampling will influence installation for the cable, cable engineering and design. Sediment samples will be collected at specified sites using a vibracoring system or equivalent, capable of collecting cores up to 5 m in length. Sediment core depth at each sampling site may vary depending on sediment overburden and the presence of rocky substrates.

NOTE: Sediment sampling in this area using gravity core samplers has been unsuccessful in previous survey work.

2.3.2.2. Optional CPT

Cone Penetrometer (CPT) testing is being considered for the geotechnical investigations as an alternative, or in conjunction with, sediment cores, to directly measure the in-situ seabed strength. CPT testing apparatus shall be capable of penetrating to at least 5 meters below the seabed while recording penetration forces. Any push resulting in less than 3 meters penetration shall warrant a second attempt.

2.3.2.3. Benthic Sampling

No benthic sampling is required for this project.

3. CONTRACTOR'S RESPONSIBILITIES

3.1. General

It shall be the Contractor's sole and prime responsibility to establish and confirm that the data provided is accurate and complete. This will include identification and summary of potential problems for cable burial along the routes. For cable installation and permitting purposes, a complete picture of the seabed and, as a minimum, the first 3m below the seabed is required. Additionally, evaluation of the significance of observed floor sediments, particularly in respect to seabed sediment stability and transport is required.

NNMREC has extensive and ongoing relationships with all parties associated with activities in this area. Any and all conversations regarding permits, etc. should be coordinated with NNMREC representatives prior to making contact. Contractor is expected to liaise with the relevant authorities such as the US Coast Guard, the Port of Newport, commercial fishermen, etc. as required during the survey. NNMREC can assist with this.

The Department of Energy (the project funding agency) has consulted with the NOAA Fisheries and the U.S. Fish and Wildlife Service (USFWS) as part of the National Environmental Policy Act (NEPA) process. Letters of Concurrence have been received from NOAA and USFWS. NNMREC has obtained a Short-Term Access Agreement from the Oregon Department of State Lands (DSL) and the necessary Nationwide Permit from the U.S. Army Corps of Engineers (USACE), which is required when geotechnical coring is being conducted with state and federal waters.

NOTE: Marine mammal observers (MMOs) will be required during the surveys. If the contractor cannot arrange this, NNMREC may be able to assist in identifying suitable personnel. All MMOs used for surveys will meet NOAA's qualifications. NOAA lists Minimum Qualifications for Marine Mammal Observers at:

http://www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/monitoring_plan_guidance.html.

Vessel operators and those standing watch must receive training in vessel strike avoidance measures and will be asked to participate in watching for marine mammals and sea turtles.

Contractor shall be solely responsible for providing all items, equipment, personnel, spares, replacements, etc., required for successful survey completion.

While Contractors are not obligated to use it, OSU's Research Vessel *Pacific Storm* is currently available from 06/15/18 to 06/28/18 for these surveys (there may be some flexibility). Basic information about the vessel can be found at <http://ceoas.oregonstate.edu/pacificstorm/>. Detailed information is available by contacting OSU's Ship Operations (Tel: 541-867-0295).

If a contractor were able to make use of the *Pacific Storm* during the above dates, the costs of the charter would be covered by NNMREC internally at OSU. The availability of the *Pacific*

Storm during other dates cannot be guaranteed at this time (the vessel's primary role is to support OSU research activities) and any potential Contractor must have independently discussed such operations with OSU's Ship Operations.

Potential Contractors may also propose the use of alternative vessels and must include the costs of such charters in their cost proposals. Responsibility for such charters would lie with the potential Contractor.

Where requirements of survey operations are not specified by NNMREC, the Contractor shall perform the duties in the most efficient, economical and professional manner possible. No exclusion to these requirements are given or implied except those which may be agreed on with NNMREC (or their Representative).

3.2. Progress Reporting

Prior to contract award, contractor should provide a sample of the daily report format they expect to submit for this project. Following contract award, contractor shall provide NNMREC, and NNMREC's representative electronic copies of Periodic Progress Reports that shall include all aspects of the marine survey works and preparations. During mobilization, demobilization, and marine operations, daily reports shall be submitted to NNMREC's Representative on board, and following his/her approval, will be submitted to NNMREC by e-mail.

Final format of the report will be agreed prior to start of survey operations, but will include the following:

- Geographical position of the survey vessel at the time of the report
- Summary of the work performed during the preceding 24-hour period
- Summary of the planned work for the next 24-hour period
- Time spent on effective work during each 24-hour period and cumulative total
- Weather downtime during each 24-hour period and cumulative total
- Vessel/equipment downtime during each 24-hour period and cumulative total
- Endorsement of the report by NNMREC's On-board Representatives
- Summary of the route surveyed
- Remarks on the viability or otherwise of the planned route(s), including any impacts on the calculated route-distances

3.3. Permissions

Contractor shall himself shall ensure that all necessary survey permissions and permits, including those required for the vessel and her crew are in place prior to commencing operations. **NNMREC will make every effort to give reasonable assistance to the application but is not responsible for obtaining permits apart from those discussed in Section 3.1 (above).**

Contractor shall be solely responsible for procurement, supply, calibration etc. for all equipment, procedures and qualified personnel to fulfil the requirements of this statement of work.

3.4. Survey Vessel & Equipment

Unless using OSU's *R/V Pacific Storm* during the dates discussed in Section 3.1 (above), the Contractor shall be responsible for ensuring availability of a suitable survey vessel or vessels, survey equipment, procedures and qualified personnel to operate the vessel(s) to fulfil the requirements of this statement of work. **NNMREC may be able to provide assistance through its contacts with the local commercial fishing community.**

3.5. Potential for Lost or Damaged Fishing Gear

The survey area is an active crab fishing ground and encounters with gear associated with this fishery can be expected. While the Dungeness crab season runs from December through August, the majority of the fishing activity occurs early in the season. NNMREC will assist the Contractor in liaising with local commercial and charter fishermen and will advise fishermen of proposed survey activity, area and time frame.

Contractor is solely responsible for any claims of damaged or lost fishing gear as a result of survey operations.

3.6. Route Development

Development of an optimal buried submarine cable route is a requirement which is expected to require some level of additional survey work, as compared to purely surveying the presently defined boundaries. To minimize survey time while obtaining an optimal route(s), initial survey operations are expected to encompass development of an optimal route, followed by a complete survey of the developed route and P MEC-SETS area.

Route development is expected to commence with a single line geophysical survey along the baseline route. Depending on the findings, further detail will be gathered in noted problem areas, until a revised route centerline is agreed.

With a revised route centerline defined, geophysical survey coverage of the entire length will then be completed with mutually agreed off-set lines covering at least a ½ NM wide corridor.

Route assessment shall be performed by the Contractor's senior personnel together with NNMREC's on-board Representative and shall be based on provisional field charts produced by the Contractor as the survey proceeds. The Contractor must be prepared to perform additional survey lines until an acceptable route can be found.

Commercial aspects of the route development process shall be addressed in Contractor's proposal.

On completion of the route development effort, additional survey work will be performed as

needed to provide 100% bathymetric and backscatter coverage (and associated depth and sub-bottom profile lines) of the final, ½ NM wide, cable corridor. Sediment sampling of the cable corridor should follow completion of the geophysical survey activities. Test site survey and sampling work can be scheduled and performed at the Contractors discretion, to account for weather, route development review etc., while optimizing project schedule.

3.7. Technical Requirements

3.7.1 Positioning System

The on-board positioning system shall be fully redundant and based on Differential GPS or RTK GPS. The positioning system shall feature real time survey equipment sensor positioning and offsets with an accuracy measured as plotted variations of less than 1 m over a 1-hour period. Position fixes should be digitally logged continuously along the vessel track. Geodesy information should be clearly presented and consistent across all data types.

A vessel-mounted acoustic positioning system, such as ultra-short baseline (USBL) positioning, is preferred to improve the reliability of positioning towed sensors. If a vessel-mounted acoustic positioning system is not utilized, layback distances should be calculated, recorded, and cross-checked with feature-mating techniques to provide accurate positioning of towed sensors.

3.7.2 Survey Coverage

Each geophysical survey line shall provide 60-meter total coverage (30 meters each side) with 100% overlap between survey runs, resulting in 30-meter survey line centers over the entire area described.

Tie lines are to be run at nominal 90° angles to the main lines, at intervals not exceeding 500 meters.

Total survey distance for the areas described is estimated as 1720 Line-km total, calculated as follows:

- 1.5-km Wide x 18 km long cable route corridor main lines at 30-meter line spacing
 - 51 lines average x 18 km = 918 Line-km
- Cable route corridor tie lines, 18 km at 500-meter spacing
 - 37 lines x 1.5 km average = 56 Line-km
- PMEC-SETS test area & buffer zone (2 x 3 NM) main lines at 30-meter line spacing
 - 125 lines x 5.55 km = 700 Line-km
- PMEC-SETS test area & buffer zone (2 x 3 NM) tie lines at 500-meter spacing
 - 12 lines x 3.75 km = 45 Line-km

3.7.3 Bathymetry Survey

The survey shall collect sea floor bathymetry data, providing 100% coverage of the survey areas described previously. Bathymetry data shall be reduced to (local) chart datum using observed tide NOAA tide station 9435380 (South Beach, OR) (or equivalent). The results shall be presented in a plan as contours (chart scale, sounding density and contour interval to be stipulated) and sun illuminated digital terrain model (DTM). The results shall also be presented as gridded data that meets the requirements of IHO S-102 and is suitable for use in a GIS system to evaluate cable route profiles, and similar.

Bathymetry system shall be capable of producing gridded data with resolution of at least 0.5 m in water depths shallower than 50 m and 1 m or better than 2% of water depth resolution in water depths beyond 50 m. Backscatter values from the seabed returns should also be logged and processed as appropriate. Evidence on object detection capabilities and experience shall be supplied in a table.

Survey specifications are expected to be based on IHO standards (Special Publication 44 http://www.iho.int/iho_pubs/standard/S-44_5E.pdf) or the USACE Technical Manual for Hydrographic Surveys, as appropriate. The Contractor will locate and plot any infrastructure encountered during survey activities. The Contractor's proposal shall detail the proposed method to carry out this function

The bathymetric survey will meet IHO Order 1a specifications. Contractor shall demonstrate, by the inclusion of a fully developed error budget and cross-line comparisons in the survey report, that this requirement has been met.

3.7.4 Sidescan Survey

Sidescan data will be acquired along all survey lines, and will provide at least 100% coverage of the seabed. As a baseline, sidescan survey data should be of equal or higher resolution than a 500KHZ (non- chirp) side scan system and shall be of sufficient quality to resolve objects 0.5 meters along and side, or better. Sidescan towfish shall be towed at an altitude of 10% to 20% of instrument range.

Contractor shall provide sufficient information in proposal to demonstrate their approach can support this requirement. Information should include survey line spacing, sidescan operating frequency(s), beamwidths, etc. Contractor shall also identify quality control measures (i.e. Tie lines, etc.) to ensure >100% coverage including nadir gap. Sidescan data shall be georeferenced, mosaiced, and interpreted for seafloor characteristics and composition.

3.7.5 Sub-bottom Profiling

Comprehensive sub-bottom profiling along each survey line shall be carried out with adequate resolution to determine the characteristics of the top 30-meters of surficial sediment. Profiling

system should be capable of vertical bed separation resolution of at least 30-cm in the uppermost 10 to 15-meters of sediments, depending on the substrate. Profiling resolution of the remaining seabed (to 30-meters below seabed) shall not exceed 3-meters.

3.7.6 Gradiometer Survey

A gradiometer (two or more total field magnetometers operating in gradiometer configuration) is the preferred solution for detection of ferrous metals or other magnetically susceptible materials. Overhauser or optically pumped systems are preferred. The gradiometer should be towed as near as possible to the seafloor and in a way that minimizes interference from the vessel hull and the other survey instruments. The gradiometer altitude should not exceed 6 m above the seafloor. An altimeter should be used to ensure the proper height of the gradiometer in the water column. The altitude of the gradiometer should be continuously recorded during data acquisition along the survey.

Gradiometer sensitivity should be 1.0 gamma (γ ; 1.0 nano-Tesla [nT]) or less. Background noise level should not exceed a total of 3.0 γ peak to peak. The Gradiometer data sampling rate should be greater than 4.0 Hz to ensure sufficient data point density. Data should be recorded on a digital medium in such a way that can be linked electronically to the positioning data. Survey line, time, position, altitude, and speed should be annotated on all output data.

3.7.7 Magnetometer Survey

If a Gradiometer survey system is not available to the bidder, Magnetometer solutions will be considered. Magnetometer data shall be recorded along all survey lines. The Magnetometer should be towed as near as possible to the seafloor and in a way that minimizes interference from the vessel hull and the other survey instruments. The Magnetometer altitude should not exceed 6 m above the seafloor. An altimeter should be used to ensure the proper height of the gradiometer in the water column. The altitude of the Magnetometer should be continuously recorded during data acquisition along the survey.

Magnetometer data shall be recorded digitally and shall be georeferenced. Magnetometer sensitivity should be 1.0 gamma (γ ; 1.0 nano-Tesla [nT]) or less. Background noise level should not exceed a total of 3.0 γ peak to peak.

The Magnetometer data sampling rate should be greater than 4.0 Hz to ensure sufficient data point density. Data should be recorded on a digital medium in such a way that can be linked electronically to the positioning data. Survey line, time, position, altitude, and speed should be annotated on all output data.

3.7.8 Seabed Core Sampling

The Contractor and NNMREC shall agree on the number and location of the seabed samples during contract negotiations.

The sediment core sampler should be a vibracorer (or similar) capable of yielding a minimum of 5-meter deep core sample. The recovered sample shall be split, and sediment characteristics described. Shear strength of the top 2.5-meter of sample sediments shall be tested utilizing either a pocket Torvane or shear vane. Pocket Penetrometer (or equivalent) tests shall be carried out in non-cohesive sediments. Finally, reference section 3.7.10 for thermal testing of cores.

In the case of an unsuccessful sampling effort, Contractor shall attempt up to three (3) sample attempts at each site, at NNMREC Representative's discretion. An unsuccessful sample will be a core of less than 2.5 m recovered, unless it can be shown that bedrock was encountered.

Sediment core sampling may be performed at some or all of the selected test points. Sediment sampling will influence installation for the cable, cable engineering and design. Sediment samples will be collected at specified sites using a vibracoring system or equivalent, capable of collecting cores up to 5 m in length. Sediment core depth at each sampling site may vary depending on sediment overburden and the presence of rocky substrates.

NOTE: Sediment sampling in this area using gravity core samplers has been unsuccessful in previous survey work in this area.

Sediment cores are required to represent the proposed installation depth plus 50 cm along the proposed route, it is anticipated that the cable will be installed at an average depth of 1-2 meters below the seafloor. Sediment cores should therefore cover, at a minimum, the first 2-1/2 meters of sea bed.

NOTE: specifics of handling core samples may be adjusted to preserve samples for permanent storage by the OSU core lab.

Each core will be split and documented in the field with the following information:

- Time of sample
- Sample location
- Water depth
- Sample length
- Visual and tactile description – including grain size, presence of shells or shell fragments, sediment stratification, width of strata
- Visual description of any invertebrates present in the sample
- Color photograph of sample with at least 0.5 mm resolution
- Pocket Torvane or shear vane test (cohesive sediments) every 25 cm along the sample

- Penetrometer test (non-cohesive sediments) every 25 cm along the sample
- Odor

Each core sample will be handled and processed separately (sediment samples will not be composited). Unless otherwise specified, core samples shall be handled and preserved for permanent record by others. Contractor shall ensure cores are preserved in a manner that is suitable for permanent storage at OSU's core lab.

Contractor shall preserve a representative set of intact core samples for use in performing thermal conductivity measurements by the OSU project team. The contractor may propose performing thermal conductivity measurements either onboard or elsewhere as an option.

3.7.9 Seabed CPT Measurement

Alternatively, CPT measurement devices shall be capable of penetrating to a minimum of 5 meters below seabed and will provide continuous monitoring and output of seabed strength during seabed penetration.

3.7.10 Thermal Resistivity Measurements

Where coring is performed, the Contractor and NNMREC's Representative will agree on which cores will be preserved for testing onshore.

Contractor may also elect to propose in-situ measurements of thermal resistivity they shall be conducted at each of the chosen seabed sample testing sites. These measurements will be conducted at the sediment sampling sites, either with an in-situ seabed probe or shipboard on recovered sediment cores. Contractor and NNMREC's Representative will agree on which sites will be tested for thermal resistivity. If sediments of thermal resistivity higher than 1.0 K-m/W are found, additional tests shall be performed to characterize these sediments and define their extent.

3.7.11 Chart Datum & Data units

All georeferenced data, and charts, etc. are to be issued in datum WGS 84. Water depths shall be referenced to local chart datum (MLLW). Water depth data shall be in meters. Geo position data shall be in consistent units throughout all deliverables. Contractor may propose an approach for keeping data in consistent units, etc.

3.7.12 Equipment Calibration and Acceptance Test

Before commencing survey field work, the Contractor shall perform all necessary calibration and integration tests to make sure that all survey equipment is working properly, appropriately calibrated and operating within specifications. equipment spare parts shall be on hand to avoid survey interruptions. Copies of equipment calibration data shall be provided to NNMREC's

Representatives prior to commencement of mobilization. Contractor shall demonstrate to NNMREC's satisfaction that all equipment is configured and calibrated to meet the requirements of this survey.

The methodology for calibration of the multibeam echo sounder shall be provided in the proposal, and calibration results will be documented in the survey report. The calibration will be carried out as part of system mobilization and an interim report detailing the calibration results will be presented to the NNMREC's Representative prior to commencement of survey work.

Acceptable calibration procedures can be found in the NOAA, Office of Coast Survey, Field Procedures Manual (http://www.nauticalcharts.noaa.gov/hsd/hydro_manual.html).

3.8 Survey Vessel and Personnel

3.8.1 General

Contractor shall be responsible for ensuring that the vessel is fully compliant with all relevant operating requirements in the waters concerned. To avoid weather down-time, Contractor shall use a sea worthy vessel well suited for the task and with the necessary endurance.

If the Contractor does not plan to use the R/V *Pacific Storm*, they shall provide in the proposal basic details of the survey vessel(s) specification, including but not limited to name, flag, call sign, operational limits and station-keeping capabilities

Due to the NOAA requirements for Marine Mammal Observers, operations will only be conducted during daylight hours when visibility is greater than 100 meters.

3.8.2 Personnel

Contractor shall ensure that all vessels and crew used in this survey are fully qualified and licensed to operate the vessel(s), in US waters off the coast of Central Oregon.

3.8.3 NNMREC Representatives

NNMREC shall be entitled to have up to one (1) Representative on board during the whole survey and on board survey data processing. This Representative will not be responsible for the survey results but only for giving appropriate assistance to the Contractor. The NNMREC Representatives shall be entitled to file daily and other reports with their offices free of charge on communications equipment provided by the Contractor if cellphone service is not available at sea.

3.8.4 Marine Mammal Observers

A minimum of two Marine Mammal Observers (MMOs) will be required on look out during

survey work. The Contractor can provide qualified MMOs or NNMREC can assist in finding suitable personnel.

All MMOs used for surveys will meet NOAA's qualifications. NOAA lists the Minimum Qualifications for Marine Mammal Observers as:

- Visual acuity in both eyes (correction is permissible) sufficient to discern moving targets at the water's surface with ability to estimate target size and distance. Use of binoculars or spotting scope may be necessary to correctly identify the target.
- Advanced education in biological science, wildlife management, mammalogy or related fields (Bachelor's degree or higher is preferred).
- Experience and ability to conduct field observations and collect data according to assigned protocols (this may include academic experience).
- Experience or training in the field identification of marine mammals (cetaceans and pinnipeds).
- Sufficient training, orientation or experience with vessel operation and pile driving operations to provide for personal safety during observations.
- Writing skills sufficient to prepare a report of observations. Reports should include such information as the number, type, and location of marine mammals observed; the behavior of marine mammals in the area of potential sound effects during construction; dates and times when observations and in-water construction activities were conducted; dates and times when in-water construction activities were suspended because of marine mammals, etc.
- Ability to communicate orally, by radio or in person, with project personnel to provide real time information on marine mammals observed in the area, as needed.

Copied from NOAA Fisheries West Coast website on 12/28/2017:

http://www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/monitoring_plan_guidance.html.

3.8.5 Communications

Contractor shall ensure that the ship is equipped with suitable means of communication so that daily and other reports can be transmitted by electronic mail, using cellular network or satellite communication techniques, whichever is appropriate.

3.9 Survey Equipment and Personnel

3.9.1 General

Contractor shall be responsible for ensuring that all survey equipment is fully operational and suitable for the survey works.

Contractor's proposal shall provide basic details of the survey equipment specifications, including but not limited to: manufacturer's name, frequency, resolution and source level. A manufacturer's brochure, if it contains the necessary information, shall be adequate to meet this requirement.

3.9.2 Personnel

Contractor shall include in his proposal the CVs and the qualifications of the survey team. Contractor shall nominate a Party Chief for the survey work.

3.9.3 Technology

Use of the latest survey and positioning technology is encouraged. Preference will be given to companies whose operations are based upon or conform to an industry standard QA process such as ISO 9002. The Contractor's QA/QC documentation will form part of the contract.

3.10 Data

At the conclusions of the survey project, all raw and processed data records shall be the property of NNMREC. Contractor shall identify in their proposal the format for all data files to be submitted to NNMREC.

4. SURVEY REPORTS

4.1. Preliminary Marine Survey Report

Example charts shall be presented, for acceptance by NNMREC, prior to start of survey. Electronic copy of the Preliminary Marine Survey Report, with a preliminary cable route, shall be presented to NNMREC for approval within 10 days of completion of the physical survey. The Preliminary Marine Survey Report shall include, as a minimum:

4.1.1. Charts

All charts shall have a small overview at the right margin showing actual chart number, and all other referenced charts, with symbols, scale, chart datum, Contractor's and NNMREC's name etc. All charts shall be stored in digital format on an appropriate data storage system at the premises of the Contractor for at least two years after the cables have been installed.

4.1.1.1. Marine Route Survey Charts

Produced charts for the submarine cable route survey will comply with the following:

- Color charts of the cable routes at an appropriate scale with UTM-grid lines, with "Tick marks" for geographical latitude and longitude. Chart Datum WGS 84
- All charts shall be formatted for size A0 and be delivered in an industry standard format (ie PDF) in sufficient resolution to provide clear, concise charts when printed at the A0 size. If multiple charts are provided, the overlaps between charts shall be approximately 100 m. PDF Charts shall be delivered with sufficient resolution and other details that meets all requirements listed in this section
- Each route alignment chart shall have four fields:
 - Top field for bathymetry with Preliminary Cable Route as much as possible in the center of the corridor. Color schemes shall show land, shallow and deep waters. All survey tracks to be plotted. Bathymetry shall be shown as contours, at agreed upon intervals, with a sun-illuminated background image.
 - Second field shall show the interpreted backscatter data with all relevant facts, including trawl-scars, obstructions, and sediment sample positions etc. Sediment types shall be marked or colored to show the range from very hard sediments to very soft sediments.
 - Third field shall be a vertical profile along the Preliminary Cable Route showing the bathymetry along the route as derived from the echo sounder data and the top layers of the seabed as derived from the sub-bottom data. Sample locations will be marked on the chart, with appropriate annotation either at the location or in a table

adjacent to the chart.

- Fourth field shall be left blank

4.1.1.2. *Wave Energy Test Site Marine Survey*

- Color charts of the wave energy test site at an appropriate scale with UTM-grid lines, with “Tick marks” for geographical latitude and longitude. Chart Datum WGS 84.
- All charts shall be in size A0 for the Preliminary Report. The overlap between charts shall be approximately 100 m. Charts shall be submitted as PDF data files sized to print out A0, resolution and other details shall meet all requirements listed in this section.
- Each area chart shall be oriented north-up and consist of two variations:
 - Chart 1 for bathymetry with Preliminary Cable Route shown as appropriate. Color schemes shall show land, shallow and deep waters. All survey tracks to be plotted. Bathymetry shall be shown as contours, at agreed upon intervals. Core sample locations will be marked on the chart, with appropriate annotation either at the location or in a table adjacent to the chart.
 - Chart 2 for backscatter data with all relevant facts, including trawl-scars, obstructions, and sediment sample positions as appropriate, etc. Sediment types shall be marked or colored to show the range from very hard sediments to very soft sediments.
- An alignment chart(s) of the cable route shall show the bathymetry, backscatter imagery, and subbottom profile in separate panels along the cable route.

4.1.1.3. *GIS Data*

Contractor shall submit survey data in a vector format compatible with, and suitable for loading into a GIS system. A sample of the proposed GIS data file formats shall be submitted prior to start of marine survey operations. The vector data files must be in a non-unique format that can be loaded by multiple GIS systems (ie ArcGIS, GlobalMapper, etc.). Contractor should submit in their proposal the format(s) they plan to use for GIS data submittals.

- Bathymetry data may be submitted as a grid vector file(s). Contour data should be submitted as vector shapefiles
- Backscatter data may be submitted as geo-reference raster images (geo-TIFF, etc.).
- Interpreted data should be submitted as vector shapefiles
- Sub-bottom profile data should be submitted as geo-referenced raster images (geo-TIFF, etc.), vector data shall be submitted in an industry standard file format appropriate for the

data being submitted.

- Seismic profile data should be submitted as geo-referenced raster images (geo-TIFF, etc.).
- Vector data shall be submitted in an industry standard file format appropriate for the data being submitted.

4.2. Report

Contractor shall provide documentation giving all relevant information, including:

- Updated route position list for the recommended cable routes
- List of waypoint positions (rounded to 0.1-meters) and length calculation (rounded to 0.1-meters) in WGS 84 format
- Navigation, system set up etc.
- All calibrations and other QC verifications
- Description of equipment and survey implementation
- Listing of all findings that could affect the cable installation including general seabed characteristics, obstructions, wrecks, debris, trawler scars, observed fishing and marine traffic activity, etc., and any other aspects that might affect cable installation and burial
- Estimated target cable burial depths along the route
- Description of the wave energy test site including general seabed characteristics, obstructions, wrecks, debris, trawler scars, observed fishing and marine traffic activity, etc. and any other aspects that might affect installation and anchoring of wave energy systems
- Description of each seabed sample, including but not limited to length, photograph, sediment type, shear strength, benthic fauna and thermal resistivity (where appropriate)
- A summary of the morphology and geology all along the route incorporating measured and expected shear strength for the top seabed layers

4.2 Final Marine Survey Report

NNMREC will review and may request changes to the report, and Contractor will make changes to the draft report as appropriate.

The Final Marine Route Survey Report shall be issued within 2 weeks of the provisional acceptance of the Preliminary Marine Route Survey Report. Submissions of all reports shall be issued in portable digital format (PDF).

5. Format of the Contractor's Proposal

5.1 Scope of Work

Contractor's proposal shall cover all aspects of the marine survey, including the test site area survey, route(s) development and sediment sampling program.

5.2 Proposed Methodology

The Proposal for services shall include a Methodology describing how each item of the Scope of Work will be implemented.

5.3 Contractor's Comments and Proposal Alternatives

In addition to a Compliant Proposal, the contractor is encouraged to offer alternatives that would improve the completion of the survey and its results.

5.4 Schedule of Activities

The Proposal for services shall include a detailed Schedule of Activities showing the implementation of each activity described in the Methodology. The Contractor may provide the all information identified in the Schedules below in their own format.

5.5 Cost Estimates

See the Compensation section of the RFP (Section 6.0)

5.6 Schedules

Contractor shall complete all attached Schedules in accordance with these notes and in accordance with the stated requirements on each schedule. Each schedule shall be signed and stamped by an individual authorized by the tendering contractor. If Contractor requires clarification on any aspect of the Schedules, questions should be referred to individuals named in the Invitation to tender letter as soon as possible. Any clarification will be issued by means of formal Addendum to be forwarded to all bidders.

5.6.1 Schedules 1: Positioning System

Sufficient information shall be given in this schedule such that an evaluation of the merits of the ashore and on-board systems proposed can be made.

5.6.2 Schedule 2: Survey Vessels

Details of the proposed vessels shall be listed within the Proposal. Vessel requirements should be included in this schedule. If there are known restrictions on the vessel's capability or availability these should be listed separately. If the Contractor plans to use the R/V *Pacific Storm*, simply state this on this schedule. No additional information needs to be provided.

5.6.3 Schedule 3: Survey Personnel

This schedule shall be completed in accordance with the instructions therein.

5.6.4 Schedule 4: Survey Equipment

This schedule shall contain the requested information for the major items of survey equipment. Manufacturer's brochures may be enclosed if desired. The survey equipment shall include any major ancillary required systems needed to carry out the survey, e.g., sound velocimeter, shear vane. Sufficient information should be included in this schedule so that evaluation of the merits of the equipment can be made.

5.6.5 Schedule 5: Schedule of Operation

This schedule shall contain a brief summary of the Contractor's proposed schedule of operation for the survey, particularly for the different survey phases.

An overall program for the work should be included which clearly indicates major milestones and overall completion dates for the submission of charts and reports, etc. A comprehensive Gantt chart is acceptable.

5.6.6 Schedule 6: Previous Marine Survey Experience

This schedule shall list the marine survey projects successfully completed by the Contractor that were of a nature similar to those detailed in this RFP.

5.6.7 Schedule 7: Deviations

This schedule shall list the deviations, if any, that the Contractor proposes. Where a deviation is proposed, the Contractor shall provide a short description as to why the deviation is felt necessary or desirable and its effect on the proposed work.

6 SCHEDULE 1. POSITIONING SYSTEM

Contractor shall enter below specification details of the proposed DGPS/RTK GPS to be used for the survey works, including all proposed station locations including base station for differential/RTK link.

If different equipment will be used for different phases of the survey work, these shall be specified separately.

Signed:

Stamp:

7 SCHEDULE 2. SURVEY VESSELS

Item	Marine Survey	Shallow Seismic	Seabed Sampling
A Name of Vessel			
B Owner			
C Location			
D Date Available			
E Length (m)			
F Beam (m)			
G Draft (m)			
H Propulsion			
I Communications			
J Cruising Speed			
K Proposed Survey Speed			N/A
L	Limiting conditions		
	Wind Speed		
	Wave Height		
	Minimum Water Depth (m)		
	Endurance (12/24 hr)		

A recent vessel brochure may be provided to cover for items E through J.

Note that it is Contractor’s responsibility to ensure the vessel(s) are appropriate and capable of carrying out the survey work. Each vessel employed in the survey work shall also be subject to inspection and approval by NNMREC, at NNMREC’s discretion.

Signed:

Stamp:

8 SCHEDULE 3. SURVEY PERSONNEL

Contractor shall include a Project organization chart and shall enter below the names of the personnel proposed for the following key positions and shall attach a resume of the qualification and experience of each named individual. If different personnel are to be involved in specific phases of the survey work, then these shall be shown in the appropriate column.

	Key Personnel	Marine Survey	Shallow Seismic	Seabed Sampling
A	Project Manager (Office)			
B	Party Chief (On board)			
C	Geophysicist (On board)			
D	Hydrographer/Surveyor (On board)			

Contractor shall enter below details of the numbers and disciplines of the proposed on site/on board survey team. The Contractor will not change the manning levels without prior agreement from NNMREC.

	Disciplines	Marine Survey	Shallow Seismic	Seabed Sampling
A	Hydrographer			
B	Geophysicist			
C	Survey Technician			
D	Data Processor			
E	Other			

Signed:

Stamp:

9 SCHEDULE 4. SURVEY EQUIPMENT

Contractor shall detail below the equipment he proposes to use. The manufacturer’s name and the accuracy and limits shall be stated for each item as shall back-up, repair facilities or arrangements. The equipment proposed shall be that which the Contractor considers appropriate to the requirements as described in the Scope of Work and Specification sections.

Manufacturer’s brochures should be included as support information.

	Equipment	Marine Survey	Shallow Seismic	Seabed Sampling
A				
B				
C				
D				
E				
F				
G				
H				
I				
J				
K				
L				
M				
N				

Signed:

Stamp:

10 SCHEDULE 5. SCHEDULE OF OPERATION

Contractor shall outline below his proposed schedule for each aspect of the survey work.

	Marine Survey	Shallow Seismic	Seabed Sampling
Vessel Mobilization Date			
Survey Start Date			
Survey End Date			
Draft Report Delivery Date			
Final Report Delivery Date			

Contractor shall provide an overall program for the work, including days/hours of working for each aspect of the survey work, indicating clearly major milestones. Inclusion of a comprehensive Gantt chart is encouraged.

Signed:

Stamp:

11 SCHEDULE 6. PREVIOUS MARINE SURVEY EXPERIENCE

Contractor shall list below the completed Marine Survey Projects of a nature similar to that proposed in the RFP. Contractor is encouraged to provide a single page Project Fact Sheet for each project listed in this schedule.

	Project Name	Location	Client	Area/Route length
1				
2				
3				
4				
5				
6				

Signed:

Stamp:

12 SCHEDULE 7.DEVIATIONS

Contractor shall enter below any deviations from the Tender Documents. If no Deviations are proposed the word "NIL" shall be entered.

Signed:

Stamp:

13 Appendices

Appendix A. Electronic Copy of the Desktop Study

Appendix B. Survey Area and Proposed Cable Route Coordinates

14 Appendix A. Desktop Study

An electronic copy of the desktop study may be downloaded from:

https://www.dropbox.com/s/3dws5qje5jggpdb/PMEC-SETS_FINAL_Cable_Routing_Study_11262014.pdf?dl=0

In case of difficulty, contact Samantha Quinn.

Email: Samantha.Quinn@oregonstate.edu

Telephone: +1 (541) 737-6138

15 Appendix B. Survey Areas, P MEC-SETS

Table 1 P MEC-SETS & Buffer Area Coordinates

P MEC-SETS					
Idx	Longitude	Latitude	Length	Total Length	Heading
1	124° 14' 30.00"W	44° 35' 00.00"N	1.852 km	---	267.4°
2	124° 13' 06.17"W	44° 35' 02.75"N	3.705 km	1.852 km	357.4°
3	124° 12' 58.51"W	44° 33' 02.75"N	1.852 km	5.557 km	87.4°
4	124° 14' 22.41"W	44° 33' 00.00"N	3.705 km	7.41 km	177.4°
5			---	11.114 km	---

P MEC-SETS Buffer Area					
Idx	Latitude	Longitude	Length	Total Length	Heading
1	44° 35' 14.3568" N	124° 12' 49.2454" W	4.675 km	---	177° 49' 34.5"
2	44° 32' 43.0283" N	124° 12' 41.2132" W	2.719 km	4.675 km	268° 20' 46.7"
3	44° 32' 40.4682" N	124° 14' 44.3151" W	4.642 km	7.393 km	357° 08' 22.4"
4	44° 35' 10.6650" N	124° 14' 54.8166" W	---	12.035 km	---

Table 2 Proposed Cable Route Coordinates

<i>Proposed Submarine Cable Route Corridor</i>					
Idx	Latitude	Longitude	Length	Total Length	Heading
1	124° 05' 04.8064" W	44° 28' 07.2749" N	1.149 km	---	281° 35' 23.3"
2	124° 05' 55.7349" W	44° 28' 14.7508" N	13.251 km	1.149 km	308° 29' 49.7"
3	124° 13' 45.5237" W	44° 32' 41.6955" N	1.298 km	14.4 km	268° 20' 1.6"
4	124° 14' 44.3151" W	44° 32' 40.4682" N	14.605 km	15.698 km	127° 03' 32.9"
5	124° 05' 57.0586" W	44° 27' 54.9924" N	1.169 km	30.303 km	95° 48' 3.9"
6	124° 05' 04.4568" W	44° 27' 51.1619" N	497.42 m	31.471 km	359° 06' 36.1"
7	124° 05' 04.8064" W	44° 28' 07.2749" N	43.831 m	31.969 km	173° 53' 15.9"
8	124° 05' 04.5953" W	44° 28' 05.8630" N	43.831 m	32.013 km	353° 53' 16.0"
9	124° 05' 04.8064" W	44° 28' 07.2749" N	---	32.057 km	---

Pricing for the Geophysical Survey	Pricing
Price per geophysical survey line-km, as described in Exhibit A, employing the “preferred” method (i.e. using a gradiometer). To include data analysis, interpretation and final report per line-km.	
Price per geophysical survey line-km, as described in Exhibit A, employing the “alternative” method (i.e. using a magnetometer). To include data analysis, interpretation and final report per line-km.	
Pricing for the Geotechnical Survey	
Price per geotechnical survey point, as described in Exhibit A, employing the “preferred” method (i.e. sediment coring). To include data analysis, interpretation and final report per survey point.	
Price per geotechnical survey point, as described in Exhibit A, employing the “optional” method (i.e. cone penetrometer testing). To include data analysis, interpretation and final report per survey point.	
Pricing per standby time (per hour)	
Weather downtime rate – applicable for weather delays	
Vessel or equipment downtime rate	
Lump sum pricing for mobilization and demobilization	
Will your organization be using the University's R/V Pacific Storm? Indicate Yes or No?	
If the answer is No, state vessel cost:	

CONSULTANT'S AGREEMENT
PMEC-SETS MARINE GEOPHYSICAL & GEOTECHNICAL SURVEYS
OREGON STATE UNIVERSITY

This CONSULTANT'S AGREEMENT (the Agreement) is made between:

the Consultant:

and the Owner: Oregon State University
Construction Contracts Administration
644 SW 13th Street
Corvallis OR 97333

Phone: (541) 737-0922
FAX: (541) 737-5546

(The Consultant and the Owner are referred to collectively as the "Parties" and individually as a "Party")

WHEREAS THE OWNER DESIRES to have the assistance of the Consultant to provide _____ Services for the Project identified as _____ for Oregon State University at Corvallis, Oregon (the "Project"); and

WHEREAS, the Consultant, with the aid of certain consultants (the "Consultants"), is willing and able to perform such professional services in connection with the Project;

NOW, THEREFORE, the Owner and the Consultant, for the considerations hereinafter named, agree as follows:

I. RELATIONSHIP BETWEEN THE PARTIES

A. **Effective Date.** This Agreement is effective on the date it has been signed by every party hereto. This is known as the Agreement effective date. No services shall be performed or payment made prior to the Agreement effective date.

B. **Defined Terms.** In addition to any terms defined elsewhere in the body of this Agreement, certain terms that are capitalized and/or set forth in bold letters throughout the Agreement are defined as follows:

"Additional Services" are those Services described in Section III.C of this Agreement.

"Basic Services" are those Services generally described in sub-section C. of Section I of this Agreement, as well as such additional Basic Services as may be established by amendment.

"Contract Documents" include the Construction Contract, any general conditions and supplemental general conditions to the Construction Contract, any amendments to the Construction Contract, the Contractor's performance and payment bonds, the plans, specifications, approved shop drawings, all approved change orders, any solicitation documents, and any response by a successful bidder to any such solicitation documents.

"Design Criteria" means the current version (as of the "Effective Date" of this Agreement) of the University's "Design Criteria for OSU Projects" provided to Consultant by the Owner and incorporated herein by reference.

“Direct Construction Costs” are the costs to the Owner of all divisions of construction, including portable equipment designed or specified by the Consultant in the construction specifications.

“Project Completion” means the final completion of all Services described in Section I.C of this Agreement.

“Reimbursable Expenses” are those expenses described in Section III.B of this Agreement.

“Services” are all those services to be performed by the Consultant under the terms of this Agreement.

“Work” is defined as the furnishing of all materials, labor, equipment, transportation, services, and incidentals for the construction of the Project by the contractor (the “Contractor”) that is eventually awarded the contract to construct the Project (the “Construction Contract”).

- C. **Services To Be Performed.** The Consultant agrees to provide, with the assistance of the Consultants, the professional services outlined below for this Project.

Such Services include

The Consultant shall perform the Services according to the following schedule:

The Consultant agrees that time is of the essence in the performance of this Agreement.

- D. **Directives for Performance of the Services.**

1. The Consultant shall provide all Services for the Project in accordance with the terms and conditions of this Agreement. The Consultant's performance of Services shall be as a professional Consultant to the Owner to carry out the activities of Project and to provide the technical documents and supervision to achieve the Owner's Project objectives.
2. In administering this Agreement, the Owner may employ the services of an independent project manager, and potentially, other consultants as needed to fulfill the Owner's objectives.
3. The Consultant shall provide a list of all sub-consultants which the Consultant intends to utilize on the Project. The list shall include such information on the qualifications of the sub-consultants as may be requested by the Owner. The Owner reserves the right to review the sub-consultants proposed, and the Consultant shall not retain a sub-consultant to which the Owner has a reasonable objection.

4. The Consultant shall provide to the Owner a list of the proposed key Project personnel of the Consultant and its sub-consultants to be assigned to the Project. This list shall include such information on the professional background of each of the assigned personnel as may be requested by the Owner. In the event that key personnel or sub-consultants become unavailable to Consultant at any time, Consultant shall replace the key personnel and sub-consultants with personnel or sub-consultants having substantially equivalent or better qualifications than the key personnel or sub-consultant being replaced, as approved by Owner. Likewise, the Consultant shall remove any individual or sub-consultant from the Project if so directed by Owner in writing following discussion with the Consultant, provided that Consultant shall have a reasonable time period within which to find a suitable replacement.
5. Consultant shall make no news release, press release or statement to a member of the news media regarding this Project without prior written authorization from Owner.

II. CONSULTANT'S STANDARD OF CARE

- A. By execution of this Agreement, the Consultant agrees that:
 1. The Consultant is an experienced professional firm having the skill, legal capacity, and professional ability necessary to perform all the Services required under this Agreement to design or administer a project having this scope and complexity; and will perform such Services pursuant to the standard of care set forth in subsections B. through G. of this Section II.
 2. The Consultant has the capabilities and resources necessary to perform the obligations of this Agreement.
 3. The Consultant either is, or will in a manner consistent with the standard of care set forth in this Agreement, become familiar with all current laws, rules, and regulations which are applicable to the design and construction of the Project, and that all drawings, specifications, and other documents prepared by the Consultant shall be prepared in accordance with its standard of care in an effort to accurately reflect and incorporate all such laws, rules, and regulations. All drawings, specifications, and other documents prepared by Consultant pursuant to this Agreement shall accurately reflect, incorporate and comply with all current laws, rules, regulations and ordinances which are applicable to the design and construction of the Project, and shall be complete and functional for the purposes intended (except as to any deficiencies which are due to causes beyond the control of Consultant);
- B. Consultant represents and warrants to Owner that (1) Consultant has the power and authority to enter into and perform this Agreement, (2) when executed and delivered, this Agreement shall be a valid and binding obligation of the Consultant enforceable in accordance with its terms, (3) Consultant shall, at all times during the term of this Agreement be duly licensed to perform the Services, and if there is no licensing requirement for the profession or services, be duly qualified and competent, (4) the Services under this Agreement shall be performed in accordance with the professional skill, care and standards of other professionals performing similar services under similar conditions;
- C. All drawings, specifications, and other documents prepared by Consultant pursuant to this Agreement shall accurately reflect, incorporate and comply with current laws, rules, regulations and ordinances which are applicable to the design and construction of the Project, and shall be complete and functional for the purposes intended (except as to any deficiencies which are due to causes beyond the control of Consultant);

- D. All drawings, specifications, and other documents prepared by the Consultant pursuant to this Agreement shall accurately reflect existing conditions for the scope of the services to be performed;
- E. The Consultant shall be responsible for any negligent inconsistencies or omissions in the drawings, specifications, and other documents. While Consultant cannot guarantee that the various documents required under this Agreement are completely free of all minor human errors and omissions, it shall be the responsibility of Consultant throughout the period of performance under this Agreement to use due care and perform with professional competence. Consultant will, at no additional cost to Owner, correct any and all errors and omissions in the drawings, specifications, and other documents prepared by Consultant;
- F. The Owner's acceptance of documents or authorization to continue to the next phase of design shall not be deemed as approval of the adequacy of the drawings, documents, plans or specifications. Any review or acceptance by the Owner will not relieve the Consultant of any responsibility for complying with the standard of care set forth herein. The Consultant is responsible for all design Services under this Agreement, and agrees that it will be liable for all its negligent acts, errors, or omissions, if any, relative to the Services;
- G. The representations and warranties set forth in this section are in addition to, and not in lieu of, any other representations and/or warranties provided.

III. COMPENSATION

The maximum, not-to-exceed, total amount payable under this Agreement is \$_____ (the "Maximum Compensation"), for the combination of Basic Services and Reimbursable Expenses. The Maximum Compensation cannot be increased without a fully executed and approved amendment or supplement to this Agreement. Consultant progress payments shall be made according to the provisions and schedule set forth in **Section V** of this Agreement. The Maximum Compensation is more particularly described as follows:

- A. **Basic Services:** The Consultant shall perform the Basic Services, directly or through the Consultants, on a time and materials basis for a Maximum Not-to-Exceed fee of \$_____.
- B. **Reimbursable Expenses:** The Owner shall reimburse the Consultant for any allowable Reimbursable Expenses, up to a maximum amount of \$_____.

Reimbursable expenses for the Project mean actual direct expenditures (without overhead, fee, markup or profit) made by the Consultant and the Consultants in the interest of the Project for the following items: long-distance communications; reproductions, postage and handling of plans, drawings, specifications and other documents (excluding reproductions for the office use of the Consultant and the Consultants); mileage and travel expenses more particularly described below; data processing and photographic production techniques; and renderings, models and mock-ups requested by the Owner. The Reimbursable Expenses will be reimbursed at cost, except travel expenses. Charges for travel expenses will be reimbursed at cost, but not in excess of the rate allowed Oregon State University employees. Travel expenses are only reimbursable when Services are rendered in excess of 25 miles from Consultant's or Consultant's office. As of the date of this Agreement, these rates are as follows. Charges for travel expenses will be reimbursed at the lowest of the following:

- (i) cost;
- (ii) the rate allowed Oregon State University employees;
or
- (iii) the following rates:

Air fare (coach class only) and car rental	At cost for economy
Personal car mileage	\$0.545 per mile
Lodging	\$134.00 per night plus tax
Meals: (documentation not required) (reimbursable only when associated with overnight travel)	
Breakfast	\$14.25
Lunch	\$14.25
Dinner	\$28.50
Printing, photography, long distance telephone charges and other direct expenses	At cost

Requests for reimbursement of allowable expenses, except meals, must include documentation of actual expenditures.

C. Additional Services: The Owner will compensate the Architect for Additional Services performed by the Architect, whether directly or through its Consultants, beyond the scope of the Basic Services described in **Section VII**, based on hourly rates for Architect personnel or Consultants, plus Reimbursable Expenses, in accordance with the hourly rates listed on the CH2M proposal dated April 28, 2017 (attached hereto and incorporated by this reference as "Exhibit 2") for the duration of this Agreement (except in the case of a suspension and reactivation of performance beyond the date agreed to by the Parties, as more particularly described in **Section I.G**), but only when the Owner has given prior written authorization and the Parties have executed an amendment or supplement to this Agreement.

Consultant

Principals	\$	/hr
Senior Architectural Designer	\$	/hr.
Architectural Designer	\$	/hr.
Urban Designer	\$	/hr.
Sr. Project Manager	\$	/hr.
Project Manager	\$	/hr.
Production Personnel/Project Architect	\$	/hr.
Senior Interior Designer	\$	/hr.
Interior Designer	\$	/hr.
Clerical	\$	/hr.

CONSULTANT

\$	/hr.
\$	/hr.

VI. CONSULTANT'S RESPONSIBILITIES IN REGARD TO HAZARDOUS MATERIALS

It is envisioned that this project will not involve the removal of and destruction of asbestos, asbestos-related or other hazardous materials. It is understood and agreed that the Owner will contract separately for the identification and removal of hazardous materials, either prior to the commencement of this project or at such time as such hazardous substances are detected. It is understood and agreed that the Consultant shall not and does not prescribe any safety measure or abatement procedure and is not responsible for any act or omission relating to the acts of the Owner and/or professional consultant and/or the contractor and/or subcontractor which the Owner selects relating to the abatement of asbestos, asbestos-related or other hazardous materials.

VII. ACCESSIBILITY REQUIREMENTS

The Consultant shall ensure that the project complies with the American with Disabilities Act Accessibility Guidelines (ADAAG), latest version, and allows for access to programs, activities, and services in the most integrated setting possible. The Owner will be responsible for review of accessibility and interpretation of ADAAG for compliance with Federal requirements.

VIII. INSURANCE PROVISIONS

During the term of this Agreement, Consultant shall maintain in full force and at its own expense each insurance coverage or policy noted below, from insurance companies or entities with an A.M. Best rating of no less than A-VII that are authorized to transact the business of insurance and issue coverage in the State of Oregon:

- A. Workers' Compensation** - All employers, including Consultant, that employ subject workers who work under this Agreement in the State of Oregon shall comply with ORS 656.017 and provide the required Oregon workers' compensation coverage, unless such employers are exempt under ORS 656.126. Workers' Compensation coverage shall be maintained at all times in accordance with statutory limits and Employer's Liability insurance shall have minimum limits of \$1,000,000 each accident; \$1,000,000 disease-each employee; \$1,000,000 disease-policy limit. When applicable, the insurance must include coverage for all federal acts, including but not limited to the Longshore and Harbor Workers' Compensation Act and the Jones Act.
- B. Commercial General Liability** - Consultant shall secure Commercial General Liability insurance with a minimum limit of \$2,000,000 each occurrence and \$4,000,000 aggregate for bodily injury and property damage. It shall include personal injury coverage and contractual liability coverage for the indemnity provided under this Agreement.
- C. Automobile Liability** - Consultant shall secure Automobile Liability insurance with a minimum combined single limit of \$2,000,000 per occurrence or accident, for bodily injury and property damage, including coverage for all owned, hired, or non-owned vehicles, as applicable. This coverage may be written in combination with the Commercial General Liability Insurance.
- D. Marine Hull & Machinery and Protection & Indemnity** – Consultant, or Vessel Operator if Consultant is not operating the vessel, shall secure Marine Hull & Machinery and Protection & Indemnity insurance with a minimum limit of \$5,000,000 per occurrence or accident and \$5,000,000 aggregate.

- E. Marine Pollution** – Consultant, or Vessel Operator if Consultant is not operating the vessel, shall secure Marine Pollution insurance with a minimum limit of \$5,000,000 per loss. This insurance must be broad in nature and cover marine pollution conditions to include clean-up of discharges or releases, third party property damage, defense, investigation and assessment of and damage to natural resources. This coverage must be in effect when the vessel enters the water.
- F. Professional Liability/Errors & Omissions** - Consultant shall provide the Owner with proof of coverage for Professional Liability/Errors & Omissions insurance covering any damages caused by any negligent error, omission, or any act for the Project, its plans, drawings, specifications and/or project manual, and all related work product of the Consultant. The policy may be either a practice based policy or a policy pertaining to the specific Project. Professional Liability insurance to be provided shall have a minimum limit of \$2,000,000 per claim and \$2,000,000 aggregate.
- G. "Tail" Coverage.** If any of the required liability insurance is arranged on a "claims made" basis, "tail" coverage will be required at the completion of the Agreement for a duration of 36 months or the maximum time period available in the marketplace if less than 36 months. Consultant will be responsible for furnishing certification of "tail" coverage as described or continuous "claims made" liability coverage for 36 months following Owner's acceptance of and final payment for the Consultant's Services. Continuous "claims made" coverage will be acceptable in lieu of "tail" coverage, provided its retroactive date is on or before the effective date of this agreement. This will be a condition of the final acceptance of Work or Services and related warranty, if any.
- H. Primary Coverage.** Insurance carried by Consultant under this Agreement shall be primary and non-contributory.
- I. Certificate of Insurance.** Prior to the signature by the Owner to this Agreement, Consultant shall furnish to the appropriate university official Certificates of Insurance as evidence of the insurance coverages required under this Agreement. In the description of operations, the certificate(s) should state specifically that the insurance is provided for this Agreement.
- J. Notice of Cancellation.** Contractor shall give thirty (30) days prior written notice to the Owner's representative set forth in Section XXVII below if any policy required by this section is suspended, voided or canceled.
- K. Additional Insureds.** All policies in this Insurance section, except for Workers' Compensation and Professional Liability/Errors & Omissions, shall be endorsed/amended so that Oregon State University, and its board members, agents, officers, and employees are Additional Insureds with respect to the Consultant's Services to be provided under this Agreement and to the full limits of liability purchased by Consultant. The certificate of insurance shall evidence additional insured status for each policy, except as otherwise indicated.

L. Sub-consultants and Sub-contractors. Consultant shall require all Sub-consultants and Sub-contractors to have insurance that meets all insurance requirements of Consultant as provided in this Insurance section, including, but not limited to, the types of insurance, extent of coverages, notice requirements, and additional insured policy endorsements, except as otherwise provided below:

- (i) Marine Hull & Machinery and Protection & Indemnity: Sub-consultants and sub-contractors are not required to carry Marine Hull & Machinery and Protection & Indemnity, unless acting as the Vessel Operator.
- (ii) Marine Pollution: Sub-consultants and sub-contractors are not required to carry Marine Pollution, unless acting as the Vessel Operator.

IX. INDEMNITY

- A. Claims for Other Than Professional Liability.** Consultant shall indemnify, hold harmless and defend the Owner and its colleges and universities and any public agencies for which Services are performed under this Agreement as supplemented or amended, and their officers, agents, employees and members from and against all claims, suits, actions, losses, damages, liabilities, costs and expenses of whatsoever nature resulting from, arising out of, or relating to the activities of the Consultant or the Consultant's sub-consultants, partners, joint venturers, subcontractors, officers, agents or employees acting under or pursuant to this Agreement or any supplement or amendment hereto.
- B. Claims for Professional Liability.** Consultant shall save, defend, indemnify and hold harmless the Owner and its colleges and universities and any public agencies for which Services are to be performed under this Agreement as supplemented or amended, and their officers, agents, employees and members from and against all claims, suits or actions, losses, damages, liabilities, costs and expenses of whatsoever nature resulting from, arising out of or relating to the professional negligent acts, errors or omissions of Consultant or its sub-consultants, partners, joint venturers, subcontractors, officers, agents or employees acting under or pursuant to this Agreement or any supplement or amendment hereto.
- C. Owner Defense Requirements.** Notwithstanding the foregoing defense obligations of the Consultant, neither the Consultant nor any attorney engaged by the Consultant shall defend any claim in the name of the Owner, nor purport to act as legal representative of the Owner, without the prior written consent of Oregon State University General Counsel. The Owner may, at any time at its election assume its own defense and settlement in the event that it determines that the Consultant is prohibited from defending the Owner, that Consultant is not adequately defending the Owner's interests, or that an important governmental principle is at issue or that it is in the best interests of the Owner to do so. The Owner reserves all rights to pursue any claims it may have against the Consultant if the Owner elects to assume its own defense.
- D. Agency's Actions.** Sub-sections A. and B. above do not include indemnification by the Consultant of the Owner for the Owner's activities, whether related to this Agreement or otherwise.

X. LIMITATION OF LIABILITIES

Except for any liability of the Consultant arising under or related to the Consultant's failure to perform according to the standard of care or any other liability arising under or related to the Consultant's representations and warranties under **Section II** of this Agreement, neither Party shall be liable for any indirect, incidental, consequential or special damages under this Agreement or any damages of any sort arising solely from the termination of this Agreement in accordance with its terms.

XI. [RESERVED]

XII. OWNERSHIP AND USE OF WORK PRODUCT OF CONSULTANT

- A. Work Product.** Copies of plans, specifications, reports, or other materials required to be delivered under this Agreement ("Work Product") shall be the exclusive property of Owner. The Owner and the Consultant intend that such Work Product be deemed "Work made for Hire", of which the Owner shall be deemed the author. If for any reason such Work Products are not deemed "Work made for Hire", the Consultant hereby irrevocably assigns to the Owner all of its right, title and interest in and to any and all of such Work Products, whether arising from copyright, patent, trademark, trade secret, or any other state or federal intellectual property law or doctrine. The Consultant shall execute such further documents and instruments as the Owner may reasonably request in order to fully vest such rights in the Owner. The Consultant forever waives any and all rights relating to such Work Product, including without limitation, any and all rights arising under 17 USC 106A or any other rights of identification of authorship or rights of approval, restriction or limitation on use of subsequent modifications.
- B. Consultant's Use of Work Product.** The Consultant, despite other conditions of this Section, shall have the right to utilize such Work Product on its brochures or other literature that it may utilize for its sales and in addition, unless specifically otherwise exempted, the Consultant may use standard line drawings, specifications and calculations on other unrelated projects.
- C. Owner Reuse or Modification of Work Product.** If the Owner reuses or modifies the Work Product without the Consultant's involvement or prior written consent, to the extent permitted by Article XI, Section 7 of the Oregon Constitution and by the Oregon Tort Claims Act, the Owner shall indemnify, within the limits of the Tort Claims Act, the Consultant against liability for damage to life or property arising from the Owner's reuse or modification of the Work Product, provided the Owner shall not be required to indemnify the Consultant for any such liability arising out of the wrongful acts of the Consultant or the Consultant's officers, employees, sub-consultants, subcontractors, or agents.

XIII. SUCCESSORS AND ASSIGNS

The provisions of this Agreement shall be binding upon and shall inure to the benefit of the Parties and their respective successors and assigns. After the original Agreement is executed, Consultant shall not enter into any new Consultant agreements for any of the Services scheduled under this Agreement or assign or transfer any of its interest in or rights or obligations under this Agreement, without Owner's prior written consent. In addition to any provisions Owner may require, Consultant shall include in any permitted Consultant agreement under this Agreement a requirement that the Consultant be bound by **Sections VIII-INSURANCE, IX-INDEMNITY, X -LIMITATION OF LIABILITIES, XII-OWNERSHIP AND USE OF WORK PRODUCT OF CONSULTANT, XV-MEDIATION, XVI-TERMINATION OF AGREEMENT; NON-AVAILABILITY OF FUNDS, XIX-FOREIGN CONTRACTOR, XX-COMPLIANCE WITH APPLICABLE LAWS, XXI-GOVERNING LAW; VENUE; CONSENT TO JURISDICTION, XXII-INDEPENDENT CONTRACTOR STATUS OF CONSULTANT, XXIII-ACCESS TO RECORDS and XXVI-NO WAIVER** of this Agreement.

XIV. NO THIRD PARTY BENEFICIARIES

Owner and Consultant are the only Parties to this Agreement and are the only Parties entitled to enforce its terms. Nothing in this Agreement gives, is intended to give, or shall be construed to give or provide any benefit or right, whether directly, indirectly or otherwise, to third persons unless such third persons are individually identified by name herein and expressly described as intended beneficiaries of the terms of this Agreement.

XV. MEDIATION

Consultant and Owner, in an effort to resolve any conflicts that may arise during the design or construction of the Project or following the completion of the Project, agree that all disputes between them arising out of or relating to this Agreement or any supplements hereto, shall be submitted to non-binding mediation unless the parties mutually agree otherwise. Consultant further agrees to include a similar provision in all agreements with sub-consultants retained for the Project, thereby providing for mediation as the primary method for dispute resolution between the Parties to those agreements. All Parties agree to exercise their best effort in good faith to resolve all disputes in mediation.

Each Party will pay its own costs for the time and effort involved in mediation. The cost of the mediator shall be shared equally by all Parties to the dispute.

XVI. TERMINATION OF AGREEMENT; NON-AVAILABILITY OF FUNDS

A. Mutual Agreement. The Owner and the Consultant, by mutual written agreement, may terminate this Agreement at any time. The Owner, on 30 days written notice to the Consultant, may terminate this Agreement for any reason deemed appropriate in its sole discretion.

- B. Termination by Owner.** Owner may terminate this Agreement, in whole or in part, immediately upon notice to Consultant, or at such later date as Owner may establish in such notice, upon the occurrence of any of the following events:
1. Owner fails to receive funding, or appropriations, limitations or other expenditure authority at levels sufficient to pay for Consultant's Services;
 2. Federal or state laws, regulations or guidelines are modified or interpreted in such a way that either the Services performed under this Agreement are prohibited or Owner is prohibited from paying for such Services from the planned funding source;
 3. Consultant no longer holds any license or certificate that is required to perform the Services;
 4. Consultant commits any material breach or default of any covenant, warranty, obligation or agreement under this Agreement, fails to perform the Services under this Agreement within the time specified herein or any extension thereof, or so fails to perform the Services as to endanger Consultant's performance under this Agreement in accordance with its terms, and such breach, default or failure is not cured within 10 business days after delivery of Owner's notice, or such longer period of cure as Owner may specify in such notice.
- C. Owner Funding.** Owner reasonably believes that sufficient funds are anticipated to pay all amounts due hereunder and hereby covenants and agrees that it will use its best efforts to obtain and properly request and pursue funds from which payments hereunder may be made, including making provisions for such payments to the extent necessary in the budget submitted for the purpose of obtaining funds and using its best efforts to have such budget approved. It is Owner's intention to make all payments due hereunder if funds are legally available therefor and in that regard Owner represents and warrants to Consultant that this agreement is important to Owner's efficient and economic operation. If, despite the above, Owner is not allotted sufficient funds for the next succeeding fiscal period by appropriation, appropriation limitation, grant, or other funds source lawfully available to it for such purposes to continue the Project and make payments hereunder, Owner may terminate this Agreement, by notice to Consultant, without penalty, effective at the end of the current fiscal period for which funds have been allocated and if not so terminated Owner will remain fully obligated for all amounts owing hereunder. Such termination shall not constitute an event of default under any other provision of the Agreement, but Owner shall be obligated to pay all charges incurred through the end of such fiscal period. Owner shall give Consultant notice of such non-availability of funds within thirty (30) days after it received notice of such non-availability.
- D. Effect of Termination.** In the event of termination of this Agreement:
1. Pursuant to **Sub-sections A, B.1 or B.2** above, the Owner, using the Schedule of hourly rates set forth in **Section III** if applicable, and within the limitations specified in **Section V** shall compensate the Consultant for all Services performed prior to the termination date, together with reimbursable expenses then due, and such amounts shall immediately become due and payable.
 2. Pursuant to **Sub-sections B.3 or B.4** above, the Owner shall have any remedy available to it under this Agreement or at law or in equity. Such remedies are cumulative and may be pursued separately, collectively and in any order.

3. For any reason, the Consultant shall immediately cease performance of Services under this Agreement, unless Owner expressly directs otherwise in the notice of termination, and shall provide to the Owner all plans, specifications, CAD drawings on compact discs, drawings, and all documents, information, works-in-progress or other property that are or would be deliverables had this Agreement been completed.
4. For any reason, the Consultant shall be responsible to the Owner for the quality of its Services and work product through the date of termination.

XVII. [RESERVED]

XVIII. DISCLOSURE OF SOCIAL SECURITY NUMBER

Consultant must provide Consultant's Social Security number unless Consultant provides a federal tax ID number. This number is requested pursuant to ORS 305.385 and OAR 150-305.100. Social Security numbers provided pursuant to this authority will be used for the administration of state, federal and local tax laws.

XIX. FOREIGN CONTRACTOR

If Consultant is not domiciled in or registered to do business in the State of Oregon, Consultant shall promptly provide to the Oregon Department of Revenue and the Secretary of State Corporation Division all information required by those agencies relative to this Agreement. Consultant shall demonstrate its legal capacity to perform the Services under this Agreement in the State of Oregon prior to entering into this Agreement.

XX. COMPLIANCE WITH APPLICABLE LAW

- A. Consultant agrees to comply with all federal, state, county, and local laws, ordinances, and regulations applicable to the Services to be provided under this Agreement. Consultant specifically agrees to comply with all applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations. Consultant also shall comply with the Americans with Disabilities Act of 1990 (Pub L No. 101-336), ORS 659.425, and all regulations and administrative rules established pursuant to those laws. Failure or neglect on the part of Consultant to comply with any or all such laws, ordinances, rules, and regulations shall not relieve Consultant of these obligations nor of the requirements of this Agreement. Consultant further agrees to make payments promptly when due, to all persons supplying to such Consultant labor or materials for the performance of the Services to be provided under this Agreement; pay all contributions or amounts due the Industrial Accident Fund from such contractor incurred in the performance of this Agreement; not permit any lien or claim to be filed or prosecuted against the State on account of any labor or material furnished; and pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167. If Consultant fails or refuses to make any such payments required herein, the appropriate Institution official may pay such claim. Any payment of a claim in the manner authorized in this Section shall not relieve the Consultant or Consultant's surety from obligation with respect to any unpaid claims. Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act and the Oregon Building Codes require all new construction to be totally accessible to people with physical limitations. Owner expects that all spaces in designs for new facilities and in remodel projects will be accessible to people with physical limitations.

B. Federal Funding Requirements:

Work under the contemplated contract is federally funded. Oregon State University has received federal funds from Department of Energy (DOE). Compliance with the following Federal Provisions, as applicable:

1. *Equal Employment Opportunity*—All contracts shall contain a provision requiring compliance with E.O. 11246, “Equal Employment Opportunity,” as amended by E.O. 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and as supplemented by regulations at 41 CFR part 60, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.”

2. *Davis-Bacon Act, as amended (40 U.S.C. 276a to a-7)*—When required by Federal program legislation, all construction contracts awarded by the recipients and sub recipients of more than \$2000 shall include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 276a to a-7) and as supplemented by Department of Labor regulations (29 CFR part 5, “Labor Standards Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction”). Under this Act, contractors shall be required to pay wages to laborers and mechanics at a rate not less than the minimum wages specified in a wage determination made by the Secretary of Labor. In addition, contractors shall be required to pay wages not less than once a week. The recipient shall place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation and the award of a contract shall be conditioned upon the acceptance of the wage determination. The recipient shall report all suspected or reported violations to the Federal awarding agency.

3. *Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333)*—Where applicable, all contracts awarded by recipients in excess of \$2000 for construction contracts and in excess of \$2500 for other contracts that involve the employment of mechanics or laborers shall include a provision for compliance with sections 102 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333), as supplemented by Department of Labor regulations (29 CFR part 5). Under section 102 of the Act, each contractor shall be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than 1½ times the basic rate of pay for all hours worked in excess of 40 hours in the work week. Section 107 of the Act is applicable to construction work and provides that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

4. *Rights to Inventions Made Under a Contract or Agreement*—Contracts or agreements for the performance of experimental, developmental, or research work shall provide for the rights of the Federal Government and the recipient in any resulting invention in accordance with 37 CFR part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

5. *Clean Air Act (42 U.S.C. 7401 et seq.) and the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), as amended*—Contracts and sub grants of amounts in excess of \$100,000 shall contain a provision that requires the recipient to agree to Compliance with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401 *et seq.*) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251 *et seq.*). Violations shall be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

6. *Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)*—Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

7. *Debarment and Suspension (E.O.s 12549 and 12689)*—Contract awards that exceed the small purchase threshold and certain other contract awards shall not be made to parties listed on the nonprocurement portion of the General Services Administration's List of parties Excluded from Federal Procurement or Nonprocurement Programs in accordance with E.O.s 12549 and 12689, "Debarment and Suspension." This list contains the names of parties debarred, suspended, or otherwise excluded by agencies, and contractors declared ineligible under statutory or regulatory authority other than E.O. 12549. Contractors with awards that exceed the small purchase threshold shall provide the required certification regarding its exclusion status and that of its principals.

C. Compliance with applicable provisions national policies prohibiting discrimination: Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d, et seq.), as implemented by 10 CFR Part 1040; Executive Order 11246 [3 CFR, 1964 1965 Comp., p. 339], as implemented by Department of Labor regulations at 41 CFR Part 60; Title IX of the Education Amendments of 1972 (20 U.S.C. 1681, et seq.); Age Discrimination Act of 1975 (42 U.S.C. 6101, et seq.), as implemented by Department of Health and Human Services regulations at 45 CFR part 90; Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), as implemented by Department of Justice regulations at 28 CFR Part 41 ; The Architectural Barriers Act of 1968 (42 U.S.C. 4151, et seq.).

D. Compliance with applicable provisions of the following national policies concerning live organisms: For human subjects, the Common Federal Policy for the Protection of Human Subjects, 10 CFR Part 745; 10 C.F.R. Part 745; 10 C.F.R. Part 600, App. A; Uniform Relocation Assistance and Land Acquisition Policies Act, 42 U.S.C. § 4601 et seq.; 49 C.F.R. Part 24; Trafficking Victims Protection Act of 2000, 22 U.S.C. § 7101 et seq. (see particularly § 7104(g)); 2 C.F.R. Part 175; 10 C.F.R. Part 600, Appendix A; 10 C.F.R. § 602.10(c)

- E. Compliance with the following environmental laws and regulations: The Clean Water Act 10 C.F.R. Part 600, Federal Water Pollution Control Act (“Clean Water Act”), 33 U.S.C. § 1251 et seq.; 33 U.S.C. § 1368; Exec. Order No. 11,738, 38 Fed. Reg. 25,161 (Sept. 10, 1973); The Clean Air Act 10 C.F.R. Part 600, Appendix A; Air Pollution Control Act (“Clean Air Act”), 42 U.S.C. § 7401 et seq; The Resource Conservation and Recovery Act (RCRA), 10 C.F.R. §§ 600.116 and 600.149; Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq. (see particularly § 6962), 10 C.F.R. Part 600, App. A; Lead-Based Paint Poisoning Prevention Act, 42 U.S.C. § 4831(b).
- F. Compliance with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271, et seq.).
- G. Compliance with Protection of Wetlands and Floodplains, 10 C.F.R. Part 1022; Flood Disaster Protection Act of 1973, 42 U.S.C. § 4001 et seq.
- H. Compliance with Coastal Zone Management Act, 16 U.S.C. § 1451 et seq.; 15 C.F.R. Part 930.
- I. Compliance with Coastal Barriers Resource Act, 16 U.S.C. § 3501 et seq.
- J. Compliance with the following lobbying laws, regulations, and policies: 10 C.F.R. Part 600, Appendix A; An Act to Prevent Pernicious Political Activities (“Hatch Act” of 1939), 5 U.S.C. §§ 1501-1508, 7324-7326; 10 C.F.R. Part 601; 31 U.S.C. § 1352.
- K. Compliance with the following health and safety laws, regulations, policies, and requirements: The Public Health Service Act 10 C.F.R. Part 600, Appendix A; Title XIV, Public Health Service Act, 42 U.S.C. § 300f et seq; 10 C.F.R. Part 600, Appendix A; Drug Abuse Office and Treatment Act, 42 U.S.C. § 290dd; Comprehensive Alcohol Abuse and Alcoholism Prevent, Treatment and Rehabilitation Act of 1970, 42 U.S.C. § 290dd-1; Construction Work Hours and Safety Standards Act, 40 U.S.C. § 3701 et seq.; 10 C.F.R. § 602.10(b); NIH Guidelines for Research Involving Recombinant DNA Molecules.
- L. Compliance with the following domestic preference laws, regulations, and policies: 10 C.F.R. Part 600, Appendix A; Cargo Preference Act, 46 U.S.C. § 55305; 46 C.F.R. § 381.7; 10 C.F.R. Part 600, Appendix A; International Air Transportation Fair Competitive Practices Act (“Fly America Act”), 49 U.S.C. § 40118.
- M. Compliance with the following project management laws, regulations, and policies: following project management laws, regulations, and policies: 10 C.F.R. Part 600, Appendix A; 31 U.S.C. § 3711; 10 C.F.R. Part 600, Appendix A; Single Audit Act, 31 U.S.C. § 7501 et seq; 10 C.F.R. § 600.31; 10 C.F.R. Part 733; 10 C.F.R. §§ 600.25
- N. & 600.113; 2 C.F.R. Parts 180 & 901 (see particularly Subpart C Responsibilities of Participants” within each section); Paperwork Reduction Act, 44 U.S.C. § 3501 et seq; 2 C.F.R. Part 25.
- O. Compliance with the following educational and cultural laws, regulations, and policies: 10 C.F.R. Part 600, Appendix A; Indian Self-Determination and Education Act, 25 U.S.C. § 450 et seq. (see particularly § 450e(b)).

- P. Make a good faith effort to comply with the following policies: 10 C.F.R. Part 600, Appendix A; Exec. Order No. 12,138, 44 Fed. Reg. 29,637 (May 18, 1979) (“Creating a National Women’s Business Enterprise Policy and Prescribing Arrangements for Developing, Coordinating and Implementing a National Program for Women’s Business Enterprise”); 10 C.F.R. § 600.306; Metric Conversion Act of 1975, 15 U.S.C. § 205a et seq.; Exec. Order No. 12,770, 56 Fed. Reg. 35,801 (July 29, 1991) (“Metric Usage in Federal Government Programs”)
- Q. Compliance with applicable provisions of the following, national policies:
1. Nondiscrimination in Federally Assisted Programs, 10 CFR part 1040 (45 FR 40514, June 13, 1980), as proposed to be amended by 46 FR 49546 (October 6, 1981).
 2. Nondiscrimination Provisions in Federally Assisted Construction Contracts, Part III of Executive Order 11246 (September 24, 1965), 3 CFR 1964—65 Comp., p. 345.
 3. Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, as amended (42 U.S.C. 4581).
 4. Drug Abuse Office and Treatment Act of 1972, as amended (21 U.S.C. 1174).
 5. Architectural Barriers Act of 1968, as amended (42 U.S.C. 4151 *et seq.*).
 6. National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 *et seq.*), 40 CFR part 1500, as implemented by (45 FR 20694, March 28, 1980).
 7. Sec. 306, Clean Air Act, as amended (42 U.S.C. 7606c).
 8. Sec. 508, Federal Water Pollution Control Act of 1972 (33 U.S.C. 1251 *et seq.*); Executive Order 11738, September 12, 1973.
 9. Title XIV, Public Health Service Act, as amended (42 U.S.C. 300f—*et seq.*).
 10. Sec. 102(a), Flood Disaster Protection Act of 1973 (Pub. L. 93-234, 87 Stat. 975).
 11. 10 CFR part 1022, “Protection of Wetlands and Floodplains.”
 12. Uniform Relocation Assistance and Land Acquisition Policies Act of 1970 (42 U.S.C. 4601 *et seq.*).
 13. Coastal Zone Management Act of 1972, as amended (16 U.S.C. 1451 *et seq.*) (15 CFR part 930).
 14. Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*).
 15. Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*).
 16. Sec. 106, National Historic Preservation Act of 1966, as amended (16 U.S.C. 470f); Executive Order 11593, “Protection and Enhancement of the Cultural Environment,” May 13, 1971, 3 CFR 1971 Comp., p. 154; Archaeological and Historic Preservation Act of 1966 (16 U.S.C. 469 *et seq.*); Protection of Historic and Cultural Properties, 36 CFR part 800.
 17. Wild and Scenic Rivers Act of 1968, as amended (16 U.S.C. 1271 *et seq.*).
 18. Protection of Human Subjects, 10 CFR part 745.
 19. Federal Laboratory Animal Welfare Act (7 U.S.C. 2131 *et seq.*) (9 CFR parts 1, 2, and 3).
 20. Lead-Based Paint Prohibition (42 U.S.C. 4831(b)).
 21. Sec. 7(b), Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e(b)).
 22. Cargo Preference Act of 1954 (46 U.S.C. 1241(b)) (46 CFR §381.7).
 23. International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 1517).
 24. Executive Order 12138, “Creating a National Women's Business Enterprise Policy and Prescribing Arrangements for Developing, Coordinating, and Implementing a National Program for Women's Business Enterprise,” (May 18, 1979) 3 CFR 1979 Comp., p. 393.
 25. Sec. 403(b), Power Plant and Industrial Fuel Use Act of 1978, (42 U.S.C. 8373(b)); Executive Order 12185 (December 17, 1979, 3 CFR 1979 Comp., p. 474).
 26. The Hatch Act (5 U.S.C. 1501-1508).

27. Federal Reports Act, as amended by the Paperwork Reduction Act of 1980, Pub. L. 96-511 (44 U.S.C. 3501 *et seq.*).
28. OMB Circular A-111, Jointly Funded Assistance to State and Local Governments and Nonprofit Organizations—Policies and Procedures.
29. Federal Claims Collection Act of 1966, Pub. L. 89-508, 89 Stat. 309 (31 U.S.C. 951 *et seq.*).
30. OMB Circular A-88, Coordinating Indirect Cost Rates and Audit at Educational Institutions.
31. OMB Circular A-73, Audit of Federal Operations and Programs.
32. Single Audit Act of 1984, Pub. L. 98-502.
33. OMB Circular A-128, Audits of State and Local Governments.
34. [47 FR 44108, Oct. 5, 1982, as amended at 50 FR 42361, Oct. 18, 1985; 51 FR 4297, Feb. 4, 1986]

XXI. GOVERNING LAW; VENUE; CONSENT TO JURISDICTION

This Agreement shall be governed by and construed in accordance with the laws of the State of Oregon without regard to principles of conflicts of law. Any claim, action, suit or proceeding (collectively "Claim") between Owner and Consultant that arises from or relates to this Agreement shall be brought and conducted solely and exclusively within the Circuit Court of Benton County for the State of Oregon; provided, however, if a Claim must be brought in a federal forum, it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. In no event shall this Section be construed as a waiver by the State of Oregon of any form of defense or immunity, whether based on sovereign immunity, governmental immunity, immunity based on the Eleventh Amendment to the United States Constitution or otherwise. **CONSULTANT, BY EXECUTION OF THIS AGREEMENT, HEREBY CONSENTS TO THE IN PERSONAM JURISDICTION OF SAID COURTS.**

XXII. INDEPENDENT CONTRACTOR STATUS OF CONSULTANT

- A. Consultant as Independent Contractor.** Consultant shall perform all required Services as an independent contractor. Although Owner reserves the right (i) to determine (and modify) the delivery schedule for the Services to be performed and (ii) to evaluate the quality of the completed performance, Owner cannot and will not control the means or manner of Consultant's performance. Consultant is responsible for determining the appropriate means and manner of performing the Services.
- B. Agency Status.** Consultant is not an officer, employee, or agent of the State or Owner as those terms are used in ORS 30.265.
- C. Benefits; Payment of Taxes.** Consultant is not a contributing member of the Public Employee's Retirement System and will be responsible for any federal or state taxes applicable to any compensation or payments paid to Consultant under this Agreement. Consultant will not be eligible for any benefits from these Agreement payments of federal Social Security, unemployment insurance or worker's compensation, except as a self-employed individual. If this payment is to be charged against federal funds, the Consultant certifies that it is not currently employed by the federal government.

XXIII. ACCESS TO RECORDS Access to records are subject to CFR §600.148 and CFR §600.153; notwithstanding the preceding, for not less than three (3) years after the termination or full performance of this Agreement, the Owner, the Secretary of State's Office of the State of Oregon, the federal government, DOE, the Comptroller General of the United States, or any of their duly authorized representatives shall have access to the books, documents, papers, and records of the Consultant and the sub-consultants which are directly pertinent to this Agreement for the purpose of making audit, examination, excerpts, and transcripts. If for any reason, any part of this Agreement, or any resulting construction contract(s) is involved in litigation, Consultant shall retain all pertinent records for not less than three years or until all litigation is resolved, whichever is longer. The Consultant will provide full access to such documents in preparation for and during any such litigation.

XXIV. SEVERABILITY

The Parties agree that if any term or provision of this Agreement is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected, and the rights and obligations of the Parties shall be construed and enforced as if the Agreement did not contain the particular term or provision held to be invalid.

XXV. FORCE MAJEURE

Neither party shall be held responsible for delay or default caused by fire, riot, acts of God, and war which is beyond such party's reasonable control. Each party shall, however, make all reasonable efforts to remove or eliminate such a cause of delay or default and shall, upon the cessation of the cause, diligently pursue performance of its obligations under this Agreement.

XXVI. NO WAIVER

The failure of the Owner to enforce any provision of this Agreement shall not constitute a waiver by the Owner of that or any other provision.

XXVII. NOTICE; PARTIES' REPRESENTATIVES

Except as otherwise expressly provided in this Agreement, any notices to be given hereunder shall be given in writing by personal delivery, or mailing the same, postage prepaid, to Consultant or Owner at the address set forth below, or to such other addresses or numbers as either Party may hereafter indicate pursuant to this Section. Any notice so addressed and mailed shall be deemed to be given five (5) calendar days after the date of mailing. Any notice by personal delivery shall be deemed to be given when actually delivered. Regular, day-to-day communications between the Parties may be transmitted through one of the methods set forth above, in person, by telephone, by e-mail, or by other similar electronic transmission.

Representatives for the Consultant and the Owner for purposes of notice and for other specific purposes provided for under this Agreement are:

Consultant: _____

Address: _____

Owner: Anita Nina Azarenko, Associate Vice President of University Infrastructure and Operations

Address: Oregon State University
3015 SW Western Blvd.
Corvallis OR 97333

With a Copy to: John Gremmels
Capital Planning & Development
Oregon State University
3015 SW Western Blvd.
Corvallis, OR 97333

And a Copy to: Construction Contracts Administration
Oregon State University
644 SW 13th Ave.
Corvallis, OR 97333

XXVIII. CONFIDENTIALITY.

Consultant shall maintain the confidentiality of information of Owner, unless withholding such information would violate the law, create the risk of significant harm to the public or prevent Consultant from establishing a claim or defense in an adjudicatory proceeding. Consultant shall require the sub-consultants to execute similar agreements to maintain the confidentiality of information of Owner.

XXIX. CONFLICT OF INTEREST.

Except with Owner's prior written consent, Consultant shall not engage in any activity, or accept any employment, interest or contribution that would or would reasonably appear to compromise Consultant's professional judgment with respect to this Project, including without limitation, concurrent employment on any project in direct competition with the Project, and will provide copies of any such agreements within ten (10) days of the full execution of such agreements.

XXX. SURVIVAL

All rights and obligations shall cease upon termination or full performance of this Agreement, except for the rights and obligations set forth in **Sections II** Consultant's Standard of Care, **IX** Indemnity, **X** Limitation of Liabilities, **XII** Ownership and Use of Work Product of Consultant, **XVI** Termination of Agreement; Non-Availability of Funds, **XXI** Governing Law; Venue; Consent to Jurisdiction, **XXIII** Access to Records, **XXVIII** Confidentiality, and **XXX** Survival.

