



Washington State
Department of Transportation

PROPOSAL | JUNE 14, 2023

East Fork Lewis River Bridge Archaeological Support



Submitted to:
WSDOT
Email: CSOSubmittals@wsdot.wa.gov

Parametrix

ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES

CRITERIA 1: Qualifications/Expertise of Firms on the Team

1A: Firms on the Team

Parametrix, Environmental Science Associates (ESA), and Equinox Research and Consulting International, Inc. (ERCI) are proposing to bring WSDOT an archaeological team with the experience and capacity to immediately deliver archaeological services on the East Fork Lewis River Bridge (EFLR) project. Our key team members have a history of collaborating to deliver archaeological support for our clients largest and most complicated projects. We have crafted a team and project approach to address our perceived key project challenge – the logistics of coordinating and implementing the required large field and laboratory analysis.

Parametrix will serve as the prime consultant. Founded in 1969, Parametrix has a long history of successful project delivery, including coordination of archaeological deliverables, on WSDOT’s largest and most complex projects. Examples of our work include the State Route (SR) 520 Pontoon Construction Project, SR 520 Bridge Replacement and HOV Program, and the Interstate Bridge Replacement (IBR) Program. Our cultural resources team will be led by Tait Elder, MA, RPA, who will provide practical, defensible, and technically sound archaeological services and work products. Tait has worked with ESA and ERCI to deliver archaeological services for large, complex, and controversial projects and considers them trusted teaming partners. Our team includes 9 archaeologists out of our Seattle, Portland, and Boise offices, as well as an additional 12 archaeologists companywide. Parametrix will provide project management and oversight, and implementation of archaeological data recovery, documentation, and management, as well as logistical support.

ESA is an employee-owned environmental consulting firm. With 28 archaeological staff within the Northwest region, including 12 Secretary of the Interior-qualified professionals, and more than 50 additional archaeologists companywide, ESA is well prepared to meet the schedule and staffing needs of this project. ESA’s staff include precontact and historic period archaeologists, historians, architectural historians, human remains experts, stone tool and faunal analysts, and museum and curation specialists. They have supported WSDOT with cultural resources services since 2013 on four on-call contracts as well as for high-profile and time-sensitive projects such as the SR 99 Alaskan Way Viaduct Replacement, SR 520 Bridge Replacement and HOV Program, SR 530 Oso Recovery, and several dozen fish passage projects. ESA and Parametrix’s partnership spans over 20 years and more than 20 projects. ESA’s recent move to its new Seattle office to Pier 70 included construction of a customized, climate controlled, secure archaeological materials analysis and curation laboratory, outfitted with requisite equipment and supplies. For this contract, ESA will provide implementation of archaeological data recovery and documentation, and subject matter expertise.

To meet your project objectives, we will build upon these team strengths: senior staff with proven delivery on WSDOT projects; a local, deep bench of archaeologists immediately available upon notice to proceed; and superior logistics and project administration to compliment technical expertise.

Firm Name, Expertise of Firm	Experience, Employees
Parametrix	
<ul style="list-style-type: none"> • Project management (including construction phase services) • Archaeological services (including site investigation, inadvertent discovery plans, site monitoring, data recovery, and artifact identification and preservation) • Regulatory compliance • GIS, mapping, and electronic data management 	54 years of experience, ~700 employees nationwide (9 regional and 12 companywide archaeological staff)
ESA	
<ul style="list-style-type: none"> • Archaeological site investigation • Inadvertent discovery plans • Site monitoring • Data recovery • Artifact identification and preservation • Laboratory facility • Historic property documentation • Archaeological site recordation, testing, and evaluation • Construction monitoring and reporting • Regulatory compliance 	54 years of experience, ~700 employees (12 regional and 50 companywide archaeological staff)
ERCI	
<ul style="list-style-type: none"> • Site discovery, testing, evaluation • Archaeological survey • Traditional Cultural Properties • Laboratory facility • Human osteological identification • Section 106 of the National Historic Preservation Act (NHPA) • National Environmental Policy Act (NEPA) 	21 years of experience, ~13 archaeological staff

ERCI is a certified Woman-owned Business Enterprise (WMBE) founded in 1994 that specializes in cultural resources services. ERCI has provided large-scale archaeological testing and data recovery at precontact archaeological sites and specializes in performing archaeological studies in logistically complex environments. The ERCI team includes 13 archaeologists out of its Mount Vernon, WA, office.

The ERCI office also includes a secure laboratory with a range of measuring, screening, and sorting equipment. ERCI will provide implementation of archaeological data recovery and documentation, subject matter expertise, and logistical support.

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1B: Work with Subs on Similar Contracts

Parametrix’s project manager and principal investigator (PM/PI), Tait Elder, MA, RPA, has worked with ESA and ERCI to provide archaeological services and deliverables for multiple clients throughout Washington State over the last decade. The following are a selection of examples of our team’s successful work experience together on large and complex infrastructure projects. We have selected these examples to represent our ability to successfully collaborate and deliver archaeological testing and data recovery services within fast-paced and logistically difficult conditions.

Team Work Experience Together

SR 99 Tunnel Boring Machine Repair Shaft Archaeological Support | Seattle, WA | WSDOT

Dates: 2014 - 2015 Revenue: \$110K Firms: Tait Elder (prior to work at Parametrix) and ESA



Prior to working at Parametrix, Tait served as PM/PI for emergency archaeological investigations for an inadvertent discovery uncovered during excavations for the tunnel boring machine repair shaft. The project was time-sensitive, and WSDOT requested that a team be mobilized as quickly as possible. To provide the necessary staff to complete the archaeological investigations as efficiently as possible, Tait teamed with ESA and WSDOT staff to field a team of 12 archaeologists. Archaeological investigations required four days to complete. During this time, 22 cubic meters of sediment were excavated and screened, and 3,000 artifacts were collected and analyzed. Following field investigations, Tait, his team, and the ESA team analyzed the artifact collection. A summary report evaluating the discovery was completed and submitted to WSDOT for distribution to the Department of Archaeology and Historic Preservation (DAHP) and consulting parties. The report received concurrence from all parties.

South Park Drainage and Roadway Partnership Project | Seattle, WA | Seattle Public Utilities (SPU)

Dates: 2021 - 2022 Revenue: \$130K Firms: Tait Elder (prior to work at Parametrix) and ERCI



ERCI and Tait Elder provided cultural resource services for Seattle Public Utilities (SPU) in Seattle’s South Park neighborhood that included historic background and archival research and archaeological site and construction monitoring. The project aimed to improve chronic flooding and drainage issues in the South Park Industrial Area, between 2nd Avenue South and 8th Avenue South, and South Holden Street and South Monroe Street.

During monitoring, ERCI identified a shell midden deposit and obtained an emergency monitoring permit. ERCI crew profiled the exposed deposits, mapped the site area to determine the extent of the deposits, and submitted an archaeological site inventory form.

The project used State Revolving Funds and King County District Flood Control Funds; SDOT contributed money from Move Seattle Forward. The project was subject to Governor’s Executive Order 21-02 and was required to comply with the State Environmental Policy Act (SEPA).

1C: Key Staff Availability

All members of the Parametrix team will prioritize the EFLR project and commit the necessary staff resources and equipment to complete the work within the requested two-year timeframe. We will place particular emphasis on completing the archaeological fieldwork in a single season, rather than two separate field seasons to reduce the risk of data loss through vandalism and erosion. PM/PI Tait Elder commits to making the EFLR project his exclusive priority and is authorized to acquire the necessary resources to support the project’s archaeological obligations. The table below summarizes the anticipated availability of our key staff. In addition to the key staff listed in this table, the Parametrix team has the capacity to draw upon over 85 archaeologists already employed with Parametrix and our partner companies.

Staff Availability: Hours available per person per month for the contract duration.

Staff Name (Firm)	Year 1												Year 2											
	Month												Month											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Tait Elder, MA, RPA <i>(Parametrix) Project Manager, Principal Investigator</i>	120	120	120	12	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
Stacy Bumback, MA <i>(ESA) Technical Advisor</i>	40	40	40	40	20	20	20	20	20	20	20	20	40	40	40	40	20	20	20	20	20	20	20	20
Terance Trent <i>(Parametrix) Project Coordinator</i>	80	80	80	80	80	20	20	20	20	20	20	20	80	80	80	80	80	20	20	20	20	20	20	20
Kate Hannah, MA (ESA) <i>Laboratory Lead</i>	40	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Chris Lockwood, PhD, RPA (ESA) <i>Field Director</i>	40	80	80	80	40	40	20	20	20	40	40	80	80	40	40	20	20	20	20	20	20	20	20	20
Kelly Bush, MA (ERCI) <i>Field Director</i>	60	20	16	20	16	20	10	10	10	10	10	10	16	20	10	20	40	60	10	10	10	10	10	10
Niki Nickoloff, MA <i>(Parametrix) Field Director</i>	80	120	120	40	40	40	40	40	40	40	40	40	80	120	120	40	40	40	40	40	40	40	40	40
Tom Ostrander, MS (ESA) <i>Faunal Analyst</i>	20	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Justin Colon, MA, RPA (ESA) <i>Lithic Analyst</i>	20	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Josh Ahmann, MAUP, GISP (Parametrix) <i>Data Management Lead</i>	80	80	80	80	80	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20

ESA staff have collaborated with Parametrix since 2001 to provide cultural resources services for the 11-mile long East Lake Sammamish Trail (ELST) project, which is moving towards successful completion in December 2023. Most recently, our teams collaborated on a Pre-NEPA Study of SR 285/N. Wenatchee Avenue Bypass.

1D: Three Project Examples per Firm

This section presents three examples of archaeological testing and/or data recovery support provided by each of the companies that comprise the Parametrix team. These examples were selected to reflect projects of comparable scope, scale, and/or complexity to the EFLR project.

Parametrix Project Examples

NM 6 Data Recovery Project, Torrance County New Mexico

Dates: 2019 - 2021 Revenue: \$146K



Between 2019 and 2021, Parametrix completed data recovery for three prehistoric archaeological sites that were going to be adversely affected by a roadway widening project in north central New Mexico. All three sites were completely excavated with the Area of Potential Effect, including 10 hearth features, hundreds of lithic and ceramic artifacts, and extensive geomorphologic analysis. The results of the geomorphologic analysis were recently published in the *Journal of Field Archaeology* and provided a model for identifying site formation processes that result in Formative Period artifacts intermixing with Archaic-age hearth features in the Ceja Mesa area.

Archaeological Discovery, Inadvertent Discovery Support, and Data Recovery for the Bay Corridor Transmission and Distribution Project

Dates: 2017 - 2022 Revenue: \$1.4M



While at his previous company, Tait authored an archaeological treatment plan for the Bay Corridor Transmission and Distribution Project, coordinated archaeological monitoring support for the project, performed geoarchaeological investigations in areas where deeply buried archaeological deposits were previously documented, documented and evaluated 12 inadvertent archaeological discoveries, performed emergency data recovery for two of the inadvertent discoveries, and coordinated the development of interpretive signs for one of the discoveries. The findings of all of the archaeological efforts were documented in a series of technical reports – including an archaeological monitoring summary report, individual resource evaluation memorandums, and an archaeological results report.

Seattle Convention Center Expansion Project | Seattle, WA | WSDOT

Dates: 2014 - 2015 Revenue: \$150K



Prior to working at Parametrix, Tait served as co-principal investigator for archaeological monitoring and inadvertent discovery support for the Seattle Convention Center Expansion project. The project required around-the-clock archaeological monitoring and access to subject matter experts in the event of inadvertent archaeological discoveries. To provide this support, Tait teamed with ERCI. Over the course of our months, Tait, his team, and ERCI coordinated and implemented around-the-clock archaeological monitoring and inadvertent discovery support. During this period, eight inadvertent discoveries occurred, but required just two full days of stoppage time to address. Once the project was completed, Tait, his team, and ERCI authored an archaeological monitoring results report and submitted the report to the lead federal agency. The report received no comments from the lead federal agency or consulting parties.

ESA Project Examples

SR 520 Bridge Replacement and HOV Program, Foster Island Landscape Area Archaeological Excavations

Dates: 2013 - 2015 Revenue: \$309K



ESA conducted archaeological survey and excavations on Foster Island in advance of mitigation landscaping for the SR520 Bridge Replacement and HOV Program. During pedestrian survey and subsurface survey involving 24 shovel probes, ESA's archaeologists surveyed, mapped, and recorded 45KI1208, a precontact lithic scatter. Stratigraphic analysis demonstrated the site to be shallowly buried, while lithic analyses indicated an expedient technology based on the use of locally available raw materials. In order to meet a highly aggressive deadline for completing a robust test excavation program, ESA assembled and mobilized a team of more than 20 archaeologists to excavate 210 units in less than six weeks.

SR 99 Alaskan Way Viaduct Replacement Project - North Access Connection (NAC), Archaeological Investigations at 45ki958

Dates: 2017 Revenue: \$8K



ESA conducted archaeological testing and treatment prior to construction of the NAC. In 2010, a different consultant recorded archaeological site 45KI958 after documenting 11 historic features and a possible precontact groundstone tool during trenching and augering, but was unable to offer a National Register of Historic Places (NRHP) eligibility recommendation. ESA's work, under Section 106, was completed using protocols set forth in an adopted Archaeological Treatment Plan. After using total station and GPS to establish a 10-meter grid across the site, ESA conducted testing in two phases; each was preceded by archaeologically-monitored mechanical stripping of overburden. During Phase 1, ESA excavated eight 0.5-x 0.5-meter test units to examine the potential for precontact artifacts within a peat layer. During Phase 2, ESA completed 47 0.5- x 0.5-meter units, 2 1.0- x 0.5-meter units, and 15 1.0- x 1.0-meter units. Using a depositional context-based recording system, ESA documented a stratigraphic sequence that extended back more than 16,000 years, revealing a history of important environmental changes from Pleistocene glacial conditions to volcanism and peat formation during the Holocene epoch to historic period urbanization and filling. Investigations yielded 283 artifacts.

Chehalis River Basin Flood Damage Reduction Project, SEPA and NEPA/Section 106

Dates: 2019 - Present Revenue: \$224K



The Chehalis River Basin Flood Control Zone District has proposed to reduce flood damage in the upper Chehalis River Basin by constructing a dam near Pe Ell, Washington, to temporarily store flood water. Due to scheduling demands, SEPA and NEPA EIS analyses had to be conducted concurrently, yet independently. ESA formed two separate teams that were isolated by a firewall. One team prepared the cultural resources section of a SEPA Programmatic EIS while the other team performed surveys of the 1,400+ acre project APE for compliance with NEPA and Section 106. ESA identified 18 cultural resources consisting of precontact, historic, and multiple component archaeological sites, built environment resources, and traditional cultural properties. ESA conducted archaeological testing at 8 archaeological sites interpreted as short-term hunting blinds/campsites and recommended two of the sites as eligible for listing in the NRHP. ESA worked with tribal members and ethnographers to support documentation efforts of the traditional cultural properties, which were also recommended eligible for the NRHP. ESA authored a cultural context and archaeological research framework for the upper Chehalis River Basin and presented archaeological testing results through this lens. ESA found evidence of land use practices and subsistence strategies stretching from the early Holocene into the ethnographic period. The material evidence corroborated ethnographic stories and practices within the APE. ESA's findings provided new information on precontact lifeways and land use within the coastal range, and contributed to a greater understanding of the region's archaeological context.

ERCI Project Examples

City of Oak Harbor Pit Road Recovery Project

Dates: 2012 - 2013 Revenue: \$1.94M



ERCI developed and implemented a massive data recovery program that included hand and machine screening the disturbed material and provided an in-depth analysis for the objects and remains that were recovered. Historic archaeological and precontact material in addition to ancestral remains were recovered and managed. The field screening was 14 months long with a combined tribal and archaeological field crew of up to 30 each day. This fieldwork involved 18 screening stations, bobcat, and excavator to move sediment around large mobile covers. ERCI developed an Archaeological Work Plan to accompany the memorandum of agreement (MOA) and received concurrence from six affected tribes, DAHP, and the consulting parties. Using an array of historic research techniques and data types, including historic maps, photos, oral histories, interviews and municipal records, ERCI reconstructed the history of Oak Harbor's Pioneer Way. This project was a direct result of Oak Harbor's Pioneer Way Redevelopment Project, which disturbed over 5,500 cubic yards of material that included both historical and precontact archaeological deposits and ancestral human remains.

City of Oak Harbor Wastewater Treatment Plant (WWTP) Project

Dates: 2013 - 2019 Revenue: \$1.5M



ERCI provided a range of cultural resources tasks for the City of Oak Harbor's WWTP through a multi-jurisdictional, variable-funded project on a saltwater shoreline in overlap territory of six federally recognized tribes. ERCI's services included conducting archaeological surveys, data recovery excavation, analyzing the geologic and historic landform for archaeological sensitivity, writing cultural resources discipline reports and treatment plans, monitoring geotechnical investigations and other work, and participating in preparation of a MOA. Construction monitoring occurred over a 4-year period, during which time ERCI monitored excavations up to 35 feet deep while working in the excavation for the sewage treatment facility with more than one crane working above and over 180 craftspeople on the site at a time. All this work occurred inside a recorded archaeological site with burials. ERCI worked in close consultation with the City, DAHP, State Physical Anthropologist Dr. Guy Tasa, area tribes, and the lead agency to develop a research strategy and an archaeological work plan that preserved the resources while still allowing construction to move forward safely and respectfully. ERCI also supported the City's public involvement efforts during project implementation.

San Juan Island 105 Claramar Drive

Dates: 2015 - 2019 Revenue: \$212K



ERCI led mitigative data recovery for this project, including excavation, screening, archaeological construction monitoring with screening, artifact analysis, and ancestral reburial. ERCI was assigned to the project while it was already in progress to assist in the clean up, identification, and management of ancestral human remains and dense cultural rich archaeological deposits in a burial ground. To mitigate demolition disturbance and construction of a planned new residence, intact deposits needed to be stabilized and protected from future disturbance. In addition, disturbed deposits needed to be removed and examined to recover all artifacts, including ancestral human skeletal remains. ERCI coordinated with the Lummi Nation, Samish Indian Nation, the property owners, and DAHP. Ultimately the team managed to avoid large sections of intact archaeological deposits while completing this complicated project.

CRITERIA 2: Qualifications of the Project Manager



The Parametrix team's proposed PM/PI is Tait Elder, MA, RPA. Tait will serve as WSDOT's primary point of contact on this contract and commits to making this project his exclusive priority. He will make sure that the Parametrix team's archaeological services meet WSDOT's expectations for responsiveness, technical proficiency, and overall budget and schedule adherence. Tait brings extensive experience serving as project manager for large and complex cultural resources and multidisciplinary stand-alone agreements and on-call contracts of up to \$2,500,000 in size. He has managed over 150 cultural resources projects in the Pacific Northwest, including 22 task order and stand-alone contracts for

WSDOT, in the last 15 years. Tait emphasizes close coordination with client project teams, identifying practical and implementable solutions, and consistent schedule management.

Project Examples

Following are three descriptions that showcase examples of Tait's project management experience. All three examples are for large and complicated WSDOT projects (completed while Tait was employed at another firm) that required archaeological support of scope, scale, and complexity similar to the project identified in this RFQ.

Pierce County/Tacoma HOV Program (2010 - 2023)

Role: PM/PI Client: WSDOT Location: Tacoma, WA

Photo Credit: WSDOT



For two periods of performance Tait served as PM/PI for archaeological support for the Pierce County/Tacoma HOV program. The services covered in these agreements included archaeological data recovery, geoarchaeological investigations, and archaeological monitoring, and inadvertent discovery support.

As PM, Tait identified technical and schedule requirements for each deliverable, coordinated with the WSDOT project team regarding technical findings, provided invoices and invoice cover letters in WSDOT's requested invoicing format, and provided scope and budget information for instances where scope and budget augmentations were requested by the WSDOT project team. Scope and budget augmentations were limited to instances where archaeological monitoring (above-and-beyond what was originally anticipated by WSDOT and consultant staff) was required.

As PI, Tait coordinated and led the archaeological data recovery effort, which included concurrent field data collection and laboratory analysis. He also designed and led the project's geoarchaeological investigation efforts. Tait oversaw archaeological monitoring and inadvertent discovery support and served as senior reviewer for the project's archaeological monitoring technical documentation. The technical studies associated with all of these services received concurrence from DAHP, consulting tribes, and FHWA.

SR 520 Bridge Replacement and HOV Program (2010 - 2017)

Role: PM/PI Client: WSDOT Location: Seattle, WA



For two periods of performance Tait served as PM/PI for six task orders to provide archaeological support for the SR 520 bridge replacement program. The services included development of an archaeological treatment plan for the project, performing a field-based geoarchaeological sensitivity analysis of the project corridor, overseeing archaeological monitoring support and inadvertent archaeological discoveries, performing archaeological survey, and testing for supporting activities. Tait also served as project director from 2017 - 2023.

As project manager, Tait worked with WSDOT to identify technical and schedule requirements for each deliverable, coordinated with the WSDOT team regarding technical findings, provided invoices and invoice cover letters in WSDOT's requested invoicing format, and provided scope and budget information in instances where scope and budget augmentations were requested by the WSDOT project team. Scope and budget augmentations were limited to instances where archaeological monitoring – above-and-beyond what was originally anticipated by WSDOT and consultant staff – was required. Under one of the task orders, savings from developing an archaeological treatment plan were reallocated to complete a portion of the field-based geoarchaeological sensitivity analysis, which provided an overall budget savings to WSDOT.

As principal investigator, Tait served as the lead author for the project's archaeological treatment plan, designed and implemented the project's field-based archaeological sensitivity analysis, implemented archaeological survey and testing for supporting activities, oversaw archaeological monitoring and inadvertent discoveries, and reviewed the project's archaeological monitoring technical documentation. The technical studies associated with all of these services received concurrence from DAHP, consulting tribes, and FHWA.

SR 99 Tunnel Boring Machine Repair Shaft Archaeological Support (2014 - 2015)

Role: PM/PI Client: WSDOT Location: Seattle, WA



Photo Credit: Malcolm Drilling

Tait served as PM/PI for three task orders to provide archaeological support of the SR 99 Tunnel Boring Machine Repair Shaft project. The services included geoarchaeological investigations to determine the extent of a buried traditionally important landform, emergency archaeological testing for a deeply buried shell deposit during repair shaft excavations, and development of supplemental Section 106 documentation for the repair shaft and supporting activities.

As PM, Tait helped establish deliverables and timelines, provided monthly progress updates, and provided invoices and invoice cover letters in WSDOT's requested invoicing format. For emergency archaeological testing, Tait coordinated with WSDOT, ESA, and other consultants to develop and implement a testing strategy and timeframe. All cultural resources services for these projects were completed on schedule and within budget. The savings from the supplemental Section 106 documentation were reallocated to complete a new stipulation of the project's MOA, providing additional budget and schedule savings for WSDOT.

As PI, Tait coordinated with WSDOT's cultural resources specialist to develop and implement a geoarchaeological testing strategy using geotechnical drill rig and a team of staff from WSDOT, ESA, and other consultants; work with WSDOT's cultural resources specialist to develop an emergency testing strategy; and serve as lead author and coordinator for the project's supplemental Section 106 documentation. The technical studies associated with each of these services received concurrence from DAHP, consulting tribes, and FHWA.

Familiarity with Regulations and Procedures

Tait has extensive experience navigating federal, state, and local regulations relating to cultural resources, health and safety, and sensitive and confidential information on behalf his clients. Examples of each of the regulations under which he has developed work products and services for his clients include:

- **Cultural Resources:**

- Section 106 of the NHPA
- NEPA and SEPA
- Section 4(f) of the US Department of Transportation Act
- Archaeological Resources Protection Act
- Reservoir Salvage Act
- Governor's Executive Order 21-02, Revised Code of Washington 27.44 – Indian Graves and Protection, 27.53 – Archaeological Sites and Resources, and 36.70A.020
- Section 106 of the NHPA Programmatic Agreement between WSDOT, FHWA, and FTA (updated in 2018)

- **Health and Safety:**

- 29 Code of Federal Regulations 1926 Subparts, C, D, E, P
- Washington Administrative Code 296-155-655
- Revised Code of Washington 39.04.180
- Revised Code of Washington 19.122

- **Sensitive and Confidential Information:**

- Section 6(a)(1)(A) of the National Scenic Area Act
- 16 United States Code 470 (hh)
- 36 Code of Federal Regulations 296.18
- Revised Code of Washington 42.17.310 (k)

Project Manager's Abilities

The table on the next page highlights three recent examples of Tait's ability to manage project scopes, schedules, and budgets. These examples are from his work experience prior to Parametrix.

Licenses and Accreditations

Tait has been a qualified professional archaeologist in accordance with the Secretary of the Interior's professional qualification standards as outlined in 36 Code of Federal Regulations (CFR) Part 61, Appendix A, since 2009. He is also a member of the Register of Professional Archaeologists, registration number 17874.

Building the Right Team for the Job

Tait has extensive experience building integrated multi-company and multi-disciplinary teams to address his clients project-specific needs. He has recent experience working with the cultural staff at ESA and ERCI to provide his clients with specialized cultural resources support. For example, since 2022, Tait and the ESA team completed a cultural resources management plan for Contra Costa County and a tribal cultural landscape study for the California Waterfix Program. Tait and the ESA team also combined resources to provide emergency archaeological support for the SR 99 Tunnel Bore Machine Repair shaft project. In 2021, Tait worked with the ERCI team to provide around-the-clock archaeological monitoring and inadvertent discovery support for the Seattle Convention Center expansion project. Tait also managed a series of contracts for Seattle Public Utilities (SPU), Seattle City Light (SCL), and King County Metro where he coordinated with ERCI cultural resources staff to share work, meet DBE requirements, and leverage the best available skillset to address project needs. As a result of these experiences, Tait hand-picked ESA and ERCI to work with him on this contract based on their combined track record of close collaboration; company expertise, experience, and staff availability; and combined success at delivering cultural resources services for large and complex projects.

East Contra Costa Cultural Resources Management Plan | Contra Costa County, CA | East Contra Costa Habitat Conservancy/East Bay Regional Park (2022 - 2023)

Tait served as PM/PI with ESA as a subconsultant to provide supplemental technical and regulatory expertise. The plan was required as part of the project's Section 106 of NHPA Programmatic Agreement obligations and needed to be completed by the fourth quarter of 2023; notice to proceed (NTP) was received in the fourth quarter of 2022.

<p>Schedule: Within two days of NTP, Tait organized a kick-off meeting with the client and the lead federal agency U.S. Department of Fish and Wildlife (DFW), to establish a schedule, critical paths, key deliverable milestones, and reviewers and review timeframes. Tait coordinated delivery of individual draft chapters at staggered intervals for client and agency review to minimize the level-of-effort required to formally review the fully compiled draft technical report. All draft and final technical documents were delivered within the originally established schedule timeframe.</p>	<p>Scope and Budget Creep: Tait worked during scoping to establish clear technical expectations. During the kick-off meeting, he authored a work plan that outlined chapters and contents of the cultural resources management plan and shared this plan with the client and DFW to obtain consensus on the document's contents which helped minimize scope and budget creep. In one instance, informal coordination with five tribes with traditional territories in the area required a more detailed consultation approach. This additional level-of-effort was covered by reallocating budget savings from another task.</p>	<p>Budget Issues: All work was completed within the originally negotiated budget.</p>	<p>Project Changes: Informal coordination with Native American tribes with territories located in the plan area revealed that a more detailed and complicated procedure for formal consultation would be required to obtain buy-in on the cultural resources management plan. As a result, the consultation chapter of the plan was revised to reflect Native American feedback.</p>
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Cultural Resources On-Call Agreement | Seattle, WA | Seattle Public Utilities (SPU) (2020 - 2023)

Tait managed this on-call contract between 2020 and 2023. To meet the contract's DBE goals and provide additional capacity, Tait subcontracted with ERCI. Six work assignments totaling \$550,000 were performed. Approximately 50% of this work was distributed to ERCI, as agreed upon in the DBE utilization plan. Services performed included archaeological survey, testing, and monitoring; inadvertent discovery support; and architectural history evaluations.

<p>Schedule: When a work assignment was received, Tait coordinated with SPU's contract manager to identify the schedule, deliverables, and agency review timeframes. In several instances, SPU needed to halt work because of project scheduling, environmental review, or funding factors and Tait helped revise deliverable timeframes accordingly. In instances where discrete services were required, such as archaeological survey or architectural history evaluation, all deliverables were provided within the requested schedule timeframe.</p>	<p>Scope and Budget Creep: In instances where archaeological monitoring and/or inadvertent discovery support was required beyond the originally scoped budget and timeframe, Tait coordinated with SPU's manager to capture the newly anticipated level-of-effort in a scope and cost amendment. Tait also developed a "general" work assignment to capture small and immediate need cultural resources support to help minimize the amount of scope of work and cost amendments.</p>	<p>Budget Issues: Where the required budget appeared as though it would exceed the anticipated budget, Tait notified the SPU manager as soon as possible. Such instances were limited to archaeological monitoring and inadvertent discovery support. Tait scoped and budgeted for the additional required level-of-effort.</p>	<p>Project Changes: Some projects were put on hold because of funding, environmental review, or scheduling issues. In these instances, Tait and the team ceased work until notice to continue was provided. Prior to continuing work, Tait helped determine if the cultural resources scope of work and schedule needed revision and submitted documentation for scope or budget amendments.</p>
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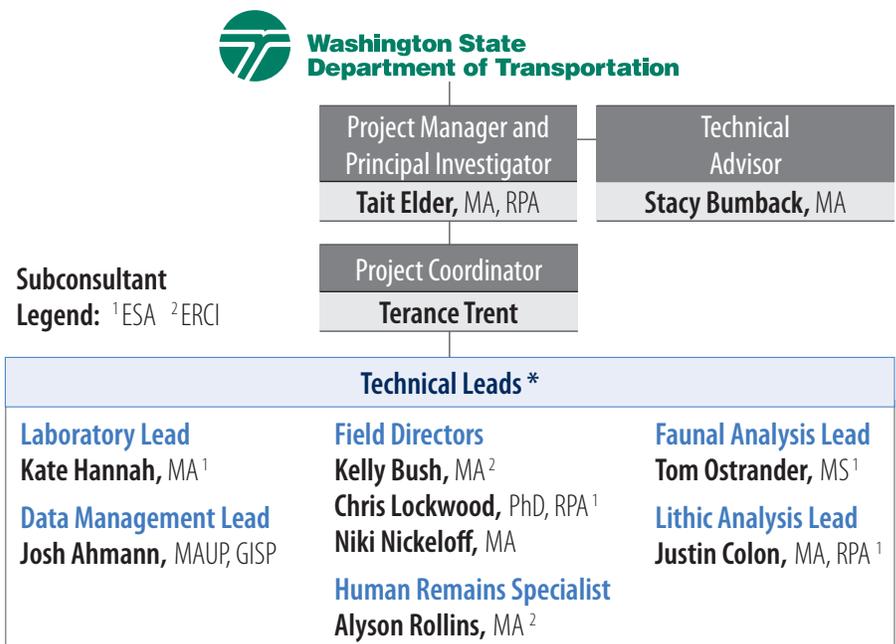
Snake River Road Projects Mileposts 19.00 to 21.97 | Asotin County, WA | Asotin County Public Works (2013 - 2020)

Tait served as his company's PM for environmental and cultural resources support between 2013 and 2020. The purpose of the project was to reconstruct, widen, and improve Snake River Road across a particularly dangerous segment. Environmental and cultural resources support was provided to the project in a series of phases – including an early feasibility analysis, during the early design phase, and then again at final design.

<p>Schedule: At project kick-off, Tait worked with Asotin County and the prime consultant to identify key deliverables and milestones associated with each design phase and grant funding deadline. During final design, work was paused due to federal funding availability, redesigns related to updated design requirements, and consultation on Section 106 of the NHPA programmatic agreement. Tait halted environmental and cultural resources work until Asotin County gave approval to continue. Tait helped identify updated key deliverable and funding deadlines and adjusted the review schedule. All environmental and cultural resources deliverables were provided on-schedule.</p>	<p>Scope and Budget Creep: Asotin County was sensitive to scope and budget creep. Tait and the prime consultant team developed detailed scopes of work and assumptions for each project design phase and tracked deliverable progress relative to budget spent. After each project pause, Tait helped revise scope and budget assumptions to reflect unanticipated level-of-effort associated with design or funding changes. This approach allowed Tait to minimize the risk of scope and budget creep, while allowing Asotin County to better anticipate and account for costs.</p>	<p>Budget Issues: Tait and the team tracked scope and budget at Asotin County's request. Efforts to coordinate with Asotin County after each project pause indicated there were no substantive budget issues associated with environmental and cultural resources review.</p>	<p>Project Changes: Following each project redesign, Tait helped decide if existing documentation would address regulatory obligations and determined the required technical studies if documentation was insufficient. This information was presented to Asotin County to request a scope and budget amendment. After approval, Tait coordinated implementation of supplemental studies.</p>
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CRITERIA 3: Key Team Member Qualifications

From our collective deep bench of archaeologists and other technical experts, we have selected 11 individuals whose experience and expertise align with the project's archaeological data recovery needs, and 45CL26's specific technical needs as a precontact archaeological site. These individuals include Tait Elder, Stacy Bumback, Terrance Trent, Kate Hannah, Chris Lockwood, Kelly Bush, Niki Nickoloff, Tom Ostrander, Justin Colon, Josh Ahmann, and Alyson Rollins. In addition to these key staff, our team has the capacity to draw from our combined pool of 85 archaeologists. The graphic to the right depicts how our team is organized, and resumes for each of key person are provided in this section of our SOQ.



* In addition to the Technical Leads in the chart above, the Parametrix team has 23 local and 62 archaeologists on the west coast available to add capacity if needed for this contract.



WHY CHOOSE TAIT?
Tait brings a proven track record of collaboration and archaeological testing and data recovery delivery as a principal investigator on some of WSDOT's largest and most complex infrastructure projects.

20 YEARS OF EXPERIENCE

EDUCATION

MA, Anthropology, 2010
BA, Anthropology (Geology minor), 2004

REGISTRATIONS

Registered Professional Archaeologist, #17874
Secretary of the Interior Qualified Archaeologist, 2009

Tait Elder, MA, RPA | PM/PI (Parametrix)

Tait is a qualified professional archaeologist in accordance with the Secretary of the Interior's standards (36 CFR 61, Appendix A), with 20 years of archaeological consulting experience. His specialized technical expertise includes geoarchaeology, Pacific Northwest prehistory, and cultural landscape studies.

Since 2010, Tait has served as principal investigator on over 150 projects in the Pacific Northwest — 20 of which were complex archaeological testing and data recovery projects. Notably, Tait has served as field director or principal investigator on some of WSDOT's largest archaeological testing and data recovery projects in the last 15 years.

For archaeological testing and data recovery projects, Tait emphasizes developing clear research questions that align with regionally relevant research issues; making sure that excavation and artifact analysis methods provide sufficient data resolution to address key research questions, and integrating Native American interests and perspectives into research designs and analyses. This emphasis, in turn, leads to collaborative research designs, efficient and focused data collection, and the opportunity to contribute meaningful archaeological analyses and syntheses to project stakeholders and the public.

Relevant Project Experience

Seattle Convention Center Expansion Project | Seattle, WA | Pine Street Group (2020 - 2021)

Principal Investigator. Tait and his team were brought-in mid-project to support the project's archaeological monitoring and inadvertent discovery needs. Tait co-authored an archaeological treatment plan, which included procedures for monitoring, inadvertent discoveries, and archaeological testing. He then coordinated 24-hour monitoring shifts and inadvertent discovery support for eight separate inadvertent archaeological discoveries over a four-month period. Based on the archaeological treatment plan's procedures, total stoppage time associated with inadvertent discoveries was less than two full days, and all eight archaeological discoveries were carefully excavated, analyzed, and evaluated.

SR 99 Bored Tunnel Machine Repair Shaft Archaeological Testing | Seattle, WA | WSDOT (2014-2015)

Principal investigator. Tait coordinated a multi-company team of 16 archaeologists to perform emergency archaeological testing on a shell deposit discovered while excavating the tunnel bore machine repair shaft. Tait mobilized his team to the job site within three days of the discovery and completed field investigations in four days, excavating and screening 22 cubic meters of sediment and collecting 3,000 artifacts. Tait then served as the lead author for the projects archaeological evaluation documentation and authored the project's supplemental environmental documentation related to cultural resources.

SR 520 Bridge Replacement and HOV Program: Foster Island Archaeological Testing | Seattle, WA | WSDOT (2010 - 2011)

Principal Investigator. Tait coordinated a crew of 20 archaeologists to excavate 612 1x1 meter test units to determine whether archaeological deposits or human remains were present in a culturally sensitive area. From start-to-finish, field investigations required six weeks to complete. Tait then co-authored the archaeological testing report.



WHY CHOOSE STACY?

Stacy brings firsthand knowledge of the EFLR project and its archaeological needs, and a history of creating innovative solutions to complex Section 106 issues.

25 YEARS OF EXPERIENCE

EDUCATION

MS, Cultural Resources Management, 2001
BS, Anthropology, 1998

Stacy Bumback, MA | Technical Advisor (ESA)

Stacy brings 25 years of experience delivering complex and controversial transportation projects. Many of her projects with WSDOT included archaeological testing and data recovery for deeply buried archaeological sites and project locations with significant involvement from Native American Tribes, including the SR 520 Pontoon Construction Project in Grays Harbor and Foster Island Archaeological Investigations in Seattle. Stacy was previously a member of the SR 520 Bridge Replacement Program team and the Alaskan Way Viaduct Replacement Program and worked with WSDOT to manage aspects of Section 106 compliance. She has also developed strategies for quickly assessing tribal, community, and lead agency interests, issues, and concerns related to NEPA/SEPA/NHPA and has provided information to support decisions on effective methods to advance projects and communicate with stakeholders.

Relevant Project Experience

Archaeological Testing and Draft Data Recovery Plan for Site 45CL26 | Clark County, WA | WSDOT (2021 - 2022)

Project Director and Technical Advisor. Stacy provided logistics support, financial review and oversight, contracting direction, and technical QA/QC on the initial testing phase and early drafts of the Data Recovery Plan while at a previous firm. She advised on resolution of comments provided by Native American Tribes.

Ballard Bridge Replacement Project | Seattle, WA | BNSF (2017 - 2021)

Principal Investigator. Stacy assisted with NHPA Section 106 compliance in support of a U.S. Coast Guard Bridge Permit to replace the railroad drawbridge near the Ballard Locks while at a previous firm. She led development and implementation of a work plan to assess the APE for buried precontact sites associated with known archaeological site 45KI1000 and/or a seasonal village and burial ground documented on ethnographic maps. Stacy conducted outreach with four tribes to inform the early design phase and geoarchaeological investigation. She led the Section 106 process and provided technical oversight and guidance to the team for the geoarchaeological investigation and technical report. She was the lead author of the cultural resources chapter for the NEPA EA.

SR520 Pontoon Construction Project | Grays Harbor, WA | WSDOT (2008 - 2011)

Co-Principal Investigator. Stacy designed and implemented a work plan for deep trenching to inventory the APE to support compliance with Section 106 of the NHPA and evaluate the precontact fish weir/trap features and historic lumber mill features that were discovered buried (10-22 feet of fill deposits) within the APE. Working with WSDOT, she assisted with tribal coordination with the Quinault Indian Nation and Chehalis Indian Tribe to negotiate the level of effort for the work plan and for the methods to accurately assess these archaeological deposits for listing on the NRHP. Stacy hired and onboarded approximately 30 archaeologists to participate in the inventory and documentation, which included concurrent fieldwork at two alternatives over a three-month period. Stacy supervised the laboratory analysis and the special studies and curation for the artifacts recovered. She co-authored the cultural resources discipline report that was done concurrently with the NEPA EIS to help inform the alternatives analysis and advance selection of the preferred alternative.



Terance Trent | Project Coordinator (*Parametrix*)

Terance has over two decades of experience coordinating and inspecting construction efforts for a wide range of infrastructure projects; and assisting with permitting and code compliance. He is also experienced in coordinating logistics for construction site preparation and staffing. Terance is a CESCL, trained in OSHA compliance, and has received First Aid/CPR&AED training. Drawing upon his experience, Terance has coordinated, performed construction inspection for, and facilitated permit compliance on a diverse range of infrastructure projects across Washington State, including for Washington State Department of Transportation. Terance will draw upon this experience to make sure that field preparation for archaeological data recovery, and implementation of field investigations occurs efficiently, in accordance with the applicable WSDOT and OSHA safety and sediment control procedures, and in accordance with any federal, state, and/or local permitting requirements.

WHY CHOOSE TERANCE?

Terance will leverage his experience at planning worksite logistics for construction and environmental engineering projects to ensure that our team has the right facilities, equipment, and staffing in place to efficiently deliver the project's archaeological fieldwork needs.

25 YEARS OF EXPERIENCE

EDUCATION

Pierce College, 1997
Central Washington University, 1996

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Relevant Project Experience

Tacoma Narrows Bridge Project | Tacoma, WA | WSDOT

Construction Inspector, Materials Tester. Terance inspected walls, columns, abutments, girders, roadway sections, concrete, and asphalt driving and walking surfaces. He performed soil, concrete, aggregate, and asphalt testing. Terance monitored the production and inspection of work for one or more operations.

Fields, Parking Lots, and Roofs and Boiler Replacement | Tacoma, WA | Tacoma Public Schools

Project Manager/Construction Manager. Projects for Tacoma Public Schools consist of the removal and replacement of field, parking lot, and the replacement of building roofs and boilers.

Main Campus and Headquarters Replacement and Additions | Federal Way, WA | Lakehaven Water and Sewer District

Inspection/Observation. Parametrix is providing OA, PM, and CM services for new and replacement buildings being delivered via GC/CM delivery on the existing site for the Lakehaven Water and Sewer District administration offices, operations, maintenance, and vehicle storage facilities. The project consists of a new 46,500-square-foot, two-story administration building, a new vehicle storage building, a remodeled existing maintenance building, replacement of the stormwater system, underground utility work, new material storage, and other miscellaneous buildings.



WHY CHOOSE KATE?

Kate brings extensive experience managing, processing, and preparing large artifact collections for analysis and curation in the State of Washington.

9 YEARS OF EXPERIENCE

EDUCATION

MA, Museology, 2018
BA, Archaeology, 2013.

CERTIFICATION

Secretary of the Interior
Qualified Archaeologist

Kate Hannah, MA | Laboratory Lead (ESA)

Kate is an archaeologist and collections management specialist with over nine years of experience. She has managed archaeological materials in a variety of settings from field survey, to laboratory processing, to curation of museum collections. She has experience in pedestrian and subsurface surveys, site testing and data recovery efforts, and understands the life history of archaeological collections from recovery during field work to accession at a qualified curation facility. Kate has been responsible for the various aspects of collection management including artifact intake, cleaning, cataloging, records management, and preparation of collections for permanent curation at the Burke Museum and other regional repositories.



Relevant Project Experience

Chehalis Basin Flood Damage Reduction Project | Chehalis, WA | Washington State Department of Ecology (Ecology) (2022 - 2023)

Collections Manager and Researcher. Ecology prepared a programmatic EIS to evaluate strategies to reduce damages from floods and restore aquatic species habitat in the Chehalis Basin through an integrated program in the floodplain of the Chehalis River and tributaries. Kate prepared all collections and associated records for curation and conducted ethnographic and historic archival research. ESA performed a cultural resources survey of the 1,400-acre APE for the dam-based flood retention alternative. ESA revisited five archaeological sites and identified 13 new cultural resources, consisting of historic, precontact, and component sites. ESA conducted archaeological testing at eight sites to assess their NRHP-eligibility.

Van Gasken Site Park Final Design | Des Moines, WA | City of Des Moines (2021 - 2023)

Collections Management. ESA investigated an inadvertent discovery at the former Van Gasken property by performing pedestrian survey, conducting shovel probes, and testing excavation units. Kate cataloged and processed recovered archaeological material, prepared samples for testing and prepared related archives for curation.

Collections Management | Sitka, AK | Sitka National Historical Park (2015 - 2016)

Project Manager and Collections Management Lead. Kate managed a multi-year project to conduct inventory, condition assessment, and reorganization of the Park's archaeological collections consisting of over 12,000 artifacts, from both precontact and historic contexts. These collections were recovered during archaeological excavations that took place in Sitka during the 1970s through the 1990s, which had been stored at an off-site regional repository for decades. Sitka National Historical Park received a grant to return the collections to the Park's care, evaluate their condition, and store them according to current curation standards. This required synthesis of the excavation data to create, complete, and catalog records for each artifact, as well as rehouse the physical materials to provide better protection and preservation. As project manager, Kate directed volunteers and interns in the care and handling of collections. Kate also coordinated with staff at other repositories to reconcile inconsistencies in records and manage the transportation of artifacts.



WHY CHOOSE JOSH?

Josh will leverage his experience at building and managing databases for large and complex environmental and cultural projects to develop, implement, and manage consistent data collection and management procedures from day one.

20 YEARS OF EXPERIENCE

EDUCATION

MAUP, Urban and Regional Planning, 2008
BS, Geography, 2003

CERTIFICATION

Certified GIS Professional, #44040

Josh Ahmann, MAUP, GISP | Data Management Lead (Parametrix)

Josh is a planner and GIS analyst with 20 years of experience supporting cultural resource surveys with customized mapping and data collection products. Josh's support for cultural resource efforts include developing custom GIS-based data structures and associated field and desktop mapping applications for capturing relevant resource information. His work also includes preparing report figures and tables to support resource determinations. Josh has supported multiple large scale cultural and historic resource mapping efforts including Portland Metro's Southwest Corridor Light Rail Extension DEIS / FEIS effort which utilized a custom application developed by Josh to catalog and report on over 500 resources across a 15 miles study area. For both efforts, Josh has worked with state historic preservation offices to ensure the data collected meets their standards and can easily be integrated into statewide databases following the completion of each project.

Relevant Project Experience

Interstate Bridge Program (IBR) | Vancouver, WA | WSDOT and ODOT (2020 - Ongoing)

GIS Lead. This program is an effort to build a replacement for the aging I-5 bridge between Portland, OR, and Vancouver, WA. Josh has developed a custom GIS data collection application for historic resource eligibility and a similar application which maps more than 50 existing cultural resource surveys and allows resource staff to document new findings in the field using a tablet and sub-meter GPS. Josh's innovative techniques for sharing and analyzing project data have been recognized by the GIS software company ESRI as an example of best practices across the architectural/engineering/construction industry. Josh has presented his work at the ESRI Infrastructure Management Conference and ESRI International User Conference.

I-5 Tumwater to Mounts Road | Tacoma, WA | WSDOT NW Region GEC (2018 - 2020)

GIS Lead. The I-5 corridor between Tumwater (Exit 99) and Mounts Road (Exit 116) was the subject of a planning study that identified causes and solutions for excessive congestion. Parametrix conducted engineering and environmental efforts to prepare the corridor for new construction.

Josh and a team of GIS specialists prepared existing conditions data, developed mapping layers for environmental and survey field collection, and built a web mapping portal to enable all project staff to view information without the need for desktop GIS. Using a tablet application setup by Josh's team, staff are cataloging field observations with sub-meter GPS that is immediately visible via a web map accessible to the consultant team and WSDOT staff.

Transit Tunnel Asset Management | Seattle, WA | King County Metro (2017 - 2020)

GIS Lead. Parametrix developed an online repository to streamline transfer of tunnel ownership and maintenance from King County to Sound Transit. Josh and his team developed a web map-based solution that not only allowed for cataloging of documents but also made these materials accessible by clicking on the associated asset in a web map. County and Sound Transit staff can access documents via a map accessible through any web browser. Having the system setup with a GIS background allowed the materials to be backed up and easily transferred.



WHY CHOOSE KELLY?

Kelly brings specialized experience at coordinating and implementing archaeological testing and data recovery efforts in logistically complex environments.

31 YEARS OF EXPERIENCE

EDUCATION

MA, Anthropology, 1997
BA, Archaeology, 1990

CERTIFICATION

Secretary of the Interior Qualified Archaeologist

Kelly Bush, Field Director (ERCI)

Kelly is a Secretary of the Interior Qualified Archaeologist with 30 years of experience managing hundreds of archaeological and historic research projects for transportation, land use development, public infrastructure, and habitat restoration. Kelly has provided cultural resources services for federal agencies such as FERC, Forest Service, Park Service, US Environmental Protection Agency, WSDOT/FHWA, Federal Transit Authority, and US Army Corps of Engineers. She has helped manage human remains and has developed plans that respect this critical resource. In permitting and planning, she has identified areas of risk and provided critical data to design teams that has helped in decision-making by considering the effect of projects on cultural resources.

Relevant Project Experience

Harrington Lagoon Septic System Replacement | Coupeville, WA | City of Coupeville (2020 - 2021)

Project Manager and Principal Investigator. Kelly provided cultural resources services that included obtaining an emergency archaeological monitoring permit for monitoring during septic system installation. She supervised a crew that monitored machine excavation, excavated rapid shovel tests, performed data recovery, screened excavated shell midden, and monitored backfilling using disturbed shell midden adjacent to the original site boundary. She also updated and submitted a DHAP site form.

Jefferson County Memorial Field Lighting Project | Jefferson County, WA | Jefferson County (2018 - 2019)

Project Manager and Principal Investigator. Kelly conducted a post-impact assessment after archaeological material was found during excavation for light pole replacement. She developed mitigation plans that included sediment screening of disturbed deposits removed from the park. In addition to artifacts, ancestral human remains were identified. Kelly and her crew sampled and recorded the deposits, completed archaeological site inventories, and coordinated reburial of remains and artifacts where they would not be disturbed.

Gooseberry Point Pedestrian Pathways Project | Whatcom County, WA | Whatcom County (2014 - 2017)

Project Manager and Principal Investigator. Kelly conducted subsurface archaeological and historic resources survey, analyzed geologic and historic landforms for archaeological sensitivity, wrote cultural resources discipline reports and treatment plans, evaluated NRHP eligibility, and monitored geotechnical investigations. She devised a managements zones with recommendations to efficiently target future monitoring of areas of highest concern to the Lummi Nation and that specified the types of ground disturbance that could proceed in each area. Consultation with the Lummi Nation Cultural Department and Lummi Nation Tribal Historic Preservation Officer revealed that their major concern was discovery of human remains in previously disturbed archaeological material. Kelly designed and implemented an investigation approach throughout the proposed pedestrian corridor that focused on archaeological subsurface investigations with field identification of skeletal material, thus eliminating the chance of missing fragmented human remains in areas of disturbed and intact cultural resources.



Chris Lockwood, PhD, RPA | Field Director (ESA)

Chris 26 years of experience as an archaeologist and geoarchaeologist. He has managed projects ranging in scope from reconnaissance surveys to data recovery to construction monitoring. He has designed fieldwork methodologies, formulated Unanticipated Discovery Plans and Archaeological Resources Monitoring and Treatment Plans, and led large survey, testing, and recovery efforts. Chris uses his dual training in earth sciences and anthropology to understand archaeological site formation processes and interpret cultural landscapes. Chris is a Secretary of the Interior Qualified Archaeologist and also a Registered Professional Archaeologist.

WHY CHOOSE CHRIS?

Chris brings a proven track record of coordinating and implementing archaeological testing and data recovery projects for clients throughout western Washington.

26 YEARS OF EXPERIENCE

EDUCATION

PhD, Anthropology (Archaeology focus), 2009

MA, Anthropology (Archaeology focus), 2002

BA, History, 1991

REGISTRATION

Registered Professional Archaeologist, #2751080

CERTIFICATION

Secretary of the Interior Qualified Archaeologist

Relevant Project Experience

SR 520: I-5 to Medina Bridge Replacement | King County, WA | WSDOT (2013 - 2014)

Principal Investigator. ESA's cultural resources staff conducted field investigations for landscape mitigation trenches on Foster Island. Chris led a team of 20 archaeologists to excavate over 200 units in five weeks. ESA's excavation discovered the first intact precontact site recorded along the shores of Lake Washington. During and after discovery of the site, ESA worked with WSDOT and the affected tribes to further amend the work plan. These rapid changes incorporated project completion and preservation of the archaeological site while maintaining the original project completion date.

Birch Bay Drive and Pedestrian Facility Improvements | Blaine, WA | Whatcom County Public Works (2014 - 2022)

Principal Investigator. ESA supported Whatcom County's construction of a 1.6-mile-long berm to halt beach erosion and protect road infrastructure from flood damage along Birch Bay Drive. The project was subject to Section 106 due to the use of FHWA funds. Since the site is known to have contained Native American villages, ESA crafted a detailed archaeological survey work plan that ensured thorough evaluation of the area. The work plan minimized the risk of disturbing archaeological resources, including human remains.

ESA conducted archaeological survey and testing and reviewed the construction footprint, mitigation areas, staging areas, and borrow pits to permanently sequester construction spoils containing archaeological remains. The studies provided critical data that prompted design changes to avoid dense archaeological deposits and costly and time-consuming data recovery efforts. ESA worked with WSDOT, DAHP, Whatcom County, and the Lummi and Nooksack Tribes to negotiate an MOA and variable-effort archaeological monitoring protocols, and then oversaw construction monitoring.

Lake Hills/NW Lake Sammamish Interceptor Sewer Upgrade Project | Redmond, WA | King County (2014 - Present)

Principal Investigator. Chris is leading cultural resources review for expansion of a 4 mile sewer line capacity project between Bellevue and Redmond. Chris developed project risk criteria, estimated costs associated with discovery and mitigation of cultural resources, evaluated project alternatives, and oversaw completion of a cultural resources existing conditions report. Following selection of a preferred alternative, Chris managed extensive archaeological and historic properties surveys (shovel probing, trenching, and testing) which resulted in the discovery of four previously unrecorded archaeological sites and documentation of 20 buildings older than 50 years. Because the project is unable to avoid precontact archaeological sites, Chris participated in negotiating an MOA, writing archaeological mitigation protocols, and providing concordance review of construction specifications.



WHY CHOOSE NIKI?

Niki brings extensive experience providing oversight for, and implementing, archaeological investigations for transportation agency clients.

14 YEARS OF EXPERIENCE

EDUCATION

MS, Applied Anthropology, 2012

BA, Anthropology, Minor in Art History, 2009

CERTIFICATION

Historic Preservation, 2016

Niki Nickeloff, MA | Field Director (Parametrix)

Niki has 16 years of experience supervising and conducting intensive and reconnaissance field surveys for cultural resource investigations, prehistoric and historic site excavation, site recordation that includes GIS mapping and photography, and artifact recordation and preservation. She leads and performs sub-surface shovel testing on multiple projects every year to examine the potential for prehistoric or historic artifacts. Her experience also includes management of cultural resource projects and background/pre-field research with agencies and county offices. Niki has prepared site forms for historical and archaeological sites, and cultural resource reports according to Section 106 of the National Historic Preservation Act of 1966.

Relevant Project Experience

CL-56s Material Source Expansion | Dubois, ID | Idaho Transportation Department – District 6 (2022)

Principal Investigator. Niki led meetings, managed and conducted fieldwork, and authored the report for the project. The project proposed acquiring additional acreage adjacent to an existing Idaho Transportation Department gravel source. Once cleared, the land would be used for the purpose of mining and processing alluvial gravels for roadway projects. The seasonal Beaver Creek drainage runs through the proposed parcel; therefore, intensive pedestrian survey and archaeological subsurface testing was required.

ID-13, Sally Ann Creek Road Culvert | Idaho County, ID | Idaho Transportation Department – District 2 (2020)

Field Director. Niki assisted with meetings, fieldwork, and report writing. The project proposed to replace a culvert on Sally Ann Creek in a culturally sensitive area. Niki’s tasks consisted of fieldwork (including intensive pedestrian survey and archaeological subsurface testing), recordation of two cultural resources (including an NRHP-eligible archaeological site), and historic research and report writing.

Archaeological Field School | Boise, ID | Boise State University (2011)

Crew Chief. Niki oversaw excavations on the Snake River Plain in southwestern Idaho. She led a team of undergraduate students in the field during excavations, within the classroom for study of methods and research, and in the lab for the handling and curation of artifacts.



WHY CHOOSE TOM?

Tom brings specialized technical expertise at analyzing vertebrate and invertebrate faunal assemblages from across the western United States.

15 YEARS OF EXPERIENCE

EDUCATION

MS, Paleopathology, 2013
BA, Anthropology,

Tom Ostrander, MS | Faunal Analysis Lead (ESA)

Tom is an osteologist and archaeologist with over 15 years of experience. He has served as ESA's Lead Faunal Analyst across California, Oregon, and Washington State for the last nine years, during which he has conducted the faunal analysis in support of over 30 testing and data recovery efforts. Tom is an experienced faunal analyst familiar with the precontact, ethnographic, and historic periods. His knowledge of both human and faunal bone allows Tom to identify fragmentary remains, even in highly disturbed contexts. Tom's work as an osteologist has allowed him to work on a wide variety of sites across regions and time periods. He has developed analysis methods which augment and inform the research framework for sites in question.

Relevant Project Experience

South Magnolia Controlled Sewer Overflow Data Recovery | Seattle, WA | King County (2014 - 2016)

Co-Author and Faunal Analyst. Tom conducted faunal analysis for materials recovered during data recovery along the shores of Smith Cove. The site, an early 20th century shanty town located in the tidal flats of Smith Cove, was discovered during excavation for a 1.5-million-gallon storage tank. Tom designed and conducted faunal analysis studies for recovered mammals, birds, and fish. He conducted speciation for the remains utilizing comparative collections from the Burke Museum and the University of Washington Fisheries collection. Tom identified three distinct cultural groups by the butchering and processing methods used on the bones. He also conducted functional analysis of the tools made in the precontact tradition.

Birch Bay Drive and Pedestrian Facility Project | Whatcom County, WA | Whatcom County Public Works (2014 - 2022)

Field Director and Co-Author. Whatcom County constructed a 1.6-mile-long berm to halt beach erosion within Birch Bay. The project improves pedestrian facilities and reduces flooding by enhancing stormwater drainage. Tom directed an archaeological survey of the APE and identified areas containing sub-surface cultural resources that warranted testing.

Testing showed limited intact deposits in an isolated area while a majority of the site was heavily disturbed. Tom conducted the faunal analysis that included precontact, ethnographic, and historic period contexts. He also conducted a functional analysis of the recovered bone tool assemblage. Tom is now working with the County to produce a Cultural Resources Management Plan for Birch Bay.

Data Recovery of Mission San Luis Obispo | San Luis Obispo, CA | City of San Luis Obispo (2015 - 2020)

Faunal Analyst, Human Osteologist, and Co-Author. ESA conducted data recovery efforts across an entire block of San Luis Obispo in advance of redevelopment. During excavation, ESA archaeologists excavated features relating to the Mission period, European period, and early modern China Town residents who had once occupied the site. Tom conducted an in-depth faunal analysis of 13,000 fragments of recovered faunal remains that were repatriated to the Most Likely Descendants. Tom also conducted faunal analysis of the entire assemblage. Tom conducted standard MNI and NISP calculations for all contexts; he also conducted butcher pattern analysis of Mission period deposits in order to understand the role of Spanish butchering tools and techniques of native California food ways, and meat cut versus meat cost studies to understand the role of cost on consumer behavior and food preferences during the European period.



WHY CHOOSE JUSTIN?

Justin brings specialized technical expertise at analyzing lithic assemblages from middle to late Holocene archaeological sites in western Washington.

9 YEARS OF EXPERIENCE

EDUCATION

MA, Anthropology, 2018
BA, Anthropology, 2011

REGISTRATIONS

Registered Professional Archaeologist, #17444
Secretary of the Interior Qualified Prehistoric Archaeologist

Justin Colón, MA, RPA | Lithic Analysis Lead (ESA)

Justin is a Registered Professional Archaeologist and meets the Secretary of Interior Standards for Prehistoric Archaeology. He has over nine years of experience in archaeology and cultural resource management practices, including analyses of regional lithic artifact types. His background includes predetermination and survey inventory, archaeological and construction monitoring, and consultation projects. Justin has experience preparing field research design plans, archaeological excavation permits, and technical reporting for various regulatory contexts (Section 106 of the NHPA, GEO 21-02, SEPA, and the RCW). He has also led and directed field crews, created report graphics, operated GPS equipment, and processed GIS data.

Relevant Project Experience

Cultural Resources Assessment | Auburn, WA | King County (2021 - 2023)

Project Manager and Lithic Specialist.

Justin managed cultural resources compliance for the first phase of a native vegetation planting project at Flaming Geyser State Park. The survey area included the alluvial floodplain adjacent to the Green River, and resulted in identification and recordation of 45KI1607, a precontact-era lithic scatter, and 45KI1605, a precontact-era archaeological isolate. Justin developed the laboratory analysis methodology and carried out the analysis, inclusive of artifact type and site interpretation.

Archaeological Resources Survey and Testing | Port Angeles, WA | Port of Port Angeles (2017 - 2021)

Lead Archaeologist. Prior to joining ESA, Justin supported cultural resources compliance for the Port of Port Angeles Log Yard Project, which is located directly east of NRHP-listed archaeological site 45CA523, a Klallam (Lower Elwha) village on the southern shores of Port Angeles Bay. Fieldwork was conducted under a DAHP excavation permit, and methods included controlled excavation of 169 test pits seeking to identify extensions of the boundaries of 45CA523 within the log yard property. Justin developed and carried out laboratory analysis methods for the precontact site, which included more than 600 stone artifacts, 900 faunal remains, and 300 historic era artifacts.

Cultural Resources Survey of the Peter's Property Subdivision Project | Clark County, WA | Clark County (2018 - 2019)

Project Manager. Prior to joining ESA, Justin managed cultural resources compliance support for the privately-funded Peter's Property Subdivision project in unincorporated Clark County north of the Camas, Washington city limits. The survey was carried out in order to satisfy regulatory compliance with the Clark County Municipal Code and SEPA. The survey resulted in identifying and recording precontact-era archaeological site 45CL1385, a site whose precontact component is characterized as a moderately density lithic scatter (n=160). The site was identified in both surface and subsurface contexts. Justin developed the field and laboratory analysis methodology, carried out the laboratory analysis and interpretation, and prepared all final reporting. The site has yet to undergo necessary testing to determine NRHP eligibility status.



WHY CHOOSE ALYSON?

Alyson brings specialized technical expertise at identifying human skeletal remains in archaeological assemblages.

20 YEARS OF EXPERIENCE

EDUCATION

MA, Anthropology
1998
BS, Human Biology,
1994

Alyson Rollins, MA | Human Remains Specialist (ERCI)

Alyson is a biological anthropologist with an advanced degree and over 20 years of experience identifying human skeletal remains in an archaeological context. She has identified fragmented or partial elements. She has been the laboratory supervisor for the Semiahmah Project, and an employee of the Lummi Indian Business Council, since 1999. Alyson also served as the Repatriation Coordinator for the Lummi Indian Business Council from 2004 – 2008 and continues to consult with the Lummi Tribal Historic Preservation Office on repatriation issues. She has significant experience consulting with museums and universities regarding NAGPRA issues, as well as in the repatriation of Native American ancestral remains and artifacts.

In 2008, Alyson joined ERCI, specializing in biological anthropology. She has worked to identify highly fragmented human remains and coordinated directly with the State Physical Anthropologist, Dr. Tasa, on dozens of professional projects throughout the Pacific Northwest. She excels at the meticulous work of separating human remains from faunal material in a disturbed archaeological context, and has quickly and accurately identified human elements in the field and from photos sent by field staff.

Relevant Project Experience

Gooseberry Point Pedestrian Pathways Project | Whatcom County, WA | Lummi Public Works Department (2016 - 2017)

Biological Anthropologist. ERCI provided archaeological investigations and monitoring which aimed to construct sidewalks at Gooseberry Point that would increase pedestrian safety. Alyson coordinated and implemented faunal analysis and identified archaeological human remains during the recovery of a disturbed site and burial ground. She also contributed to authored reports.

Clean Water Facility and Windjammer Park Improvements | Oak Harbor, WA | City of Oak Harbor (2013 - 2019)

Laboratory Director and Biological Anthropologist. Coordinated and implemented faunal analysis and identification of archaeological human remains in the field and laboratory. Alyson worked in close consultation with the City, DAHP, State Physical Anthropologist Dr. Tasa during multiple unanticipated discoveries.

Pit Road Recovery Project | Island County, WA | City of Oak Harbor (2012 - 2013)

Lab Director and Biological Anthropologist. ERCI conducted a data recovery program for the recovery of a disturbed site and ancient burial ground for City of Oak Harbor. Coordinated and implemented faunal analysis and identification of archaeological human remains during the recovery of a disturbed site and burial ground. Contributing authored on reports. Successfully implemented numerous, complex scope amendments and received concurrence from the affected tribes, DAHP and the consulting parties.

CRITERIA 4: Firm's Project Management Systems

As prime consultant, Parametrix recognizes the importance of adapting our project management system to meet each client's invoicing and accounting standards, deliverable guidance and procedures, and specific project needs. Parametrix has a long history with WSDOT and we are well-experienced at adapting our systems to meet WSDOT's requirements. Archaeological data recovery has its own unique logistical and technical factors that require special consideration, including coordination and management of direct costs and expenses, fielding and coordinating appropriately qualified field and laboratory staff, and consistent collection and management of large volumes of data. The project management approach outlined below has been customized to reflect both WSDOT's standards and the specific project management considerations associated with archaeological data recovery.

Importantly, PM/PI, Tait Elder, has the authority to obtain the internal resources required to successfully manage and administer the EFLR project's scope of work.

Quality Assurance/Quality Control (QA/QC) Processes

An effective QA/QC process is a key ingredient for successfully completing technically sound deliverables and work products on-schedule and within budget. The goal of our QA/QC process is to produce high-quality, visually appealing, scientifically defensible, and reader-friendly work products deliverables that meet WSDOT and DAHP's technical and reporting standards, as well as the standards outlined in the project's Section 106 agreement documentation.

Strong QA is rooted in the identification of deliverable and performance requirements, and the proactive and systematic development of procedures and protocols to meet these requirements. Our QA process begins with developing clear project objectives, scopes of work, deliverables, and timelines in close coordination with our clients. Our proposed project manager, Tait Elder, will work closely with WSDOT and key staff from the Parametrix team to establish these items for the EFLR project. Once NTP is received, Tait will work with the Parametrix team key staff to develop a detailed project work plan outlining the key procedures and protocols to follow during implementation of the EFLR project and will provide a draft of the work plan to WSDOT for review and comment. Specific details about the contents of the work plan can be found in **Criteria 5: Project Delivery Approach**. Concurrently, the Parametrix team key staff will coordinate to develop a comprehensive, relational database with associated data entry forms to facilitate the consistent collection of field and laboratory data. Additionally, prior to development of the work plan, summary of fieldwork findings, and technical report, Parametrix's PM/PI, Tait Elder, will develop the structure and format of each document.

For archaeological testing and data recovery projects, there are two broad types of QC to consider. For field and laboratory work, QC will initially be implemented at the end of each day by Parametrix team field and laboratory directors who review the contents of data forms to make sure all fields have been filled in and entered correctly, and the provenance of the data is accurate. Once all of the necessary information has been collected from the field and laboratory analysis, the field and laboratory directors, as well as Tait will back-check the data for any errors or omissions.

The early stages of QC for technical documentation will be implemented during development of each deliverable. PM/PI, Tait Elder, will hold periodic check-ins with report authors to review content and make sure the content aligns with its data requirements and objectives. Once completed, the draft work plan, summary of fieldwork findings, and technical report will undergo review by the Parametrix team’s technical advisor, Stacy Bumback, one additional Parametrix team senior archaeologist, and professional editorial staff. Once any revisions associated with this review are completed, the revised documents will be provided to Tait for final review before submission to WSDOT. If WSDOT provides comments, the Parametrix team will prepare the necessary revisions and document responses and revisions related to each comment in a Microsoft Excel table. If the revised document meets WSDOT’s approval, it will then be finalized. Final documents associated response tables will be provided to WSDOT.

Scope, Budget, and Scheduling

Accurate and realistic work planning and estimating are the foundation of developing predictable and achievable schedules and budgets. As indicated previously, Tait will work with the WSDOT project team to establish quantities, durations, costs, and project milestones for the EFLR project. Once the Parametrix team and WSDOT staff agree to a scope of work and budget and WSDOT provides NTP, Parametrix will enter project tasks, budgets, and schedule information to our financial software – BST Enterprise.

BST Enterprise has the capacity to provide budget and schedule forecasts and monitor actual versus planned budget performance. Based on our familiarity with WSDOT projects, we recognize that we will need to provide progress reports in a format identified by WSDOT with our monthly invoices. Each month, Tait will review project data, including labor and expense charges, with each task lead and update the project’s Estimate-to-Complete (ETC) forecast. Any budget variances will be discussed with the task lead and a plan for recovery, if necessary, will be implemented.

As part of the monthly progress review and reporting, a detailed invoice showing earned value will be prepared and sent to the WSDOT project manager for review and approval. Any issues or changes that affect the scope or budget will be discussed with the WSDOT project manager in advance, tracked in a change log, and noted in the progress report. Notably, Tait has successfully used the process outlined above recently on the Waste Management East Wenatchee landfill project, Waste Management Adams County Landfill Inadvertent Discovery Support project, and SR 520 Bridge Replacement and HOV Program cultural resources support task order.

Tait will monitor work progress on a weekly basis though a check-in meeting with the key Parametrix team staff. Based on information obtained during these meetings, Tait will identify any issues and action items and share them with WSDOT as needed.



ESA houses a customized, climate controlled, secure archaeological materials analysis and curation laboratory, outfitted with requisite equipment and supplies.

Internal Project Team Communication

Tait is experienced in fostering focused and productive interactions with internal team staff, including subconsultants, to meet his client’s objectives. As evidenced in our response under **Criteria 1: Qualifications/Expertise of Firms on the Team**, Tait brings extensive experience communicating and coordinating with ESA and ERCI staff to deliver cultural resources services. To facilitate the internal team communication necessary to be responsive to your needs and adjust to unanticipated issues as they arise, Tait will hold weekly meetings with key Parametrix team staff to discuss project status, key issues, resource allocation, and critical path issues. For collaborating on workload and deliverables, the Parametrix team will maintain a project-specific shared and secure SharePoint site for all written deliverables and database, and a shared and secured ArcGIS Online site. Both the SharePoint and ArcGIS Online sites will be made available to designated project team members – including Parametrix team staff and key WSDOT project team staff.

Additional details relating to internal project team communication and decision-making in instances where there might be disagreement within the project team are provided in our response to **Criteria 5: Project Delivery Approach**.

Client and Stakeholder Interaction

We know the importance of clear and consistent client interaction, and its strong relationship to successful project outcomes. As indicated earlier in this section, if selected, Tait will work closely with the WSDOT project team to establish scope of work and level-of-effort. Following NTP, Tait will set-up a project kick-off meeting to develop a work plan, begin coordinating property access, and discuss the structure and content of key technical deliverables. Tait commits to providing the WSDOT project team with weekly status updates on pre-fieldwork preparations and field and laboratory analysis, as well as during the reporting process. In instances where potential schedule- or budget-affecting issues are identified, Tait will reach out to the WSDOT project team immediately to make them aware of the issue, propose options, and arrange a coordination discussion. If WSDOT believes it to be beneficial for the Parametrix team to participate in stakeholder interaction, Tait will work with the WSDOT project team to identify the necessary type and level of appropriate stakeholder interactions. Parametrix staff are experienced at documenting, tracking, and coordinating responses to public comments using Microsoft Excel.

Additional details relating to client and stakeholder interaction are provided in our response to **Criteria 5: Project Delivery Approach**.



Parametrix completed excavation of 10 hearth features and 100s of artifacts, and provided extensive geomorphologic analysis in support of a roadway widening project in north central New Mexico.

CRITERIA 5: Project Delivery Approach

This section outlines some of the key elements for how the Parametrix team plans to successfully deliver the projects archaeological data recovery and reporting on-schedule and within budget. We recognize that successful delivery on archaeological data recovery requires more than excellent technical qualifications. It also requires the thoughtful application of logistical and planning expertise. Below, we highlight our approaches to providing practical and field-tested archaeological project delivery to meet the EFLR project's archaeological obligations.

Work Plan Development

The overarching purpose of a work plan is to document desired project outcomes, identify key decision-makers, outline any procedures and protocols that need to be followed as the project progresses, describe key steps and deliverables that need to be completed to achieve the desired outcome, and outline the desired schedule with key critical paths and milestones identified. This is done so that project delivery can be accomplished in a consistent, repeatable, and defensible way. This is particularly important for archaeological data recovery projects, which must be accomplished in accordance with federal regulations, Section 106 agreement documentation, and archaeological data recovery plans.

For the EFLR project, PM/PI Tait Elder develop the work plan with input from the WSDOT project team. Based on his previous experience developing work plans for similar cultural resources projects, he has identified the following key logistical and scheduling issues to consider for efficient project implementation. These issues include:

- **Procedures and content for weekly progress reporting** – including recurrence intervals, the types of information that WSDOT would like to receive, and whether the WSDOT project team would prefer to receive project update information via an ArcGIS online account.
- **Procedures for coordinating with Native American staff** – including notification protocols to make sure the jobsite and archaeological laboratory are accessible for Native American staff.
- **Health and safety information** - including directions to the nearest hospital and procedures for slips, trips, falls, and near-misses.

- **Consultant and agency responsibilities** – including a table outlining roles and responsibilities for the consultant and WSDOT as summarized in the work breakdown structure later in this section.
- **Project schedule** – including key project milestones and deliverables.
- **Outline** for the contents to be provided in the summary of field findings and in the archaeological data recovery technical report.

Upon NTP, Tait will coordinate a project kick-off meeting with the WSDOT project team to discuss these issues, and any other considerations that WSDOT feels should be included in the work plan. Based on feedback from the WSDOT team, Tait will review the Section 106 agreement document and archaeological data recovery plan and prepare the project work plan in accordance with any procedures and protocols outlined in these documents. Upon completion, Tait will provide the work plan to the WSDOT team for review and integrate the team's edits and comments into the final work plan.

We anticipate that the key contingencies for this project are those that could result in schedule or budget changes. Examples of key contingencies include delays in negotiating field access, unexpectedly poor field conditions, and unexpected archaeological conditions (e.g., denser or more diffuse archaeological deposits than anticipated). Ultimately, the best way to recognize and accommodate these instances is to track work progress and field conditions carefully, report them to the WSDOT team during weekly progress reports as soon as they are apparent, propose approaches to accommodate for these conditions through staffing adjustments and/or adjusting deliverable schedules, and promptly implementing these approaches.

Resolving Issues Amongst Team, Client, and Stakeholders

We recognize that it will be our responsibility to support WSDOT in meeting its cultural resources obligations on this project, and that WSDOT is the ultimate authority on its obligations. Our role on will be to implement archaeological technical studies in accordance with the project's Section 106 agreement document and archaeological data recovery plan, and to advise WSDOT in archaeological technical matters. In the rare instances where we have specific technical concerns that we feel put WSDOT and its interests at risk, we will make reasonable and efficient effort to explain the issue and potential risks. If WSDOT determines the issues and risks are of negligible concern and want to proceed as initially planned, we will defer to WSDOT's judgment and continue providing technical services as directed.

While we do not anticipate disagreement amongst the Parametrix team, we will take key steps to minimize the risk of this occurring. These steps include proactively building clear scopes of work and work plans, developing a workload distribution plan, coordinating to have a shared understanding of our role in support of WSDOT and its archaeological obligations, and having regular Parametrix team leadership check-ins to discuss technical and logistical issues. If there is disagreement about how to implement a specific method or analysis, the Parametrix leadership team will discuss the issue and weight the best approach with consideration to WSDOT's needs and interests. If the team cannot come to an agreement, PM/PI Tait Elder will make an informed decision for how to move forward and will document the decision and acknowledge dissenting perspectives.

The Parametrix team recognizes that we do not have the authority to voice disagreement with stakeholders on issues related to WSDOT's regulatory or agreement-based obligations. If a stakeholder disagrees with a specific technical approach, data, or project implementation, our PM/PI will relay the issue to the WSDOT project team. We will either work directly with the stakeholder to resolve the issue within the confines of the agreed-upon technical approach or support WSDOT to resolve the issue if WSDOT determines the issue requires their participation.

Although we consider this to be unlikely, if the issue is related to the conduct of specific personnel, our PM/PI will document the issue, notify WSDOT, and if the issue was primarily caused by individual consultant staff, remove them from the project.

Work Breakdown Structure

The Parametrix team recognizes that WSDOT is selecting a consultant team to implement archaeological data recovery and document the findings of the archaeological data recovery effort in accordance with the project's Section 106 agreement document and archaeological data recovery plan. To provide WSDOT the support it needs and alleviate the load on the WSDOT cultural resources technical staff, the selected consultant must take the lead on work elements that are not required by agreement or regulation to be led by WSDOT staff directly.

While specific work elements that the Parametrix team will lead will be established in the project work plan, we anticipate that we will be responsible for:

- **Providing** technical staff with the relevant and appropriate qualifications to complete the requested archaeological services;
- **Using** key staff's technical expertise and judgment to implement technical studies in accordance with the archaeological data recovery plan;
- **Developing** a project work plan;
- **Planning, coordinating, and implementing** the archaeological data recovery and laboratory analysis efforts, including the procurement of mechanical excavation equipment and vendor services for special studies;
- **Providing** weekly status updates to the WSDOT project team;
- **Coordinating** directly with Native American representatives for access to the data recovery excavations and archaeological laboratory while work is being conducted; and
- **Documenting** the findings of the data recovery and laboratory analysis in the summary of findings and archaeological data recovery technical report.

We anticipate that WSDOT will be responsible for:

- Formal Section 106 consultation with Native American tribes;
- Assisting with providing right-of-entry to the project site;
- Reviewing work products;
- Facilitating consulting party review of work products; and
- Submitting the final archaeological data recovery technical report to DAHP and consulting parties.

Key Issues and Critical Milestones

The Parametrix team recognizes that field investigations for archaeological data recovery must be completed before the project can move to construction. The technical work and deliverables for the archaeological data recovery must also meet the conditions outlined in the project’s Section 106 agreement document and archaeological data recovery plan and adhere to WSDOT, DAHP, and the affected tribes technical adequacy requirements for cultural resources technical documentation. Currently, WSDOT anticipates the fieldwork will require approximately three months to complete, and this work may need to occur over two field seasons to avoid the rainy season. WSDOT also anticipates that artifact analysis will require up to nine months and reporting will require an additional nine months. Notably, all field and laboratory work must be completed with Native American participation and involvement. The Parametrix team has identified the following key issues to consider and address in our approach to supporting the projects archaeological obligations.

- **Limiting Fieldwork to One Field Season:** The RFQ notes that fieldwork is anticipated to occur over three months and may need to be divided into two field seasons to account for poor excavation conditions in the late fall, winter, and early spring. Although the Parametrix team is committed to delivering the project’s fieldwork needs regardless of whether it occurs over one or two field seasons, we strongly recommend prioritizing completion of field investigations in a single field season.

This is because dividing the fieldwork over two field seasons increases the risk of intra-fieldwork vandalism, erosion damage, consulting party leadership changes, and duplicative efforts associated with field mobilization and artifact analysis. To negate these risks, the Parametrix team proposes to assemble a large enough field crew to definitively complete archaeological fieldwork during the summer and early fall of 2023, prior to the rainy season.

- **Staff Capacity:** WSDOT anticipates that data recovery will require approximately 311 cubic meters of manual excavation and that this level-of-effort will require three months to complete. WSDOT also anticipates this work may need to occur over two field seasons to accommodate for poor excavation conditions during the late fall, winter, and early spring. As indicated above, the Parametrix team proposes to complete all fieldwork during the summer and early fall of 2023. To accomplish this, we commit to **(1)** mobilizing to prepare for and complete the fieldwork immediately upon NTP, and **(2)** fielding a team of at least ten archaeologists per field session and performing field sessions back-to-back to complete the work in a single field season. Additionally, we will accomplish this by relying primarily on staff who are already on-the-books. This strategy will allow us to staff the fieldwork immediately and will demonstrate that our labor pool consists of trusted, collaborative, and field-tested archaeologists who will prioritize the project and deliver high quality archaeological support.
- **Data Consistency and Quality:** This project will require the selected consultant to coordinate many staff to collect a large amount of data in a short period of time. This environment introduces the possibility of data recording inconsistency, data loss, and lack of cohesion between datasets. The Parametrix team proposes to reduce the risk of these items by **(1)** primarily relying on trusted and field-tested archaeologists who are already on-the-books, **(2)** developing a comprehensive, secure, project-specific relational database, and **(3)** using digital tablets in the field and laboratory to complete series of field and laboratory analysis forms that upload directly into the database in real time or at the end of each day if cellular access is not available.

TASK	ASSUMES ONE FIELD SEASON																							
	2023						2024												2025					
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Weekly Status Updates	ongoing task throughout contract duration																							
Kick-off Meeting ¹	█																							
Work Plan ²	█																							
WSDOT Review ³	█																							
Site Preparation ⁴		█	█																					
Fieldwork ⁵		█	█	█																				
Artifact Processing ⁶		█	█	█																				
Summary of Findings ⁷							█																	
Laboratory Processing ⁸		█	█	█																				
Laboratory Analysis ⁹				█	█	█	█	█	█	█	█	█	█	█										
Special Studies Samples ¹⁰						█																		
Draft Technical Report ¹¹						█	█					█	█	█	█	█	█	█	█	█				
Agency Review ¹²																		█	█					
Final Technical Report ¹³																				█	█			

TASK	ASSUMES TWO FIELD SEASONS																							
	2023						2024												2025					
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Weekly Status Updates	ongoing task throughout contract duration																							
Kick-off Meeting ¹	█																							
Work Plan ²	█																							
WSDOT Review ³	█																							
Site Preparation ⁴		█	█									█												
Fieldwork ⁵		█	█									█	█											
Artifact Processing ⁶		█	█									█	█											
Summary of Findings ⁷						█											█							
Laboratory Analysis ⁸				█	█	█	█	█	█	█	█	█	█	█			█	█						
Special Studies Samples ⁹						█											█							
Draft Technical Report ¹⁰						█													█	█	█			
Agency Review ¹¹																					█	█		
Final Technical Report ¹²																							█	█

Above, we depict archaeological data recovery schedules. Although the Parametrix team recommends completing the archaeological fieldwork in a single field season, these graphics illustrate the project schedule for both a single field season and two field seasons.

We have identified twelve critical project milestones and the sequence and timeframes during which they must be accomplished to complete the project within two years. These milestones include:

- 1. Kick-Off Meeting:** Within two business days of NTP, PM/PI Tait Elder will organize a kick-off meeting with key consultant and WSDOT staff to coordinate on logistics, work plan details, and communication procedures and protocols. This information will be used to develop the work plan and to initiate outreach for any right-of-entry and utility locate requirements.

- 2. Consultant Work Plan Development:** The Parametrix team will author a work plan that includes procedures and key content for weekly progress reporting, coordinating with Native American staff, health and safety information (including directions to the nearest hospital), consultant and agency responsibilities, schedule, and outlines for the summary of field findings and the archaeological data recovery reports. We will provide the work plan to WSDOT for review within five business days of project kick-off.
- 3. WSDOT Work Plan Review:** The Parametrix team anticipates that WSDOT will require up to ten business days to review the work plan.

4. **Pre-Fieldwork Site Preparation:** Once WSDOT has approved the work plan, our project coordinator, Terance Trent, will begin preparing the site. Preparation activities will include erecting fencing in key excavation areas, placing a mobile secured storage and processing facility, placing restrooms, locating utilities, ordering mechanical excavation equipment, and scheduling field crews. This task will require up to five business days to complete.
5. **Fieldwork:** Once the necessary right-of-entry and utility locates are obtained and the project site has been prepared for fieldwork, we will mobilize staff. WSDOT anticipates the fieldwork will require 90 days to complete and notes that fieldwork may need to be completed in two field sessions.
6. **Artifact Processing:** The Parametrix team proposes to begin processing artifacts in a mobile field laboratory before sending them to in-state archaeology laboratories so that we can perform quality control checks on the collections and field notes while the project is still fresh in staff's memory and to clean and sort artifacts so they can be efficiently analyzed at the in-state archaeological laboratories. Artifact processing will occur concurrently with fieldwork.
7. **Summary of Findings:** Within 90 days of fieldwork completion (whether one or two field seasons), the Parametrix team will author fieldwork findings that describe total volume excavated, the number and types of artifacts and archaeological features collected, preliminary stratigraphic and spatial analysis information, and samples proposed for special studies.
8. **Laboratory Analysis:** As fieldwork nears completion, the Parametrix team will analyze artifacts, features, and sediment samples. WSDOT anticipates this effort will require 270 days to complete. If fieldwork needs to be completed over two seasons, the Parametrix team will analyze all artifacts from the first field season prior to commencement of the second field season.
9. **Special Study Selection:** Following initial sorting and analysis, within 90 days of fieldwork completion the Parametrix team will select a series of artifacts, feature, and/or sediment samples for additional special studies. We will describe, outline the analytical value of, and propose the study for each item in the project's summary of findings.
10. **Draft Technical Report:** WSDOT anticipates the draft technical report will be completed up to 270 days after laboratory analysis has been completed. Following internal technical and quality control review, the Parametrix team will submit the draft report to WSDOT for review and for distribution to other reviewing parties.
11. **Agency Review:** The Parametrix team anticipates that WSDOT will review the draft technical report and provide it to other reviewing parties. We anticipate that agency review will require up to 60 days to complete.
12. **Final Technical Report:** Following receipt of agency comments from WSDOT, the Parametrix team will update the technical report. We anticipate that revising the technical report may require up to 60 days. We will provide the final technical report to WSDOT for distribution to reviewing agencies and key consulting parties.

