ATTACHMENT A PROPOSAL COVER SHEET

RFP# 25134; Oregon Department of Transportation

This Proposal is for: PE/Design Services ☐, (OR) Both PE/Design and CA/CEI Services ☒

Legal Name of Firm as provided to IRS: OBEC Consulting Engineers, Inc.; an Oregon Corporation

☒ Corporation ☐ Professional Corporation ☐ Ltd. Liability Company ☐ Partnership or Joint Venture
☐ Limited Partnership ☐ Ltd. Liability Partnership ☐ Sole Proprietorship ☐ Other _____

Mailing Address 920 Country Club Road, Ste 100B
Eugene, OR 97401

Type name of primary Contact for this Proposal Lawrence, H. Fox, PE
Email address lfox@obec.com
Telephone 541.683.6090 Fax 541.683.6576
Type name of person(s) authorized to sign Contract/Price Agreement: Lawrence H. Fox, PE and Guy N. Hakanson, PE

"PASS/FAIL" - PROPOSAL SUBMISSION CHECKLIST (for Proposer use)

☒ Submission Deadline Date and Time met
☒ Proposal Does Not Include Conditional Language about Terms and Conditions

"REQUIRED" ITEMS – PROPOSAL SUBMISSION CHECKLIST (for Proposer use)

☒ Proposal Cover Sheet Included and authorized original signature obtained
☒ Minimum Qualifications met and indicated on Proposal Cover Sheet
☒ Proposal Format and Page Length Requirements met
☒ Correct number of Proposals included along with CD for electronic submittals
☒ Reference Questionnaire forms
☒ Subcontractor/Supplier Solicitation and Utilization Form, completed and signed
☒ Checked off appropriate Conflict of Interest Disclosure certification on Proposal Coversheet (and included COI Disclosure Form(s) if there are required disclosures).

RESPONSES TO MINIMUM QUALIFICATIONS (See RFP Section 1.5.2)

➢ Registered Professional Engineer

Proposers must provide information below for at least one Registered Civil Engineer intending to perform civil engineering services under the Contract/Price Agreement.

Name	Registration Number	Jurisdiction of Registration
Jerry Lane, PE	12295	Oregon
Bob Goodrich, PE	69466	Oregon

➢ Registered Professional Land Surveyor (PLS)

Proposers must provide information below for at least one PLS intending to perform surveying services under the Contract/Price Agreement.

Name	Registration Number	Jurisdiction of Registration
Jim Colton, PLS	58756	Oregon
Bret Elithorp, PLS	63148	Oregon

CERTIFICATIONS. By signature below, the undersigned Authorized Representative on behalf of Proposer certifies that:

1. Agency shall not be liable for: a) any claims or be subject to any defenses asserted by Proposer based upon, resulting from, or related to, Proposer's failure to comprehend all requirements of the

RFP; or b) any expenses incurred by Proposer in either preparing and submitting its Proposal, or in participating in the proposal evaluation/selection or Contract/Price Agreement negotiation process, if any.

2. Neither the Proposer, a major partner or a major shareholder, (defined as a partner or shareholder owning 10% or more of your firm), a major subcontractor (defined as receiving 10% or more of the total Contract/Price Agreement amount), nor any principal officer of a Proposer, major partner, a major shareholder or major subcontractor:

a) is presently debarred, suspended, disqualified, proposed for debarment or declared ineligible for the award of contracts by any federal agency or agency of the State of Oregon, and is not listed on GSA's Excluded Parties List System which is available at **http://epls.gov.**

b) has, within the last 3-year period, been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of federal or state antitrust statutes relating to the submission of bids or Proposals; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property? {A "principal officer of a Proposer, major partner or major subcontractor," means an officer, director, owner, or partner and any person having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions)}.

3. Proposer has made all required **Conflict of Interest (COI) disclosures**, if any.
The ODOT COI Guidelines and COI Disclosure Form are available at the following link: **http://www.oregon.gov/ODOT/CS/OPO/AE.shtml#Forms** (under "Misc. Procurement Related Forms")

(Check one of the following two certifications as applicable)

☐ Proposer understands and has provided to all Associates (which includes subcontractors) the COI Guidelines and COI Disclosure Form. Proposer and, to the best of the undersigned's information, knowledge and belief**,** Proposer's Associates (as defined in the COI Guidelines) are in conformance with the COI Guidelines, have no employees that were employed by ODOT within the last one-year period, and have no conflicts of interest or other disclosures required per the COI Guidelines. The response to each question on the COI Disclosure Form was "no".

☒ Proposer understands and has provided to all Associates (which includes subcontractors) the COI Guidelines and COI Disclosure Form. Proposer and, to the best of the undersigned's information, knowledge and belief, all Associates (as defined in the COI Guidelines) have provided on the COI Disclosure Form(s) submitted with this Proposal all disclosures required per the ODOT COI Guidelines.

4. Proposer has available (and can furnish to Agency upon request) the appropriate financial, material, equipment, facility and personnel resources and expertise, or ability to obtain the resources and expertise, necessary to indicate the capability of the Proposer to meet all contractual responsibilities.

5. Proposer recognizes this is a public document open to public inspection. Any portion(s) of the Proposal that Proposer considers exempt from disclosure under Oregon Public Records Law is/are clearly designated in the Proposal and listed on a separate sheet attached to this Proposal Cover Sheet with justification and citation to the authority relied upon.

6. Proposer does not discriminate in its employment practices with regard to race, creed, age, religious affiliation, sex, disability, sexual orientation or national origin. Nor has Proposer or will Proposer discriminate against a subcontractor in the awarding of a subcontract because the subcontractor is:

- a minority, women or emerging small business enterprise certified under ORS 200.055, or
- a business enterprise that is owned or controlled by or that employs a disabled veteran, as defined in ORS 408.225.

7. Proposer has an operating policy supporting equal employment opportunity. If proposing firm has 50 or more people, Proposer also has a formal equal opportunity program.

- Does Proposing firm have 50 or more employees? ☒ **Yes,** ☐ **No.**
- Does Proposing firm have a formal equal employment opportunity program? ☒ **Yes,** ☐ **No**

Agency is an equal-employment-opportunity employer and values diversity in its work force. Agency requires its Contractors to have an operating policy as an equal employment opportunity employer. Firms of 50 people or less do not need to have a formal equal employment opportunity program, but shall have an operating policy supporting equal employment opportunity. Firms of 50 people or more shall also have a formal equal employment opportunity program.

8. The Proposal submitted is in response to the specific language contained in the RFP, and Proposer has made no assumptions based upon either (a) verbal or written statements not contained in the RFP, or (b) any previously-issued RFP, if any.

9. Proposer, acting through its authorized representative, has read and understands the RFP instructions, specifications, and terms and conditions contained within the RFP (including the sample contract) and all Addenda, if any. Failure to provide information required by the RFP may ultimately result in rejection of the Proposal.

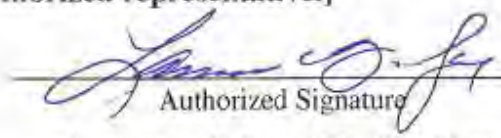
10. Proposer agrees to and shall comply with, all requirements, specifications and terms and conditions contained within the RFP (including the sample contract) and all Addenda, if any.

11. Proposer and Proposer's employees and agents are not included on the list entitled "Specially Designated Nationals and Blocked Persons" maintained by the Office of Foreign Assets Control of the United States Department of the Treasury and currently found at http://www.treas.gov/offices/enforcement/ofac/sdn/t11sdn.pdf.

12. All contents of the Proposal (including any other forms or documentation, if required under this RFP) and this Proposal Cover Sheet, are truthful and accurate and have been prepared independently from all other Proposers, and without collusion, fraud, or other dishonesty. **False Claims.** Proposer understands that any statement or representation it makes, in response to this solicitation, if determined to be false or fraudulent, a misrepresentation, or inaccurate because of the omission of material information could result in a "claim" {as defined by the Oregon False Claims Act, ORS 180.750(1)}, made under the resulting PA/WOC being a "false claim" {ORS 180.750(2)} subject to the Oregon False Claims Act, ORS 180.750 to 180.785, and to any liabilities or penalties associated with the making of a false claim under that Act.

13. The signatory of this Proposal Cover Sheet is a duly authorized representative of the Proposer, has been authorized by Proposer to make all representations, attestations, and certifications contained in the Proposal document and to execute this Proposal document on behalf of Proposer.

[Note: Any alterations or erasures to the proposal shall be initialed in ink by the undersigned authorized representative.]



Authorized Signature — Date December 12, 2012

Lawrence H. Fox, PE – President

(Print Name and Title)

PE-DESIGN PROPOSAL INDEX

2.2.1 – OBEC'S PROJECT MANAGEMENT..... 1-6

2.2.1.A – Management and Organizational Structure; Office Locations; and Subconsultant Selection, Utilization, and Management

2.2.1.B – Coordinating and Expediting Quality Project Elements and Adjusting Effort Levels

2.2.1.C – Quality Control Procedures & Policies

2.2.1.D – OBEC's Approach to Determining that a Construction Budget Is Insufficient

2.2.2 – OBEC'S COST EFFECTIVENESS..... 7-9

2.2.2.A – Steps to Ensure Cost-Effectiveness

2.2.2.B – Cost Estimating Methods and Ensuring Fair and Reasonable Estimates

2.2.3 – PROJECT TEAM AND QUALIFICATIONS..... 10-12

2.2.3.A – Project Managers' Experience with Similar Interdisciplinary Teams

2.2.3.B – Services Offered and Demonstration of Ability to Perform 51% of Design Phase Services

2.2.3.C – Key Staff Resumes

2.2.5 – REFERENCES FOR RELEVANT EXPERIENCE

Reference Questionnaires Submitted Directly to ODOT

2.2.1.A
(10 points)

*Describe **(i)** Proposer's management and organizational structure, and how that structure aids the delivery of project Services - including chain of command. Describe **(ii)** how subcontractors will be selected for specific WOC assignments, utilized and managed to complete the projects. Include **(iii)** a list or org chart showing key staff of the prime and all subconsultants and their proposed role/discipline for PE-Design Services.*

A(i) Management and organization of the OBEC Team aids the delivery of project services with a concise chain of command (**see *Figure 1***).

By deliberately structuring our teams so that experienced leaders are in a position to manage and mentor discipline leads and project staff we facilitate quality, collaboration, innovation and efficiency while meeting ODOT and Local Agency requirements.

OBEC also integrates Quality Assurance and Quality Control (QA/QC) directly into our chain of command.

This structure provides clear authority and accountability for ensuring the ultimate accuracy of designs – resulting in effective and efficient project services.

FIGURE 1
OBEC's Concise Chain of Command

Principal-in-Charge
(Larry Fox, PE, OBEC President)
- Contract negotiations
- Client satisfaction
- Final work order contract (WOC) QA

PA Contract Manager
(Guy Hakanson, PE, OBEC Vice President)
- Assign Project Manager
- Assemble project-specific teams
- Contract negotiations
- Final WOC QC

Quality Manager
(Jeff Bernardo, PE)
- Review and approve Project Quality Plan
- Auditing of Project Quality Plan

Project Manager
(one of nine highly experienced managers)
- Scoping meeting with ODOT or Local Agency
- Detailed scope of work and budget
- Contract negotiations
- Execute kick-off meeting
- Prepare project schedule and work plan
- Prepare Project Quality Plan (PQP)
- Manage team, scope, schedule, and budget
- Coordinate with ODOT or Local Agency
- Coordinate work elements with discipline leads
- Manage project deliverables
- PQP execution and documentation

Discipline/Team Leads
(both OBEC and subconsultant staff)
- Task management
- Coordination with other disciplines
- Task-specific deliverables
- Cross-discipline and constructability reviews

Project Staff
- Task execution
- Contract document preparation
- Environmental documentation and permits

As the prime consultant, OBEC has successfully delivered more than 380 full-service projects in the last 12 years by maintaining a management structure focused on:

- **Proactive communication and client service**
- **Clear expectations**
- **Interdisciplinary project development approach**
- **Advocating for clients' individual projects and concerns**

In addition to the convenient geographic distribution of OBEC's offices, our team includes 55 highly skilled engineering and support service firms with offices in and near your regional communities to provide state-wide, full-service design expertise for your transportation infrastructure projects (**see *Figure 2***).

Our collective team familiarity with local concerns and regulations as well as established partnerships with local ODOT, county, city, regulatory agency staff and other key stakeholders aids the delivery of project services.

FIGURE 2
Team Organizational Structure – Statewide Full-Service Coverage

(#) number of subconsultant offices | ODOT regional office | OBEC office

✓ Local service | + Service from another region

		PM	Proj. Scoping	Survey	Geotech	Hydraulics	Stormwater	Bridge/Struct.	Civil/Rdwy.	Hazmat	Environ./Permits	PI	ROW	PS&E	Bidding Assist.	Landscape Arch.	Traffic	Utility Coord.
R1	OBEC	✓	✓	✓		✓	✓	✓	✓		✓			✓	✓			✓
	Subs		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
R2	OBEC	✓	✓	✓		✓	✓	✓	✓		✓			✓	✓			✓
	Subs		✓	+	✓	✓	✓	+	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
R3	OBEC	✓	✓	✓		✓	✓	+	✓		+			✓	✓			+
	Subs		✓	+	✓	+	+	✓	✓	✓	✓	+	✓	✓	✓	+	+	+
R4	OBEC	+	+	+		+	+	+	+		+			+	+			+
	Subs		+	✓	✓	✓	✓	✓	✓	✓	✓	+	+	+	+	+	✓	✓
R5	OBEC	+	+	+		+	+	+	+		+			+	+			+
	Subs		+	✓	+	+	+	+	+	✓	+	+	+	+	+	+	+	+

A(ii) Subconsultant selection, utilization and management are key elements of how we build effective and efficient project teams. We select our subconsultant partners in three primary ways: by past experience, referral and by solicitation.

Past Experience: OBEC has a long history working with many subconsultants on our team and have established close working relationships and a history of successful project delivery.

Referral Selection Process: When a public agency or partner recommends a firm based on the quality of their services, we review their qualifications and check in with additional references.

Solicitation Selection Process: Based on specific needs, OBEC periodically initiates a direct solicitation or RFQ to solicit potential subconsultants, who may be shortlisted, interviewed or added to a project team.

Subconsultant Selection Criteria Include:

- **Quality and competence** of past work of the design/discipline lead and staff members.
- **Relevant skills and expertise** delivering services and designs that conform to project requirements.
- **Proven collaboration** with diverse stakeholders, inter-governmental agencies, engineers, and specialty technical staff on similar projects.
- **Familiarity with the client and project area,** and site-specific expertise.
- **Record of effective delivery** within scope, budget and schedule.
- **Qualified DMWESB firms** and individuals typically receive preference.

We value diversity in our workforce and those of all our subconsulting partners. As an involved member of the community, we are committed to advancing the interests of DMWESB firms.

In November, 2012, OBEC issued an RFQ to solicit, pre-qualify and select skilled DMWESB firms with the goal of exceeding ODOT's new DMWESB requirements.

Our team includes 20 DMWESB teaming partners.

Utilization: Each subconsultant partner is assigned project tasks in line with their expertise, licensing, and capacity. Our goal is to deliver a high-quality project while also supporting the development of DMWESB firms through on-the-job mentoring and training focused on ODOT policies and procedures.

Management: All subconsultant partners are managed as a direct part of the OBEC team. With an established scope, schedule, and budget, they are an integrated part of our well-structured project delivery process. This includes full participation in the proven OBEC Quality Management Plan (QMP) that we implement on each project.

A(iii) OBEC has selected a strong team of regional experts to provide ODOT and Local Agencies with comprehensive local preliminary engineering services. **Our organizational chart** (Figure 3) reflects personnel assigned to this contract for each discipline, including subconsultant firms for key supporting tasks.

FIGURE 3

2.2.1.B

(10 points)

*Describe **(i)** Proposer's methods of coordinating and expediting all elements of projects to meet delivery schedules without sacrificing quality. Describe **(ii)** Proposer's flexibility and approach to making adjustments to schedules or staffing in order to meet a schedule.*

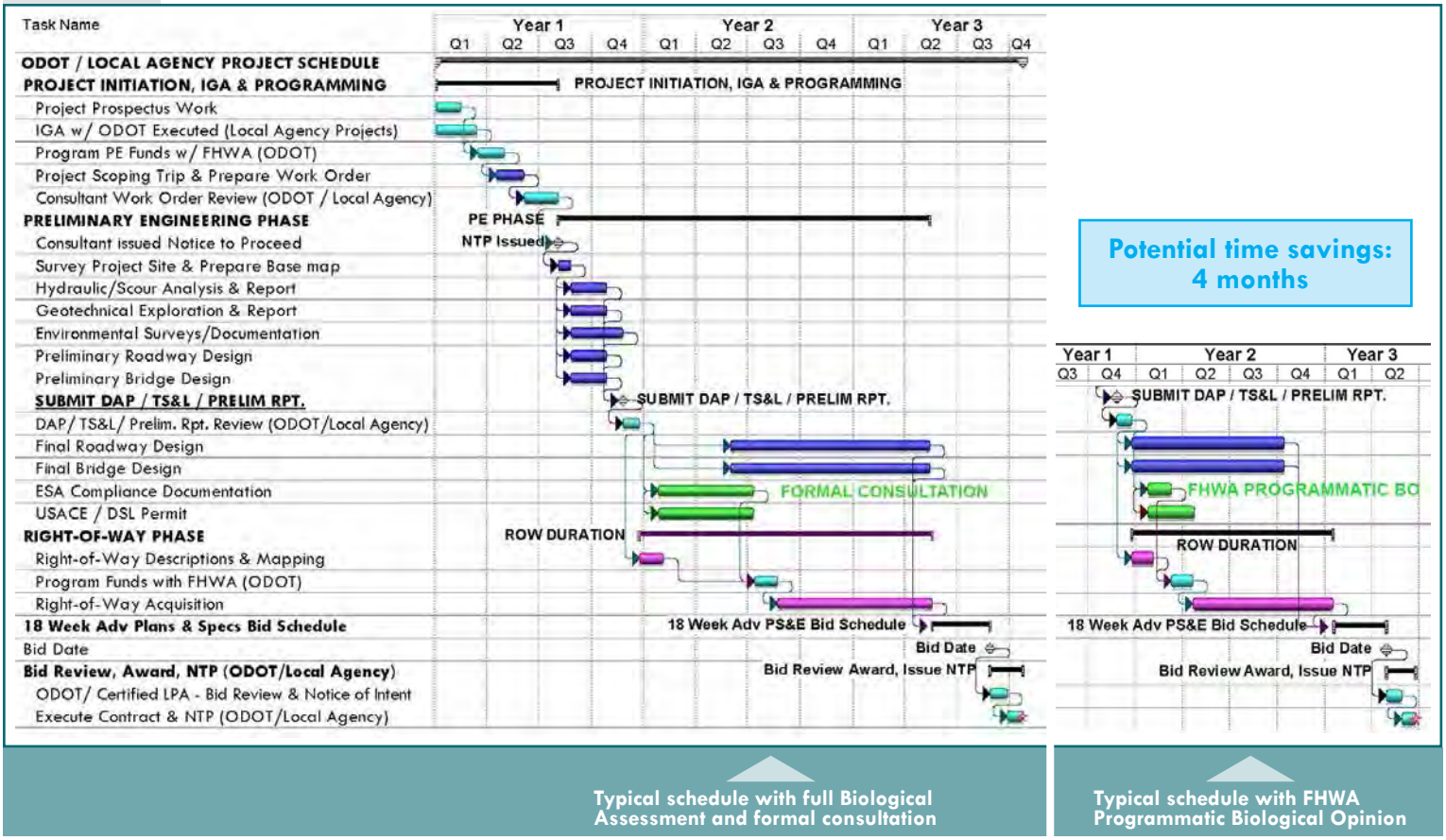
B(i) Our reliable approach to high-quality results, especially when expediting projects to meet schedules, is founded on detailed and proactive schedule control. Our Project Managers understand the ODOT and Local Agency Program project delivery process and are skilled at using the key milestones as both schedule and quality control tools.

Figure 4 shows a typical ODOT or Local Agency project schedule that meets all ODOT-required major tasks and milestones and critical path activities such as permitting, right-of-way, and utility coordination.

Expedited project start-up: Immediately upon receiving NTP, the Project Manager will create and maintain a schedule reflecting the final scope of work. OBEC uses these key strategies for confident schedule control:

- **Conduct a site visit with the owner and team** to solidify understanding of scope, goals, and issues.
- **Confer with ODOT or the Local Agency** and develop contingency tasks to ensure timely progress.
- **Lead rapid alternatives analysis** to quickly present viable options and advance the project to DAP.
- **Monitor and maintain progress** by regularly updating the task and milestone schedule.
- **Anticipate and proactively deal with issues that may arise** to ensure obstacles are circumvented.

FIGURE 4



Typical schedule with full Biological Assessment and formal consultation

Typical schedule with FHWA Programmatic Biological Opinion

Delivering quality while expediting project elements: OBEC's approach of integrating the time, resources, and milestones for the QA/QC process directly into our project schedules helps ensure that we deliver quality under tight deadlines. Our methods include:

- **Proven leaders** who effectively manage critical path milestones and full-service teams.
- **Proactive communication** with resource and regulatory agencies, utilities, and key stakeholders.
- **Coordination of any unique specifications** and integrating them into the QA/QC plan.
- **Enlisting senior CE staff** to conduct constructability and design reviews.
- **Ensuring environmental permits are in place** and right-of-way is certified 10 weeks prior to bid.
- **Enforcing a proven QA/QC policy** throughout each project and including designated independent checkers and QA reviewers in the QC plan as well as internal QC audits.

B(ii) We have several well-established approaches to provide flexibility when adjusting schedules and staffing to meet evolving project needs. OBEC's approach to managing ODOT and Local Agency Program projects has been honed by decades of effort and experience – more than 1,800 highway, bridge and transportation projects in Oregon over the past 46 years.

Since1966 we have provided services for hundreds of STIP-funded projects that are the same as those required for this contract. Our approaches include:

- **Carefully configuring teams** to provide skilled, interdisciplinary staff who are assigned for the duration of your project, and adjusting remaining firm-wide staffing assignments as required.
- **Contingency staffing provisions** (including overtime work and additional subconsultant staffing) are integrated into our work plans, enabling us to achieve quality fast-track results.
- **Continuous progress monitoring** by the Project Manager – identifying potential delays or opportunities for acceleration.
- **Schedule evaluation** if additional scope or time is needed, determining available float, ascertaining critical path changes and new completion dates – all discussed with and agreed to by the client.
- **Preparation for accelerating critical path tasks** by identifying them early; developing a strategy to complete them in a timely manner; and closely monitoring and adjusting task execution.
- **Cross-office resource management** supporting rapid adjustment to evolving demands.

Consistent with the need to be available to augment ODOT's and Local Agencies' engineering capabilities, OBEC invests in developing highly competent, experienced engineers and technicians, as well as subconsultant partnerships, ensuring capacity and production readiness, both now and into the future.

Combined OBEC and subconsultant staffing in each discipline is shown in Table 1.

Team members' overall availability to take on additional work assignments in support of your projects is currently 40 to 50 percent through mid-2013 and considerably more beyond.

TABLE 1

INTERDISCIPLINARY STAFFING CAPACITY

Discipline	OBEC	Subs
Architecture	---	14
Bridge/Structural	14	107
Constructability/Bid Assistance	15	1
Cultural/Historical	---	42
Engineering/CADD Technicians	13	53
Environmental/Permitting	3	85
Geotechnical Engineering	---	90
Hydraulics/Scour	2	36
Land Use Planning	---	17
Landscape Architecture	---	39
Project Administrative Support	20	99
Public Involvement	4	12
Right-of-Way	---	22
Roadway/Civil/Drainage	14	67
Specifications	2	18
Surveying/GIS	16	12
Traffic/Illumination	---	116
Utility Coordination/Design	2	20
Total Staff	**105**	**850**

OBEC's dedicated professionals have a "can do" attitude, and our team has significant depth at all staff levels, enabling us to adjust to maintain timely, quality deliverables.

The dynamic nature of project delivery often necessitates rapid adjustments including supplementing staff throughout project lifecycles to ensure timely, effective and economical completion.

Circumstances that may require staff additions to maintain schedules include:	On past projects, OBEC has increased capacity to meet fast-track schedules by:
• Construction schedule requirements. • Design revisions due to unforeseen conditions. • Additional info revealed after preliminary design. • Regulatory agency or permit requirements. • Revisions due to key stakeholder influence.	• Utilizing overtime. • Re-allocating staff workloads. • Adjusting workloads to involve additional staff. • Re-balancing project priorities. • Outsourcing to qualified subconsultants. • Hiring additional staff.

2.2.1.C

(5 points)

Provide a concise summary of Proposer's Quality Control procedures and policies for PE-Design.

OBEC's quality control procedures are designed to provide quality control and quality assurance at every step of project development.

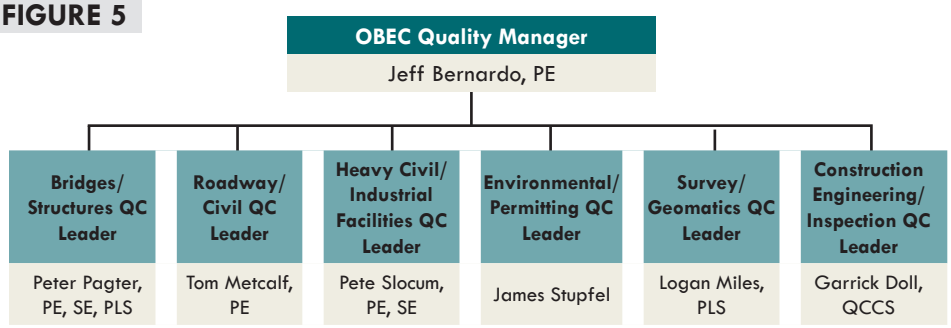
OBEC understands the critical importance of establishing, monitoring, and maintaining a high level of quality throughout the project development process. Our philosophy of ensuring high quality OBEC deliverables has always involved independent quality control (QC) checking by experienced engineers and quality assurance (QA) review of project deliverables by senior level staff.

During OTIA III, OBEC's Quality Management Program resulted in four of the six zero-finding audits in the entire history of the OTIA III Program. This exemplary record demonstrates our commitment to quality.

The OBEC Quality Management Program (QMP) is a comprehensive system of discipline-specific checklists, comment forms and QA/QC procedures that provides complete documentation of the firm's quality control processes for each and every deliverable. OBEC's commitment to quality requires that all employees are trained and fully participate in ensuring the appropriate steps in the OBEC QMP are completed for each project in a timely manner.

OBEC's QMP management and training structure is shown in Figure 5.

FIGURE 5



KEY ELEMENTS OF OBEC'S QMP INCLUDE:

- **Comprehensive Discipline Specific QC reviews** incorporated into schedules, including the time required for internal and external reviews.
- **Independent check and review** implemented for all deliverables per the Project Quality Plan that is coordinated by the Project Manager.
- **Cross-discipline, environmental compliance, design, and constructability reviews** to ensure compatibility among disciplines, and that designs are constructable within permitting constraints.
- **Plans and specifications review checklists** for each discipline and for each major project phase.
- **Reports are reviewed by senior staff** using comment forms that are tracked by the PM to ensure closure of each issue.
- **Full QMP process documentation** including proper close-out and completion by all parties.

PE PHASE – OBEC QA/QC PROCEDURES

The OBEC Project Manager (PM) prepares and manages the Project Quality Plan (PQP) and oversees all QA/QC reviews.

All engineering plans, specifications, and technical reports prepared by OBEC are reviewed by the PM and senior-level staff to ensure consistency

Each OBEC technical team utilizes discipline-specific internal QC checklists.

Independent QC checking of all calculations, plans, quantities, and cost estimates are completed and documented by qualified independent staff at the all phases of the project. This includes skillful use of more than 40 manuals for design and specifications including ODOT, AASHTO, FHWA, and Local Agency documents.

Senior construction personnel perform constructability and design reviews at concept, preliminary, advanced, and final design plan stages.

Computer Aided Design and Drafting (CADD) Group Leaders provide a QA review of project plans at each milestone submittal for consistency with client and OBEC drafting standards.

All project engineering plans and calculations are sealed and signed by the registered professional responsible for the engineering design.

All QA/QC documentation is archived in centralized files.

2.2.1.D
(5 points)

*Describe **(i)** how and when you would determine that a client's total construction budget was insufficient to meet the objectives of a given project and **(ii)** the approach you would use to demonstrate that to the client as early as possible during the PE-Design phase.*

D(i) OBEC's project development process has several assessment points to determine if a construction budget is insufficient to meet project objectives.

Identifying shortfalls in the construction budget early in project development is more important than ever given the current funding challenges. Our project teams routinely utilize several assessment points early in the project development process, including:

- **Pre-proposal meetings** – OBEC project managers often lead independent site visits and client meetings to discuss project goals, stakeholder concerns, and funding opportunities in order to obtain a full understanding of each project.
- **Project kick-off** – The project kick-off meeting is a key opportunity for the entire project team to review the scope, schedule, and budget prior to starting work on each new project. This face-to-face meeting with the client allows the design team to assess project risks, priorities, and timing that could affect overall construction costs.
- **Design reviews** – Per the OBEC Quality Management Program (QMP), senior level staff routinely review concept designs for each project prior to preparation of the DAP, TS&L or preliminary report. This review process is focused on ensuring that each project design satisfies all project goals with the most efficient, readily constructable solution available.

As a project moves from concept review to the DAP phase, the true scale and scope of the project is further developed. Key information about right-of-way, environmental requirements, geotechnical issues and potential utility conflicts that may not have been know during the initial scoping phase become clearer, allowing for a more accurate construction cost estimate to be produced.

While the improved data allows for a better estimate, this phase also provides an opportunity for the design team to shift alignments, change structure types, implement ROW avoidance measures or make other refinements to offset unforeseen challenges and keep the project within the original cost estimate.

D(ii) Clear expectations from the start of the project and ongoing proactive communication are the core of our approach to demonstrating to a client, as early as possible, that a construction budget is insufficient to meet all of the project objectives.

Setting expectations: OBEC's project management system is based on transparency, honesty, and mutual understanding of all project goals. Our project managers establish clear project expectations with our clients and the consultant team starting at the kickoff meeting and continuing throughout design. Expectations that do not fit within budget constraints are identified and resolved immediately.

Alternative Analysis: OBEC is committed to exploring the most feasible design alternatives to maximize economy and value for every client. Sharing the results of the alternative analysis with our clients early and often allows them to fully understand the facts and make informed decisions on how to keep the project on schedule and within budget. This critical interaction is typically accomplished with face-to-face design review meetings at our client's office.

Keep the conversation going: Project designs are commonly adjusted and refined throughout the design process based on the unique circumstances that each project presents. The OBEC team makes certain that there are no sudden shortfalls for our clients by ensuring that the budget and project goals are continuously synchronized. Some successful tools and methods that we use with our clients include:

- **Action Item/Decision Logs** – to systematically document and track budget-impacting issues to resolution.
- **Detailed construction cost estimates** – developed during alternative analysis and regularly updated through final design for the preferred alternative.
- **Clear issue resolution exhibits** – targeted at a specific site constraint or project element, such as right-of-way or environmental impacts, to focus understanding of key issues.
- **Independent review** – by a construction cost estimating/value engineering specialist to help focus on ways to overcome a budget shortfall, as necessary.

2.2.2.A

(10 points)

*Describe **(i)** the specific efforts Proposer makes to ensure tasks and deliverables are completed in the most cost-effective manner. Explain **(ii)** how Proposer ensures all travel, lodging, and per diem expenses are as low as possible.*

A(i) Cost-effectively completing tasks and deliverables is a core part of our corporate culture. We take pride in our ability to innovate within strict project cost-control measures and deliver site-appropriate, economical solutions.

OBEC's expertise, skills, and experience are tailored to provide what is required for cost-effective delivery of ODOT and Local Agency STIP projects including:

Scope of Work Development

- Detailed understanding of project goals, site constraints, and permitting requirements.
- Effective scoping and use of contingency tasks to help eliminate time delays for WOC amendments.

Work Order Contract Management

- Development of clear, concise work orders.
- Ensuring timely execution of amendments.

Project and Team Management

- Close collaboration and partnership with ODOT and Local Agencies.
- Work Plan and chartering meeting with project staff to communicate expected levels of effort.
- Proficiency managing multi-disciplinary teams.
- Anticipation/management of permit requirements.
- Internal concept reviews early in design to focus efforts on project goals and minimize re-design.
- Regular internal coordination meetings to ensure project staff are properly focused.
- Early identification of right-of-way impacts.
- Public/stakeholder involvement to enhance project support and timely project development.

Project Delivery

- In-depth proficiency with ODOT and Local Agency standards and requirements.
- Expertise managing interdisciplinary tasks.
- Effective and proactive client communication.
- Stringent quality and cost controls that have been honed by decades of experience.

In line with ODOT's move to ***Enhance*** and ***Fix-It*** categories for STIP projects, OBEC focuses our project delivery process on these core results:

- Complete, high quality and swift project delivery.
- Practical design, appropriate to the context.
- Low lifecycle maintenance costs.
- Construction efficiency.
- Durability.

Additionally, our full-service offices and multi-disciplinary subconsulting and small business partners located strategically throughout Oregon ensure:

- **Coverage** for projects anticipated under this PA.
- **Cost containment** when working on more remote projects by using available subconsultants' offices and always working from the closest office to the project to reduce travel time and expenses.
- **Reduced travel time and maximized productivity,** by assigning personnel who are closest to the project.

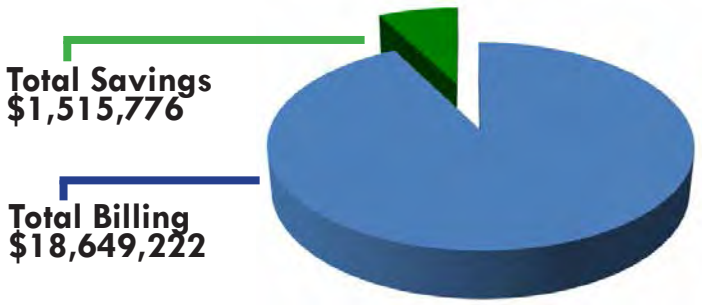
On many contracts, our cost-effectiveness measures result in unused engineering fees being returned to project budgets (see Figure 6).

FIGURE 6

Full-Service Project Performance History

PE-Design Project	Budget	% Savings
N. Going St. Br. Seismic Rehab	$791,819	3%
OR 126B Ped Improvements	$95,982	7%
Creekside Truck Parking Facilities	$29,965	9%
I-5: Jumpoff Joe - Glendale	$199,926	9%
Ayers Creek (North Valley Rd.) Br.	$214,564	10%
Willamette R. (Whilamut Passage) Br.	$2,683,339	13%
OR 221: Wallace Rd@Glenn Cr. Rd.	$251,554	14%
Gulick Road (Clear Creek) Bridge	$284,363	16%
US 26: North Plains to Cornell Road	$709,003	17%
OR 224: I-205-UPRR Overcrossing	$569,162	20%
Morrison Bridge Deck Rehabilitation	$416,761	21%

PE-Design Total Contract Value on ODOT & Local Agency Projects Completed 2008-2012: $20,164,998



In Oregon's current economic situation transportation dollars are scarce in comparison to the infrastructure demands, and OBEC is committed to continuing our proven record of meeting the needs of ODOT and Local Agencies for streamlined, high-quality and cost-effective project delivery.

A(ii) With four offices located throughout Oregon, OBEC ensures travel, lodging and per diem expenses are as low as possible through routine, effective logistics planning. We regularly assess projects for logistics-management and cost-containment opportunities where we can cross-utilize crews for inspections, bundle field survey activities, or combine multiple project tasks or design meeting reviews to achieve the highest level of efficiency.

OBEC's experienced Project Managers have the technical knowledge to handle most Agency meetings without the need to include a lot of discipline staff. In addition, many OBEC staff are cross-trained in multiple technical disciplines, enabling individuals to perform diverse project tasks during the same site visit or client meeting, further contributing to cost control and increased efficiency.

Logistics Planning and Expense Control

Minimizing and controlling travel expenses to maximize available time for project tasks is critical. OBEC uses several standard practice guidelines to control expenses, particularly for remote sites:

- **Kickoff Meetings –** Use the kickoff to conduct site work activities for environmental, hydraulic and other disciplines to avoid additional trips.
- **Site Surveys –** Coordinate with team members on wetland delineations, utility locates, geotechnical explorations, topographic mapping needs, and/or inspection tasks that could be included to maximize efficiency of trip.
- **Travel Time –** Multiple offices throughout Oregon minimize travel costs, and our staff combine project tasks into the same trip.
- **Overnight Lodging –** OBEC uses the closest economical accommodations, along with corporate discounts, to contain costs for overnight stays.
- **Travel Expenses –** OBEC tracks all daily travel expenses consistent with ODOT guidelines. Mileage and per diem under this PA will conform to the current Federal Travel Resource rates. To help contain expenses well within contract requirements, all expenses are verified by receipt and a completed expense accounting form.
- **Overtime Expenses –** Overtime expense for project tasks performed by non-exempt employees are not charged to the Agency.
- **Electronic Data Transfer, Management, and Teleconferencing –** Electronic communication is an integral part of OBEC's operations to provide continual team updates on schedules, budget, resource allocation, and all critical project information. OBEC and all subconsulting partners maintain leading-edge computer capabilities, containing project costs through efficient tele- and web-conferencing and electronic data transfer that includes ProjectWise® and SharePoint® project management software to make design, reviews and quality control much more effective and efficient.

Our staff members' diligent application of these methods routinely keeps our travel, lodging, and per diem expenses below the negotiated contract amount (see Table 2).

OR 213: I-205 – Redland Road "Jughandle"
OBEC's PM and design staff were heavily involved in the extensive public information campaign orchestrated to prepare motorists for a four-day closure of OR 213 during the accelerated bridge construction phase of this highly technical project.

By using the methods outlined above, our team was able to deliver award-winning* services while also coming in 27% under the expense budget.

Public Relations Society of America 2012 Merit Award Winner

TABLE 2 Project Expense Performance History

PE-Design Project	Budget	% Savings
OR 222: Springfield SCL to Jasper Bridge	$1,745	5%
North Bend Waterfront (Harbor Avenue)	$5,077	11%
OR 224: I-205-UPRR Overcrossing	$1,024	12%
Curry Co./City of Brookings Paving (ARRA)	$4,359	15%
OR 213: I-205 – Redland Rd. Overcrossing	$16,529	27%
Gulick Road (Clear Creek) Bridge	$2,290	36%
Creekside Truck Parking Facilities	$1,573	37%
South Yamhill River (Bridge St) Green Br. Rehab.	$8,858	45%
Goodpasture, Pengra & Nelson Mtn. Covered Brs.	$1,240	86%

2.2.2.B

(5 points)

*Describe **(i)** the specific methods, tools, and processes Proposer uses to develop the estimate for Services. **(ii)** How does Proposer ensure that estimates for Services are fair and reasonable to both the government and Proposer?*

B(i) OBEC's methods, tools, and processes to develop estimates for services have been established and improved during more than four decades of continually working with ODOT and many of Oregon's counties and cities.

STEP 1 – Project Understanding and Team Selection

For each WOC assignment our Contract Manager, Guy Hakanson, will select a Project Manager with the requisite background and experience to successfully manage the project. Together, Guy and the Project Manager will select the appropriate Discipline Task Leads from OBEC and our subconsultant team to develop a scope to successfully deliver the project.

STEP 2 – Developing the Scope and Schedule

The Project Manager and the Discipline Task Leads will collaboratively establish the full scope of work and schedule including:

- Review all existing project information and scoping documents such as the Project Prospectus.
- Conduct scoping meetings and site visits with ODOT and the Local Agency, as necessary.
- Determine all elements that must ultimately be constructed within the project.
- Develop a complete scope of work for professional services including detailed subtasks and deliverables (construction services' scope is typically prepared as a contract amendment at Advanced PS&E).
- Determine all design schedule drivers such as environmental studies, utility conflicts, permits, and right-of-way acquisition.
- Determine construction schedule drivers such as environmental constraints, paving windows, and critical-path sequences for required work.
- Develop a detailed milestone design schedule.

STEP 3 – Developing the Fee Estimate

Once our team has established a reliable scope of work and schedule, our project managers use the following techniques to develop the final fee estimate:

- Upon concurrence on the scope of work, our Discipline Leads prepare detailed time estimates for all tasks and subtasks.
- These time estimates take into consideration both historic staff production rates and all unique aspects of the work.
- Determine the staff experience level required to complete each task most cost effectively.
- Once each Discipline Leader has completed their estimated fee, the Project Manager compiles all fees into the current ODOT-approved fee estimate spreadsheet.
- The Project Manager reviews the entire fee estimate to ensure it is reasonable, complete and consistent with the scope of work.

STEP 4 – Quality Checks

Each scope of work and fee estimate undergoes a final set of independent checks and QC to ensure OBEC is submitting accurate, reasonable, and reliable fee estimates that are fair to the government and our team. These include:

- Full independent review of scope and fee by Contract Manager, Guy Hakanson.
- Cost comparisons to similar projects based on percent of construction for PE and CE services (we use actual cost data from our Vision ® accounting database to track detailed costs on every project we complete).
- Full-time employee equivalent (FTE) projections are used to compare the number of staff required for the budget within the established schedule. (Used for budget checking and project planning).
- To provide a reality check, estimated costs are measured against our custom-built "***PE Estimator***" that includes formulas to calculate projected effort and uses OBEC's historic per-plan-sheet estimates for structures, roadway, landscaping, and traffic control along with historic costs for surveying, environmental documents and permits, hydraulics, geotechnical, right-of-way descriptions, PM, etc.
- Final senior level WOC budget QA.

The accuracy of our rigorous process is evidenced by our consistent on-time, within-budget project delivery shown in Figure 6 of this proposal.

B(ii) OBEC ensures estimates are fair and reasonable through strict adherence to the estimate development process outlined above. We reinforce that process with our corporate and management philosophy to be effective stewards of public funds.

Additionally, we maintain our ODOT-approved rate sheets in line with ODOT's established process and we participate in industry surveys to ensure that our cost of services is in line with A/E/C industry norms.

2.2.3.A

(5 points)

Describe experience (which may include experience while working for the Proposing firm or while working for other firms) of Project Manager(s) with similar interdisciplinary teams.

OBEC's Project Managers and senior leaders have an average of 20 years of experience utilizing interdisciplinary teams on similar ODOT projects or Local Agency projects monitored by ODOT. We have a long history of successful project delivery with our subconsulting partners on many small, medium and large and full-service transportation projects. Our leadership team has in-depth experience successfully delivering state and Federal-aid transportation projects, and they routinely manage highly-skilled, interdisciplinary teams working in close collaboration to achieve project goals.

TABLE 2 **P-I-C, Contract Manager and Project Manager Discipline Management Experience**

Senior Leadership / Project Manager	Years of Experience	Roadway design	Bridge design	Seismic retrofit	Bike-ped facilities	Utility design	Survey/right-of-way mapping	Right-of-way acquisition	Hydraulics	Utility coordination	Railroad permitting	Traffic engineering/ITS	Signals/illumination	Specifications	Drafting	Bridge coatings	Geotechnical engineering	Constructability/cost estimating	Landscape architecture	Stormwater management	NEPA	EA/EIS	Environmental permitting	Cultural resources	Hazmat	Wetlands	Noise	Air	Construction management	Construction inspection
Guy Hakanson, PE	25	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Larry Fox, PE	22	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦		
Jerry Lane, PE	33	♦	♦		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦		♦	
Tim Shell, PE	28	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Greg Ausland, PE	26	♦	♦		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦			♦	♦
Douglas Kirkpatrick, PE	21	♦	♦	♦	♦		♦	♦	♦	♦	♦		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦				
Brian Nicholas, PE	18	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Jeff Bernardo, PE	15	♦	♦		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦		♦	♦	♦	♦	♦		♦	♦	♦	♦			♦	♦
Tom Metcalf, PE	15	♦	♦		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦		♦	♦	♦	♦	♦		♦	♦	♦	♦	♦	♦		
Bob Goodrich, PE	13	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦		
Andy Howe, PE	13	♦	♦		♦		♦		♦	♦	♦			♦	♦	♦	♦	♦		♦	♦	♦			♦					

TABLE 3 **Project Managers' Selected Interdisciplinary Project Experience**

Jerry Lane, PE – Project Manager	***Relevant Experience***
Jerry's more than 33 years of experience includes serving key roles – from preliminary design to plan preparation – on more than 100 Oregon highway and bridge projects for ODOT, local cities and counties. He has extensive experience with project scoping, project management, environmental permitting/ compliance, and contract administration.	● US 26: SE 51st to I-205 (Powell Blvd) ● OR 62 Corridor Solutions Unit 2 ● OR 217 Active Traffic Management Project ● US 26: North Plains to 185th Avenue ⊙ Curtis Creek Bridge Replacement ⊙ Middle Fork Willamette Loop Path – Units 1, 2 & 3 ⊙ A St. & Thurston Rd. Improvements
Tim Shell, PE, LEED AP – Project Manager	***Relevant Experience***
Tim Shell is a senior project manager with 28 years of project management and civil engineering experience throughout the Northwest. Tim previously provided consulting services as a senior project manager for transportation projects throughout Oregon and he also served as an Engineer in the City of Vancouver's and Clark County's Departments of Public Works.	● Sunrise Corridor JTA – Utility Relocations ● I-5 Bridges Vertical Clearance (prior empl.) ● Cape Creek Tunnel Reconstruction (prior empl.) ● I-5 Sign Replacements Region 3 (prior empl.) ● Bundle A04 Bridge Improvements (prior empl.) ● US 97 Imp'ts: LaPine to Crescent SLC (prior empl.) ⊙ Buena Vista Ferry Replacement (prior empl.)

● ODOT Project || ⊙ Local Agency Project

Greg Ausland, PE – Project Manager	***Relevant Experience***
Greg has more than 26 years of civil/structural design and project management experience on roadway and bridge projects. He has the distinctive experience of being the designer and/or project manager on the rehabilitation of 34 of Oregon's covered bridges. Greg expertly facilitates consensus among multi-disciplinary teams with diverse stakeholders.	⊙ Chambers Covered Bridge Rehabilitation ⊙ Delta Ponds Path and Pedestrian Bridge ⊙ Sweet Creek Retaining Wall Replacement ⊙ Goodpasture Covered Bridge Rehabilitation ⊙ West Bank Trail Bike Path ⊙ Eugene Train Depot Master Plan ⊙ Eugene Courthouse Transportation Improvements
Douglas Kirkpatrick, PE – Project Manager	***Relevant Experience***
Douglas brings 21 years of structural design and project management experience. He is skilled at establishing schedules and budgets and fostering a team environment. Douglas has specialized proficiency leading and performing calculations, plans, specifications and estimates for the design and retrofit of bridges and other transportation infrastructure.	● OR 164: Santiam River (Jefferson) Br. Repairs ● I-84: MLK Boulevard to I-205 (prior empl.) ⊙ Wipper Road Bridge Replacement ⊙ Columbia Slough (Elrod) Bridge ⊙ Harlan Road Slide Repair ⊙ Old River Rd Slide Repair ⊙ North Bank Rogue River Slide Repair
Brian Nicholas, PE – Project Manager	***Relevant Experience***
Brian is a project manager with 18 years of experience in design and construction of civil, industrial, transportation, and alternative delivery projects specializing in the strategic management of complex projects with tight schedules, budget, and permit constraints. Brian has developed effective tools for managing teams on various projects.	● I-5 NB @ I-205 Interchange Project ● I-5: Willamette River - Martin Creek ⊙ Morrison Bridge Deck Rehabilitation ⊙ South Yamhill River (Bridge St) Bridge ⊙ Hyde Park Reservoir @ OR217 ⊙ Brookings Harbor FEMA Tsunami Repairs ⊙ 223rd Underxing @ UPRR Mainline (prior empl.)
Jeff Bernardo, PE – Project Manager/QA Manager	***Relevant Experience***
Jeff's 15 years of experience encompasses comprehensive engineering services spanning field survey, construction inspection, utility coordination, roadway and multi-use trail design, and project management. He provides attentive and responsive design services. Jeff also provides oversight of OBEC's Quality Control Plan.	● OR 62 Corridor Solutions Unit 2 ⊙ Upton Road/Scenic Avenue Improvements ⊙ Lower Sucker Creek (Holland Loop Road) Bridge ⊙ Bear Creek Greenway Trail Reconstruction ⊙ East Pine Street: I-5 to Peninger ⊙ Plaza Ave: Nezla Street to Verda Street ⊙ Munger Creek (Davidson Road) Bridge
Tom Metcalf, PE – Project Manager	***Relevant Experience***
Tom is a fast-track design expert, and his 15 years of experience includes leading multi-discipline teams to successful project delivery. Within constrained sites with complex right-of-way issues, he leads engineers in the judicious application of practical design.	● Sunrise Corridor JTA ● I-205: Pacific Highway to Willamette River Bridge ● OR224: I-205 – UPRR O'xing, WB Right Turn Lane ⊙ S. Barnards Road (Bear Creek) Culvert ⊙ Cedar Creek (Ten Eyck) Rd Bridge
Bob Goodrich, PE – Project Manager	***Relevant Experience***
Bob's more than 13 years of experience as project manager, assistant project manager, or design engineer on more than 30 Local Agency and ODOT projects provides an extensive range of management and design skills to the team. His strong and proven leadership enables his teams to develop creative solutions and deliver efficiently designed projects.	● US26: West Humbug Creek Bridge Replacement ● Bundle 217/Bundle 218 ● US 20: Beaver Creek- Marys River- Bundle 409 ● OR18: Newberg - Dundee Bypass ⊙ OR 213: I-205 - Redland Rd Overcrossing ⊙ Weaver Road Extension ⊙ Salmon River (Elk Park Road) Bridge
Andy Howe, PE – Project Manager	***Relevant Experience***
With 13 years of relevant experience, Andy brings design expertise focused on steel and concrete bridges, with specialized experience on pedestrian bridges. He works with interdisciplinary teams to minimize site impacts and deliver innovative solutions.	● Sunrise Corridor JTA ● I-5: Beltline Interchange (Gateway) Ped Bridge ⊙ OR213: I-205 – Redland Road Overcrossing ⊙ Battle Creek (Fairway Ave. SE) Bridge ⊙ Delta Ponds Path and Pedestrian Bridge

● ODOT Project || ⊙ Local Agency Project

2.2.3.B
(10 points)

Agency, in the majority of cases, does not intend to assign WOCs to consultants that cannot self-perform a minimum of 51% of the PE-Design phase of a given WOC assignment. Describe the types of Services Proposer (prime consultant's firm) has qualifications and experience to self-perform. Provide 2 or 3 examples of multi-discipline (i.e., full-service) transportation design projects started in the last 5 years where Proposer was responsible for 51% or more (based on cost) of the PE-Design phase work under the contract. For each project example, identify the following: project name, location, year started, and total contract dollar amount; tasks self-performed by Proposer; the percentage of the contract dollars that went to Proposer for Services that were not subcontracted.

OBEC maintains full-service staffing capacity that allows us to routinely provide well over 51% of the design project services on transportation infrastructure improvement projects throughout Oregon (examples cited below).

As a prime consultant, the types of services OBEC provides includes:

- Bridge/Structural Engineering
- Constructability/Value Engineering
- CADD
- Environmental/Permitting
- Hydraulic/Stormwater Engineering
- Project Administrative Support
- Project Management
- PI/Graphic Design
- Roadway/Civil Engineering
- Specifications
- Stormwater Management Design
- Surveying/Geomatics
- Trail/Path Design
- Utility Coordination/Design

OR 213: I-205 - Redland Rd Overcrossing | Oregon City, Oregon | Designed: 2009-2011

Total contract dollar amount:	$2,709,923
Percentage performed by OBEC:	58%

Tasks self-performed by OBEC: design project management, public outreach support, survey, right-of-way research, utility coordination, environmental documentation, stormwater, roadway design, bridge design, specifications, bidding assistance

North Umpqua River (Brown) Bridge | Douglas County | Designed: 2007-2009

Total contract dollar amount:	$829,195
Percentage performed by OBEC:	62%

Tasks self-performed by OBEC: design project management, structural design, roadway design, surveying, right-of-way engineering, utility coordination, environmental documentation, hydraulic analysis, stormwater management, waterline design, specifications, bidding assistance

Plaza Avenue: Nezla St. to Verda St. | Ashland, Oregon | Designed: 2009-2011

Total contract dollar amount:	$119,678
Percentage performed by OBEC:	91%

Tasks self-performed by OBEC: design project management, roadway design, surveying, environmental documentation, utility coordination, public involvement, stormwater management, specifications, bid assistance

2.2.3.C
(5 points)

Using the "Key Staff Resumes" form, provide the requested information for the proposed key Staff anticipated to perform services under assigned WOCs as the lead or manager role for the following disciplines: project manager(s); structural engineering; roadway design; survey; geotechnical; hydraulics; environmental; right-of-way; public involvement.

Your OBEC team's key staff resumes are provided on the ODOT Key Staff Resume Forms included with our proposal.

KEY STAFF RESUMES

Consultant Name: OBEC Consulting Engineers; RFP #: 25134
Project Name: Full-Service A&E Price Agreements for ODOT and Local Agency Transportation Projects

NAME & TITLE

Jerry Lane, PE

Division Manager / Sr. Project Manager

ROLE ON THIS PROJECT
Project Manager

ACTIVE REGISTRATION IN OR: **Y**

DISCIPLINE: Roadway

EDUCATION:
- BS, Civil Engineering, University of California, Davis, 1979

YEARS OF EXPERIENCE IN DISCIPLINE/ ROLE PROPOSED FOR THIS PROJECT: **33**

Basis for Team Selection:

- *Extensive project management experience on multi-disciplinary teams for large and small urban and rural projects*
- *In-depth knowledge of project delivery of ODOT and Local Agency projects*
- *Thorough knowledge of design standards and processes*

Jerry has the proven ability to provide expert leadership of design services on a range of projects that may include roadway, interchanges, and bridge design.

He readily develops a project culture among discipline leads, who in turn implement practical design into each project element and phase, resulting in stakeholder consensus, efficient project development, and construction cost savings.

By aggressively advocating for design innovations, Jerry has helped ODOT realize significantly reduced construction costs and accelerated project delivery while achieving extremely high-quality standards. His extensive experience includes more than 100 Oregon highway and Local Agency projects.

EXPERIENCE ON RELEVANT PROJECTS:

- **US 26: SE 51st Avenue to I-205 (Powell Blvd.), Portland, Oregon***
  Project Manager for a 3R pavement preservation project that included addition of pedestrian mid-block crossings and ADA improvements to over 100 sidewalk ramps. Project includes pavement inlay, hazardous materials assessments, signing, striping, signal modifications, public involvement, No-Effect Memo, survey, archaeological and historic studies, and noise analysis. **Outcome:** Jerry successfully led a multi-disciplinary team to deliver final PS&E for this roadway preservation and pedestrian improvement project located on a heavily travelled, highly urbanized section of highway.
- **OR 62 Corridor Solutions: Unit 2, Medford, Oregon***
  Project Manager for design of a 2.7-mile bypass of Hwy 62. The project includes a new interchange, a new four-lane limited access arterial, a new separated multi-use bike path, bridge, retaining walls, box culverts, illumination, signing and striping, traffic signals, pavement rehabilitation, landscaping, geotechnical investigation, and utility coordination. **Outcome:** Jerry is providing close coordination with ODOT Region management and design staff to deliver PS&E for Phase 1 of this multi-phased project, incorporating ODOT design elements and supporting ODOT environmental staff in permitting of this large, complex, JTA project.
- **OR 217 Active Traffic Management, Washington and Clackamas Counties, Oregon***
  Roadway Lead/Engineer of Record for this federally-funded ODOT project designed to improve reliability and safety along OR 217. **Outcome:** Jerry, as OBEC's roadway lead and engineer of record, managed the roadway design for six miles of 1R paving; shoulder widening; guardrail upgrades; and over 20 separate ITS sites on OR 217 and adjacent arterials for active traffic management on this heavily travelled corridor.
- **Curtis Creek (Cox Road) Bridge Replacement, Douglas County****
  Project Manager for this HBP funded bridge replacement project. **Outcome:** This single-span precast prestressed concrete bridge was constructed in stages using temporary signals to maintain one lane of continual two-way traffic – a requirement due to no available detour route. This approach minimized costs by avoiding a detour, eliminating right-of-way acquisition, and minimizing environmental impacts.
- **Middle Fork Willamette River Loop Path, Springfield, Oregon****
  Project Manager for the design of four miles of multi-use path for Willamalane Park & Recreation District. OBEC conducted a feasibility study and is providing final design for the path. Work includes all permitting, structure design for two creek crossings, and trailhead design with restrooms. **Outcome:** Jerry directed and managed the design and development of PS&E for this TE-funded project, which is being constructed in multiple phases.

"Through my experience working with the OBEC staff on the 'A' Street, Thurston Road, and Glenwood Path Extension projects, they have been great to work with. The staff has been very easy to work with, they are professional, timely, and have technical expertise. It would be my pleasure to work with them again on future projects."
– Kristi Krueger, Principal Engineer, City of Springfield

**ODOT Project | **Local Agency Project*

NAME & TITLE

Bob Goodrich, PE

Division Manager / Sr. Project Manager

ROLE ON THIS PROJECT
Project Manager

ACTIVE REGISTRATION IN OR: **Y**

DISCIPLINE: Bridges/Structures

EDUCATION:
- BS, Civil Engineering, University of Maine, 1996
- MS, Civil Engineering, University of Maine, 1998

YEARS OF EXPERIENCE IN DISCIPLINE/ ROLE PROPOSED FOR THIS PROJECT: **13**

Basis for Team Selection:
- *Proven design innovation and ability to lead teams to develop economical technical solutions for bridge replacement projects*
- *Extensive experience and knowledge working with ODOT Region 2*
- *Expert in leading interdisciplinary teams*
- *ABC delivery experience*

Bob brings a comprehensive range of project management and structural design experience to the team. He is effective in delivering efficiently designed bridge projects.

He has provided expert leadership as the Project Manager, Assistant Project Manager, or Bridge Engineer for numerous projects including more than 20 bridge projects, such as Bundle 409, OR213, Weaver Road Extension and North Fork Molalla River.

Bob's strong technical skills, and ability to facilitate creative solutions, enable him to provide the required leadership to ensure successful delivery of your project.

EXPERIENCE ON RELEVANT PROJECTS:

- **US 20: Beaver Creek – Marys River (Bundle 409), Lincoln and Benton Counties***
  Project Manager for this project on Highway 20 that originally included four bridge replacements and four bridge repair projects. Bob led the development of the 30% design to replace the bridges. The design investigation assessed feasible bridge types, mobility impacts on Highway 20, viable detour routes, Motor Carrier coordination, environmental constraints, significant utility impacts, constructability, and construction costs. Due to funding constraints, these bridges were ultimately repaired. **Outcome:** Bob successfully managed the day-to-day work of all aspects of the project that involved more than 10 OBEC staff and seven sub-consultants to successfully deliver this project.

- **Sunrise Corridor JTA Project , Clackamas, Oregon***
  Bridge Lead for this $130 million transportation improvement project in the Portland metro area that includes construction of new roadway, multi-use paths, three new roadway bridges, two new pedestrian bridges, roadway/trail retaining walls, and major interchange/ intersection improvements. **Outcome:** Bob led the development and delivery of TS&L/DAP for four new bridges, approximately 20 retaining walls and several sign structures. Each bridge site had a unique set of topographic, environmental and stakeholder challenges requiring innovative yet efficient designs.

- **OR 213: I-205 to Redland Road, Oregon City, Oregon****
  Assistant Project Manager for this complex bridge and roadway project that includes extensive bike/pedestrian improvements, public involvement, accelerated bridge construction, City utilities design, stormwater design, and new roadway alignments. **Outcome:** Bob led this effort and coordinated closely with City, ODOT, the interdisciplinary team, and key stakeholders to successfully design a project that meets all site and environmental constraints while drastically minimizing mobility impacts with full bridge installation occurring in four days.

  > "The City is very pleased with the performance and ability that Bob provided to drive the design of our large and complex bridge/roadway project that involved the ODOT Region 1 review/approval process."
  >
  > *– Aleta Froman-Goodrich, City of Oregon City*

- **Weaver Road Extension, Douglas County, Oregon****
  Assistant Project Manager and bridge/structures lead for the extension of Weaver Road across the South Umpqua River and widening of old Highway 99. **Outcome:** Bob successfully managed environmental permitting, FAA clearance, FEMA No-Rise mitigation, right-of-way acquisition, archeological site exploration (including successfully addressing the unexpected finding of a site of significance), and multi-disciplinary design of bridge, roadway, stormwater, and traffic aspects.

- **N. Fork Molalla R. (Dickey Prairie Rd.) Bridge, Clackamas County**
  Project Manager for this bridge replacement. **Outcome:** Bob led the design effort to study three alternatives to determine the least cost and best overall solution considering project constraints such as overall funding, girder delivery limitations, environmental features and requirements and local resident input. The preferred alternative effectively balanced all project constraints.

**ODOT Project | **Local Agency Project*

NAME & TITLE

Eric Bonn, PE

Sr. Project Engineer

ROLE ON THIS PROJECT
Structural Engineering Lead

ACTIVE REGISTRATION IN OR: **Y**

DISCIPLINE: Bridges/Structures

EDUCATION: BS, Civil Engineering, Oregon State University, 1988

YEARS OF EXPERIENCE IN DISCIPLINE/ ROLE PROPOSED FOR THIS PROJECT: **24**

Basis for Team Selection:

- *Expert in the design of new bridges and rehabilitations of existing structures*
- *Expert delivering fast-paced ODOT and local agency projects*
- *Detailed knowledge of ODOT processes*

Eric has definitive expertise serving in key roles on several major and minor bridge designs, rehabilitations, and preservation projects. Eric has extensive knowledge of bridge and retaining wall design utilizing AASHTO LRFD Bridge Design Specifications, ODOT BDDM, and ODOT GDM.

His experience with bridge types includes standard and custom cast-in-place, precast, prestressed and post-tensioned concrete plus steel plate girders. He also has extensive experience in seismic modeling, analysis, and design including work with AASHTO Guide Specifications for LRFD Seismic Design.

EXPERIENCE ON RELEVANT PROJECTS:

- **Sunrise Corridor JTA Project, Clackamas County, Oregon***
  Bridge Engineer for this $130 million transportation improvement project in the Portland metro area that includes construction of more than new roadway, multi-use paths, three new roadway bridges, two new pedestrian bridges, roadway/trail retaining walls, and major interchange/ intersection improvements, some of which include railroad coordination. **Outcome:** This project, which is still in the design phase, will construct new roadways and bridges to relieve congestion and improve safety in this highly traveled interstate corridor.
- **I-5: Willamette River Bridge (WRB), Bundle 220, Lane County***
  Bridge Engineer for this $220 million bridge replacement project. The project comprises three structure types from north to south: a cast-in-place concrete girder span; two concrete deck arch spans over the Willamette River; and several approach spans of post-tensioned concrete box girders. OBEC is providing project management, design, survey, construction engineering, and overall project management. **Outcome:** This project, which is currently under construction, will provide new bridges that will eventually be able to handle additional lanes of traffic to meet future needs.
- **I-5: McKenzie River – Goshen Grade Design-Build, Lane County***
  Bridge Engineer responsible for layout and structural design of two pile-supported, single-span bridges using modified precast prestressed concrete T-beams and four retaining walls, including two mechanically stabilized earth and two modular block walls. **Outcome:** The project was completed on time and received many accolades from various environmental permitting agencies.
- **N. Leadbetter Extension Overcrossing, Portland, Oregon****
  Bridge Engineer for a new crossing of BNSF Railroad. The project included significant utility relocation and protection measures, water quality facilities, roadway improvements, bridge and structure design, RR coordination, and engineering support for preparation of environmental permitting and cultural resource documentation. OBEC provided design and overall project management. **Outcome:** Provided a grade-separated connection with N. Marine Drive that accommodates the railroad and Port of Portland expansion while providing property owner access.
- **Dorrance Lane Bridge, Wallowa County**
  Project Manager for this replacement of a railroad flatcar bridge. The timeframe and budget available was very limited. **Outcome:** The economical precast concrete slab design allowed the County to accomplish much of the work with their own forces.

> "Eric was Wallowa County's contact at OBEC for 3 Bridge projects in the summer of 2011. We communicated the features of each project so the plans reflected the specific needs for each project. The Dorrance Ln. Bridge is a terrific example of how all parties co-operated to complete the project before winter set in. Approval to start the project was given in mid September, the design was completed, Beams ordered and the bridge was opened the third week of November."
> *– Russ McMartin, Director of Public Works, Wallowa County*

**ODOT Project | **Local Agency Project*

NAME & TITLE

Tom Metcalf, PE

Project Manager / Roadway Group Manager

ROLE ON THIS PROJECT
Roadway Design Lead

ACTIVE REGISTRATION IN OR: **Y**

DISCIPLINE: Roadway

EDUCATION:
- BS, Civil Engineering, Iowa State University, 1997

YEARS OF EXPERIENCE IN DISCIPLINE/ ROLE PROPOSED FOR THIS PROJECT: **15**

Basis for Team Selection:

- *Demonstrated roadway team leadership*
- *Successful large, fast-track project experience*
- *Driver of quality, cost-saving innovations*
- *Familiarity with local area issues and projects*

Tom has served as the roadway design team leader on a series of successful projects during the last several years. He leads multi-discipline teams in daily meetings and collaborates with contractors to develop value engineering innovations including 3D traffic stage modeling that ensures constructability, and machine-control grading that results in substantial time and cost savings. With more than 14 years of experience, Tom is proficient at successfully leading and developing fast-track design.

Tom's background includes leading roadway design on large projects involving interchanges, freeways, state and local highways, highway reconstruction and bridge replacements. With a demonstrated ability to maximize the efficiencies of the latest roadway design and modeling programs, Tom inspires confidence among his teams.

Within constrained, urban sites with complex right-of-way issues, he leads engineers in the successful application of practical design that helps ensure smooth permitting and construction of new roadway alignments and bike, pedestrian and stormwater treatment facilities.

EXPERIENCE ON RELEVANT PROJECTS:

- **Sunrise Corridor JTA Project, Clackamas County, Oregon***
  Lead Roadway and Traffic Control Engineer for this $130 million transportation improvement project in the Portland metro area that includes construction of new roadway, multi-use paths, three new roadway bridges, two new pedestrian bridges, roadway/trail retaining walls, and major interchange/ intersection improvements. **Outcome:** This project, which is still in the design phase, will construct new roadways and bridges to relieve congestion and improve safety in this highly traveled interstate corridor.

"Tom truly understands what is important to contractors on ODOT transportation projects. Through daily collaboration with Hamilton Construction on ODOT D-B and CM/GC projects over the last 5 years, Tom has consistently led roadway design teams to the most cost efficient and constructable solutions. This results in a reduction of our risk during bidding and yields lower construction costs for the project, which ultimately leads to significant savings for ODOT."

– Kevin Parrish, Hamilton Construction

- **I-205: Willamette River Bridge – Pacific Hwy. (Unit 3), Clackamas and Washington Counties***
  OBEC provided design and construction assistance for this fast-tracked $32 million project on I-205. Key project elements included new auxiliary lanes, pavement preservation, bridge/rail retrofits, and water quality facilities on an 8.8-mile-long corridor. **Outcome:** Tom successfully led the design for new northbound and southbound auxiliary lanes, provided efficient 3D modeling of traffic staging, and helped obtain five critical design exceptions. His leadership and expertise helped ensure design completion in 9 months.
- **Cedar Creek (Ten Eyck) Rd. Bridge, Clackamas County****
  Project Manager for a new bridge to replace a culvert that was failing due to scour. **Outcome:** The project was delivered using a modified design-build model where the County selected a contractor to work with OBEC during the design phase.
- **OR 213: I-205 to Redland Road Overcrossing****
  OBEC provided design services for extensive traffic and safety improvements in Oregon City. Efforts included design of a new roundabout and bridge, as well as proactive public involvement. **Outcome:** As the Roadway Lead, Tom coordinated with ODOT to assist with the Interchange Layout sheet and successfully obtained five design exceptions processed through ODOT Region 1.
- **I-5: Willamette River Bridge (WRB), Bundle 220, Lane County***
  Roadway Design Lead for this $154 million bridge replacement project. **Outcome:** Tom launched intense collaboration to produce the first early work package 5 months after the DAP and successive packages every 5-9 months after that. He led the innovative 3D modeling of all nine traffic control stages to ensure constructability as well as the machine-control grading effort that accelerated construction by eliminating nearly all contractor requests for clarification of grading specifications.

**ODOT Project | **Local Agency Project*

NAME & TITLE

Jim Colton, PLS

Division Manager / Project Manager

ROLE ON THIS PROJECT
Survey Lead

ACTIVE REGISTRATION IN OR: **Y**

DISCIPLINE: Survey

EDUCATION: Coursework, Northern Arizona University, and, Diploma, International Correspondence School – Surveying and Mapping

YEARS OF EXPERIENCE IN DISCIPLINE/ ROLE PROPOSED FOR THIS PROJECT: **34**

Basis for Team Selection:

- *Demonstrated survey team leadership*
- *Extensive survey experience and knowledge working on ODOT projects with survey tasks*
- *Extensive experience with ODOT R/W Engineering process*

Jim has the primary responsibility for survey project coordination, project management, scheduling field crews, and QA/QC.

He is experienced in a full range of advanced and traditional survey techniques and tasks including GPS network control projects, route surveys, and right-of-way acquisition.

Jim is skilled in the use of GPS and electronic survey software for creating alignments and processing field codes and has many years of experience performing boundary, construction, cadastral, ALTA and topographic surveys.

His expert leadership will ensure that each survey task is completed on time and within budget and that all project deliverables fully comply with all applicable standards and specifications.

EXPERIENCE ON RELEVANT PROJECTS:

- **US 20: Beaver Creek – Marys River (Bundle 409), Lincoln and Benton Counties***
  Survey Manager for this project on Highway 20 that originally included four bridge replacements and four bridge repair projects. Due to funding constraints, these bridges were ultimately repaired. **Outcome:** Jim successfully managed all survey elements of this project that involved multiple crews on a narrow state highway collecting topographic and hydraulic cross sections for design.

- **US 26: North Plains to Cornell Rd, Washington County, Oregon***
  Survey Manager for design of a 9.8-mile-long 3R preservation project. **Outcome:** Jim managed all survey activities related to this project that included: setting of pre-marks for aerial photography, establishment of the horizontal and vertical control network used for the project, collecting of supplemental topographic data, preparation of the base map and project DTM and finally the construction staking to support the Contractor.

- **I-5 Gateway Pedestrian Bridge, Eugene, Oregon****
  Survey Project Manager for the design and construction of several interchange structures. Survey work included utility mapping; establishing a horizontal and vertical control network (HVCN); and right-of-way, topographic, and planimetric surveys for the interstate route corridor. **Outcome:** This 530-foot-long cable-stayed pedestrian bridge provides a key connection for non-motorized travel between Eugene and Springfield.

- **Middle Fork Willamette River Loop Path, Springfield, Oregon****
  Survey Project Manager for the design of four miles of multi-use path for Willamalane Park & Recreation District in Springfield. OBEC conducted a feasibility study and is providing final design for the path. Work includes all permitting, structure design for two creek crossings, and trailhead design with restrooms. **Outcome:** This new multi-modal path connects two of Springfield's most popular recreational sites and adds to the area's reputation for exceptional paths and trails.

- **Lake Oswego — Tigard Water Line Project, Lake Oswego, Oregon**
  Survey Project Manager for the right of way engineering (preparation of descriptions and exhibit maps for easement acquisition) to support the construction activity for the Lake Oswego – Tigard Water Line Project. The project involves the construction of a new water intake structure, 14,000 feet of raw water pipe, upgrades and expansion of the existing water treatment plant and nearly 7 miles of treated water pipe. **Outcome**: The descriptions and Exhibit maps have been submitted and the right-of-way agent is in the process of acquiring signatures form the landowners – project is on schedule.

"OBEC personnel interacted with citizens and other project team members with respect and professionalism. OBEC has demonstrated responsiveness, ability to meet deadlines, and provides a high quality work product. It is a pleasure working with OBEC on this project."
– Pat McDougal, Sr. Associate Engineer, City of Lake Oswego

**ODOT Project | **Local Agency Project*

NAME & TITLE

Bill Nickels, PE, GE

President / Corvallis Group Manager

NAME OF FIRM (ONLY IF SUB)
Foundation Engineering, Inc.

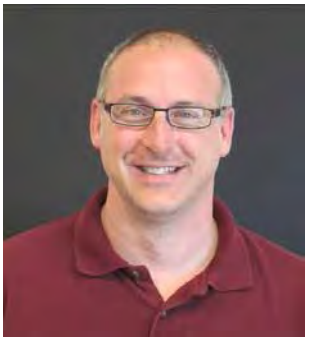
ROLE ON THIS PROJECT
Geotechnical Lead

ACTIVE REGISTRATION IN OR: **Y**

DISCIPLINE: Geotechnical Engineering

EDUCATION: MS, Civil/Geotechnical Engineering, University of Maine, 1995

YEARS OF EXPERIENCE IN DISCIPLINE/ ROLE PROPOSED FOR THIS PROJECT: **17**



Basis for Team Selection:

- *Project management expertise*
- *Proven interdisciplinary design team leadership*
- *Successful delivery of several large ODOT projects*

Bill has completed more than 100 bridge and transportation-related projects for ODOT and Local Agencies.

Key roles that he has served include: project management, development of foundation and geotechnical investigations, geotechnical analysis and design, and preparation of construction documents.

EXPERIENCE ON RELEVANT PROJECTS:

- **Fern Valley Interchange, Unit 2, Jackson County***
  Geotechnical Bridge Lead for Unit 2 that captures full reconstruction of the interchange. Components include two bridge replacements, abutment and embankment MSE walls, soil and rock cut slopes and sign structures. **Outcome:** The FEI team worked directly with ODOT designers to complete the required geotechnical tasks within the delivery schedule and budget.

- **I-5@Beltline Interchange – Unit 3, Lane County***
  Geotechnical Lead for Unit 3. Includes replacing the Beltline Overcrossing of I-5, constructing three new multi-use path bridges, new ramps and ramp widening, sign supports and a retaining wall. **Outcome:** The FEI team worked directly with ODOT designers to complete the required geotechnical tasks within the delivery schedule and budget.

- **S. Fork Rock Creek (Logsdon Road) Bridge, Lincoln County****
  Geotechnical Lead for the replacement of a two-span, ±38-foot long bridge with a single-span, ±60-foot long bridge using driven piles. **Outcome:** The FEI and OBEC team worked with the County to provide an abbreviated report focusing on foundation design only, resulting in cost savings in the PS&E phase.

- **Munger Creek (Davidson Road) Bridge, Josephine County****
  Geotechnical Lead for the replacement of a single-span bridge on Davidson Road with a wider and longer single-span structure. Services included analysis and design of driven pile foundations, and pavement analysis and design for new approaches. **Outcome:** Project was completed on-time and within budget.

- **North Umpqua River (Brown) Bridge, Douglas County****
  Geotechnical Lead for the replacement of a 650-foot long, three-span bridge with a new three-span bridge using drilled shaft and pile supported bents. Foundation construction support services were also provided. **Outcome:** Project was completed on-time and within budget.

- **Curtis Creek (Cox Road) Bridge, Douglas County****
  Geotechnical Lead for the replacement of ±70-foot long bridge with a single-span, ±85-foot long bridge using driven pile supported bents. Services also included pavement analysis and design for approach reconstruction. **Outcome:** The investigation supported the staged construction of the bridge that allowed one lane to remain open during construction and keep traffic moving through this key area without the need for a long detour.

**ODOT Project | **Local Agency Project*

NAME & TITLE

Hans R. Hadley, PE, CFM

Sr. Hydraulic Engineer

NAME OF FIRM (ONLY IF SUB)
WEST Consultants, Inc.

ROLE ON THIS PROJECT
Hydraulics Lead

ACTIVE REGISTRATION IN OR: **Y**

DISCIPLINE: Civil Engineering, Water Resources

EDUCATION: MS, Civil Engineering, Oregon State University

YEARS OF EXPERIENCE IN DISCIPLINE/ ROLE PROPOSED FOR THIS PROJECT: **17**

Basis for Team Selection:

- *Extensive relevant experience including over 100 bridge hydraulics and scour evaluations for bridge replacements in all geographic regions of Oregon*
- *Extensive experience working with ODOT and many local agencies*
- *Extensive experience with FEMA and local agency floodplain development ordinances*

Hans has a specialized education in hydrology, hydraulics, river mechanics, geomorphology, and sediment transport. He also has extensive experience conducting FEMA no-rise analyses, CLOMRs, LOMRs and Flood Insurance Studies.

His work at WEST includes more than 100 bridge hydraulic and scour evaluations for bridge replacements in Oregon, geomorphic analysis for bridge replacements to meet the requirements of the ODOT Fluvial Performance Standard, and multiple stormwater analyses.

EXPERIENCE ON RELEVANT PROJECTS:

- **Bridge Street (South Yamhill River) Bridge Rehabilitation, Sheridan, Oregon****
  Hans conducted the hydraulic analysis, scour assessment and scour mitigation design for the rehabilitation of the Bridge Street bridge over the South Yamhill River. The scour analysis indicated that the bridge foundations were susceptible to undermining by scour.
  Outcome: Scour mitigation measures for the bridge piers and abutments were designed.

- **Wyss Road (Trask Slough) Bridge Replacement, Tillamook County****
  Hans conducted the hydraulic analysis, scour assessment and abutment protection design for the replacement of the Wyss Road bridge over Trask Slough. The replacement bridge will tie into a Corps of Engineers' levee.
  Outcome: Replacement bridge has increased freeboard, minimal backwater impacts, and erosion protection for levee.

- **I-84 (Sandy River) Bridge Replacements, Multnomah County***
  Hans conducted the hydraulic analysis, scour assessment and abutment protection design for replacement of the east and westbound I-84 bridges over the Sandy River. Hans also conducted post-design hydraulic analyses to help ODOT and the contractor understand the increased flood risk associated with temporary works that would be left in the water during the flood season.
  Outcome: Replacement bridges meet freeboard requirements, resist scour and abutment erosion, reduce debris buildup, and reduce backwater. Temporary works were redesigned to reduce flood risk.

- **Hwy 30 & PWRR (Eilertsen Creek) Bridge Replacements, Columbia County***
  Hans conducted the hydraulic design, scour analysis, abutment protection, and debris deflector design for the replacement of a concrete box culvert under State Highway 30 with a bridge; and the replacement of twin CMP culverts under the Portland & Western Railroad with a bridge. One of ODOT's main concerns was that the replacement structures be able to accommodate future debris flows emanating from the heavily logged watershed. A debris flow in December 2007 plugged the culverts and closed Hwy 30 for several days.
  Outcome: Replacement bridges will resist scour and abutment erosion, reduce backwater, pass typical debris and deflect debris flows.

**ODOT Project | **Local Agency Project*

NAME & TITLE

Austin Bloom

Environmental Team Lead

ROLE ON THIS PROJECT
Environmental Lead

ACTIVE REGISTRATION IN OR: **N**

DISCIPLINE: Environmental

EDUCATION: BS, Environmental Studies, University of Oregon, 2001

YEARS OF EXPERIENCE IN DISCIPLINE/ ROLE PROPOSED FOR THIS PROJECT: **12**

Basis for Team Selection:

- *Proven ingenuity and proficiency developing streamlined solutions for environmental constraints on federally funded projects*
- *Extensive experience and comprehensive working knowledge of the NEPA process as applied by FHWA via ODOT*
- *Established, transparent relationships with ODOT environmental staff and agency liaisons*
- *Expert in utilizing programmatic biological opinions and permits to address impacts associated with typical ODOT projects*
- *Excellent coordination and communication skills both written and verbal*
- *Full understanding of the requirements and concerns of resource and regulatory agencies*

Austin's experience includes researching and developing permit applications and supporting documentation in compliance with a multitude of environmental regulations, including ESA, NEPA, CWA, Removal-Fill Law, and the Oregon Fish Passage Law. Austin's experience also includes environmental scoping, wetland and waters delineations, construction compliance monitoring, and fish salvage.

EXPERIENCE ON RELEVANT PROJECTS:

- **Middle Fork Willamette River Loop Path, Springfield, Oregon****
  Environmental Specialist for this federally-funded, four-mile-long, multi-use path along the north bank of the Middle Fork Willamette River. **Outcome:** The project includes the design of a 70-foot-long, single-span, prestressed slab bridge; trailheads at each end of the path; a turnaround rest area and several retaining walls adjacent to the riverbank. OBEC responsibilities included coordination of all environmental documentation, local land use and NPDES 1200-C permit acquisition, NEPA compliance, and environmental compliance monitoring.

- **Delta Ponds Pedestrian Bridge, Eugene, Oregon****
  Environmental Specialist for this multi-use bike/pedestrian and signature cable-stay bridge across Delta Highway funded through the ARRA federal stimulus program. **Outcome:** OBEC provided design, surveying, construction engineering, environmental/NEPA compliance, and overall project management services. Austin ensured environmental compliance throughout the project lifecycle, and erosion and sediment control inspection during construction.

  "Austin Bloom shouldered the complicated environmental clearance procedures. Austin managed the various environmental reports and delivered a green light on the project plans well within schedule. Austin's professionalism and hard work behind the scenes became crystal clear to me on later occasions when it was my turn to manage environmental clearances on much smaller projects. I look forward to working with OBEC on future projects, and hope it is my good fortune to get Austin Bloom on my team."

  – Patrick Cox P.E, City of Eugene

- **Port of Siuslaw Dock Replacement, Florence, Oregon****
  Environmental Specialist for the fast-track replacement of a deteriorated floating timber dock with a new concrete floating dock anchored by steel piles, including new water, sewer, and electrical facilities for both commercial and public fishing. **Outcome:** OBEC worked closely with regulatory agencies to quickly write a BA resolving environmental issues that developed after construction began. OBEC provided design, construction engineering, environmental/NEPA compliance, and overall project management.

- **Curtis Creek (Cox Road) Bridge Replacement, Douglas County****
  Environmental Team Lead for this bridge replacement project. **Outcome:** This single-span, precast, prestressed concrete bridge was constructed in stages using temporary signals to maintain one lane of continual two-way traffic – a requirement due to no available detour route. This was made possible by a temporary shoring and staged construction design. This approach minimized costs by avoiding a detour, eliminating right-of-way acquisition, and minimizing environmental impacts.

**ODOT Project | **Local Agency Project*

NAME & TITLE

Leslie Finnigan, SR/WA

Western Regional Manager

NAME OF FIRM (ONLY IF SUB)
Universal Field Services

ROLE ON THIS PROJECT
Right-of-Way Lead

ACTIVE REGISTRATION IN OR: **Y**

DISCIPLINE: Principal Oregon Real Estate Broker

EDUCATION: 4 Years – Western Oregon University

YEARS OF EXPERIENCE IN DISCIPLINE/ ROLE PROPOSED FOR THIS PROJECT: **26**

Basis for Team Selection:

- *Thorough understanding of the acquisition and relocation assistance processes in accordance with laws and regulations*
- *Excellent communication skills*
- *Detail oriented*
- *Diligent to project success needs*
- *Understanding of the federal aid process*

Leslie is a former ODOT Right of Way Employee with 26 years of experience performing right-of-way services. Her role as right-of-way lead will ensure the success of the projects by keeping vigilant controls over the schedule, budget and staff performances. Her knowledge of the right-of-way process will bring creativity to the problem solving needs of the project.

EXPERIENCE ON RELEVANT PROJECTS:

- **Portland-Milwaukie Light Rail, Portland, Oregon**
  This project involves complex right-of-way and relocation services for the new light rail line from Portland to Milwaukie. Leslie has been providing oversight on the project including assisting staff, reviewing completed files (quality control) and monitoring schedule and budget. This project has 250 acquisitions and over 100 complex relocations. **Outcome:** We have successfully completed several of the multi-million dollar property acquisitions and relocations and anticipate completion on time.

- **Columbia River Crossing, Portland/Vancouver, Oregon/Washington***
  Universal has been involved in the Columbia River Crossing for five years providing early right-of-way involvement at public meetings, preparing cost estimates and providing knowledge of the right-of-way process to the CRC. **Outcome:** We are currently involved with the project providing a staff member to assist in the early stages of the project.

- **Oswego Lake Interceptor Sewer Upgrade, Lake Oswego, Oregon**
  Leslie provided consultant services for the City of Lake Oswego in acquiring property for the new interceptor line for Oswego Lake. The project included assisting the City with contacting property owners for a suitable location for the new pipe as well as providing acquisition and relocation. **Outcome:** This project's construction is complete.

- **OR 213: I-205 to Redland Road, Oregon City, Oregon****
  Universal was responsible for all phases of the right-of-way process for this project. There were four properties involved for this high-profile project. Leslie provided oversight, quality control and assisted the attorneys for the City as needed. **Outcome:** There were no condemnations. The right-of-way was completed and the new structure is open for operation.

- **Munger Creek Bridge, Josephine County, Oregon****
  Universal provided right-of-way services as a subconsultant under OBEC for the replacement and widening of this bridge on Munger Creek. **Outcome:** There was one relocation involved that required extra assistance because of unusual circumstances. The relocation was completed and the project successfully certified.

- **Lower Sucker Creek, Jackson County, Oregon****
  This project was in a rural area of Jackson County. Universal provided full right-of-way services as a subconsultant to OBEC. **Outcome:** Successful right-of-way supported the completion of the design phase of the project.

**ODOT Project | **Local Agency Project*

NAME & TITLE

Kate Parker

Public Involvement Specialist

NAME OF FIRM (ONLY IF SUB)
Mason, Bruce & Girard

ROLE ON THIS PROJECT
Public Involvement Lead

ACTIVE REGISTRATION IN OR: **N**

DISCIPLINE:

EDUCATION: MA, Community and Regional Planning, University of Oregon

BA, Community, Regional, and Environmental Studies, Bard College,

YEARS OF EXPERIENCE IN DISCIPLINE/ ROLE PROPOSED FOR THIS PROJECT: **7**

Basis for Team Selection:

- *Specialized expert in public involvement strategies for transportation and community planning projects*
- *Expertise with communication plans, informational publications, and public meetings in large and small communities throughout Oregon*
- *Understanding of the federal aid process*

Kate is passionate about utilizing smart public participation techniques to address complex issues and facilitate decision-making. She has successfully provided public involvement services to support the National Environmental Policy Act (NEPA) process and conducted outreach to low-income populations pursuant to federal policies on environmental justice. In addition, Kate has experience working with municipalities to engage communities in the development of their parks, natural hazard mitigation, and transportation system plans.

EXPERIENCE ON RELEVANT PROJECTS:

- **OR 213: I-205-Redland Road Overcrossing Project, Oregon City, Oregon****
  Managed public involvement and outreach programs for the design and construction of a transportation improvement project on OR 213 at one of I-205's busiest interchanges. **Outcome:** Coordinated public meetings and community briefings with affected business owners, emergency responders, neighborhood associations, and freight haulers. Planned and implemented highly successful outreach campaign to raise awareness of a 104-hour full highway closure and prevent associated gridlock. Kept public informed of construction progress with a project website, email updates, informational mailers, press releases, and detailed responses to individual questions and concerns.

- **Outer Powell Boulevard Safety Improvements Project, Portland, Oregon***
  Assisted ODOT with public involvement strategy and implementation. The project involved the addition of bicycle lanes and wider road shoulders for pedestrians in a low-income and multi-cultural neighborhood of Southeast Portland. **Outcome:** Prepared outreach materials, coordinated open houses, and worked with the Community Affairs and engineering team to provide meaningful opportunities for public input on specific elements of project design.

- **Sweet Creek Road Retaining Wall Replacement Project, Lane County, Oregon****
  Led public involvement during design of a project to replace a retaining wall adjacent to the Siuslaw River along Sweet Creek Road. As the sole roadway providing access to approximately 70 homes, proposed full closures of the road during construction had the potential for significant impacts to residents. **Outcome:** Worked closely with Lane County Public Works staff to provide opportunities for stakeholders to weigh in on the road closure schedule in order to develop a plan that balanced residents' needs with contractor efficiencies. Prepared a public involvement plan, developed fact sheets, and coordinated meetings and briefings with local environmental groups to address stakeholder concerns.

- **Weaver Road Extension Environmental Assessment, Douglas County, Oregon****
  Managed multi-faceted public involvement program to support the development of an Environmental Assessment for a new bridge over the South Umpqua River. **Outcome:** Worked with Douglas County and ODOT to develop a comprehensive communications plan. Coordinated Citizen Advisory Committee meetings, public open houses, and a public hearing. Conducted environmental justice outreach to inform affected low-income households of the proposal, its potential effects, and opportunities to comment during the decision-making process.

**ODOT Project | **Local Agency Project*

CA/CEI PROPOSAL INDEX

2.2.6 – OBEC'S PROJECT MANAGEMENT..... 1-6

2.2.6.A – Management and Organizational Structure; Office Locations; and Subconsultant Selection, Utilization, and Management

2.2.6.B – Coordinating and Expediting Quality Project Elements and Adjusting Effort Levels

2.2.6.C – Quality Control Procedures & Policies

2.2.7 – OBEC'S COST EFFECTIVENESS..... 7-9

2.2.7.A – Steps to Ensure Cost-Effectiveness

2.2.7.B – Cost Estimating Methods and Ensuring Fair and Reasonable Estimates

2.2.8 – PROJECT TEAM AND QUALIFICATIONS..... 10-12

2.2.8.A – Project Managers' Experience on Projects Similar in Nature and Complexity

2.2.8.B – Key Staff Resumes

2.2.10 – REFERENCES FOR RELEVANT EXPERIENCE

Reference Questionnaires Submitted Directly to ODOT

2.2.6.A

(10 points)

*Describe **(i)** Proposer's management and organizational structure, and how that structure aids the delivery of project Services - including chain of command. Describe **(ii)** how subcontractors will be selected for specific WOC assignments, utilized and managed to complete the projects. Include **(iii)** a list or org chart showing key staff of the prime and all subconsultants and their proposed role/discipline for CA/CEI Services.*

A(i) Management and organization of the OBEC Team aids the delivery of project services with a concise chain of command (**see *Figure 1***).

By deliberately structuring our teams so that experienced leaders are in a position to manage and mentor project staff we facilitate quality, collaboration and efficiency to comply with FHWA standards and deliver to ODOT and Local Public Agency (LPA) expectations.

OBEC also integrates Quality Assurance and Quality Control (QA/QC) directly into our chain of command. This structure provides clear authority and accountability for ensuring comprehensive quality of completed projects and effective project services.

FIGURE 1

OBEC's CA/CEI Chain of Command

Chief Engineer
(Guy Hakanson, PE, Chief Engineer)
- Contract negotiations
- Client satisfaction and issue resolution
- Final work order contract (WOC) QA

Contract Manager
(Brad Larsen, PE, CA/CEI Division Manager)
- Assign Project Manager
- Assemble project-specific teams
- Contract negotiations and issue resolution
- Final WOC QC

CE Quality Manager
(Garrick Doll, CA/CEI QA Manager)
- Quality Assurance Plans creation/facilitation
- Provide federal-aid documentation guidance
- Conduct Plan audits to ensure completeness

Construction Project Manager (CPM)
(one of four highly experienced managers)
- Detailed scope of work and budget
- Manage sub-consultants and project staff
- Conduct design transfer meeting
- Conduct pre-construction meeting
- Coordinate/Process design modifications
- Review contractor's quality documentation
- Monitor schedule, budget, and monthly pay est.
- Coordinate with contractor, ODOT and LPAs
- ODOT Construction Manual compliance
- Final inspection and project acceptance

Inspection Staff
(Asst. CPMs, Field Engineers, Field Engr. Techs.)
- On-site contractor coordination
- Environmental compliance/erosion control
- Field inspection/construction activity monitoring
- Quality control monitoring
- Task-specific records and documentation
- Facilitate design support/design inquiries
- Keep CPM and Agency informed of progress
- Perform project close-out

Contract Admin Staff
- Enter Paynotes after verifying QA documents
- Process submittals and general documentation
- Verify payroll information
- Process and bind final documentation

As the prime consultant, OBEC has successfully delivered more than 100 CA/CEI projects in the last 10 years with a management structure focused on:

- **Geographic availability for local, responsive service**
- **Proactive communication and rapid issue resolution**
- **Comprehensive team staffing, licensing, and certification**
- **Expert understanding of the federal-aid process**
- **Quality and efficiency**

In addition to the convenient geographic distribution of OBEC's offices, our team includes 22 highly skilled construction engineering support subconsultants (**see *Figure 3***) with multiple offices in and near your regional communities to provide state-wide expertise (**see *Figure 2***).

This familiarity with local concerns and regulations as well as established partnerships with local ODOT, county, city, and regulatory agency staff facilitates effective communication and efficient delivery of CA/CEI services.

FIGURE 2

Team Organizational Structure – Statewide, Full-Service Coverage

(#) number of subconsultant offices ODOT regional office OBEC office

✓ Local service + Service from another region

		Certified Const. Insp.*	Electrical/ Traffic Signal	Environmental/ Permit Compliance	Certified Testing Tech.*	Hist./ Cult./ Hazmat	Survey/ Constr. Staking
R1	OBEC	✓	✓	✓	✓		✓
	Subs	✓	✓	✓	✓	✓	✓
R2	OBEC	✓	✓	✓	✓		✓
	Subs	✓	✓	✓	✓	✓	+
R3	OBEC	✓	✓	✓	✓		✓
	Subs	✓	+	+	+	✓	✓
R4	OBEC	+	+	+	+		+
	Subs	✓	✓	✓	✓	✓	✓
R5	OBEC	+	+	+	+		+
	Subs	✓	+	+	+	✓	✓

*See Table 1 on page 4 for listing of certification categories.

A(ii) Subconsultant selection, utilization and management are key elements of how we build effective and efficient project teams. We select our subconsultant partners in three primary ways: by past experience, referral and by solicitation.

Past Experience: OBEC has an established history with many subconsultants. These partnerships among OBEC, our subs, and the Agencies we work with significantly aid in successful project delivery.

Referral Selection Process: When a public agency or other consultant firm recommends a subconsultant based on the quality of their services, we review their qualifications, meet in person with key staff, and check in with additional references. If their services meet the needs of the project and client, we may add them to a project team.

Solicitation Selection Process: Based on specific needs, OBEC periodically initiates an RFQ process to solicit potential subconsultants who may be shortlisted, interviewed or added to a project team.

Subconsultant Selection Criteria Include:

- **Quality and competence** of past work of the technical discipline lead and staff members.
- **Relevant skills and expertise** for specialty technical services, based on project requirements.
- **Experience** monitoring the construction of similar public transportation projects.
- **Geographic location** to cost-effectively deliver CA/CEI services throughout the state.
- **Established ODOT and LA relationships** to ensure client satisfaction.
- **Capacity** to help meet project-specific demands.
- **Qualified Oregon firms** and individuals typically receive preference for selection.

We value diversity in our workforce and those of all our subconsulting partners. As an involved member of the community, we are committed to advancing the interests of DMWESB resources.

In November, 2012, OBEC issued an RFQ to solicit, pre-qualify and select skilled DMWESB firms to for the purpose of meeting ODOT's new DMWESB policy and goals.

Our team currently includes eight DMWESB partners.

Utilization: Each subconsultant partner is assigned project tasks in line with their expertise, licensing, and capacity. Our goal is to deliver a high-quality project while advancing the development of DMWESB firms through on-the-job mentoring and training focused on compliance with ODOT policies and procedures.

Management: All subconsultant partners are managed by the CPM as a direct part of the OBEC team. With an integral scope, schedule, and budget, they are an integrated part of our well-structured project delivery process. This includes full participation in the proven Quality Management Plan (QMP) that we implement on each project.

A(iii) OBEC has selected a strong team of regional experts to provide ODOT and Local Agencies with comprehensive CA/CEI services. **Our organizational chart** (Figure 3) reflects personnel assigned to this contract, including subconsultant firms for key supporting tasks.

FIGURE 3

2.2.6.B
(10 points)

*Describe **(i)** Proposer's methods of coordinating and expediting all elements of projects to meet delivery schedules without sacrificing quality. Describe **(ii)** Proposer's flexibility and approach to making adjustments to schedules or staffing in order to meet a schedule.*

B(i) Coordinating and expediting project delivery without sacrificing quality is achieved by leveraging OBEC's 46 years of experience successfully delivering high-quality finished projects in partnership with ODOT and Local Public Agencies.

OBEC's accomplished CPMs and experienced field engineers are the foundation of our successful project delivery and client service. Our focus on quality as the primary goal results in projects that routinely exceed client expectations under tight schedules.

Nearly five decades of CA/CEI experience allows us to proactively anticipate issues and find solutions early to ensure quality while meeting schedule and budget.

Managing Project Start-up: Immediately upon receiving NTP for a project, the CPM and Quality Manager confirm the work elements to be inspected and assign a CA/CEI team using the ODOT QA/CA plan. This ensures the assigned staff have proper certifications and experience.

Most OBEC CA/CEI services are for OBEC-designed projects. By providing constructability reviews and creating the Construction Time Estimate (CTE) during design, the team is already familiar with project details and desired outcomes.

OBEC's streamlined and effective approach to QA/QC for all projects (OBEC-designed or non-OBEC-designed) is shown in Figure 4 in Section 2.2.6.C.

Proactive CA/CEI Services: Our communication-intensive, project-first approach ensures all stakeholders (ODOT, LPA, A&E, contractor) stay engaged in decisions that are necessary to maintain schedule and budget. We achieve this by:

- **Partnering with ODOT, LPAs, and CCs** to establish highly cooperative working relationships.
- **Expediting decision-making** with transparent and proactive communication among all parties.
- **Conferring with ODOT and LPA** regarding schedule or budget adjustments necessary to meet project constraints and ensure desired outcomes.
- **Conducting regular progress meetings** with stakeholders to ensure fully informed and timely decision making.
- **Proactive communication** with PE-phase staff to ensure design intent and permitting conditions are achieved.
- **Monitoring schedule and staffing assignments** to enhance quality with timely inspection.

Expediting: Through diligent and proactive planning, workload balancing, and careful scheduling of personnel, we routinely accommodate expedited project elements. We can adjust staff levels to meet higher demands on one or multiple ongoing projects.

- **Our multi-discipline construction staff** members are able to seamlessly move between projects.
- **Crews routinely work overtime,** nights and weekends to meet contractor-driven schedules.
- **Design staff with inspection certification and experience** are used to supplement peak demands.

OR 213: I-205 – Redland Road "Jughandle"

In the spring of 2012, OBEC's CPM used our proven methods (outlined above) to prepare for an extremely fast-paced project phase that required the utmost degree of accuracy, coordination and quality.

From March 23nd–26th, OBEC's CE team worked around the clock during a four-day closure of OR 213 to complete the accelerated bridge construction phase of this highly technical project.

The move was completed ahead of schedule, and ODOT Region 1, Oregon City, and Mowat Construction staff have all recognized the critical role that OBEC's CE staff played in making this project a nationally-recognized success.

"During the City's OR213 Jughandle project, OBEC demonstrated their firm has excellent resources to deliver a well-engineered design and perform top-notch construction management, administration and inspection of a complex project with a compressed schedule."

– Aleta Froman-Goodrich, PE, City of Oregon City Public Works Senior Project Engineer

B(ii) OBEC's flexibility and approach to CA/CEI allows straight-forward adjustments to meet changing schedule demands and successfully deliver high-quality completed projects.

The approach begins with the OBEC Construction Project Manager's (CPM) regular reviews of the construction contractor's (CC) overall project schedule and three-week look-ahead schedules. This allows the CPM to adjust staff levels to meet varying demands on multiple projects.

To position each project for success, OBEC CPMs meet on a weekly basis to adjust staffing assignments. This proactive adjustment allows CPMs to share progress with each other and use all of OBEC's CA/CEI experience to resolve issues in real time.

OBEC's dedicated professionals have a "project first" attitude, and our significant team depth ensures delivery of timely, quality services. Major elements of our approach to flexibility include:

- **Multi-discipline field engineers** with experience in construction inspection, contract administration, quality documentation and surveying – allowing them to fill multiple roles.
- **CPM flexibility** to limit inspection time charged to projects that don't require full-time efforts by assigning field engineers who are cross-trained in design and load rating duties.
- **Dedication to work overtime,** including nights and weekends, to meet the CC's schedule.
- **Design staff are also experienced, certified inspectors** and can provide additional support.
- **Stringent cost-control measures** to reserve budget for CC activities like asphalt paving that may require multiple inspectors.

Adapting to Project Needs: Construction is dynamic, often requiring rapid adjustment of staffing levels during project lifecycles to ensure timely and cost-effective task completion.

Situations requiring staff adjustments to meet schedules may include:

- Construction schedule acceleration.
- Meeting regulatory permit timelines.
- Concurrent activity at multiple site locations.
- Nighttime or multiple shifts worked by the CC.
- Unanticipated or emergency project assignments.

OBEC effectively adjusts staffing levels to meet fast-track schedules by:

- Effectively managing overtime.
- Adding staff to adjust individual workloads.
- Re-balancing project priorities as needed.
- Outsourcing to our highly qualified subconsultants.
- Using design staff, skilled interns, and seasonal help.

Ready to Provide Service: Consistent with the need for CA/CEI expertise to augment ODOT's and Local Agencies' engineering capabilities, OBEC invests in developing highly competent, experienced field engineers and field engineering technicians, as well as subconsultant partnerships, ensuring capacity and production readiness for state-wide CA/CEI services, both now and into the future. Combined OBEC and subconsultant staffing is shown in Table 1.

TABLE 1

COMPREHENSIVE CERTIFICATION & SKILLS		
Certification	**OBEC**	**Subs**
Aggregate Technician	3	3
Asphalt Technician	3	2
Bridge Construction Inspector	14	6
Density Technician	3	1
Drilled Shaft Inspector	11	2
Embankment Technician	3	3
Erosion Control Inspector	18	13
General Construction Inspector	15	17
HMAC Inspector	11	9
Maintenance Bridge Inspector	4	4
Quality Control Technician	11	7
Traffic Control Inspector	7	---
Traffic Signal Inspector	10	20

I-5: Willamette River (Whilamut Passage) Bridges

One Wednesday afternoon in February 2012, Agency inspectors found a rebar placement error in the 8'x25' drilled shafts located near mid-river, with concrete already placed. OBEC's engineers confirmed a repair was needed to meet seismic criteria. OBEC staff worked late into that Thursday night, evaluating options with the team, and delivering a fully checked design solution Friday afternoon, which was completed the following week.

"To have a design solution to a complex problem by Friday afternoon… having only discovered the problem on Wednesday afternoon… on a project of this size… to me that is extremely impressive and worthy of note. It speaks volumes to the dedication of the people involved to maintain a schedule, and being true team members."
–Con O'Connor, Hamilton Construction Superintendent

2.2.6.C

Provide a summary of Proposer's Quality Control procedures and policies for CA/CEI Services.

(10 points)

Quality Assurance/Quality Control (QA/QC) has two components during implementation of the OBEC Quality Management Program (QMP) in the construction phase of a project. **Internally,** assignments and procedures take place to ensure the highest level of quality service is provided. **Externally,** the OBEC team will monitor construction activities and materials to ensure the highest possible quality, maximizing the value obtained with limited public funds.

Internally, the process starts with Garrick Doll, OBEC's Quality Manager for CA/CEI, and the CPM completing an ODOT Quality Assurance/Contract Administration form. This ensures assigned staff have proper certifications and experience to inspect the work being performed.

Further, the CA/CEI component of the QMP ensures that the OBEC team:

- Has necessary project-specific information.
- Performs independent calculations to verify accuracy of design data.

Every project has a history developed during design, including right-of-way agreements, environmental permits, unique details, stakeholder interests and desired outcomes. The CPM facilitates a 'design transfer' meeting that serves to pass this knowledge and intent from the design team to the CA/CEI team.

CA/CEI staff perform independent checking of design data necessary to build the project, such as deck grades for a bridge or locations of individual components. This is done to provide a supplemental QA of information being provided to the construction surveyor. Our proactive and forward-thinking approach, reviewing plans and specifications before work is performed, helps avoid issues and improves quality.

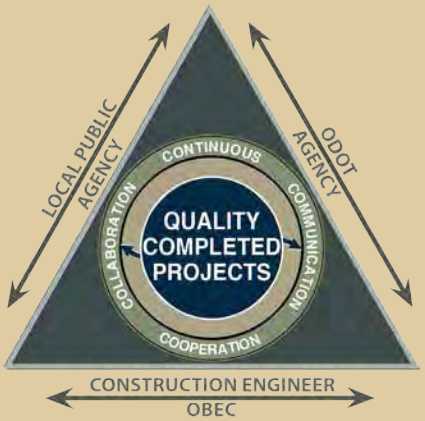
Externally, OBEC expertly uses the *ODOT Construction Manual, Manual of Field Test Procedures, Non-field Tested Materials Acceptance Guide* and relevant industry standards to administer the construction contract and monitor construction quality. The QCCS assigned to the project monitors project test summaries and quality documentation for compliance with Agency standards.

OBEC has managed hundreds of ODOT and LPA projects and understands the rigors of successfully monitoring a CC's QC Program. While continually checking the requirements of the QC Program and the CC's performance, OBEC also stays focused on a quality finished product. All OBEC staff are familiar with ODOT quality requirements, and know how to leverage these stringent requirements to deliver durable finished infrastructure projects that reliably stand the test of time.

Our QMP is aligned with ODOT's quality process.

It establishes a framework that results in continuous collaboration with ODOT and LPAs, and a comprehensive culture of quality at OBEC.

Detailed, in-depth understanding of Local Public Agency goals, ODOT and federal aid requirements and their interdependency with the construction management team ensures delivery of high-quality finished projects.



KEY ELEMENTS OF OBEC'S QMP INCLUDE:

- **Comprehensive CA/CEI QC reviews** begin during the design phase to provide high quality PS&E deliverables. This allows CA/CEI staff to become familiar with OBEC-designed projects for a more seamless transition from design to construction.
- **Experience reviewing** in-house designs fosters efficiency for reviewing PS&E documents developed by Agency or another consultant when OBEC is providing CA/CEI services only.
- **Independent check of design data** by CA/CEI staff provides supplemental independent review of important data used for construction of the project.
- **QA/QC forms are reviewed** by the QCCS and senior staff and tracked by the CPM to ensure closure of each part of the QA process.
- **Full documentation** of compliance with the QA/QC Plan by OBEC and subconsultant staff.

OBEC CA/CEI PHASE QA/QC PROCEDURES

OBEC's Construction Project Manager (CPM) is responsible for controlling the quality of project deliverables, overseeing reviews, assuring conformance of construction with design, and ensuring project administration in accordance with ODOT and FHWA policies. CA/CEI team involvement in QC begins at concept development for OBEC-designed projects – this ensures constructable designs when designed in-house, and develops an efficient means of providing a QC review of construction documents developed by an agency or another consultant.

The CPM works with the other CPMs and Division Managers to assemble the CA/CEI team by assigning an inspector and QCCS. Their ODOT certifications, experience, and additional specialized training will be carefully matched to the work to be monitored.

Prior to construction:

The CA/CEI team meets with designers for a design transfer meeting to:

- Review project design history for continuity from design through construction.
- Share any R/W issues to ensure client and property owner expectations are met.
- Discuss plans, specifications, permits, and project-specific details to ensure CA/CEI team's thorough understanding of design intent.

After contract award:

The project CA/CEI team:

- Analyzes documents emphasizing construction material quality certifications, and measurement/payment requirements.
- Independently calculates and checks plan geometrics and grades.
- Conducts preconstruction meeting with the CC(s), Local Agency (on LA projects), ODOT, utilities, and others to outline roles, lines of communication, and set expectations for federal-aid documentation.
- Reviews contractor submittals for compliance with contract documents.

Field Inspectors:

- Create a table for quantity and quality documentation (Q&Q) for each bid item. After the project QCCS concurs, the Q&Q is sent to the ODOT Region Assurance Specialist for concurrence.
- Review construction layout and staking information used to control the location for all construction.
- Work proactively with CC(s), continually looking ahead to ensure correct construction and offering input on the order of work activities to help assure construction sequences meet design intent.
- Document quantities of work (Paynotes) for payment, document results of field-tested materials, and compile non-field tested material certifications.
- Perform technical inspections of critical on-site work, keeping meticulous daily records of CC's work activities.

Contract Administrators:

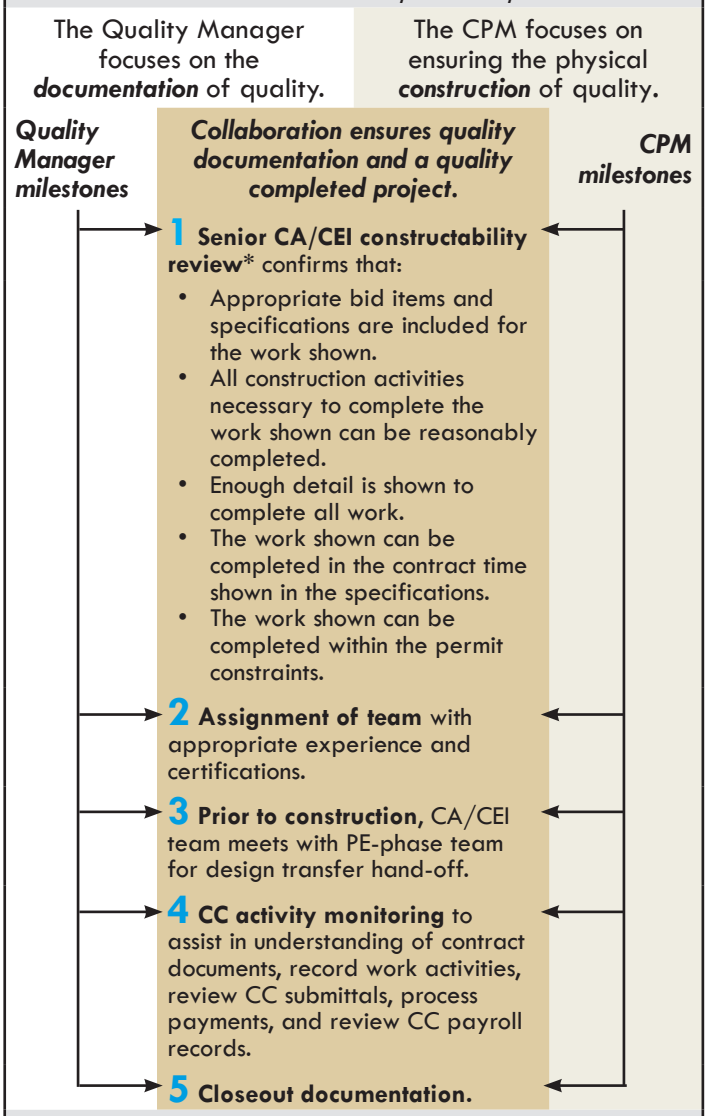
- Track submittals and return to CC.
- Assist CPM with CA documentation.
- Verify that Quantity and Quality documents have been filed while entering Paynotes.
- Verify certified payrolls reflect allowed wages and civil rights requirements are met.

After construction is complete:

The assigned CE team performs project closeout tasks:

- Prepare as-built drawings and submit for final records.
- Complete all quality documentation forms and compile all documentation for submittal to Agency.
- Integrate lessons learned into our quality process.
- Prepare structure load rating (if applicable).

FIGURE 4 OBEC CA/CEI QA/QC PROCESS



We conduct the same level of constructability review for projects designed by OBEC, ODOT, an LPA, or another consultant.

2.2.7.A

(10 points)

*Describe **(i)** the specific efforts Proposer makes to ensure tasks and deliverables are completed in the most cost-effective manner. Explain **(ii)** how Proposer ensures all travel, lodging, and per diem expenses are as low as possible.*

A(i) A fundamental part of OBEC's mission is stewardship of client funds, and we are committed to providing accurate and efficient service to maximize the constructed value of every project.

OBEC has a thorough understanding of task and deliverable requirements, ensuring accurate and cost-effective CA/CEI services. Outlined below are many of the efficiency measures that OBEC takes in each major task area in a typical SOW.

Project Management

- Perform multiple concurrent tasks on assigned projects.
- Manage multiple projects.
- Balance staff workloads to provide timely inspection for full-time or intermittent needs.
- Assign the most cost-effective inspection staff based on location and skills.

Construction Contract Administration

- Complete CA documentation concurrent with on-site monitoring as construction activity allows.
- Use of smart phones and remote network access.
- Office admin staff assist CPMs and inspectors with submittal processing, labor compliance monitoring, Paynote, and quality documentation verification.
- Inspectors assist CPMs with review of submittals and subcontracts, and draft CCO preparation.

Construction Inspection

- When travel is required, utilize economical lodging.
- Carefully coordinate inspections with scheduled CC activities to eliminate unnecessary travel.
- Inspector's survey skills minimize the need for survey crews to mobilize to the site.

Construction Survey

- Careful planning to maximize amount of survey work accomplished with each trip.
- Close coordination with inspectors to assist survey crew with staking.
- Set reference points for inspector use to complete ongoing verification.
- Robotic equipment that allows one surveyor to perform staking.

Project Close-out

- Real-time documentation and resolution of QA audit findings reduces effort at project completion.
- Detailed, accurate, and timely plan markups by the inspector ensures efficient completion of as-built plans.
- Draft closeout documentation and forms prepared by inspection or admin staff streamlines CPM review.

In Oregon's current economy, transportation dollars are scarce in comparison to the infrastructure demands. We recognize this and are committed to providing:

- **Expert services,** resulting in high quality projects on time and within budget.
- **Highly-skilled OBEC CA/CEI staff** in four offices in Oregon, and subconsultants in additional locations.
- **A "project first" attitude** and focus on quality ensures low-maintenance, durable infrastructure.
- **Thorough construction documentation** ensures federal aid compliance and final project acceptance.
- **Proactive issue identification and rapid resolution** to minimize or eliminate added costs.

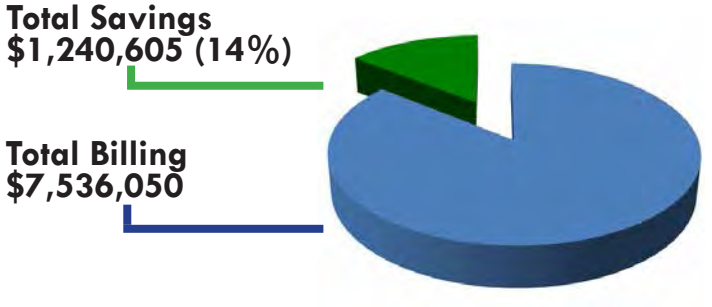
Figure 5 (below) demonstrates the effective results of our approach to ensuring CA/CEI tasks and deliverables are completed in the most cost-effective manner.

FIGURE 5

CA/CEI Services Budget Performance History

Project	Budget	% Savings
Delta Pond Path: Goodpasture Is. Rd.	$557,808	4%
Kokanee Dr: Indust. Dr. - Fish Hatch.	$126,555	5%
DeMoss Springs Mem. Park (Phase 1)	$70,505	6%
Ayers Creek Br - North Valley Road	$145,745	16%
69th St: Thurston Rd. to B St.	$179,407	18%
North Umpqua River (Brown) Bridge	961,609	18%
Lampa Lane Slide Repair	$73,556	23%
Curtis Creek (Cox Road) Bridge	$168,103	23%

CA/CEI Total Contract Value on ODOT & Local Agency Projects Completed 2008-2012: $8,776,655



A(ii) OBEC has CA/CEI staff working from all four of our multidisciplinary offices located throughout Oregon. Since 1966 we have continuously demonstrated our expertise providing high quality, low cost CA/CEI services to ODOT and LPAs across the state.

Our conveniently-located offices, highly-qualified staff, and specialty sub-consulting and small business partners located strategically around Oregon ensure:

- Complete coverage for projects in all Regions.
- Cost containment when working on more remote projects by using inspection staff from the closest office to minimize travel time and expenses.
- Additional trained technical staff available to fill in during busy times.

Logistics Planning: Projects are assessed regularly for logistics-management and cost-containment opportunities where we can cross-utilize crews for inspections and construction-related activities, to achieve the highest level of efficiency.

Some OBEC technical staff have been cross-trained in construction inspection, which also enables individuals to step in and support construction staff during times of heavy demand, and return to their design assignments when completed. Most OBEC construction staff have been cross-trained in technical tasks that allow them to be utilized on other tasks during times of slow construction activity.

Minimizing and controlling travel, lodging, and per-diem expenses to maximize the time available to be on-site and conducting project tasks is critical. OBEC uses several standard practice guidelines to control expenses, particularly for remote sites:

Travel Time – If travel times for tasks do not appear to be balanced with the benefit, we use our firm-wide workload balancing process to arrange a more logical combination of work tasks and locations to maximize productivity.

Overnight Lodging – OBEC always chooses the most economical accommodations, maximizing the benefits of State rates or corporate discounts, to contain costs for overnight stays.

Extended Stay – When the occasional project requires extended stay in remote locations, we research alternative accommodations that are often much more economical than hotels/motels, including the use of RVs.

Travel Expenses – OBEC tracks all travel expenses, consistent with ODOT or relevant client guidelines. Mileage and per diem under this PA will conform to the current Federal Travel Resource rates. All expenses are verified by receipt and a completed expense report form that is reviewed and verified by the supervisor.

Overtime Expenses – Any overtime expense (beyond approved hourly rates) for project tasks performed by non-exempt employees are not charged to the Agency.

Table 2 (below) demonstrates the effective results of our approach to ensuring travel, lodging and per-diem expenses are as low as possible.

TABLE 2 CA/CEI Project Expense Performance History

Project	Expenses Budget	Expenses Billed	% Savings
Plaza Ave: Nezla Street to Verda St.	$2,250	$1,785	21%
3rd St: US 30- School Sidewalks	$8,250	$6,123	26%
Curtis Creek (Cox Road) Bridge	$5,217	$3,646	30%
Boulder Cr. (Beaver-Blaine Rd) Br.	$13,275	$8,574	35%
Brookings Harbor Pedestrian Improve	$11,213	$7,190	36%
North Umpqua River (Brown) Bridge	$66,574	$41,607	38%
Lampa Lane Slide Repair	$7,059	$4,379	38%
69th St: Thurston Rd. to B St.	$5,349	$2,884	46%
DeMoss Springs Memorial Park (Phase 1)	$7,321	$3,656	50%
C Street Bike/Ped Improvements (ARRA)	$994	$332	67%

2.2.7.B

(5 points)

*Describe **(i)** the specific methods, tools, and processes Proposer uses to develop the estimate for Services. Explain **(ii)** how does Proposer ensure that estimates for Services are fair and reasonable to both the government and Proposer?*

B(i) Developing a fair and reasonable fee estimate begins with experienced construction staff preparing a comprehensive and realistic construction schedule. The OBEC CPM uses the construction schedule to establish the duration of CA/CEI services and contacts the Agency PM to discuss their level of service expectations (full time or part time inspection) and whether specific tasks will be performed by the Agency. We focus on open and honest negotiation that sets the tone for a collaborative process.

After establishing mutual understanding, the OBEC CPM follows these processes to develop a detailed SOW and estimate:

STEP 1 – Prepare a thorough and accurate construction schedule
During the design phase, the Construction Division Manager assigns a CA/CEI staff member to develop a detailed construction time estimate including:

- The estimated length of time for each work activity.
- Any periods of no work on-site.
- The final completion date.

STEP 2 – Developing the Scope
The OBEC CPM will develop the project specific scope of work utilizing ODOT's most current CA/CEI template. The following steps will be taken:

- Contact the Agency to determine expected level of service and any tasks that they plan to complete with their own forces. Determine the amount of full-time inspection required for the project.
- Identify what tasks in the scope of work template will be required, which contingency tasks will be required and determine if there are any additional tasks required for the specific project.
- Identify all sub-consultants used during the design phase that will be required during construction.
- Contact the sub-consultants regarding expected level of effort and request a budget for those services.
- Prepare the final scope of work with stated assumptions where required.
- Submit the scope for Agency approval.

STEP 3 – Developing the Fee Estimate
After completing the SOW, we will:

- Determine a detailed fee estimate for scope items that considers the unique aspects of the work.
- The number of staff required to complete the work is based on the required task duration(s) dictated by the construction schedule.
- The time for each task is entered into the current ODOT-approved fee estimate spreadsheet.
- Negotiate appopriate profit percentage with Agency PM using Agency's profit worksheet and finalize the fee spreadsheet.
- The CPM reviews the estimate to ensure it is complete and reasonable, measured against the SOW.

STEP 4 – Quality Checks
Each scope of work and fee estimate undergoes a final independent QC to ensure OBEC is submitting accurate, reasonable, and reliable fee estimates that are fair to the government and our team. These include:

- Full independent review of scope and fee by the Construction Division Manager or Chief Engineer.
- Cost comparisons to past projects based on historical data for similar amount of services provided from our Vision® accounting database.
- Final BOC calculations are checked by OBEC contracting staff.

B(ii) To ensure OBEC's budget estimates for professional services are fair and reasonable for the government and our project team, we utilize the methodical step-by-step process outlined above.

Our goal is to develop an estimate that sufficiently covers the entire scope of work, identifies possible contingencies, and falls within reasonable ranges that Agencies can readily accept. Additionally, the Not-To-Exceed (NTE) contracts we execute ensure that Agencies have confidence in the budgets that are set.

In conjunction with our fee estimating process, the SOW includes detailed assumptions that make the level of effort readily apparent for both the Agency and OBEC. Additionally, we maintain our approved fee schedule according to ODOT's process and we participate in industry surveys to ensure that our estimates are in line with industry standards.

The result of our rigorous process is evidenced by our consistently within-budget project delivery shown in Figure 5 of this proposal.

2.2.8.A

(15 points)

Describe experience (which may include experience while working for the Proposing firm or for other firms) of Project Manager(s) with CA/CEI Services on projects similar in nature and complexity to the projects described in this RFP.

All of OBEC's Project Managers have multiple years of experience on projects similar to those anticipated under this procurement (***see Tables 3, 4 and 5 below***) – both on ODOT projects and LPA projects contracted by ODOT. Our team has collective experience gained on more than 400 state and federal-aid transportation projects, all of which required highly-skilled teams working in close collaboration to achieve satisfaction and project goals.

Beyond this extensive experience base, our Project Managers and Assistant Project Managers have in-depth familiarity with ODOT and Local Agency requirements, processes, and key issues.

TABLE 3 **Chief Engineer, CPM, Assistant CPM and Inspector CA/CEI Services Experience**

Senior Leadership
Construction PM
Assistant CPM
Inspector

	Issue Resolution	Subconsultant Mgmt.	Federal-aid	Project Close-out	Traffic Control	Erosion Control	Environmental Prot.	Earthwork	Riprap Protection	Drainage & Sewers	Structure Exc & BF	Drilled Shafts	Driven Piles	Reinforced Conc.	Prestressed Conc.	Post-Tensioning	Structural Steel	Structure Coating	Retaining Walls	Agg. Base & Paving	Conc. Pavement	Curbs & Sidewalks	Metal Guardrail	Pavement Marking	Signs & Supports	Lighting & Signals	Seeding & Planting	Potable Water
Guy Hakanson, PE	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Brad Larsen, PE	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Steve Sparkman, PE	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Bob Thompson, PE	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Gordon Drake, EI	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Pat Moore, PE	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Garrick Doll, QCCS	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Jason Kelly, PE	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Tyler Douglas	♦		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦		♦		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Mike Hawkins, PE	♦		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Marissa Himmel, PE	♦		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦				♦	♦		♦	♦	♦	♦	♦	♦	♦
Justin Bernt	♦		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Jim Mills	♦		♦	♦	♦	♦	♦	♦	♦	♦	♦			♦					♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Jared Trowbridge	♦		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Avery Roemen, EI	♦		♦	♦	♦	♦	♦	♦			♦			♦			♦		♦	♦		♦	♦	♦	♦	♦	♦	
Mike McNulty, PE	♦		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦			♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	

TABLE 4 **Chief Engineer, Project Manager and Assistant PM Similar Experience**

Guy Hakanson, PE – Chief Engineer	***Relevant Experience***
Guy has 25 years of experience in design and construction management and is Chief Engineer for OBEC. Guy has extensive experience with federal aid projects of all types including bridges, highways, trails, rehabilitation, and emergency response. He shares his extensive project management experience with CPMs, provides constructability reviews, project scheduling and reviews, and design consultation during construction. Guy is also an expert with dispute resolution and change order negotiation.	● OR99E: Aurora - Salem Paving – Const. P-I-C ● US26: North Plains to 185th – Const. P-I-C ● I-5: Row River and Overflow Bridges – CPM ● Beltline Interchange Structures – Const. P-I-C ⊙ South Umpqua River (Myrtle Creek) Bridge – CPM ⊙ South Umpqua River (Pruner Road) Bridge – CPM ⊙ Delta Ponds Pedestrian Bridge – Const. P-I-C ⊙ Courthouse District Transp. Improvements – CPM ⊙ OR213: I205 - Redlands Road – Const. P-I-C ⊙ Lampa Lane Slide Repair – CPM

● ODOT Project || ⊙ Local Agency Project

Brad Larsen, PE – Contract Manager/Project Manager	***Relevant Experience***
Brad has 12 years of design and construction management experience and is OBEC's Construction Engineering/Inspection Division Manager. Before joining OBEC, Brad worked in bridge construction and also designed building structures for two years specializing in seismic design. He is highly qualified as a construction project manager for both ODOT and local agencies, having provided these services on more than a dozen federal aid and county projects.	● I-5: Willamette River Bridge – Const. Assistance ⊙ Chambers Railroad Covered Bridge – CPM ⊙ Lost Creek (Parvin) Covered Bridge – CPM ⊙ Creekside Truck Parking Facilities – CPM ⊙ Union Street RR Bridge: Steel Truss Painting – CPM ⊙ US101: 18th St - 2nd St (Florence) – CPM ⊙ Middle Fork Willamette Loop Path, Unit 1 – CPM ⊙ Deer Creek and Feagles Creek Bridges – Asst. CPM ⊙ Rogue River Bike Lanes – Asst. CPM
Steve Sparkman, PE – Project Manager	***Relevant Experience***
Steve has 14 years of experience including project management, surveying, contract administration and inspection. Steve is Construction Project Manager for OBEC's southern Oregon area and was lead inspector for many federal aid projects. Before joining OBEC, he spent 3 years in New Jersey working on municipal, highway and building projects and two years in Guam performing quality control for building projects.	⊙ Bear Creek Greenway Trail Reconstruction – CPM ⊙ Munger Creek Bridge Replacement – CPM ⊙ Bear Creek Trail: Seven Oaks to Upton – CPM ⊙ Mace Road - Howard Elementary Sidewalk – CPM ⊙ Brookings Harbor Pedestrian Improvements – CPM ⊙ East Pine Street: I-5 to Peninger – CPM ⊙ Plaza Avenue: Nezla to Verde – CPM ⊙ Lower Sucker Creek Bridge – CPM
Bob Thompson, PE – Project Manager	***Relevant Experience***
Bob has 41 years of experience with transportation projects, including design and construction management. Bob is the Construction Project Manager for OBEC's northern Oregon area and has experience with both state and local agency projects. Prior to joining OBEC, Bob was ODOT's Bridge Operations Engineer, responsible for statewide bridge inspection, and bridge maintenance engineering.	● OR99E: Aurora - Salem Paving – CPM ● Region 2 Illumination and ITS Improvements – CPM ⊙ OR213: I-205 – Redland Road - CPM ⊙ OR214: Front Street Ramp – Progress Way – CPM ⊙ Beaver Falls Guardrail Replacement – CPM ⊙ DeMoss Springs Memorial Park – CPM ⊙ Gulick Road (Clear Creek) Bridge – CPM ⊙ OR99E: Main Street - 4th Street Sidewalk – CPM
Gordon Drake, EI – Project Manager	***Relevant Experience***
Gordon is a construction expert with 35 years of experience and has been a valued member of the OBEC team since 1985. He is currently Construction Project Manager for OBEC projects in Lane and Douglas Counties. His experience includes surveying, inspection, and contract administration for over 150 projects. He is highly proficient with Federal-aid project delivery for both ODOT and Local Agencies.	● I-5: Row River and Overflow Bridges – Asst. CPM ● I-5: Willamette River Bridge – Const. Support ⊙ Weaver Road Extension and Bridge – CPM ⊙ Delta Ponds Pedestrian Bridge – CPM ⊙ N. Umpqua River (Brown) Bridge – CPM ⊙ Boulder Creek (Beaver-Blaine Rd.) Bridge – CPM ⊙ Trask River (Johnson) Bridge – CPM ⊙ S. Umpqua River (Pruner Road) Bridge – Asst. CPM
Pat Moore, PE – Assistant Project Manager	***Relevant Experience***
Pat has 31 years of design and construction management experience. His experience includes on-site construction engineering on large and complex projects ranging from bridges to highways. Pat has extensive experience with inspection and contract administration for Federal-aid projects and is currently Assistant PM for Southern Oregon OBEC projects.	⊙ Weaver Road Extension and Bridge – Asst. CPM ⊙ North Umpqua River (Brown) Bridge – Asst. CPM ⊙ Maple Avenue Bridge – Asst. CPM ⊙ South Umpqua (Myrtle Creek) Bridge – Asst. CPM ⊙ Port of Siuslaw Dock – Asst. CPM ⊙ Sprague River Bridges – Asst. CPM ⊙ North Bent Waterfront Improvements – Asst. CPM

● ODOT Project || ⊙ Local Agency Project

Garrick Doll, QCCS – Assistant Project Manager	*Relevant Experience*
Garrick has 23 years of experience including 9 years of naval underwater construction. He is OBEC's Quality Manager for the CE Division. Garrick plays a key role on OBEC projects and is a recognized expert with quality assurance oversight and conflict resolution. His experience includes contract administration, inspection, and federal aid documentation.	● US26: North Plains to 185th – QCCS ● OR99E: Aurora - Salem Paving – QCCS & APM ⊙ Lost Creek (Parvin) Covered Bridge – Asst. CPM ⊙ Eugene Train Depot (Unit 2) – QCCS & APM ⊙ Creekside Truck Parking Facilities – QCCS & APM ⊙ Courthouse District Transp. Improvements – QCCS ⊙ 69th Street: Thurston Road - B St. – QCCS & APM
Jason Kelly, PE – Assistant Project Manager	***Relevant Experience***
Jason has 9 years of construction and survey experience. Jason has performed inspection for hundreds of in-service bridges for ODOT's bridge inspection program, as well as contract administration, inspection and surveying for numerous local agency and federal aid construction projects. Jason is an outstanding communicator and is proficient with project coordination and quality assurance documentation.	● Local Agency Bridge Inspection – APM ● Oregon City Arch Bridge Rehab – Const. Support ⊙ OR213: I205 - Redlands Road – Asst. CPM ⊙ Willamette Shoreline Trestle Repair – Asst. CPM ⊙ Periwinkle Creek (2nd Ave.) Bridge – Field Engineer ⊙ Ritner Creek Covered Bridge – Field Engineer ⊙ Courthouse District Transp. Impr. – Field Engineer ⊙ Teal Creek Bridge Replacement – Field Engineer

● ODOT Project || ⊙ Local Agency Project

TABLE 5 OBEC CA/CEI PROJECT TEAM EXPERTISE

Name/Role/Years of Experience	Education/Licensing	Experience
Tyler Douglas Field Engineering Technician 9 Years of experience	***BS - Forest Engineering*** ODOT Certified Inspector QCCS	• S. Umpqua River (Pruner Rd) Br. • Hazel Street: N. 9th - N. 10th. • Bear Cr. GW Trail: Barnett O'xing
Mike Hawkins, PE Field Engineer 8 Years of experience	***BS - Civil Engineering*** Professional Civil Engineer ODOT Certified Inspector	• Chambers RR Covered Bridge • Carmen Diversion Bridge • Curry County ARRA Paving
Marissa Himmel, PE Field Engineer 7 Years of experience	***BS - Civil Engineering*** Professional Civil Engineer ODOT Certified Inspector	• Middle Fork Willamette Loop Path • US101: 18th Street - 2nd Street • Gulick Road (Clear Creek) Bridge
Justin Bernt Field Engineering Technician 5 Years of experience	***BS - Forest Engineering*** ODOT Certified Inspector QCCS	• Rogue River Bike Lanes • Trask River (Johnson) Bridge • I-5 Bridges Vertical Clearance Imp.
Jim Mills Field Engineering Technician 11 Years of experience	***BA - Geography*** ODOT Certified Inspector WSDOT Bridge Inspection	• Oregon City Arch Bridge • OR213: I-205 - Redland Road • Bridge Camp Road Truss
Jared Trowbridge Field Engineering Technician 4 Years of experience	***BS, M. Eng - Civil Engineering*** ODOT Certified Inspector Bridge Inspection Team Lead	• Oregon City Arch Bridge • OR213: I-205 - Redland Road • Little Rock Creek Bridge
Avery Roeman, EI Field Engineering Technician 5 Years of experience	***BS - Civil Engineering*** EI - Civil Engineer ODOT Certified Inspector	• OR213: I-205 - Redland Road • Weaver Road Extension • Local Agency Bridge Inspection
Mike McNulty, PE Field Engineer 5 Years of experience	***BS - Civil Engineering*** Professional Civil Engineer ODOT Certified Inspector	• OR214: Front St. - Progress Way • OR99E: Aurora-Salem Paving • Region 2 Illumination and ITS

2.2.8.B

(15 points) *Complete "Key Staff Resume for CA/CEI Services" forms.*

Your OBEC team's key staff resumes are provided on the ODOT Key Staff Resume Forms included with our proposal.

Key Staff Resumes for CA/CEI Services

Consultant Name: OBEC Consulting Engineers ; RFP #: 25134

Project Name: Full-Service A&E Price Agreements for ODOT and Local Agency Transportation Projects

NAME & TITLE:

Guy Hakanson, PE

Chief Engineer

NAME OF FIRM (ONLY IF SUB):

ROLE ON POTENTIAL PROJECT ASSIGNMENTS:
Chief Engineer

YEARS OF EXPERIENCE IN PROPOSED ROLE: **27**

Basis for Team Selection:

- *Experienced team leadership on ODOT and Local Public Agency projects*
- *Proven construction engineering management and negotiations*
- *Successful delivery of ODOT and Local Public Agency projects of all sizes*

Guy brings extensive civil/structural design and construction management experience to each OBEC project. He has been involved in numerous design and construction engineering projects including bridge replacements, seismic rehabilitation and road reconstruction. To assure design constructability and efficiency, Guy integrates his expertise into all phases of project development from preliminary site surveys through construction management.

Guy started with OBEC in 1985 and has held the positions of bridge designer, roadway designer, permitting specialist, spec writer, construction inspector and construction project manager.

LIST ACTIVE CERTIFICATION(S), CERTIFICATION NUMBER(S)

Registration

- Civil Engineer, Oregon PE No. 15987 (1992)
- Civil Engineer, Washington PE No. 49684 (2012)

Certification

- ODOT Inspection Certification No. 41748

PREVIOUS ROLE(S) ON RELEVANT PROJECTS:

- **South Umpqua River (Myrtle Creek) Bridge Rehab., Douglas County****
  CPM for the widening of this historic nine-span Conde McCullough bridge. The bridge is a three-span deck arch with approach spans. The widening added a third concrete arch rib to match the adjacent two existing arch ribs adjoining the project. **Outcome:** A bridge that provides more roadway capacity, meets modern standards and includes features that return the bridge to its historically correct appearance.
- **I-5: Willamette River (Whilamut Passage) Bridge, Lane County***
  Senior QA Reviewer during design development and A/E Construction PM for construction of the southbound bridge. The bridge is a two-span deck arch with 5 post-tensioned approach spans. The project is being delivered with the CM/GC method of design-build delivery. **Outcome:** A bridge that replaces a closed bridge that limited interstate commerce on I-5. The southbound bridge is being used for both southbound and northbound traffic during project completion and provides an aesthetic structure that is the pride of many local community action groups.

> "I have been working with OBEC Consulting Engineers in various capacities as a representative of the Agency for the past 14 years. During that time I have worked with Guy Hakanson on projects as simple as highway culvert replacements in response to fish passage constraints to complex interchange projects including the I-5 @ Beltline Interchange and the replacement of the Willamette River Bridge.
>
> "Managing change during construction is at times challenging for project managers. Mr. Hakanson is keenly aware that solving problems in a timely manner is critical in keeping the project moving forward. His help has been critical in managing solutions which balance both worker and public safety with sound engineering principles and still keeping public stewardship. His experience and professionalism should be welcomed on any highway project team."
>
> *– Karl Wieseke*
> *ODOT CPM*

- **South Umpqua River (Pruner Road) Bridge, Douglas County****
  CPM for a project that includes a 588-foot-long steel plate girder bridge over the South Umpqua River. Guy adapted a unique 4-part concrete mix design with fibers from a previous OBEC project for this long-span steel structure. It produced a pristine concrete deck that has been recognized by ODOT for its superior performance. The mix design was incorporated into the project by contract change order that had to be negotiated with ODOT, the Local Agency, and the contractor. **Outcome:** A functional new bridge with a durable deck and aesthetically pleasing elements that compliments the environmentally sensitive project site.

**ODOT Project | **Local Agency Project*

NAME & TITLE:

Brad Larsen, PE

Division Manager / Project Manager

NAME OF FIRM (ONLY IF SUB):

ROLE ON POTENTIAL PROJECT ASSIGNMENTS:
Contract Manager/Project Manager

YEARS OF EXPERIENCE IN PROPOSED ROLE: **12**

Basis for Team Selection:

- *Experienced project manager*
- *Proven construction engineering and inspection team leadership*
- *Successful delivery of a broad range of ODOT and Local Public Agency projects*

Brad has twelve years of civil/structural engineering experience and more than seven years of construction experience. He leads the CA/CEI team in delivery of quality on all projects, fostering an environment of cooperation, collaboration, and dedication to our public agency clients.

Before joining OBEC, Brad worked on building structures for two years specializing in seismic design. Brad started with OBEC in 2002 as a bridge designer, and in 2007 he added specification writing duties to design and construction support roles.

LIST ACTIVE CERTIFICATION(S), CERTIFICATION NUMBER(S)

Registration

- Civil Engineer, Oregon PE No. 58432 (2004)
- Civil Engineer, California PE No. 64100 (2002)
- Civil Engineer, Washington PE No. 42942 (2006)
- Civil Engineer, Idaho PE No. 12581 (2007)

Certification

- ODOT Inspection Certification No. 44649

PREVIOUS ROLE(S) ON RELEVANT PROJECTS:

- **Middle Fork Willamette River Loop Path – Unit 1, Springfield, Oregon****
  Construction PM for the first of three units that cover four miles. Unit 1 constructed 2.5 miles of paved paths and included trailhead facilities and two pedestrian bridges. Close coordination ensured the work avoided impacts to private properties, riparian areas and wetlands. **Outcome:** This new multi-modal path will connect two of Springfield's most popular recreational sites for Willamalane Park & Recreation District in 2013, adding to the area's reputation for exceptional paths and trails.
- **Lost Creek: Parvin Road (Parvin Covered Bridge), Lane County****
  Construction Project Manager for the rehabilitation of a vehicular covered bridge. The project replaced 2000 board feet of structural timber, raised the bridge 1 foot to lessen flooding impacts, and replaced all timber siding and decking. **Outcome:** The single-span timber Howe Truss bridge was rehabilitated back to a functional bridge that can carry modern legal loads.

> "On our three most recent covered bridge construction projects, Brad Larsen has been the project construction manager and has done a good job coordinating the inspection, submittal review, and working with the Contractor to keep the contract on time and as per plans. He also forwards pertinent information and decisions to the County for review and comment, and has been a good resource regarding Federal-funded contract processes and procedures."
>
> *– Brad Lemhouse*
> *Lane County Public Works*

- **I-5: Springfield/Creswell Overcrossing, Lane County, Oregon***
  Construction support for this project that replaced two bridges on Hwy 228 and repaired two bridges on I-5. **Outcome:** The bridges on Hwy 228 were brought up to current standards and widened to connect the quickly growing east side of the City of Creswell to the west side. In addition, two I-5 bridges were incorporated into the project during the design phase as part of the OTIA III program.
- **Union Street Bridge: Phase 2 Steel Truss Painting, Salem, Oregon ****
  Project Manager for the design phase and the construction phase that provided a much-needed structural coating. The project adds security cameras and lighting to make the historic resource pedestrian-friendly and provide a more secure multi-modal path. **Outcome:** This project brought safety to both pedestrians and vehicular traffic by eliminating the pedestrian use of shoulders.
- **Little Elk Cr., Feagles Cr. and Fruitvale Road Bridges, Lincoln County**
  CPM for two bridge replacements that, because of cost-effective design and construction, were expanded to include a bridge repair also. **Outcome:** All work was completed within the budget for the original two bridges – essentially giving the County **three completed bridge projects for the price of two.**

**ODOT Project | **Local Agency Project*

NAME & TITLE:

Steve Sparkman, PE

Construction Project Manager

NAME OF FIRM (ONLY IF SUB):

ROLE ON POTENTIAL PROJECT ASSIGNMENTS:

Construction Project Manager

YEARS OF EXPERIENCE IN PROPOSED ROLE: **14**

Basis for Team Selection:

- *Experienced project manager*
- *Federal aid expertise*
- *Familiar with project delivery in southern Oregon*

Steve has 10 years of experience that includes project management, field surveying, field inspection, and utility coordination. Steven joined OBEC in July 2003 and is currently Construction Project Manager for all construction engineering projects in the Medford Office and has been the lead inspector for numerous State, County, and City projects. Before joining OBEC he spent three years as a staff engineer for a large consulting firm in New Jersey. He has designed and managed a wide variety of projects including municipal engineering, remediation for existing structures, various pavement rehabilitation/overlay projects, and storm sewers. Steve also worked as a junior engineer in Guam for two years performing quality control management of building projects.

LIST ACTIVE CERTIFICATION(S), CERTIFICATION NUMBER(S)

Registration

- Civil Engineer, Oregon PE No. 58432 (2006)
- Fundamentals in Land Surveying, Oregon No. 58432 (2006)

Certification

- ODOT Inspection Certification No. 43576

PREVIOUS ROLE(S) ON RELEVANT PROJECTS:

- **Munger Creek Bridge, Davidson Road, Josephine County****
  Project Manager for this bridge replacement project that removed an aging timber structure from service that was too short for this crossing of the creek. The 75-foot prestressed concrete bridge was built in stages that were extremely tight and required close monitoring of the contractor's traffic control. **Outcome:** The well-traveled secondary road has safe access, and the extremely short bridge over a sensitive creek meets current fish-passage characteristics.

  > *"*Working with Steve Sparkman and Jeff Bernardo is not only enjoyable but they are also a great resource. During design and construction, they are open to look at alternatives. Their projects come in under budget."
  >
  > *– Charles DeJanvier, P.E.*
  > *County Engineer, Josephine County Public Works*

- **Upton Road/Scenic Avenue, Central Point, Oregon ****
  Construction Project Manager for the realignment of two adjacent three-way intersections; widening Upton Road to three lanes; and construction of new storm sewer lines, sanitary sewer replacement, and domestic water system improvements in the middle of Upton Road. **Outcome:** Safer intersections and wider lanes for the traveling public that include bike lanes, and addition of sidewalks, curbs and gutters, and new signing and striping.
- **Bear Creek Greenway Trail: Barnett Road to Blue Heron Park, Unit 2A, Jackson County****
  Project Manager for a federally-funded project that includes a 155-foot steel truss with cast-in-place concrete approach spans and decorative railings that match the aesthetics of other bridges along the trail. The project is adjacent to the South Medford Interchange project, and construction was concurrent with the completion of the interchange work. **Outcome:** The last street crossing along the 18-mile long trail was removed, creating an 18-mile-long, uninterrupted multi-modal route connecting Central Point and Ashland and all the cities along the Bear Creek Greenway Trail.
- **Little Applegate River Bridge (Applegate Road), Jackson County***
  Field Engineer for a $1.5 million bridge replacement project consisting of a two-span 122-foot-long by 37-foot-wide precast prestressed beam bridge and more than 0.5 mile of improved highway realignment. **Outcome:** Full realignment of Little Applegate Road at the bridge site allowed use of the existing bridge by public traffic during construction, thus minimizing driver inconvenience and avoiding the cost of a detour structure.

**ODOT Project | **Local Agency Project*

NAME & TITLE:

Robert Thompson, PE, PLS

Construction Project Manager

NAME OF FIRM (ONLY IF SUB):

ROLE ON POTENTIAL PROJECT ASSIGNMENTS:
Construction Project Manager

YEARS OF EXPERIENCE IN PROPOSED ROLE: **41**

Basis for Team Selection:

- *Project management expertise*
- *Proven construction engineering/inspection team leadership*
- *Successful delivery of ODOT projects*

Bob brings his extensive experience to ensure quality, efficient, and timely construction engineering services. He started with OBEC in 2004 and his prior experience quickly led him to project management.

Prior to joining OBEC, Bob served as Bridge Operations Engineer for the Oregon Department of Transportation (ODOT). He was responsible for statewide bridge inspection, bridge repair and replacement selection, bridge management data systems, bridge maintenance program, and bridge maintenance engineering.

LIST ACTIVE CERTIFICATION(S), CERTIFICATION NUMBER(S)

Registration

- Professional Engineer, Oregon PE No. 12600 (1984)
- Professional Land Surveyor, Oregon PLS No. 02161 (1985)

Certification

- ODOT Certified Lead Bridge Inspector, No. S0030 (2000)
- ODOT Inspection Certification No. 41223

PREVIOUS ROLE(S) ON RELEVANT PROJECTS:

- **OR 213: I-205 - Redland Road Overcrossing, Oregon City, Oregon****
  Project Manager for this complex bridge and roadway project that included numerous traffic control stages through a busy intersection, addition of a new alignment that includes a traffic circle and multiple types of retaining wall structures, and Accelerated Bridge Construction (ABC) techniques. **Outcome:** The project increased traffic safety to one of the state's most congested corridors. During construction, the project drastically minimized mobility impacts with ABC occurring in four days instead of building a bridge in stages just 1000 feet from the I-205 interchange.
- **North Fork Molalla River (Dickey Prairie) Bridge, Clackamas County****
  Project Manager for the replacement of a timber bridge that used a 155-foot spliced steel girder replacement structure, and included water infiltration features to handle stormwater. The construction was accomplished with falsework near the OHW boundary that required close coordination by OBEC and the County. **Outcome:** The finished bridge clear spans the hydraulic opening to improve river flows and fish passage.

  > "Bob is a seasoned professional with many bridges completed. His work with me on the N Fork Bridge replacement was nothing but professional with the project's best interest at the heart of his decisions.
  >
  > "I find Bob to be easy to work with but firm when required. He and his team have been responsive to issues that required immediate attention."
  >
  > *– Kerri Whitlow*
  > *Clackamas County Project Manager*

- **OR 99E: Aurora - Salem Paving, Marion County***
  Project Manager for this 22-mile-long preservation, operations, and safety project. The project required a significant change to the contractor's traffic control plan which involved interaction with four cities as well as ODOT. In addition to providing contract admin, Bob coordinated design modifications and helped with construction activity monitoring when double shifts occurred. **Outcome:** This section of 99E was preserved to serve the public while minimizing the effects to local businesses and residents due to project requirements for night work.
- **OR 8: N.10th - N.19th (Adair St), Cornelius, Oregon***
  Assistant PM for the road work on a half-mile section of the Tualatin Valley Highway through the City of Cornelius. Major elements included widening on both sides and curbs and sidewalk improvements with bulb-outs at certain intersections for traffic calming and slowing purposes. The project also included major utility relocations underground, water lines, drainage and sewers, pavement removal, illumination, paving, striping, and signing. **Outcome:** Working with the construction contractor and non-OBEC plans and specs, Bob successfully provided contract admin, construction inspection, quality control, and quality assurance.

**ODOT Project | **Local Agency Project*

NAME & TITLE:

Gordon Drake, EIT

Construction Project Manager

NAME OF FIRM (ONLY IF SUB):

ROLE ON POTENTIAL PROJECT ASSIGNMENTS:

Construction Project Manager

YEARS OF EXPERIENCE IN PROPOSED ROLE: **35**

Basis for Team Selection:

- *Extensive inspection and management experience on unique structures*
- *Inspector on more than 1000 of bridges across the state*
- *Successful delivery of projects with unique structure types*

Gordon has 35 years of experience and has been an inspector with OBEC since 1985. His experience includes serving as Construction Inspector or Project Manager on more than 120 civil/bridge projects. Responsibilities include bridge and highway construction inspection, surveying, quantity and quality assurance documentation, and testing on Federal-aid projects.

His responsibilities also include inspecting structures under the federally-mandated bridge inspection programs for various counties, cities, and private agencies (more than 1,100 in the past 15 years).

LIST ACTIVE CERTIFICATION(S), CERTIFICATION NUMBER(S)

Registration

- Oregon EIT No. 41265 (1977)

Certifications

- ODOT Inspection Certification No. 41570
- American Concrete Institute as Concrete Field Technician – Grade 1

PREVIOUS ROLE(S) ON RELEVANT PROJECTS:

- **Delta Ponds Path and Pedestrian Bridge, Eugene, Oregon****
  Project Manager for this multi-use bicycle/pedestrian path near the Delta Ponds Natural Area and signature cable-stay bridge across Delta Highway. The cable-stay bridge was constructed over the highway with precast units and staged traffic that required close monitoring of the contractor's traffic control and construction techniques. **Outcome:** The new path and bridge provide a vital connection between the Valley River area and North Eugene, accommodating safe recreational and commuter transportation needs.

  "The City of Eugene was fortunate to have Gordon Drake assigned … during construction. He carefully documented all of the project's quality and quantity of work, coordinated all of the field inspections, and has a ready response to any question I asked. His work was impeccable and successfully passed through several audits. In addition Gordon was a tireless advocate for the City of Eugene, negotiating several change orders and making sure the City received fair prices."
  – Patrick Cox, City of Eugene

- **South Umpqua River (Pruner Road) Bridge, Douglas County****
  Assistant PM for a project that includes a 588-foot-long steel plate girder bridge over the South Umpqua River. The project was built adjacent to property with historic implications, requiring close oversight of the contractor's operations, and included a water line crossing with approximately 600 linear feet of on-grade pipeline near the ends of the bridge, disinfection, and testing for a tie-in ready installation for the City of Riddle. The long-span structure used a unique 4-part concrete mix design with fibers that produced a pristine concrete deck that has been recognized by ODOT for its innovative composition. **Outcome:** The new bridge features aesthetically pleasing elements such as weathering steel, concrete rails with a stone architectural treatment, and powder-coated steel railings that mimic the weathering steel.
- **North Umpqua River (Brown) Bridge, Douglas County****
  Project Manager for this multi-season project to build a 646-foot-long, three-span steel plate girder bridge. This ODOT project had to be coordinated with an earlier emergency Local Agency project to provide an emergency detour bridge at this location. **Outcome:** After accelerating completion of a 12-span 760-foot-long temporary detour bridge, OBEC successfully coordinated the construction contract for the replacement structure that included a significant amount of Local Agency involvement.
- **Boulder Creek (Beaver - Blain Road) Bridge, Tillamook County****
  Construction PM for this bridge replacement project that used drilled-in-place piling and completed an emergency project for a washed out culvert. Previously the culvert had been replaced with an emergency Bailey Bridge. **Outcome:** This new bridge replaced a culvert that did not meet current fish passage standards, and permanently re-opened a road that had been intermittently closed.

**ODOT Project | **Local Agency Project*

NAME & TITLE:

Pat Moore, PE, SE

Assistant Construction Project Manager

NAME OF FIRM (ONLY IF SUB):

ROLE ON POTENTIAL PROJECT ASSIGNMENTS:

Assistant CPM

YEARS OF EXPERIENCE IN PROPOSED ROLE: **32**

Basis for Team Selection:

- *Broad range of construction project experience with a specialty in projects that include structures*
- *Proven delivery of federal aid and local agency projects of all sizes*

Patrick has more than 32 years of civil and structural design, project development and construction admin/ construction management experience.

He has worked as Project Engineer and Assistant PM on large and complex projects ranging from multi-span bridges to the structural design of commercial structures and office buildings. He has been a part of numerous Federal-aid contracts and several local agency contracts over the past five years. He is currently an Assistant Project Manager and Lead Inspector for construction projects in Southern Oregon.

LIST ACTIVE CERTIFICATION(S), CERTIFICATION NUMBER(S)

Registration

- Oregon PE/SE No. 18739

Certifications

- ODOT Inspection Certification No. 41704

PREVIOUS ROLE(S) ON RELEVANT PROJECTS:

- **North Umpqua River (Brown) Bridge, Douglas County****
  Assistant PM for this multi-season project to build a 646-foot-long, three-span steel plate girder bridge. This ODOT project had to be coordinated with an earlier emergency Local Agency project to provide an emergency detour bridge at this location. **Outcome:** After accelerating completion of a 12-span 760-foot-long temporary detour bridge, OBEC successfully coordinated the construction contract for the replacement structure that included a significant amount of Local Agency involvement.
- **Port of Siuslaw Dock Replacement, Florence, Oregon****
  Assistant PM for the fast-track replacement of a deteriorated floating timber dock with a new concrete floating dock anchored by steel piles, including new water, sewer, and electrical facilities for both commercial and public fishing. **Outcome:** OBEC worked closely with regulatory agencies to quickly write a BA resolving environmental issues that developed after construction began. OBEC provided design, construction engineering, environmental/NEPA compliance, and overall project management.
- **Harbor Ave. Waterfront Elevated Pier, North Bend, Oregon****
  Assistant PM for this elevated pier along the historic waterfront in North Bend. For construction to take place during the tidal in-water work season, much of the structure was built during winter months, requiring close monitoring of the contractor's means and methods. **Outcome:** The multi-use path accommodates a future commercial dock; connection of current and future development; and pedestrian-friendly facilities that include illumination, benches, bicycle racks, and other functional and aesthetic enhancements to the waterfront setting.
- **Weaver Road Extension and Bridge Project, Douglas County***
  Assistant PM for a new roadway that spans the Umpqua River with a 1,100-foot-long steel plate girder bridge with reversing curves, which required close coordination with OBEC surveyors and the contractor to ensure proper elevations for the girders and obtain deck grades according to the plans. The project also includes large areas of MSE walls, a large detention pond, improvements to Hwy 99, and work on both sides of the highway. The bridge also spans archaeologically sensitive areas, and the falsework temporarily founded in one of those areas requires special details to minimize any disturbance. Close monitoring of contractor operations were required for this multi-season project. **Outcome:** The bridge work is finished and the project is nearing completion. Construction access has been uninterrupted in spite of moving a local access road, and a signalized intersection with Hwy 99 has been created for safe public access to the new crossing. Multiple elements were constructed near local access roads, private driveways, businesses and on both sides of Highway 99.

**ODOT Project | **Local Agency Project*

NAME & TITLE:

Garrick Doll

Quality Control Compliance Specialist (QCCS) / Construction Engineering QA Manager

NAME OF FIRM (ONLY IF SUB):

ROLE ON POTENTIAL PROJECT ASSIGNMENTS:

Quality Control Manager, QCCS, Assistant CPM

YEARS OF EXPERIENCE IN PROPOSED ROLE: **24**

Basis for Team Selection:

- *Construction inspection expertise*
- *Quality Control Compliance Specialist*
- *Specializes in quality control for production and placement of aggregate, AC, and structural concrete*

Garrick is a senior construction engineering technician with a broad range of construction inspection experience. One of his key roles for OBEC construction projects is quality assurance for HMAC paving, as well as performing mix design reviews and on-site inspections for placement and compaction.

Garrick's responsibilities at OBEC include CA/CEI Quality Manager, construction inspection, project administration, and QCCS duties. AS OBEC's paving expert, Garrick has been involved in more than 50 paving projects of various sizes while with OBEC.

LIST ACTIVE CERTIFICATION(S), CERTIFICATION NUMBER(S)

Certifications

- Special Inspector Reinforced Concrete, ICBO
- HE02 Hard Hat Diver
- ODOT Inspection Certification No. 41591
  - Certified Aggregate Technician
  - Certified Embankment Technician
  - Certified Asphalt Tech. 1
  - Certified Density Technician

PREVIOUS ROLE(S) ON RELEVANT PROJECTS:

- **East Fork Dairy Creek (Meacham Road) Bridge, Washington County****
  QCCS for this bridge replacement project where the Local Agency managed the construction contract. **Outcome:** Helped the County manage and compile the Federal-aid quality control documentation for both OBEC-inspected work as well as County-inspected work.

  > "Garrick is very efficient and comprehensive in regards to compiling quality control and quality assurance documentation. I highly recommend Garrick and hope to utilize his knowledge and capabilities on future County projects."
  > *– Matt Meier, Washington County Land Use & Transportation*

- **OR 99E: Aurora - Salem Paving, Marion County***
  Quality Control Inspector for this 22-mile-long preservation, operations, and safety project. The project requires a high level of public involvement, including interaction with four cities as well as ODOT. Garrick provided quality control monitoring and assisted with construction contract administration. **Outcome:** Greatly improved roadway and safety conditions in this highly traveled corridor and minimized disruptions to the local businesses and traffic. The project added 4,000 feet of roadway that crosses I-5.
- **US 26: North Plains to 185th, Washington County***
  Lead Inspector for this 2.3-mile-long 3R preservation project on a busy highway involving mostly night work. The project upgraded nine signalized intersections; median barrier; ADA ramp improvements; local agency permits; and signing, striping, and traffic control. Garrick helped complete the construction quality assurance plan and assisted with construction contract administration. He also provided work zone monitoring, construction activity monitoring, and quality control monitoring. **Outcome:** The roadway was brought up to modern standards while vastly improving ADA accessibility in the area.
- **Courthouse District Transportation Improvements, Eugene, Oregon****
  Lead Inspector for Phase 1 and Phase 2 of this transportation improvement project surrounding the new Federal Courthouse in the City of Eugene. Garrick provided construction inspection, general documentation, quality control and assurance documentation, quantity assurance and final documentation. **Outcome:** New roadway sections enhanced by compact and attractive "green street" storm drainage treatment facilities are consistent with the new Federal Courthouse that also has green features.

**ODOT Project | **Local Agency Project*

NAME & TITLE:

Jason Kelly, PE, LSI

Field Engineer/ Safety Manager

NAME OF FIRM (ONLY IF SUB):

ROLE ON POTENTIAL PROJECT ASSIGNMENTS:

Assistant CPM

YEARS OF EXPERIENCE IN PROPOSED ROLE: **9**

Basis for Team Selection:

- *Highly qualified, ODOT-certified inspector*
- *Successful delivery of large, complex ODOT projects*
- *Certified as a Bridge Safety Inspection Team Leader*

Jason has 9 years of experience in construction inspection, in-service bridge inspection, and surveying. He is also an extremely good communicator with all levels of people involved in construction projects, from owners and engineers to construction contractors.

He is familiar with all forms and manuals, including the 2008 Oregon Standard Specifications for Construction, the Manual for Field Test Procedures and the ODOT Construction Manual. He specializes in bridge construction inspection, and is experienced in all types of transportation construction for highways, roadways, and trails.

LIST ACTIVE CERTIFICATION(S), CERTIFICATION NUMBER(S)

Registration

- Civil Engineer, Oregon PE No. 72500 (2007)
- Civil Engineer, California PE No. 71154 (2006)
- Surveying, Oregon LSIT No. 72500 (2003)

Certification

- ODOT Certified Bridge Inspector Team Leader No. C0064
- ODOT Inspection Certification No. 43763

PREVIOUS ROLE(S) ON RELEVANT PROJECTS:

- **OR 213: I-205 to Redland Road Overcrossing, Oregon City, Oregon****
  Assistant PM for this complex bridge and roadway project that included numerous traffic control stages through a busy intersection, addition of a new alignment that includes a traffic circle and multiple types of retaining wall structures, and Accelerated Bridge Construction (ABC) techniques. **Outcome:** The project increased traffic safety to one of the state's most congested corridors. During construction, the project drastically minimized mobility impacts, with ABC occurring in four days instead of building a bridge in stages just 1,000 feet from the I-205 interchange.
- **Gresham-Fairview Trail, Gresham, Oregon****
  Lead inspector for structures, including Powell Blvd overcrossing and Fairview Creek Bridge, on a project where the construction contract was managed by the Local Agency. **Outcome:** Jason was responsible for quality and quantity documentation for the structures and coordinated QA testing with ODOT Region 1. He worked closely with ODOT Region Assurance Specialists to complete documentation.

  "Jason understands structural engineering and construction. His reporting paper work for state and federally funded projects was exceptional; his oral and written communication skills are outstanding. Jason is a pleasant person to work with and we would be more than happy to have him work on future City projects."
  – Mike Green, Civil Engineer for the City of Gresham

- **Oregon City Arch Bridge Rehabilitation, Oregon City, Oregon***
  Lead inspector in the condition evaluation of this historic bridge prior to and in the early stages of construction on a project managed by ODOT. The steel arch bridge is encased in shotcrete that required many trial applications of the shotcrete to arrive at the correct mix design and application techniques. **Outcome:** Jason coordinated both ODOT and OBEC inspectors in confined space inspections of the steel arches to properly design the project. Assisted in inspection and evaluation of the shotcrete coating of the bridge in the early stages of construction with ODOT construction staff. Construction is now complete, and the bridge has been re-opened to the public.
- **2nd Avenue Crossing of Periwinkle Creek, Albany, Oregon****
  Lead Inspector for this culvert replacement project that used a large precast arch for the replacement structure. **Outcome:** Restoration of the stream channel, removal of a roadway narrowing, and construction of a new 8-inch water line.

**ODOT Project | **Local Agency Project*