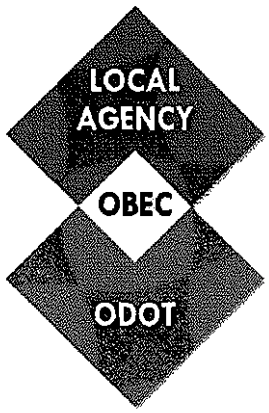
2.2.1 – UNDERSTANDING OF REQUESTED SERVICES

Demonstrate a clear and concise understanding of the scope of services requested in the RFP. [10pts]

SERVICES OVERVIEW: On behalf of Local Agencies, the Oregon Department of Transportation (ODOT) is currently seeking the services of qualified consultants to provide engineering, surveying, and related professional services statewide, to design and assure delivery of transportation-related projects. The services required will only be delivered on approved Local Agency projects included in, added to, and assigned under the State Transportation Improvement Program (STIP).



It is anticipated that seven to ten proposers may be selected statewide. A two-tier selection process will be applied with ODOT establishing a list of qualified consultants in Tier 1, and executing Price Agreements (PAs). In Tier 2, Local Agencies will use the list of qualified firms to procure projects utilizing Work Order Contracts (WOCs). WOC procurement for these services is anticipated to begin in February of 2010. WOCs may only be assigned for projects already included in or added to the 2008-2011 STIP, and potentially the 2010-2013 STIP.

THE NEXT THREE YEARS: During this funding cycle, the Oregon Department of Transportation (ODOT) and Local Agencies throughout Oregon will face the challenges of:

- Maintaining and improving transportation infrastructure with limited funding.
- Carefully managing a shift from procuring projects via Oregon Transportation Investment Act (OTIA) funding to utilizing currently available sources.
- Increased reliance on proven consultant partners to deliver key STIP elements.
- Achieving efficient, appropriate solutions to leverage limited available funding.

MAJOR CURRENT FUNDING SOURCES*

- Transportation Enhancement (TE)
- Highway Bridge Program (HBP)
- Congestion Mitigation and Air Quality (CMAQ)
- Jobs and Transportation Act (HB 2001)
- American Recovery and Reinvestment Act (ARRA)
- Scenic Byway

* Approximately 30 additional sources, such as the Surface Trans. Program and Safe Routes to Schools.

Similarly, Oregon's Local Agencies need to be able to do more with fewer resources, while at the same time managing available funds in a way that meets unique regional needs and provides opportunities for good-paying jobs in each City and County.

FOCUSING OPPORTUNITIES: Between 2001 and 2009, OTIA I, II, and III funding allowed ODOT and Local Agencies to complete critical bridge repairs, rehabilitations, and replacements, but current and future funding sources have a greater emphasis on improving highways, urban streets, rural roadways, and alternative transportation modes. Overall, there is a greater backlog of infrastructure needs than there is funding to complete the work, making it critical for each Agency to identify and utilize cost-effective and practical solutions to maximize results within the fixed funding constraints.

Oregon's current economic situation presents a range of challenges and opportunities including:

- ***Effectively utilizing available funding*** to achieve maximum value while improving critical infrastructure.
- ***Complying with all Federal-aid requirements,*** including reporting and environmental permits.
- ***Ensuring each design meets the local need*** and results in a practical finished project.
- ***Preparing and positioning "shovel-ready" projects*** for potential additional ARRA funding.
- ***Achieving efficient and timely project delivery*** utilizing the On-call Contract and an ODOT-approved Tier 2 procurement process.
- ***Supporting local economies*** through job creation, improved infrastructure, and timely project construction.

OBEC SERVICES: OBEC Consulting Engineers recognizes the serious, pressing issues that affect the safety and function of our public transportation infrastructure as well as the challenges of Oregon's current economy.

As OBEC has shown on 235 projects for public agencies during the last three years, our project managers are fully prepared and experienced leading highly-skilled, multi-disciplinary teams which provide responsive, personalized service on each project.

OBEC currently has On-Call A&E PE & CE Services contracts in all five ODOT Regions, and we have held the first place standing in four of the five Regions since 2005.

In 2007 we completed a four-year, statewide ODOT contract for scoping HBRR, TE, HRRR, and Federal Earmark Projects.

Our team is prepared to provide the support that Local Agencies need and the expertise delivering FHWA compliant projects that ODOT requires:

- ***Consistent, proven leaders who will advocate for Local Agencies' needs*** and who know how to effectively and successfully manage ODOT-procured, locally-delivered, practical projects.
- ***Expert project managers and skilled, flexible technical staff*** with extensive experience delivering engineering services to Local Agencies and ODOT on diverse projects of all sizes, types, locations, and varying complexities.
- ***Excellent knowledge base and experience*** applying ODOT and AASHTO standards, recognizing local needs.

- ***An admirable record of effectively instituting practical design,*** judiciously utilizing the Design Exception process, and delivering high-quality Federal-aid projects within budget.
- ***An agile, multi-disciplinary team*** to efficiently deliver roadway, bridge, multi-modal, and specialty projects.
- ***Responsive service from an entirely Oregon-based design and project staff*** in Eugene, Medford, Roseburg, Salem, and Lake Oswego.
- ***Complete coverage in all five ODOT Regions*** with a strong team of multi-disciplinary subconsultants that include disadvantaged, minority, women, and emerging small businesses (DMWESB), to provide specialty services and added capacity.
- ***An in-depth understanding of the current economic climate and proven ability to provide smaller, local, flexible teams*** with the right experience and skills, focusing on delivery with a sense of urgency and commitment to each individual Local Agency.

PROJECT TYPES: The State of Oregon, as well as its Cities and Counties, have comprehensive and diverse infrastructure needs. Table 1.1 includes a breakdown by major category, ODOT Region, and estimated project cost, based on data from the 2008-2011 STIP.

TABLE 1.1
PRIMARY 2008-2011 STIP PROJECT TYPES*

Modernization	Transportation system improvements to accommodate traffic growth.
Bridge Replacement or Rehabilitation	Improvements to rebuild or extend life of bridges, including seismic retrofits.
Pavement Preservation	Rehabilitation or reconstruction to extend the life of pavements.
Congestion Mitigation & Air Quality (CMAQ)	Projects designed to reduce congestion and improve air quality in non-attainment areas around the State.
Transportation Enhancement (TE)	Pedestrian and Bicycle Projects, Historic Preservation, Scenic Beautification, Environmental Mitigation.

**Other types include Safety, Operations, Transit, Bike/Ped, Scenic Byway, Rail Safety, and Planning.*

STIP ALLOCATION BY TYPE, REGION, FUNDING ($M), AND NUMBER OF PROJECTS

Reg.	1	2	3	4	Totals
Mod.	$294M (51)	$38M (12)	$102M (29)	$41M (8)	$551M (121)
Bridge	$29M (8)	$26M (23)	$32M (14)	$1M (2)	$94M (53)
Pres.	$19M (10)	$12M (9)	$2M (7)	$19M (4)	$58M (32)
CMAQ	$24M (12)	$1M (1)	$6M (8)	$2M (1)	$34M (24)
TE	$12M (9)	$12M (8)	$3 (3)	$3 (4)	$33 (27)

Table 1.2 outlines the major project types in the 2008-2011 STIP and the services typically required to complete them.

TABLE 1.2
ANTICIPATED SERVICES ON MAJOR PROJECT TYPES

	Mod.	Bridge	Pres.	CMAQ	TE
Scoping	✓	✓	✓	✓	✓
Field Survey	✓	✓	♦	♦	✓
Geotechnical	✓	✓	✓	✓	✓
Pvmt. Design	✓	✓	✓	✓	✓
Br. Hydraulics	✓	✓			✓
Road Design	✓	✓	✓	✓	✓
Bridge Design	✓	✓			✓
Stormwater	✓	✓	✓	✓	✓
Utility Coord.	✓	✓	✓	✓	✓
Traffic / TP&DT	✓	✓	✓	✓	✓
Right-of-Way	✓	✓		✓	✓
Permits	✓	✓	✓	✓	✓
ESA Compliance	✓	✓	✓	✓	✓
Public Meetings	✓	✓	♦	♦	✓
Const. Engrg.	✓	✓	✓	✓	✓

Typically required: ✓ Sometimes required: ♦

STATEWIDE, FULL-SPECTRUM SERVICES: Our integrated project management, design, survey, permitting, and construction engineering (CE) services provide certainty for Local Agencies who need respansive and cost-effective services to make the most of limited funding. Together with our subconsultant teaming partners, OBEC offers effective coverage of all five ODOT Regions.

TABLE 1.3
ANTICIPATED FULL-SPECTRUM SERVICES

Preliminary Eng.	Construction Eng.
1. Project Management	1. Bid, Audit, and Award Evaluation (ODOT)
2. Field Surveys	2. Preconstruction Conference
3. Geotech./Pavement Investigation	3. Office Eng./Design Consultation
4. Hydraulic Studies	4. Construction Monitoring/Inspection
5. Utility Coordination	5. Project Management and Contract Admin.
6. Stormwater Mgmt.	6. Shop Drawing and Submittal Reviews
7. Preliminary Bridge and Roadway Design	7. Field-Testing and Inspection of Material
8. Constructability/ Design Reviews	8. Central Laboratory Testing
9. Draft and Final Enviranmental Docs	9. Off-Site Material Testing and Inspection
10. Public Involvement	10. As-Constructed Plans Preparation
11. Permit Applications and Acquisition	11. Public Relations
12. Right-of-Way (R/W) Services	12. Construction Staking
13. Restoration Design/ Landscape Architecture	13. Control Survey
14. Final Plans, Special Provisions, and Cost Estimates	14. Quantity Verification
15. Bidding Assistance	15. R/W Monumentation
	16. Bridge Load Rating

2.2.2.1 – MANAGEMENT STRUCTURE, OFFICE LOCATIONS, AND SUBCONSULTANTS

Describe: (A) firm's management and organizational structure – including chain of command – and how it aids the delivery of project services, (B) offices and the types of services each is capable of performing, and (C) how subcontractors will be selected, utilized, and managed. Show proposed role. [10pts]

2.2.2.1.A – MANAGEMENT AND ORGANIZATIONAL STRUCTURE: OBEC's project management and organizational structure supports successful and timely completion of complex, interdisciplinary projects by ensuring:

- Appropriate team assembly.
- Rigorous schedule monitoring, cost control, and quality throughout a project.
- Meticulous checking at every stage, complemented by QA/QC review at each level.

Subconsultants provide services as part of the overall integrated team and conform to OBEC's and each client's requirements.

FIGURE 2.1 OBEC'S FULL SERVICE SOLUTIONS

PROJECT TEAM: OBEC has selected an outstanding team of key personnel to provide Local Agencies with comprehensive preliminary engineering and construction engineering services. Our organizational chart (Figure 2.2 – on the next page) reflects personnel assigned to this contract for each discipline, including subconsultant firms for key supporting tasks. Details of our key team members' experience are included in Section 2.2.2.5 and in the resumes in Appendix A.

ORGANIZATIONAL STRUCTURE: We have structured our team with a full complement of personnel to provide highly skilled managers and staff for each of the technical areas.

- **Principal-in-Charge – Gayle Harley, PE,** will provide senior level oversight including WOC negotiation and issue resolution.
- **Contract Manager – Larry Fox, PE,** will be the key point of contact, making WOC Manager assignments and organizing specifically-tailored teams for each project.
- **QA Manager – Michael Swan,** will manage the QA/QC program utilized on all OBEC projects.
- **Our structure includes eight (8) highly-experienced WOC Managers,** one of whom will take the lead on each project awarded under this PA.
- **These WOC Managers will provide day-to-day contract oversight** and project management to ensure that the designated discipline leaders and professional technical staff provide responsive, high-quality service that meets all ODOT and Local Agency needs.

Effective Delivery of Project Services and Efficient Workload Planning

OBEC comprises six primary Technical Sections that perform uniquely-defined project tasks, outlined above in Figure 2.1.

Throughout project lifecycles, WOC Managers, Section Managers, and assigned Discipline Leads monitor:

- Project staffing
- Schedules
- Cost control
- Quality

CHAIN OF COMMAND SUPPORTING PROJECT DELIVERY: On the next page, Figure 2.3 indicates OBEC's levels of authority for each Local Agency project phase, along with the responsibilities for key project tasks and milestones required for successful project delivery.

FIGURE 2.2

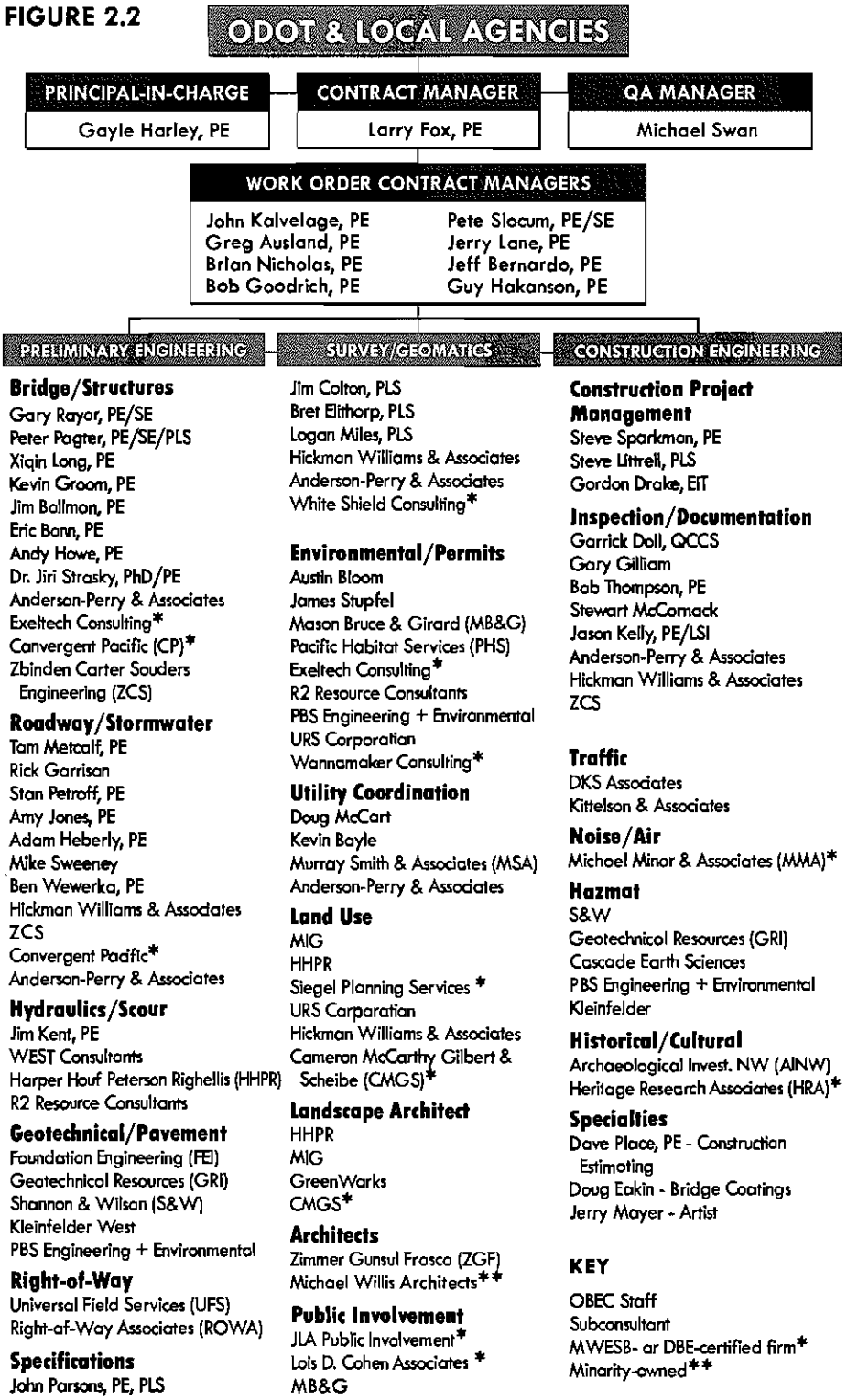


FIGURE 2.3

OBEC's Local Agency Project Phase Responsibilities

	OBEC TASK LEADER(S)	RESPONSIBILITIES
WOC Set-Up, Development & Execution	Principal-in-Charge	• Final Work Order Contract QA • Contract Negotiations
	Contract Manager	• Assign WOC Manager • Assemble project-specific team • WOC QC • Contract negotiations
	WOC Manager	• Scoping meeting with ODOT & Local Agency (LA) • Develop detailed scope of work • Develop project budget • Contract negotiations
Project Kick-Off	WOC Manager	• Execute kick-off meeting • Prepare Project Schedule • Prepare Project Work Plan • Prepare Project Quality Plan
Preliminary Engineering	WOC Manager	• Manage project team • Coordinate with LA & ODOT • Monitor scope & budget • Update project schedule • Coordinate work elements with discipline leads • Manage project deliverables • Project Quality Plan execution & documentation
	QA/QC Manager	• Review/approval of QC Plan • Internal QC audits
	Discipline Leads	• Task management • Coordination with other disciplines • Task-specific deliverables
	Project Staff	• Task execution • Contract document preparation • Environmental documentation & permits
	Sr. Construction Staff	• Constructability/design reviews • Plan & quantity reviews
Construction Administration & Engineering	Construction WOC Manager	• Prepare WOC CE Amendment • High level contract administration • Change order QC
	Construction PM	• Contract administration • Inspection oversight • Progress estimates & payments • Prepare change orders
	QCCS	• Quality assurance documentation
	Construction Inspectors	• Field engineering & inspection • Quantity verification • Off-site inspection • Quality documentation
	WOC Manager/ Design Staff	• Review shop drawings/submittals • Respond to RFIs • Prepare as-built drawings • Complete structure load rating

ACCOUNTABILITY AND RELIABILITY: The OBEC WOC Manager is ultimately responsible for the majority of project tasks and assuring ODOT and the Local Agency of on-time, on-budget delivery. OBEC's Principal-in-Charge and Contract Manager will support each WOC Manager with project issues, senior-level QC, and assisting with high-level contract issues.

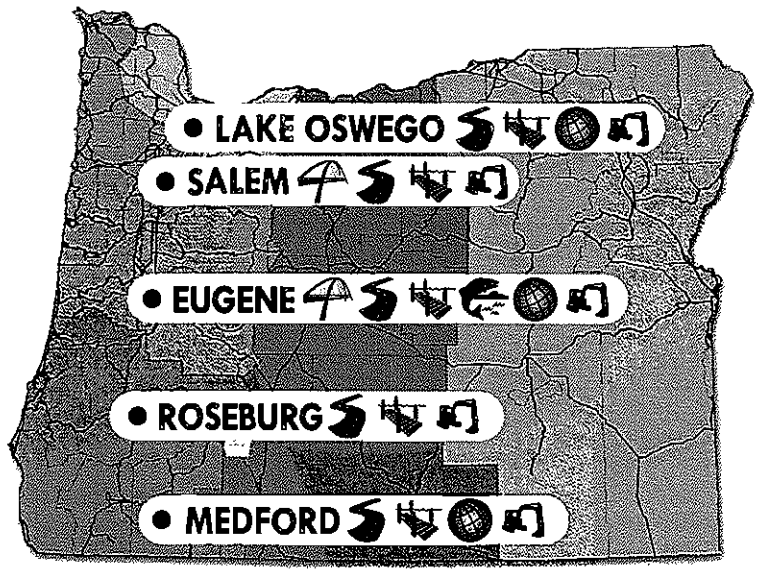
2.2.2.1.B – OBEC LOCATIONS AND SERVICES: Since 1966 we have provided efficient services to all parts of Oregon from our main office centrally located on the I-5 corridor. Adding branch offices in Medford (1999), Salem (2004), Lake Oswego (2007), and Roseburg (2008), has increased our efficiency and decreased overall project costs for our Local Agency clients. Our skilled, local staff perform project management, survey, and construction engineering. All of our offices are interconnected electronically so detailed design engineering for bridge and roadway work, among varied other tasks, is shared in the most efficient manner by the assigned staff. Figure 2.4 shows our offices and the services each location provides, further supporting our ability to effectively provide responsive, cost-controlled, statewide service.

2.2.2.1.C – SUBCONSULTANT SELECTION, UTILIZATION, AND MANAGEMENT: OBEC has carefully selected a full complement of specialty subconsultants for this contract. Each subconsultant firm and their proposed role(s) are clearly represented in Figure 2.2 on the preceding page.

We value diversity in our workforce and those of all our subconsulting partners. As an involved member of the business community, we are committed to advancing the interests of MWESB and DBE resources, including setting goals to engage them statewide on our varied projects.

SUBCONSULTANT OUTREACH MWESB AND DBE RESOURCES: For OBEC's multi-disciplinary projects we use outreach initiatives to solicit, pre-qualify, and select skilled professional and technical staff to enhance our service capabilities. In addition to engaging subconsultants and emerging businesses all over Oregon, we make the effort to identify local businesses, community-based service providers, and vendors who can potentially participate in or benefit from local project involvement.

FIGURE 2.4 OFFICE LOCATIONS AND SERVICES



RFS/RFQ PROCESS AND SUBCONSULTANT SELECTION CRITERIA: Based on specific project requirements, OBEC may initiate an RFS or RFQ process to solicit qualifications and depending on the selection criteria, subconsultants may be shortlisted, interviewed or requested to participate on the OBEC team.

Selection Criteria Include:

- Quality and competence of past work of the Lead and team members.
- Skill producing practical, value-added services and designs that conform to project requirements.
- Multi-disciplinary team experience on similar public transportation projects.
- Proven expertise working collaboratively with diverse stakeholders, inter-governmental agencies, engineers, and specialty technical staff in the design and execution of integrated transportation projects.
- Familiarity with the client and project area, and site-specific expertise.
- Record of effective delivery within budget, schedule, and other constraints.
- Preference may be given to qualified Oregon firms and individuals.

2.2.2.2 –SCHEDULE/QUALITY MANAGEMENT AND ADJUSTING EFFORT LEVELS

Describe: (A) firm's methods of coordinating and expediting all elements of projects to meet delivery schedules without sacrificing quality and (B) approach to adjusting schedules when needed, or adjusting level of effort to meet a schedule while keeping a project within a stated budget. [5pts]

2.2.2.2A – BALANCING SCHEDULE AND QUALITY: Our accomplished WOC Managers and experienced project staff are the foundation of our successful client service. OBEC routinely delivers high-quality projects that meet client expectations under tight schedules.

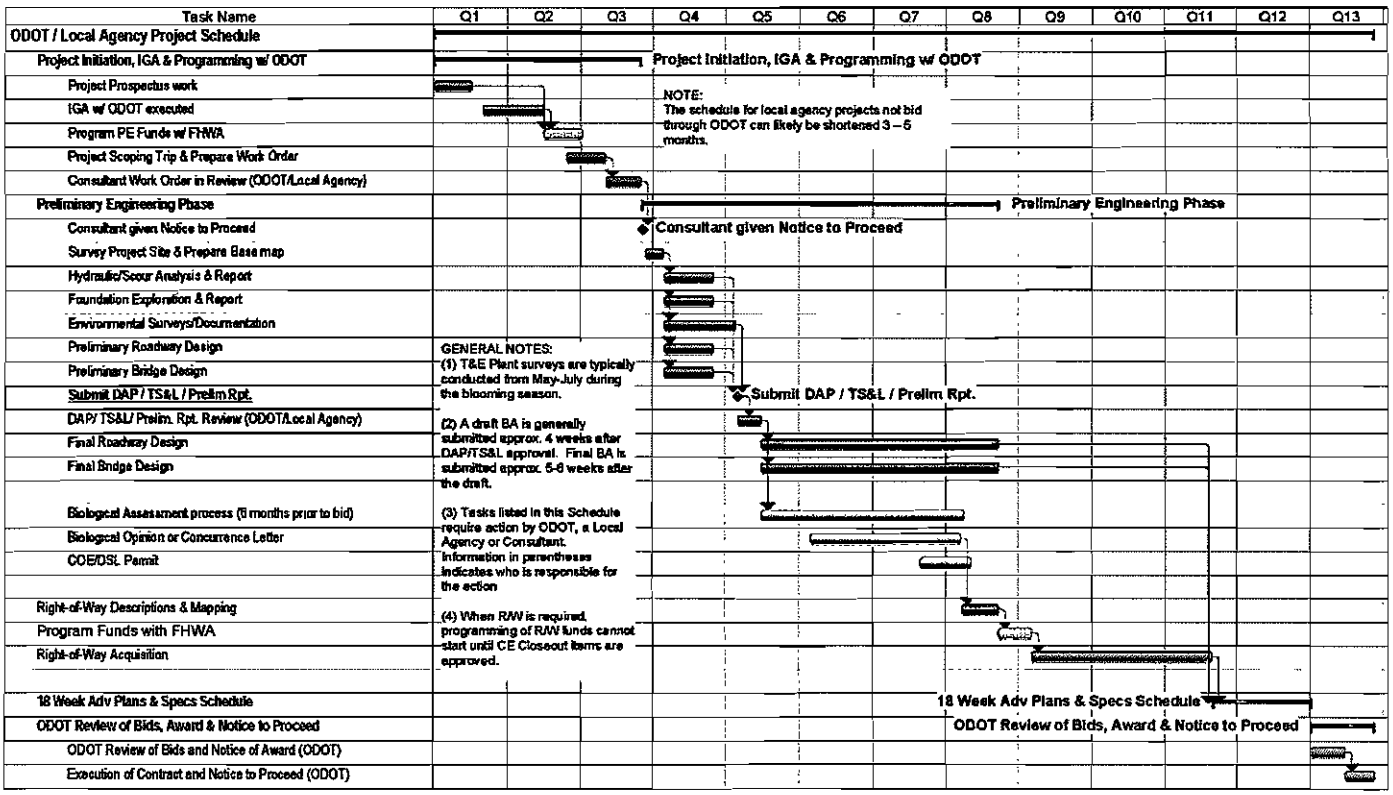
TYPICAL SCHEDULE: On the following page, Figure 2.5 shows a typical Local Agency project schedule that meets all ODOT-required major tasks and milestones. A reliable schedule is founded on meeting minimum time lines required for critical path activities such as permitting, right-of-way acquisition, utility coordination, and ODOT's bidding process.

MANAGING SCHEDULES

EXPEDITED PROJECT STARTUP: Immediately upon receiving NTP for a project, the WOC Manager will create and maintain a schedule reflecting the final scope of work. OBEC will utilize these key strategies for design schedule control:

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

GENERIC LOCAL AGENCY PROJECT

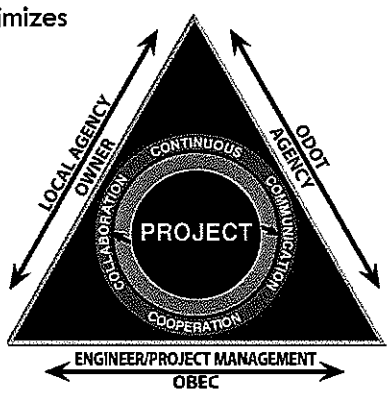


2.2.2.2B – APPROACH TO ADJUSTING SCHEDULES OR LEVEL OF EFFORT WHILE MAINTAINING BUDGETS:

OBEC regularly accelerates design and construction schedules on projects to meet emergency, environmental, or budgetary concerns of our clients.

- **We carefully configure our teams** to provide skilled, interdisciplinary staff for each project phase.
- **Contingency staffing provisions are integrated into our work plans and schedules,** enabling us to achieve quality results within fast-track schedules.
- **Our experienced staff has ample capacity and availability** to respond to immediate requests or changes that may arise.
- **Efficient Principal oversight and management** of our staff and supporting subconsultant team enables us to rapidly adjust and meet evolving demands.

AGILE PROJECT DELIVERY: Consultants selected from this solicitation will need to react swiftly to prepare and deliver WOCs. OBEC's proactive approach minimizes potential impacts to the overall project schedule. The contract delivery process and scope of work may vary depending on the funding source. OBEC is prepared to team with Local Agencies and ODOT, implementing our best engineering practices that demonstrate:



- Lessons learned and cost-control innovations.
- Optimization of value engineering elements that accelerate project delivery.
- Adaptability to changing needs.
- Ongoing, proactive communication.
- Constant monitoring of construction costs and trends.
- Unrelenting dedication to successful project delivery.

DELIVERING QUALITY

OBEC's project approaches and methods ensure that we deliver quality under tight deadlines.

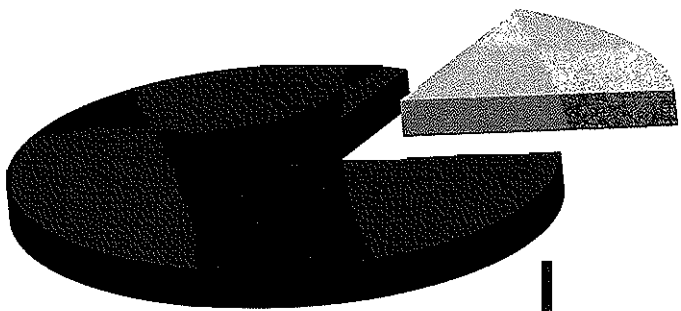
- ✓ **Proven leaders who effectively and successfully manage critical path milestones,** including environmental documentation and permits, utility coordination, and right-of-way.
- ✓ **Proactive communication with resource and regulatory agencies, utilities, the general public, and key stakeholders** regarding project impacts throughout the development phase.
- ✓ **Coordinating with the Local Agency** for any unique specifications or requirements 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 the scheduled ODOT bid date.
- ✓ **Agile, multi-disciplinary teams** experienced with meeting ODOT and AASHTO standards.
- ✓ **Enforcing a proven QA/QC policy** throughout each project lifecycle including designated reviewers in the QC plan and internal QC audits.

PROVEN ABILITY TO SUCCESSFULLY MANAGE ADJUSTMENTS OF SCHEDULE AND EFFORT: OBEC's approach to managing Local Agency projects monitored by ODOT has been honed by years of effort and experience. Since1966 we have provided the exact engineering services required through this contract for hundreds of STIP-funded projects.

- **Successful delivery of more than 2,500 projects,** from design through construction, throughout the Pacific Northwest and Western U.S.
- **Completion of more than 1,800 highway, bridge and transportation enhancement projects** in Oregon over the past 43 years.
- **Utilization of ODOT Standard Specifications** and guidelines for the majority of these projects.
- **OBEC's responsible stewardship of public money** has resulted in unspent funds returned to project owners on a noteworthy percentage of past projects.

Figure 2.6 (immediately below) represents cost control and savings on select OBEC ODOT and OTIA contracts between 2005 and 2009, and Table 2.1 details our proven ability to reliably deliver the highest quality projects while maintaining outstanding budget management.

FIGURE 2.6 SELECTED PROJECT SAVINGS



Total Billings = $9,488,761

Total Savings = $1,960,347

TABLE 2.1
SELECTED PROJECT PERFORMANCE HISTORY

Project	Budget	Billings	Savings
Portland Area			
Scholls Ferry Rd. Br.	$1,207,885	$813,120	**$394,764**
Zigzag R. Br.	$717,817	$538,303	**$179,513**
US 26: North Plains	$961,374	$781,836	**$179,538**
US 26: Powell Blvd.	$928,314	$849,320	**$78,994**
Springwater Tr. Brs.	$1,037,450	$865,027	**$172,422**
Willamette Valley/Northern Oregon			
S. Santiam R. Br.	$1,025,642	$801,220	**$224,421**
Independence Br.	$483,869	$429,749	**$54,119**
Meadow Lk. Rd. Br.	$719,387	$651,495	**$67,891**
Teal Cr. Br.	$254,923	$202,668	**$52,254**
DeMoss Springs Park	$171,436	$144,853	**$26,582**

TABLE 2.1 (cont.)
SELECTED PROJECT PERFORMANCE HISTORY

Project	Budget	Billings	Savings
Southern Oregon			
Brown (Detour) Br.	$494,252	$465,287	**$28,965**
Lampa Lane Slide	$147,454	$130,239	**$17,214**
West Valley View Br.	$814,335	$719,245	**$95,089**
Little Applegate R. Br.	$628,172	$607,287	**$20,884**
Oak St. Br.	$515,383	$392,031	**$123,351**
Emigrant Cr. Rd. Br.	$480,922	$363,130	**$117,791**
Pass Cr. Br.	$336,401	$229,625	**$106,775**
Upper Rock Cr. Br.	$360,094	$300,607	**$59,486**
North Lake Rd. Br.	$270,015	$203,719	**$66,295**

2.2.2.3 – QUALITY CONTROL

Provide a summary of your Quality Control procedures and policies. [5pts]

ASSURANCE AND CONTROL AT EVERY STEP OF PROJECT DEVELOPMENT: As part of OBEC's growth, we have continually enhanced our internal Quality Control processes. Our Quality Assurance Manager, Michael Swan, oversees the QCP execution and documentation to ensure the project teams, including subconsultants, comply with the plan and submit the highest quality deliverables.

Our established QCP summarizes policies, procedures, and protocols implemented independently of the design and construction staff. The entire OBEC team will adhere to the comprehensive QCP, which outlines how review comments for each type of deliverable will be documented, managed, and closed out.

OBEC owns **four of the six** zero-finding OTIA III audit distinctions in the entire history of the Program. **This exemplary record attests to our Quality commitment.**

KEY ELEMENTS OF OBEC'S QCP INCLUDE:

- **Comprehensive QC reviews** incorporated into overall project schedules, including the time required for internal and external reviews.
- **Independent check and review** implemented for all deliverables, including a staffing plan coordinated by the QA Manager and WOC Manager.
- **Cross-discipline, environmental compliance, design, and constructability reviews** performed 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 and comment forms** are reviewed by senior staff and tracked by the PM to ensure closure of each issue.
- **Full QCP process documentation** including proper close-out and completion by all parties.

QUALITY ASSURANCE MANAGER

Michael Swan

Bridges/ Structures QA Leader	Roadway/ Civil QA Leader	Heavy Civil QA Leader	Specifications, Permitting, & Utilities QA Leader	Survey/ Geomatics QA Leader	Construction Engineering Management QA Leader
Peter Pagter, PE	**Tom Metcalf, PE**	**Gary Rayor, PE, SE**	**Greg Ausland, PE**	**Logan Miles, PLS**	**Garrick Doll, QCCS**

PE PHASE – OBEC QA/QC PROCEDURES

The OBEC Project Manager (PM) controls the quality of project deliverables and oversees QA reviews.

All engineering plans, specifications, and technical reports prepared by OBEC are reviewed by the PM and Principal Engineer at each milestone.

Independent QC checking of all calculations, plans, quantities, and cost estimates are completed and documented by qualified independent engineers at the Advance and Final PS&E phase.

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

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

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

All QC documentation is archived in centralized files.

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

OBEC skillfully utilizes more than 40 manuals for design, specifications, and construction including ODOT, AASHTO, FHWA, and Local Agency documents.

CE PHASE – OBEC 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. QC involvement from the CE team begins at concept development.

The CPM assigns an experienced team of ODOT-Certified Inspectors prior to construction including an Assistant Project Manager (APM), Resident Inspectors, and a Quality Control Compliance Specialist (QCCS).

➲ ***Prior to bid, the CE team meets with designers for a design transfer meeting to:***

- Review team and roles for continuity from design through construction.
- Share any R/W issues with the CE team to ensure client and property owner expectations are met.
- Discuss plans, specifications, and details to ensure CE team's thorough understanding of design intent.

➲ ***After contract award, the project CE team:***

- Analyzes documents emphasizing construction details materials and measurement/payment requirements.
- Independently calculates and checks plan grades.
- Conducts pre-construction meeting with the Contractor(s), Local Agency, ODOT, utilities, and others to outline roles and lines of communication.
- Performs technical inspections of all critical on-site work, keeping meticulous daily records for activities.

Field Inspectors:

- Set up Quantity and Quality Documentation for each bid item with QCCS review and assistance.
- Review construction layout and staking information used to control the location for all construction.
- Work proactively with Contractor(s), continually looking ahead to ensure work progresses smoothly.
- Document quantities of work for payment, and that materials are properly certified per specifications.
- Track daily contractor and subcontractor work.

Office Administrators:

- Track submittals and return to Contractor(s).
- Assist CPM with Contract Admin documentation including processing Payments to Contractor(s).
- Check Quantity and Quality Documents.
- Verify that certified payrolls reflect wages specified in the contract and that EEO requirements are met.

➲ ***After construction is complete, the assigned CE team performs project closeout tasks:***

- Prepare As-Built drawings and submit final records.
- Prepare structure load rating (if applicable).
- Meet with designers to review "lessons learned," ensuring potential improvements benefit future jobs.

2.2.3.1 – QUALIFICATIONS

Describe your firm's qualifications and proficiencies to complete the requested services. [5pts]

OBEC Consulting Engineers has excelled in the field of transportation, civil, and structural engineering since 1966 by providing our clients with quality services and constructable engineered solutions involving full-spectrum services from design through construction including:

- A total of more than 3,500 projects throughout the Pacific Northwest and Western U.S.
- Engineering leadership on more than 1,800 highway, bridge, and public transportation projects.
- More than 400 State or Federal-aid projects in the State of Oregon.
- Expertise designing industrial and marine facilities, water reservoirs, pipelines, buildings, and other challenging civil and structural engineering projects.
- Construction engineering and inspection expertise.
- A majority of OBEC projects have utilized *Oregon Standard Specifications for Construction* and ODOT guidelines.

FOCUSED, DEDICATED SERVICES: OBEC has remained focused on the exact services required by this RFP, and we have intentionally concentrated on serving Local Agency and ODOT requirements.

Our exceptional record of success has resulted from our dedication to:

- ✓ Developing in-depth familiarity with our clients and acquiring a thorough understanding of their needs.
- ✓ Establishing a detailed understanding of the budget requirements for each project.
- ✓ Building on our legacy of local area knowledge with archived, historic records gained from past projects.

Further, OBEC is distinguished by the commitment of its many hands-on, senior-level personnel who are working managers, along with depth of exceptionally talented, experienced staff who are trained in and dedicated to swift, economical, and innovative project delivery.

Our breadth and depth of experience, ability to deliver project-specific solutions and skill managing tight deadlines, budget constraints, and diverse site conditions, provide the project results needed by Local Agencies to get projects completed successfully with all the funding, time, and permitting constraints they typically face.

- ✓ **OBEC has strong relationships** with a diverse spectrum of regulatory agencies and a thorough understanding of permitting processes.
- ✓ **We have years of partnership experience** and established credibility with regulators.
- ✓ **Our in-house environmental permitting staff** and our highly-qualified subconsultants enable us to deliver value-added solutions.

TABLE 3.1

OBEC'S FULL-SPECTRUM SERVICES

▶ ROADWAY/CIVIL ▶ BRIDGE/STRUCTURES ▶ HEAVY CIVIL ▶ SURVEY/GEOMATICS ▶ SPECS, PERMITS & UTILITIES	▶ DESIGN PHASE SUPPORT ▶ CONSTRUCTION ENGINEERING ▶ INSPECTION
▪ Feasibility studies ▪ Design ▪ Specification writing ▪ Contract administration ▪ Technical and client support services	▪ Constructability and design reviews ▪ Construction estimating ▪ Technical support services
▪ Environmental permitting ▪ Inter-agency consultation ▪ Public involvement and outreach programs	▪ Construction oversight ▪ Inspection ▪ QC & Material testing ▪ Contract Admin.
▪ Location surveying ▪ Construction staking ▪ Right-of-way services including retracement, mapping, descriptions, and monumentation	▪ Change orders ▪ Wage certifications ▪ Estimates & reports ▪ Quantity verification ▪ Contractor/Owner liaison

OBEC'S CERTIFIED INSPECTION STAFF

CERTIFICATION	# OF STAFF
Aggregate Technician	1
Embankment Technician	3
Asphalt Technician	1
Density Technician	1
Quality Control Technician	6
Traffic Signal Inspector	2
Bridge Construction Inspector	15
HMAC Inspector	15
Maintenance Bridge Inspector	5
Erosion Control Inspector	13
Drilled Shaft Inspector	15
General Construction Inspector	17

OVERALL CAPABILITIES: In addition to increased environmental permitting scrutiny, policy changes regarding right-of-way acquisition, changes in design codes, and emerging issues including sustainability, context-sensitive designs, and lifecycle costing analysis are all factors that combine to increase project complexity along with the need for unified outcomes.

OBEC's past performance demonstrates our commitment to Local Agencies, having skillfully managed these complex variables on a wide range of projects we have successfully delivered during decades of Local Agency service.

2.2.3.2 – COMPARABLE PROJECTS

List projects and services performed within the last three (3) years by type and location, most comparable to the requested services. [5pts]

COMPARABLE TRANSPORTATION PROJECTS IN LAST THREE YEARS: OBEC has provided complete transportation engineering services through direct and On-call Flexible Services contracts with ODOT for Local Agencies in all five ODOT Regions.

OBEC's reputation has been built on our ability to provide complete, project-specific engineering solutions of high value, from design through construction administration, inspection, and oversight. To the right, Figure 3.1 displays transportation-related projects we have delivered in each Region in the last three years. To meet funding requirements, several of the projects were completed under accelerated schedules.

FIGURE 3.1 TRANSPORTATION-RELATED PROJECTS IN THE LAST THREE YEARS

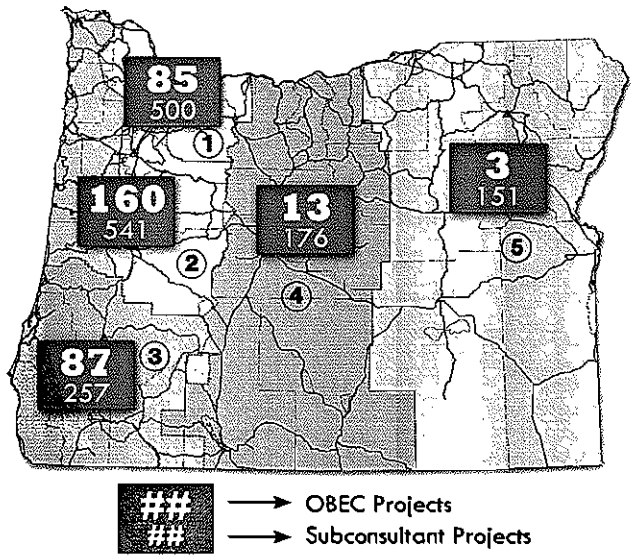


TABLE 3.2

MOST RECENT ODOT AND LOCAL AGENCY CONTRACTS – UPCOMING BIDS

Region – Location	Project Name	Project Type	Svcs.	Bid Date
5–Haines	Third St.: US 30 – School Street Sidewalks	LA – Roadway	PE/CE	4-06-10
2–Lane Co.	Lost Creek – Parvin Rd. (Parvin Covered Br.)	LA – Bridge/Roadway	PE/CE	3-18-10
2–Springfield	Middle Fork Willamette River Loop Path	LA – Ped Roadway	PE/CE	3-11-10
3–Jackson Co.	Rogue River Bicycle & Pedestrian Path	LA – Ped Roadway	PE/CE	2-18-10
2–Lane Co.	Goodpasture, Pengra & Nelson Mtn. Cov. Br.	LA – Bridge	PE/CE	2-11-10
2–Woodburn	OR 214: Front Street Ramp – Progress Way	ODOT – Roadway	PE/CE	1-28-10
2–Lebanon	2nd St. & Airport Rd Paving Strip. (ARRA)	LA – ARRA Roadway	PE/CE	1-28-10
3–Jacksonville	C St.: Bike/Ped Improv. (ARRA)	LA – ARRA Roadway	PE/CE	1-21-10
3–Central Point	Pine St.: 1st - 6th Central Point (ARRA)	LA – ARRA Roadway	PE/CE	1-14-10

MOST RECENT ODOT AND LOCAL AGENCY CONTRACTS – COMPLETED BIDS

Region – Location	Project Name	Project Type	Svcs.	Bid Date
2–Florence	Florence Street Paving Project	LA – ARRA Roadway	PE/CE	12-10-09
1–Portland	US 26: SE 51st to I-205 (Powell Blvd.)	ODOT – Roadway	PE/CE	12-10-09
1–Gresham	Gresham-Fairview Trail	LA – Bridge only	PE/CE	11-19-09
2–Salem	Union St. RR Br.: Ph2 Steel Truss Painting	LA – Bridge Painting	PE/CE	9-24-09
3–Medford	Bear Cr. Grnwy.: Barnett Rd. – Blue Heron Pk.	LA – Prefab Bridge/Path	PE/CE	9-17-09
3–North Bend	North Bend Waterfront (Harbor Avenue)	LA – Special Structure	PE/CE	8-27-09
3–Jackson Co.	Jackson County Roads: Pavement Resurface	LA – ARRA Roadway	PE/CE	8-20-09
3–Ashland	Ashland City Streets: Pavement Overlay	LA – ARRA Roadway	PE/CE	7-16-09
1–Multnomah Co.	I-84: Multnomah Falls to Cascade Locks	ODOT Dis. Spec. – Rdwy	PE	7-16-09
3–Central Point	Hazel Street: 9th to East 10th St Paving	LA – CMAQ	PE/CE	6-25-09
1–Portland	I-84: E Portland Freeway to NE 181st Ave	ODOT DS – Roadway	PE	6-25-09
2–Eugene	Delta Pond Path: Goodpasture Island	LA – Ped Bridge/Roadway	PE/CE	6-24-09
2–Eugene	Eugene Train Depot (Unit 2)	LA – Roadway	PE/CE	6-18-09
3–Ashland	Hersey Street: Oak St. – Ann St. Sidewalk	LA – Roadway	PE/CE	6-16-09
2–Yamhill Co.	Ayers Creek Br – North Valley Rd. MP 8.5	LA – Bridge/Roadway	PE/CE	6-11-09
1–Portland	North Leadbetter Extension Overcrossing	LA – Bridge Only	PE	5-19-09
2–Marion Co.	OR 99E: Aurora – Salem Paving and Safety	ODOT – Roadway	PE/CE	5-14-09
1–Portland	North Going St. Bridge Seismic Strengthening	LA – Roadway Only	PE	5-14-09
3–Douglas Co.	North Umpqua River (Brown) Bridge	LA – Bridge/Roadway	PE/CE	4-30-09
1–Columbia Co.	Beaver Falls Guardrail Replacement	LA – Roadway	PE/CE	4-09-09
3–Jacksonville	Elm and "M" St. Paving	LA – CMAQ	PE/CE	2-26-09
1–Washington Co.	US 26: North Plains to Cornell Road	ODOT – Bridge/Roadway	PE/CE	2-19-09
2–Florence	Port of Siuslaw Infrastructure Improvement	LA – Special Structure	PE/CE	11-13-08
2–Oakridge	Kokanee Dr.: Industrial Dr. – Fish Hatchery Rd.	LA – Roadway	PE/CE	10-23-08
1–Portland	Willamette R. (Morrison) Bridge	LA – Bridge	PE	6-26-08

Region – Location	Project Name	Project Type	Svcs.	Bid Date
3–Coos Co.	Lampa Lane Slide Repair - Coos County	LA – Roadway	PE/CE	6-19-08
4–Sherman Co.	DeMoss Springs Memorial Park (Phase I)	LA – Roadway	PE/CE	5-22-08
2–Springfield	69th St.: Thurston Rd. to B St.	LA – Roadway	PE/CE	5-08-08
2–Marion Co.	Willamette R. (Independence) Br.	LA – Bridge	PE/CE	3-27-08
2–Lincoln Co.	Canal Creek (Alder Springs Road) Bridge	LA – Bridge/Roadway	PE/CE	9-13-07
2–Waldport	US 101: Alsea Bay Br. to Wm. Keady Wayside	LA – Roadway	PE	6-28-07
2–Eugene	Courthouse District Transportation Improvement	LA – Roadway	PE/CE	5-17-07
3–Douglas Co.	South Umpqua River (Pruner Road) Bridge	LA – Bridge/Roadway	PE/CE	5-03-07
2–Lane Co.	Bundle 218 - Hwy 18 (OR 58) Bridges	ODOT – Bridge/Roadway	PE	3-22-07
2–Polk Co.	Ritner Creek Covered Bridge Rehabilitation	LA – Bridge	PE/CE	3-22-07
MOST RECENT LOCAL AGENCY OTIA CONTRACTS				
2–Tillamook Co.	Long Prairie Road: Johnson Bridge	LA – Roadway	PE/CE	7-16-09
2–Tillamook Co.	Johnson (Trask River) Bridge	LA – Bridge/Roadway	PE/CE	3-31-08
2–Lincoln Co.	Siletz River (Logsden Road) Bridge	LA – Bridge/Roadway	PE/CE	2-26-08
4–Klamath Co.	Sprague River Bridges	LA – Bridge/Roadway	PE/CE	12-05-06

2.2.3.3 – CHRONOLOGY OF THREE MOST RECENT PROJECTS

For a total of three of the most recent projects listed, include a brief description of project type, size, location, duration, and objectives; a chronological time line describing the tasks performed by the Proposer to fulfill the project objectives; and the actual project budget. [5pts]

The following projects represent situations in which OBEC's Local Agency clients encountered unique challenges that required focused, knowledgeable support from a multi-disciplinary design team to effectively facilitate collaboration between Local Agencies, ODOT, and regulatory agencies. OBEC invests the time and effort to fully evaluate and understand the issues each Local Agency faces on their individual projects. Our in-depth knowledge of how to navigate funding, permitting, and construction-phase issues and provide unified solutions helps ensure successful project completion.

Sprague River Bridges: Three bridge sites on a 20-mile stretch of roadway in Klamath County presented an opportunity for OBEC to work closely with the County in both PE and CE phases to economically deliver the three bridges in a single construction contract. Partnering closely with the County, an overall PE/CE cost savings of $209,088 was achieved.

Johnson (Trask River) Bridge: Tillamook County faced a severe budget shortfall (after their project funding had been determined and allocated) when unexpectedly paving and construction costs escalated, threatening to cancel the project. By reconfiguring the design and bid documents and facilitating application for ARRA funding, OBEC helped the County determine a successful solution that resulted in completion of the bridge and sufficient funding to build the widened approach roadway.

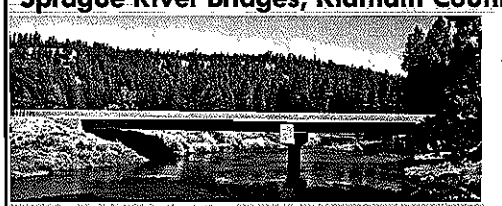
Brown Bridge: Douglas County faced a potentially catastrophic failure of this critical bridge because the typical procurement process would have taken too long to deliver a replacement. OBEC worked in close collaboration with the County to quickly design and construct a detour bridge while simultaneously expediting permitting and design on a permanent structure. Together, the County's goal of ensuring safety of the traveling public was attained.

TABLE 3.3

RECENT RELEVANT PROJECTS

■ Preliminary Engineering ■ Survey ■ Construction Engineering ■ Contract Administration

Sprague River Bridges, Klamath County (2009)



PE & CE Budget: $1,806,529
Actual PE & CE: $1,597,441

OBEC provided design and construction engineering services to the County for this $7.7M project that included three replacement bridges on Sprague River Road funded through the OTIA program. The bridges are all two-span, prestressed concrete girders and are 176, 230, and 250 feet long.

In addition to bridge and roadway design, OBEC's responsibilities included surveying, right-of-way mapping, descriptions and negotiations; foundation investigation; temporary detour traffic signaling; utility coordination; Native American site studies; and environmental permitting. OBEC also provided all construction engineering and contract administration services.

- Initially the project planned to include detour routes at two of the sites, but through public input, the County decided to add adjacent bypass bridges.
- OBEC worked collaboratively with Tribal representatives to incorporate distinctive Klamath Tribe basketry patterns into the bridge rail to replace pictographs cast into the existing concrete bridge rails.

APRIL PE Start Date | DECEMBER Bid Date | FEBRUARY CE Start Date | OCTOBER All Construction Complete

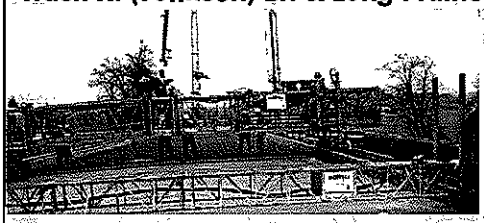
2005 | 2006 | 2007 | 2008 | 2009 | 2010

TABLE 3.3 (cont.)

RECENT RELEVANT PROJECTS

■ Preliminary Engineering ■ Survey ■ Construction Engineering ■ Contract Administration

Trask R. (Johnson) Br. & Long Prairie Rd. Approach Roadway, Tillamook County (Ongoing)



PE & CE Budget: $724,856
Actual PE & CE: $693,502

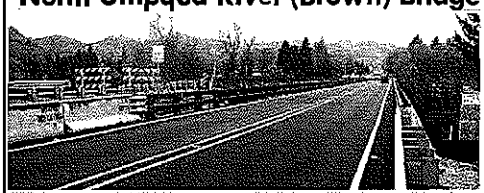
OBEC provided design and construction engineering under the OTIA Bridge Program for the $2.7M replacement of a 264-foot-long, 3-span bridge that had significant shear cracks, reducing the load capacity to 17 tons.

Long Prairie Road serves as a major transportation link for timber harvest, dairy production, agriculture, and industry from central Tillamook County to SR 6 and US 101. Load posting of this bridge resulted in placing heavy truck traffic on county roadways that were not designed to carry heavy loads. The new OTIA III-funded bridge is a 260-foot-long two-span precast prestressed concrete girder bridge.

Although the County encountered difficulties completing the project in one package as originally planned, OBEC worked closely with our client to make modifications in order to successfully deliver the completed project as follows:

- OBEC's alternative analysis recommendation, informed by public involvement, was to bid the project with an on-site temporary bridge as an additive alternative should funding allow.
- Initial bids came in near the engineer's estimate. However, due to the unexpected escalation in bid prices in 2007, the County's remaining OTIA funding was insufficient to award the project as bid, so all bids were rejected.
- Working closely with the County, OBEC analyzed available options and recommended eliminating the approach construction, assuring the remaining OTIA funding would replace the deficient bridge (meeting the intent of OTIA). The approach roadway construction was postponed pending the County locating a funding source for completion.
- OBEC re-designed the alignment to fit the wider bridge into the existing road with minimal approach construction.
- The second bid was successful and OBEC provided construction engineering services for completion of this project.
- Bridge construction was nearing completion when the federal stimulus program commenced. The County was asked to submit projects for consideration. OBEC and the County collaborated to evaluate their project options and recommended the Johnson Bridge Approaches be considered a top priority and ideal project for ARRA funding.
- OBEC worked with County and ODOT staff to provide environmental documentation sufficient to meet NEPA standards, assisting the County in obtaining approval for ARRA funding for the roadway portion of the project.
- OBEC prepared a bid package for the approach roadways meeting ODOT & FHWA standards necessary for bidding through ODOT's ARRA program administration. The plans considered the current state of construction.
- The ARRA project bid successfully and construction is proceeding smoothly with anticipated completion of final paving and striping in May of 2010, right on schedule. OBEC is providing construction engineering for the project.

North Umpqua River (Brown) Bridge and Detour Bridge, Douglas County (Ongoing)



Detour PE & CE Budget: $494,252
Detour Actual PE & CE: $465,287
New Br. PE Budget: $1,087,924
New Br. Actual PE: $911,077

OBEC designed a $6.6M, 646-foot-long, three-span structural steel plate girder bridge with a CIP composite deck to replace a 627-foot-long, seven-span prestressed girder and CIP box beam structure.

Because the existing bridge was badly deteriorated and severely load-limited, OBEC was enlisted by Douglas County to accelerate completion of a temporary 12-span, 760-foot-long detour bridge.

The detour bridge was designed and constructed on a very tight schedule and consists of precast concrete deck panels, structural steel girders, and steel piling with rock anchors.

- As a result of OBEC's routine inspection of this bridge, we determined that the shear cracking was more serious than indicated by previous inspections, and recommended an in-depth inspection and Load Rating be performed.
- This inspection and Load Rating determined that the severity and progression of the cracks were endangering the structural integrity of the bridge, and we recommended the bridge be placed on a monthly inspection cycle.
- Over the next year, the monthly inspections provided mounting evidence that the cracking was progressing, the condition of the bridge was rapidly deteriorating, and it was going to necessitate full closure in the near future.
- The County posted a limit, and ODOT solicited OSU Professor Chris Higgins to inspect the bridge and review OBEC's findings. Professor Higgins confirmed OBEC's assessment that the structure was in fact in a "collapse mode."

- Working with Douglas County to explore options, OBEC recommended the County remove traffic from the bridge as soon as possible. Recognizing the time lines involved for design, permitting, and right-of-way for the permanent replacement, it became apparent that the detour needed to precede these tasks to assure public safety.
- Douglas County took the initiative and retained OBEC to design a temporary detour structure to be constructed with County funds, concurrent with the design of the permanent replacement and OBEC immediately began the permitting and design processes for both the detour and permanent bridge.
- OBEC provided design and construction engineering for accelerated detour bridge construction, completed on schedule and under budget.
- OBEC provided design engineering for the permanent structure, which successfully bid and is under construction.
- OBEC is currently providing construction engineering services for the permanent bridge.

2.2.3.4 – BUDGET AND SCHEDULE MANAGEMENT OF THREE MOST RECENT PROJECTS

For each of the three projects above, indicate whether the services were accomplished within the original estimated budget and schedule. Briefly explain the reason for any revisions. [5pts]

SPRAGUE RIVER: This project – which OBEC delivered on schedule and under budget for both PE and CE – is an excellent example of our ability to collaborate with our Local Agency clients (Klamath County), responding to public and stakeholder concerns.

Sprague River Bridges	
Original PE Budget: $808,980	
PE Budget: $943,274*	**PE Total Billed:** $904,475
	PE Savings: $38,799
CE Budget: $863,255	**CE Total Billed:** $692,966
	CE Savings: $170,289

* *Amendment 1: $134,294 (anticipated R/W and environmental – scoped after preliminary design)*

TRASK RIVER: OBEC worked in close partnership with our Local Agency client (Tillamook County) to complete this key project despite a sharp escalation in construction costs at the time of the bid that resulted in underfunding. Due to a 30%-40% increase in construction costs at time of bid (versus the 5% inflation that had been included in the project prospectus) it was critical for OBEC to value-engineer the project to meet the client needs within the available funding. The bridge construction was completed within the original schedule. Final paving and striping for the roadway portion funded by ARRA will be complete in May 2010.

Trask River Bridge (Original Budget)	
Original PE Budget: $319,500	
PE Budget: $356,885*	**PE Total Billed:** $356,885
CE Budget: $202,342	**CE Total Billed:** $202,338
Long Prairie Road ARRA PE & CE	
Budget: $165,629	**Billed to Date:** $134,279
	Anticipated Completion Cost: $15,000
	Total Savings: $16,350

* *Amendment 1: $ 37,385 (roadway redesign for re-bid of bridge)*

BROWN BRIDGE: The critical factor in this project was ensuring that our Local Agency client (Douglas County) received responsive and innovative service to quickly get traffic off the dangerously deteriorated bridge while working within the available processes to keep the project compliant with all FHWA requirements. The detour bridge also needed to be designed and installed on a fast-track schedule to meet the next available in-water work window. The project was successfully completed on schedule and under budget.

Brown Bridge Detour	
Total Contract: $494,252	
PE Budget: $326,946	**Total Billed:** $465,287
CE Budget: $167,306	**Savings:** $28,965

The next project phase involved permanent structure design, also completed on time and under budget.

Brown Bridge Permanent Structure	
PE Budget: $1,087,924	**PE Total Billed:** $911,077
	PE Savings: $176,847
CE Budget: $961,611	**CE Total Billed:** $162,464*

**Billed to date*

MEETING BUDGETS

OBEC closely monitors budgets throughout the design process to ensure suitable funding, project scope, and design parameters. Key elements of establishing and maintaining economical PE and CE budgets include:

- ✓ **Define a clear scope of work.**
- ✓ **Clear and well-communicated work plan.**
- ✓ **Weekly team progress/coordination meetings.**
- ✓ **Accelerating tasks to maintain schedule.**
- ✓ **Close management of subconsultant partners.**
- ✓ **Close client collaboration to prevent scope creep.**
- ✓ **Stringent control of expenses.**
- ✓ **Diligent task management to avoid re-work.**
- ✓ **Team flexibility to adapt to changing conditions.**

2.2.4.1 – STAFFING, CAPACITY, AND VARYING LEVELS OF WORK

Describe staffing levels and capacity for the types of projects that may be assigned via WOCs and how the Proposer can accommodate varying levels of work assigned under the PA, including any limitations. [10pts]

STAFFING AND CAPACITY TO PROVIDE IMMEDIATE SERVICE: Consistent with the OTIA III Program Goals of increasing employment opportunities for Oregon residents, OBEC grew our base of exceptionally talented engineering and multi-disciplinary staff in Oregon.

OBEC'S OREGON PE/CE CONTRACTING CAPACITY

- ✓ OBEC's in-house annual contracting capacity is $14-15M, and up to $20M when including our subconsultant partners.
- ✓ OBEC's diverse team has the capacity and technical capabilities to fulfill any WOC needs under this PA without limitation.
- ✓ Our full-service staff is specifically tailored to successfully deliver Local Agency WOCs as demonstrated by our performance on previous ODOT-administered Local Agency contracts.

Combined OBEC and subconsultant staff availability in each discipline is shown in Table 4.1. Team members' availability is currently 40 to 50 percent through mid-2010 and considerably more beyond.

TABLE 4.1
INTERDISCIPLINARY TEAM STAFFING

Discipline	OBEC	Subs
Architects		15
Bridge/Structural Engineers	21	23
Construction Engrs./Inspection Mgmt.	18	43
Cultural Resources		26
Engineering/CADD Technicians	12	57
Environmental Engrs./Specialists	4	110
Geotechnical Engineering		72
Hydraulic/Stormwater Engineers	2	29
Land Use Planners		13
Landscape Architects		31
Project Administrative Support	20	120
PI Specialists/Graphic Design	4	23
Right-of-Way Specialists		17
Roadway Engineers/Civil Designers	17	55
Specification Specialists	3	12
Surveying/Geomatics	13	55
Traffic/Trans. Engineers/Planners		96
Utility Coordination	3	15
Total	**117**	**812**

We currently have ample capacity available for immediate Local Agency project assignments.

- We invested heavily during the OTIA program, training our staff and finding highly competent, experienced engineers and technicians to increase our staff, assuring capacity and production readiness, both now and into the future.
- Our staff is motivated to take on project challenges congruent with OBEC's mission of improving the transportation infrastructure for our state and the communities we serve.

ACCOMMODATING VARYING LEVELS OF WORK: Through diligent and proactive planning, workload balancing and careful scheduling of personnel, we routinely accommodate varying levels of work. To position each team and each project for success:

- **OBEC makes appropriate staffing assignments,** including engineers and technical staff who are exclusively assigned, and adjusts remaining firm-wide staffing assignments as required.
- **The WOC Manager monitors progress** and updates the project schedule continuously to identify potential delays or opportunities for acceleration.
- **If additional scope or time is needed,** the WOC Manager will evaluate the schedule to determine if float is available; ascertain changes to the critical path; and determine new completion dates; all discussed with and agreed to by the client.
- **OBEC routinely accelerates critical path tasks** by identifying them early; developing a strategy to complete them in a timely manner; and closely monitoring and adjusting task execution.

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. Even with thorough staff planning priar to starting any project, the dynamic nature of project delivery often necessitates rapid adjustments including supplementing project staff throughaut project lifecycles to ensure timely, effective and economical completion.

Circumstances that may require staff additions to maintain schedules include:

- Construction schedule acceleration.
- Design revisions due to unforeseen conditions.
- Additional info gained after preliminary design.
- Regulatory agency ar permit requirements.
- Revisions due to abrupt changes in material availability and costs.
- RFIs and shop drawings during construction.

On past projects, OBEC has increased capacity to meet fast-track schedules by:

- Utilizing overtime.
- Re-allocating staff workloads.
- Adjusting workloads to involve additional staff.
- Re-balancing project priorities.
- Outsourcing drafting or certain design services to qualified subconsultants.
- Hiring additional staff.

2.2.4.2 – ACCOMMODATING WORK IN VARIOUS PARTS OF OREGON, OFFICE LOCATIONS, AND CAPABILITIES

Describe how the Proposer can accommodate working on projects that may be located in various parts of Oregon as well as the Proposer's branch or satellite offices located within the state and the types of services these locations are capable of performing. [10pts]

We can assure Local Agencies that our team has highly skilled and experienced interdisciplinary staff available to immediately respond to WOCs under this PA.

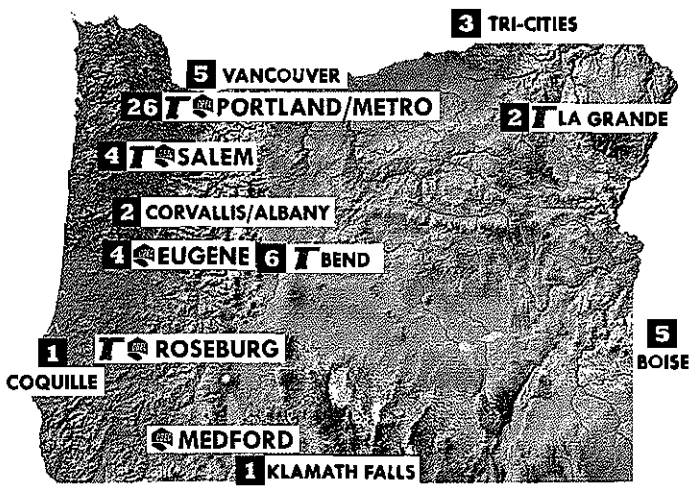
In addition to OBEC's core capabilities, we have assembled a team to provide specialty services typically required on transportation projects to ensure complete coverage of all ODOT Regions and timely, efficient delivery of any project type assigned to us under this PA. (Also see section 2.2.3.2. of this proposal.)

OBEC'S RESPONSIVE STATEWIDE SERVICE TO LOCAL AGENCY CLIENTS IN ALL REGIONS: OBEC's bridge and highway design and associated transportation project services started in 1966 with our Region 2 clients; in 1968 for Region 3; in 1973 for Region 4 and 5 clients; and since 1974, OBEC has also extensively serviced our Region 1 clients.

The OBEC team can respond quickly to meet project needs anywhere in Oregon while achieving value with strict cost-containment and logistics management. Figure 4.1, below, displays our team's locations throughout the State, and Table 4.2 summarizes the in-house services that OBEC is capable of performing from each of our offices.

OBEC's full-service and specialty operational bases in **Lake Oswego, Salem, Eugene, Roseburg, and Medford** are supplemented by our subconsulting partners' local offices throughout the State. Larry Fox, Contract Manager, will assemble teams and make project assignments based on local expertise, project proximity, and other associated critical factors.

FIGURE 4.1
LOCATION OF OBEC TEAM MEMBERS



NUMBER OF SUBCONSULTANT OFFICES
OBEC OFFICES ODOT REGIONAL HEADQUARTERS

TABLE 4.2
OBEC OFFICE LOCATIONS AND CAPABILITIES

Lake Oswego	Roadway, Heavy Civil, Survey, Construction Engineering
Salem	Bridge, Roadway, Heavy Civil, Construction Engineering
Eugene	Bridge, Roadway, Heavy Civil, Environmental, Survey, Construction Engineering
Roseburg	Roadway, Heavy Civil, Construction Engineering
Medford	Roadway, Heavy Civil, Survey, Construction Engineering

EFFECTIVE SUBCONSULTANT PARTNERSHIPS: OBEC has teamed with diverse subconsultants on more than 1,500 transportation-related projects since the 1970s. This foundation enables OBEC to combine forces with expert subconsultant specialists to form the best, readily-available team to perform the work.

Together with our partners, our achievements in service of our Local Agency clients include:

- Expanded value engineering efforts on virtually every project undertaken.
- Technical and cost-containment advantages.
- Increased practical and economical design results.
- Lifecycle costing and maintenance improvements.
- Bridge and roadway engineering innovations.
- Incorporation of sustainable solutions.
- Acceleration of complicated permitting issues.

Having historically worked with a diverse and qualified group of subconsultant firms to successfully deliver interdisciplinary transportation projects, we can attest to the competence of the subconsultants joining our team for this PA. OBEC tailors our selection of subconsultant resources to serve each individual project's unique, full-spectrum requirements.

Team members are typically selected for project assignments based on:

- ✓ Familiarity with the project requirements.
- ✓ Site- or location-specific expertise.
- ✓ Availability to perform the work within the project milestones.
- ✓ Relevant experience.
- ✓ Proximity to the project site and client.
- ✓ MWESB/DBE goals.

Each project is unique. Effective delivery requires that important factors be balanced:

- Design and construction standards.
- Economy and constructability of design solutions.
- Permitting and natural resource requirements.
- Historical and cultural impacts.
- Stakeholders' key issues and concerns.

Rigorous client dedication complements the OBEC Principals' and WOC Managers' expertise, providing Local Agencies with skilled and focused attention. Our interdisciplinary team members are able to leverage their extensive experience, having completed hundreds of transportation, civil, and structural projects in Oregon.

The following table demonstrates our ability to provide efficient, statewide coverage for all typical and specialty services required to complete transportation projects in Oregon, regardless of requirements that may be associated with various funding sources.

TABLE 4.3
TEAM MEMBER REGIONAL COVERAGE

Regions	1	2	3	4	5
NEPA/PLANNING					
URS	✓	✓	✓	✓	✓
Wannamaker*	✓	✓			
MB&G	✓	✓	✓		
ENVIRONMENTAL					
OBEC	✓	✓	✓	✓	✓
MB&G	✓	✓	✓	✓	✓
PHS	✓	✓	✓	✓	✓
Exeltech*	✓	✓	✓	✓	✓
R2 Resource	✓	✓	✓	✓	✓
PBS Engineering	✓	✓	✓	✓	✓
HAZMAT					
S&W	✓	✓	✓	✓	✓
CES	✓	✓	✓	✓	✓
PBS Engineering	✓	✓	✓	✓	✓
Kleinfelder West	✓	✓	✓	✓	✓
HISTORICAL/CULTURAL					
AINW**	✓	✓	✓	✓	✓
HRA*	✓	✓		✓	✓
RIGHT-OF-WAY					
OBEC	✓	✓	✓	✓	✓
UFS	✓	✓	✓	✓	✓
ROWA	✓	✓	✓	✓	✓
LAND USE					
OBEC	✓	✓	✓	✓	✓
HHPR	✓	✓			
Siegel*	✓				
URS	✓	✓	✓	✓	✓
Hickman Williams				✓	✓
MIG	✓	✓	✓		
CMGS*		✓	✓		
NOISE/AIR					
MMA*	✓	✓	✓	✓	✓
PUBLIC INVOLVEMENT					
OBEC	✓	✓	✓	✓	✓
JLA*	✓	✓	✓	✓	✓
Lois Cohen	✓	✓	✓	✓	✓
MB&G	✓	✓	✓	✓	✓
ROADWAY/STORMWATER					
OBEC	✓	✓	✓	✓	✓
Hickman				✓	✓
ZCS			✓	✓	✓
Convergence	✓	✓	✓	✓	✓
Anderson				✓	✓
SURVEY/GEOMATICS					
OBEC	✓	✓	✓	✓	✓
Anderson				✓	✓
White Shield*	✓	✓	✓	✓	✓
Hickman Williams				✓	✓
GEOTECHNICAL/PAVEMENT					
FEI	✓	✓	✓	✓	✓
GRI	✓	✓	✓		
S&W	✓	✓	✓	✓	✓
Kleinfelder West	✓	✓	✓	✓	✓
PBS Engineering	✓	✓	✓	✓	✓

TABLE 4.3 (cont.)
TEAM MEMBER REGIONAL COVERAGE

Regions	1	2	3	4	5
UTILITIES					
OBEC	✓	✓	✓	✓	✓
MSA	✓	✓	✓	✓	✓
Anderson-Perry				✓	✓
HYDRAULICS/SCOUR					
OBEC	✓	✓	✓	✓	✓
WEST	✓	✓	✓	✓	✓
HHPR	✓	✓			
R2 Resource	✓	✓	✓	✓	✓
TRAFFIC/TRAFFIC CONTROL PLANNING					
OBEC	✓	✓	✓	✓	✓
DKS	✓	✓	✓	✓	✓
Kittelson	✓	✓	✓	✓	✓
BRIDGE/STRUCTURAL/ LOAD RATING					
OBEC	✓	✓	✓	✓	✓
Anderson-Perry				✓	✓
Exeltech*	✓	✓	✓	✓	✓
CP*	✓	✓	✓	✓	✓
ZCS			✓	✓	✓
Dr. Jiri Strasky	✓	✓	✓	✓	✓
LANDSCAPE ARCHITECT					
HHPR	✓	✓			
CMGS*		✓	✓	✓	✓
GreenWorks	✓	✓	✓	✓	✓
MIG	✓	✓	✓	✓	✓
ARCHITECTS					
ZGF	✓	✓	✓	✓	✓
Michael Willis**	✓	✓	✓	✓	✓
SPECIALITIES/HEAVY CIVIL					
OBEC (Heavy Civil)	✓	✓	✓	✓	✓
Doug Eakin (Coatings)	✓	✓	✓	✓	✓
Jerry Mayer (Artist)	✓	✓	✓	✓	✓
Dave Place (Const. Estimating)	✓	✓	✓	✓	✓
CONSTRUCTION ENGINEERING					
OBEC	✓	✓	✓	✓	✓
Anderson-Perry				✓	✓
Hickman Williams				✓	✓
ZCS			✓	✓	✓

* MWESB- or DBE-certified firm | ** Minority-owned

EFFICIENT SERVICE DELIVERY AND SUPPORT RESOURCES: OBEC maintains a fleet of design, construction, and surveying field service vehicles equipped to provide statewide interdisciplinary support. OBEC and our subconsulting partners have a long history of successful project collaboration and our communication networks are well-established and cost-effective.

Sharing interconnected, state-of-the-art computer systems, which are fully compatible with ODOT and Local Agencies, has been an important advantage for proactive and timely response to project needs. Electronic data transfer between OBEC offices and our subconsulting partners maximizes efficiency, cost-containment, and supports our team in aggressively meeting project and accelerated delivery schedules, along with continuous client communication.

2.2.5.1 – EXTENT OF PRINCIPAL INVOLVEMENT [5pt]

As Principal-in-Charge, Gayle Harley, PE, will leverage his extensive experience managing hundreds of civil and structural projects. Gayle has more than 31 years of experience with OBEC including design and construction management on more than 120 bridge and highway projects, many of which have been administered through ODOT for Local Agencies.

Gayle will facilitate communication, accountabilities, and ensure seamless contract administration. His rigorous client dedication complements the WOC Managers' expertise, providing ODOT and Local Agencies with skilled and focused attention.

His senior-level input on QA/QC and other critical project issues will ensure effective responsiveness to all client concerns. He takes responsibility for negotiating contracts, performing high-level project reviews, and ensuring that all phases of the project are thorough, timely, and meet OBEC and ODOT quality guidelines.

If the need arises for the WOC Manager to escalate any contractual or project issues, Gayle will function as the ultimate responsible charge to achieve resolution.

PRINCIPAL-IN-CHARGE RESPONSIBILITIES

- ✓ Final Work Order Contract QA
- ✓ Contract Negotiations
- ✓ Constructability/Design Reviews
- ✓ Issue Oversight/Resolution
- ✓ Regular Performance Check-ins with Clients

2.2.5.2 – PROJECT MANAGERS' EXPERIENCE WITH SIMILAR INTERDISCIPLINARY TEAMS [10pts]

All of OBEC's WOC Managers have multiple years of experience utilizing interdisciplinary teams on similar Local Agency projects monitored by ODOT, and we have a long history of successful project delivery with our subconsulting partners on many full-spectrum transportation projects. Our team has collective experience gained on more than 400 state and Federal-aid transportation projects, all of which required highly-skilled, interdisciplinary teams working in close collaboration to achieve satisfaction and project goals.

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

KEY TEAM MEMBERS' SELECTED EXPERIENCE

SENIOR MANAGEMENT TEAM

Larry Fox, PE – Contract Manager

Larry has 21 years of in-depth experience including project management; bridge design; seismic analysis; load ratings; and evaluation of existing steel, concrete, and timber structures. He has been instrumental in the delivery of more than 120 Local Agency and ODOT bridge projects throughout Oregon in the past 10 years. He is a highly skilled project manager of complex bridge and highway projects involving multi-disciplinary teams, having successfully delivered a number of OBEC's largest projects.

Relevant Experience

- Odell Creek and Crescent Creek (Hwy. 58) Bridges
- N. Leadbetter Extension Overcrossing
- N. Going Street Bridge Seismic Strengthening
- Canal Creek (Alder Springs Road) Bridge
- I-5: Willamette River Bridge (Bundle 220)
- I-205: Pacific Highway to Willamette River Bridge
- US 26: SE 51st Ave. to I-205 (Powell Boulevard)
- US 26: North Plains – 185th Ave.
- I-84: E. Portland Freeway – NE 181st Avenue
- I-84: Multnomah Falls to Cascade Locks

Michael Swan – QA Manager

Michael provides effective oversight of OBEC's Quality Control Plan development, execution, and documentation to ensure project teams are in compliance and are submitting the highest quality deliverables – demonstrated by four zero-finding OBDP audits. His 35 years of project management, roadway design, construction, surveying, inspection, and subconsultant team management experience will ensure successful QA/QC plan adherence.

Relevant Experience

- Kokanee Dr: Industrial Dr. – Fish Hatchery Rd.
- OR 214: Front Street Ramp to Progress Way
- 3rd Street: US-30 – School Street (Haines)
- Brookings Harbor Pedestrian Improvements
- Teal Creek (Frost Road) Bridge
- West Lane Road Freight Improvements
- Hwy. 99: Aurora – Salem Preservation Project
- I-5: Willamette River Bridge, (Bundle 220)
- US 20: Beaver Creek – Marys River (Bundle 409)

WORK ORDER CONTRACT MANAGERS

John Kalvelage, PE

John is a project manager with 17 years of experience on a wide range of public transportation projects. In addition to coordinating all aspects of project design, including environmental permitting, utility coordination, and R/W acquisition, he has provided project management and bridge engineering services for over 60 bridge projects in Oregon. His experience includes preliminary design and preparation of full PS&E contract documents.

Relevant Experience

- North Umpqua River (Brown) Bridge
- Weaver Road Extension
- OR 213: I-205 to Redland Road Overcrossing
- Oregon City Arch Bridge Rehabilitation
- Union Street RR Bridge: Steel Truss Painting
- Fairway Bridge Replacement
- Cedar Creek Culvert Replacement
- Boulder Creek Culvert Replacement
- Isthmus Slough Bridge (Prior emp.)

Greg Ausland, PE

With a career spanning more than 24 years, Greg has comprehensive engineering and project management experience. He has extensive site, roadway, bridge, and environmental project development skills and a successful approach to managing multidisciplinary subconsultants and diverse stakeholders. His specialized background includes key roles for projects on 27 of Oregon's covered bridges.

Relevant Experience

- Courthouse District Transportation Improvements
- Ritner Creek Covered Bridge Rehabilitation
- Delta Pond Path: Goodpasture Is. – Robin Hood Ave.
- Eugene Train Depot (Unit 2)
- Lowell Covered Bridge and Interpretive Center
- Big Butte Creek (Netherlands Road) Bridge
- Little Applegate River Bridge Replacement

Brian Nicholas, PE

Brian provides solid leadership and direction managing a wide range of projects. He has served in an array of roles and his background includes more than 15 years of bridge, civil, and project management experience. Brian specializes in the strategic delivery of complex projects with tight schedule, budget, and permit constraints, including design-build and alternative procurements.

Relevant Experience

- Willamette River (Morrison) Bridge Rehabilitation
- Stringtown Bridge Replacement (Prior emp.)
- 223rd Ave. (UPRR) Undercrossing (Prior emp.)
- Central Oregon Hwy. Brs. Design-Build (Prior emp.)
- Mt. Hood-Chemult Bridges Design-Build (Prior emp.)
- Weaver Road Design-Build – Bundle 306 (Prior emp.)
- McKenzie R. to Goshen Design-Build (Prior emp.)

Bob Goodrich, PE

Bob has significant experience designing or managing prestressed and post-tensioned concrete and steel bridge projects using the AASHTO LRFD Bridge Design Specification. His 10 years of experience include serving as project manager, assistant project manager, or bridge engineer for numerous Local Agency and ODOT projects.

Relevant Experience

- Harbor Ave. Waterfront Elevated Pier
- Weaver Road Extension
- Tualatin River (Scholls Ferry Road) Bridge
- US 20: Beaver Creek – Marys River – Bundle 409
- Load Rating of State and Local Agency Bridges
- Odell Creek and Crescent Creek (Hwy. 58) Bridges

Pete Slocum, PE, SE

As an accomplished civil and structural engineer, Pete brings 18 years of experience designing, managing, and checking a variety of municipal and transportation infrastructure projects, including bridges, retaining walls, and signal and sign structures. His specialized experience has included designing high-quality and cost-effective culvert replacements, reservoirs, pump station buildings, and piping systems associated with water distribution.

Relevant Experience

- Clackamas River (Springwater Road) Bridge
- Sprague River Bridge
- Portland and Western Railroad ("L" Street) Bridge
- Little Applegate River Bridge Replacement
- I-5: Willamette River – Tualatin River
- I-405: Fremont Bridge Sign Structures
- Hayden Bridge Filtration Plant Expansion (HBFP)
- Beaver Falls Road Guardrail Replacement
- Parvin Covered Bridge

Jerry Lane, PE

Jerry's more than 30 years of experience includes highly diverse engineering assignments, project development and management from preliminary design to plan preparation on more than 100 Oregon highway and bridge projects for local cities and counties. He has extensive experience with project scoping, project management, environmental permitting/compliance, and contract administration.

Relevant Experience

- US 101: Alsea Bay Br. to Wm. Keady Wayside
- Willamette River (Independence) Bridge
- Beaver Falls Road Guardrail Replacement
- US 26: SE 51st Ave. to I-205 (Powell Boulevard)
- US 26: North Plains – 185th Ave.
- Courthouse District Transportation Improvements
- Kokanee Dr: Industrial Dr. – Fish Hatchery Rd.
- Lampa Lane Slide Repairs

Jeff Bernardo, PE

Jeff's 12 years of experience with OBEC encompasses comprehensive engineering services spanning field survey, construction inspection, public utility coordination, public involvement, roadway and multi-use trail design, and project management. His extensive project management on various local agency projects has involved bridges, highways, urban signalized intersections, city streets, railroad crossings, streetscapes, and multi-use trails.

Relevant Experience

- Elm and M Street Paving
- Hazel St.: 9th to East of 10th
- Rogue River Bicycle/Pedestrian Path
- Barnett Road to Blue Heron Park, Unit 2C
- Ashland City Streets: Pavement Overlay
- Hersey Street: Oak Street – Ann Street Sidewalk
- Jackson County Road Resurfacing
- Pine Street Pavement Resurfacing
- C St: Bike/Ped Improvements

Guy Hakanson, PE

Guy brings more than 23 years of design and construction management experience. He has played a key role during design and construction on projects of all types including bridge, roadway, dock, reservoir, and pipeline. Guy provides design/constructability reviews, construction management, scheduling, change order negotiation, contract administration, contractor-client relations management, and final inspection and contract closeout.

Relevant Experience

- North Umpqua River (Brown) Bridge
- Ayers Creek Bridge Replacement
- South Umpqua River (Pruner Road) Bridge
- Canal Creek (Alder Springs Road) Bridge
- Delta Pond Path: Goodpasture Is. – Robin Hood Ave.
- Courthouse District Transportation Improvements
- Port of Siuslaw Dock Replacement
- Eugene Train Depot (Unit 2)
- 69th Street, Thurston Road to B Street

2.2.5.3 – KEY STAFF RESUMES [15pts] | Key staff resumes are included in Appendix A.

2.2.6.1 – STEPS TO ENSURE COST-EFFECTIVENESS

Describe the specific efforts your firm makes to ensure tasks and deliverables are completed in the most cost-effective manner. Explain how your firm ensures all travel, lodging, and per diem expenses are as low as possible (including for long-term CEI/CA projects). [10pts]

For more than four decades, OBEC has earned the reputation for completing our work in the most accurate and efficient manner possible. We provide value-added, cost-effective engineering and client services by implementing strict project and cost control measures to ensure delivery of viable yet economical solutions. On many contracts, these measures have resulted in unused engineering fees returned to project budgets.

FULL-SERVICE DELIVERY: OBEC has a proven record of meeting the needs of Local Agencies for streamlined and cost-effective delivery involving an array of project types, most requiring unique combinations of services and skills, along with diligent attention to client satisfaction.

Local Agency STIP projects require a special range of expertise, skills, and experience including:

Scope of Work Development
- Detailed understanding of project goals, site constraints, and permitting requirements.
- Effective scoping to help eliminate costly 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 the Local Agency.
- Proficiency managing multi-disciplinary teams.
- Timely delivery to maintain the STIP schedule.
- Anticipation/management of permit requirements.
- Early identification of right-of-way impacts.
- Public/stakeholder involvement to enhance project support and sustainable solutions.

Project Delivery
- In-depth proficiency with ODOT requirements.
- Technical expertise managing interdisciplinary tasks.
- Effective and proactive client communication.
- Proven ability to keep projects on schedule.
- Stringent quality and cost controls.

CRITICAL SUPPORT: In our State and in the current economy, transportation dollars are scarce in comparison to the infrastructure demands. **More critical than ever before, our Local Agencies need:**

- ✓ Professional services that help achieve project objectives and swift delivery.
- ✓ Economy of design, appropriate to the context.
- ✓ Practical designs vs. merely applying standards.
- ✓ Construction efficiency.
- ✓ Lifecycle maintenance cost considerations.
- ✓ Enduring value.

LOCAL SOLUTIONS: OBEC is a consulting engineering firm with a demonstrated history of providing Local Agencies across Oregon with accelerated, full-service project delivery without sacrificing quality, economy, or ingenuity. Having grown from a bridge specialty firm, we now provide a full suite of technical services including expanded roadway, civil, stormwater, hydraulic engineering, and construction engineering, plus heavy civil and alternative design/delivery capabilities. As taxpayers and residents of the communities we serve, intense commitment to client and public satisfaction is the driving force of OBEC's professional practice spanning more than four decades in Oregon.

Full-service offices, highly-qualified staff, and multi-disciplinary subconsulting and small business partners located strategically around the State ensure:
- Complete coverage for any project.
- Cost containment when working on more remote projects by using available subconsultants' offices and always working from the closest office to the project for determining travel time and expenses.
- Reducing travel time and maximizing productivity, especially on CEI/CA projects, by assigning personnel who are closest to the project.

LOGISTICS PLANNING: Projects are assessed regularly for logistics-management and cost-containment opportunities where we can cross-utilize crews for inspections, cluster field survey activities, or combine multiple project tasks or design meeting reviews to achieve the highest level of efficiency. Many OBEC staff are cross-trained in multiple technical disciplines, which also enables individuals to perform diverse project tasks during the same site visit or client meeting, aiding in cost control measures and increased project efficiencies.

LOGISTICS PLANNING & EXPENSE CONTROL

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

- ✓ ***Site Surveys*** – Plan survey projects to gather as much information as possible per trip. Coordinate with team members on wetland delineations, utility locates, foundation investigation, topographic mapping needs, and/or inspection tasks that could be included to maximize trip plans.
- ✓ ***Travel Time*** – If travel times for tasks-at-hand seem extensive, arrange for other work to share the travel costs with subconsultants and project staff.
- ✓ ***Overnight Lodging*** – OBEC always uses the closest economical accommodations, along with corporate discounts, to contain costs for overnight stays.
- ✓ ***Extended Stay*** – If projects involve extended stay or remote locations (especially for CEI/CA work), we research alternative rental accommodations when such options may be more economical than hotels/motels, including the use of RVs.
- ✓ ***Travel Expenses*** – OBEC tracks all daily 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. To help contain expenses well within contract requirements, all expenses are verified by receipt and a completed expense accounting form.

- ✓ ***Overtime Expenses*** – Any overtime expense for project tasks performed by non-exempt employees are absorbed by OBEC.
- ✓ ***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 state-of-the-art computer capabilities, containing project costs through efficient tele- and web-conferencing and electronic data transfer. This supports our team in cost-effective management of aggressive project schedules.

2.2.6.2 – COST ESTIMATING METHODS AND ENSURING FAIR AND REASONABLE ESTIMATES

Describe the specific methods, tools, and processes your firm uses to develop the estimate for services and how your firm ensures they are fair and reasonable to both the government and your firm. [10pts]

ENSURING BUDGET-COMPLIANT DESIGNS: To ensure OBEC's budget estimates for professional services are fair and reasonable for the government and our project team, we utilize a methodical step-by-step fee estimate process on all projects. Our goal on every WOC is to develop an estimate that sufficiently covers the entire scope of work, identifies possible contingencies, and falls within reasonable cost ranges that both ODOT and the Local Agencies can readily accept. In conjunction with our methodical fee estimating process, all our estimates are prepared by staff with extensive experience having completed completing each critical task previously on numerous similar projects.

OBEC'S FEE-ESTIMATING PROCESS

STEP 1 – Project Understanding and Team Selection
For each WOC assignment our Contract Manager, Larry Fox, will select a WOC Manager with the requisite background and experience to successfully manage the project. Together, Larry and the WOC Manager will select the appropriate Discipline Task Leads from OBEC and our subconsultant team to scope, estimate, and successfully deliver the project.

STEP 2 – Developing the Scope and Schedule
The WOC 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.
Determine all elements that must ultimately be constructed within the project.
Develop a complete scope of work for professional services (construction services' scope is generally prepared as a contract amendment at the advanced plans stage of design).
Determine all design schedule drivers such as environmental studies, utility conflicts, permits, and right-of-way acquisition.

- Determine construction schedule drivers such os in-water work periods, paving windows, and critical-path sequences for required work.
- Develop a detailed design schedule and construction duration (construction CE schedules used for CE fee estimating are developed at the advanced plans stage of the project).

STEP 3 – Developing the Fee Estimate
Once our team has established a reliable scope of work and schedule, our preference is to submit it to ODOT and the Local Agency for concurrence prior to submitting our final fee estimate.

- Upon concurrence, our Task Leads prepare detailed time estimates for all scope items.
- These time estimates take into consideration both historic staff production rates and all 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 project schedule.
- Once each Discipline Leader has completed their estimated fee, the WOC Manager compiles all fees into the current ODOT-approved fee estimate spreadsheet.
- The WOC Manager reviews the entire fee estimate to ensure it is reasonable and complete, measured against 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, Larry Fox.
- 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 that tracks detailed costs on every project we complete).
- Costs are measured against historical per-plan-sheet estimates. Major disciplines such as structures, roadway, landscaping, and traffic control are often estimated by cost per sheet, which provides quick reality checks on design fee estimates.
- 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).
- Final WOC budget check QC is conducted by Principal-in-Charge, Gayle Harley.

The result of our rigorous process is evidenced by our consistent on-time, on-budget project delivery shown in Table 2.1 of this proposal.

CURRENT AND FUTURE RELIABLE PARTNERS: OBEC exists to support our ODOT and Local Agency clients and Oregon communities with transportation solutions of enduring value. We look forward to continuing our tradition of public service.