



OREGON DEPARTMENT OF TRANSPORTATION TECHNICAL SERVICES
TECHNICAL SERVICES DIRECTIVE

SUBJECT Errors and Omissions Contract Language and Administration Procedures	FINAL NUMBER TSB07-01(D)	EFFECTIVE DATE 10/22/2007	VALIDATION DATE 08/16/2013	SUPERSEDES or RESCINDS
	WEB LINK(S) http://www.oregon.gov/ODOT/HWY/TECHSERV/Pages/technicalguidance.aspx			
TOPIC/PROGRAM Consultant Contracts	APPROVED SIGNATURE Original signed by: Catherine M. Nelson, P.E. Technical Services Manager/Chief Engineer			

PURPOSE

- To develop clear and consistent procedures to identify, evaluate and resolve errors and omissions (E&O) in consultant prepared construction plans and contract documents or in the performance of consultant construction engineering and inspection/contract administration.
- To create a shared understanding between Oregon Department of Transportation (ODOT) staff and the consultant community regarding errors and omissions in relation to standard of care in professional work within ODOT contracts.
- To focus first on resolving issues collaboratively and quickly and second, on identifying cost responsibility.

The Directive will include a method for resolution and/or cost recovery in the event standard of care has not been met and ODOT has suffered damages.

GUIDANCE

This directive is applicable to all ODOT Architectural & Engineering (A&E) contracts and ODOT Construction contracts utilizing consultant prepared construction plans and contract specifications or consultant construction engineering and inspection.

All ODOT A&E contracts for design and construction engineering and inspection (CE) contracts will include the most current ODOT Procurement Office (OPO) Contract Price Agreement language.

Key contract elements relevant to E&O include:

- Indemnity
- Insurance
- Standard of Care
- E&O Claims Process

Current language for these key elements can be found at the following internet site:

<http://www.oregon.gov/ODOT/CS/OPO/docs/aepage/xbti.pdf>

As contract language is often updated over time, for the management of E&O issues on existing contracts, refer to the specific project contract language regarding these contract elements.

E&O Claims Process

The goals of the E&O Claims Process are to:

- identify E&O issues and associated costs early,
- require timely notification to the Consultant of problem issues,
- establish a requirement to work together to correct, mitigate, or minimize the effects on the construction project's quality, schedule and budget, and
- identify associated costs when the standard of care has not been met and provide resolution of responsibility for Premium Costs incurred.

The process is specifically defined in the Exhibit Section of the General Price Agreement language for A & E Contracts.

The process is focused on resolving issues at the lowest possible administrative levels in a spirit of collaboration. However, if the Agency Consultant Contract Administrator (CA) cannot reach resolution with the Consultant regarding E&O issues, the Agency CA may request a standard of care determination from the Chief Engineer.

Upon request from the Agency CA, the Chief Engineer shall initiate an Internal Investigation review utilizing one of the following three options:

Internal Investigation:

Option 1:

The Chief Engineer reviews the information provided by the Agency CA and renders a determination regarding whether standard of care was met by the Consultant.

Option 2:

The Chief Engineer appoints a Technical Investigator (TI) to examine the records pertaining to the issue. The Agency TI renders a recommendation to the Chief Engineer regarding whether standard of care was met.

Option 3:

The Chief Engineer appoints an Agency TI to chair a Technical Review Committee (TRC). The Agency TI will then select at least 3 additional technical experts from a roster of Agency, ACEC or other technical experts. Committee members shall have no connection to the underlying dispute.

TRC members will review terms of the applicable contract, including Statement of Work, Agency supplied data, Consultant supplied documentation/correspondence, the deliverables and design standards. Both the Consultant and the Agency's CA will present their perspectives on the facts and issues to the TRC. The TRC will make a recommendation to the Chief Engineer as to whether standard of care was met.

In all 3 options the Chief Engineer renders the Agency determination regarding whether standard of care has been met.

If the Chief Engineer determines that the standard of care has been met, then all parties are to continue to work together to correct, minimize, or mitigate effects of the issue and it is the Agency's responsibility to cover Premium Costs.

If the Chief Engineer determines that standard of care has not been met, then Cost Evaluation and Recovery will be pursued.

Cost Evaluation and Recovery

The Premium Costs incurred by the Agency and/or construction project resulting from the Consultant's failure to meet the standard of care will be evaluated and quantified by the Agency CA with assistance from the Agency TI or TRC as requested by the Chief Engineer. Any extenuating or mitigating factors in relation to cost recovery, such as limitations on fee and scope of services, time constraints for performance of services, unforeseen or changed conditions, third party requirements, responsibility and comparative fault of other parties, or other circumstances or constraints affecting the Consultant's performance will be considered.

Utilizing cost information generated by the Agency's internal investigation, the Agency CA will meet with the Consultant in an attempt to reach agreement for resolution of responsibility and corresponding Premium Costs. If resolution is not reached, then the Chief Engineer or designee will meet with the Consultant and pursue one or all of the following actions:

- Negotiate a resolution with the Consultant
- Agree with the Consultant to share equally the cost to jointly present the issue to a credible, neutral third party panel to obtain a non-binding recommendation
- Pursue other Alternate Dispute Resolution methods as agreed to with the Consultant
- Escalate the issue to litigation.

Alternate Methods of Recovery

When the parties reach agreement on cost recovery for a failure to meet the standard of care determination the Consultant may make restitution to the Agency in the following methods, as agreed to by both Parties:

- Making direct payments to the Agency
- Correcting the deficient services
- Re-performing the deficient services
- Forfeiting payments for other services on other Agency contracts
- Providing in-kind services at no cost to the Agency
- Utilizing other methods acceptable to both parties

Documentation

The Agency CA or designee shall document the contract file with all correspondence, notices, meeting notes and letters of concern related to E&O issues, claims or potential claims. The file must include a written statement summarizing the findings of the claims process and the outcome, including:

- The determination of whether or not the Consultant met contract requirements and met the standard of care;

- The determination of responsibility and whether there were mitigating circumstances beyond the reasonable control of the Consultant;
- The determination of whether or not the work requested by the Agency was within the scope of services of the contract;
- If the Consultant was not required to correct deficiencies at no cost to the Agency, provide the reasons for that decision.
- A record of negotiation for any negotiated settlement, subject to the rules regarding confidentiality of mediations, in OAR 731 division 001.

DEFINITIONS

A&E Contracts – Professional Service agreements for Architectural and Engineering services

Agency – Oregon Department of Transportation (ODOT)

Agency CA – Agency Consultant Contract Administrator overseeing the consultant contract and deliverables. This would be a Consultant Project Manager (CPM) on a full service Consultant Contract or a Technical Discipline Leader in a Region Technical Center overseeing Technical Discipline Specific Consultant Contracts.

Agency TI – Agency Technical Investigator. An Agency manager familiar with the technical discipline at issue who independently reviews records and interviews personnel pertinent to the claim to determine if the standard of care was met.

CE – Construction Engineering which may include construction engineering, inspection services and construction contract administration.

Consultant – Private sector entity, which has entered into a contract with the Agency to provide Architectural or Engineering services and which employs or engages the services of the POR.

Contract – Price Agreement, Work Order Contract (WOC) or project specific Contract between Agency and Consultant.

Error – Plan or specification details or contract administration actions which are incorrect, conflicting, insufficient or ambiguous.

E&O – Errors and Omissions

Omission – The plans, specifications or contract administration actions are silent on an issue that should otherwise be addressed in the documents.

Parties – Refers to Agency and Consultant collectively

Party – Refers to Agency and Consultant separately

PM – Project Manager (Agency)

POR – Professional of Record – All professional disciplines included in ODOT A&E contracts who are in responsible charge of final design and construction engineering deliverables and services including; Professional Engineers, Professional Land Surveyors, Registered Professional Geologists, Certified Engineering Geologists, Registered Landscape Architects and Registered Architects.

Premium Costs – The additional costs incurred by the Agency and/or a construction project which result from the Consultant’s failure to meet the standard of care. Premium Costs are dollar amounts paid for non-value added work. Premium costs are not reimbursed by the federal government on federal aid projects. Delays, inefficiencies, rework or extra work as shown below, caused by the Consultant’s failure to meet the standard of care, will be considered as non-value added work. Non-value added work can occur in three distinct situations:

- Work delays or inefficiencies.
The Premium Costs are the total delay/inefficiency damages paid to the construction contractor.
- Rework
The Premium Costs are the dollar amount of the original items of work that have to be removed and the costs to remove these items.
- Extra work
The Premium Costs are computed as the net difference between the final agreed prices paid to the construction contractor and what the cost would have been had the extra work been included in the original bid at letting.

Price Agreement – The written document of understanding negotiated between the Agency and a Consultant for the provision of services with no guarantee of a minimum or maximum purchase. A Price Agreement contains clauses and pricing information that will apply to potential future contracts to be established through work order contracts that will incorporate the required and applicable clauses of the Price Agreement.

Responsible Charge – Final authority and responsibility for professional work as defined by ORS 671 and 672, to have supervision and control of final design of work with responsibility for design decisions. Supervision and control means establishing the nature of, directing and guiding the preparation of, and approving the work product and accepting responsibility that the work product is in conformance with standards of professional practice.

Services in Kind – Services provided by a Consultant – in lieu of money – as restitution for damages caused by the failure to meet the standard of care.

TRC – Technical Review Committee. A committee convened by the Agency Chief Engineer, chaired by the Agency TI and staffed by at least 3 technical experts chosen by the Agency TI from a list of Agency, ACEC and other technical experts. The committee is charged with reviewing records and interviewing personnel pertinent to the claim to determine if standard of care was met.

WOC – Individual written work order contracts which define specific tasks agreed to by the Contracting Agency and Consultant, executed within the broader contractual scope of a Price Agreement.

BACKGROUND/REFERENCE

As a steward for the public it is ODOT’s responsibility to develop, operate and maintain safe and functional public transportation facilities. ODOT relies on the skills, judgment, and ethics of professional staff to meet this objective through the design and delivery of safe and

functional projects. ODOT utilizes both in-house and private sector professional staff (Consultants) to develop and deliver projects.

This Directive is focused on providing professional and financial accountability for the quality of design and construction engineering work performed by Consultants on ODOT projects.

Governing Board Requirements

The practice of professional technical work is governed by Oregon State Boards under the authority and within the scope of Oregon Revised Statutes (ORS) and further defined within Oregon Administrative Rules (OAR).

Professional	Governing Board	Laws/Rules
<ul style="list-style-type: none"> • Professional Engineers • Professional Land Surveyors 	Oregon Board of Examiners for Engineering and Land Surveying (OSBEELS)	ORS Chapter 672 OAR Chapter 820
<ul style="list-style-type: none"> • Registered Professional Geologists • Certified Engineering Geologists 	State Board of Geologist Examiners	ORS Chapter 672 OAR Chapter 809
<ul style="list-style-type: none"> • Registered Landscape Architects • Registered Architects 	State Board of Architect Examiners	ORS Chapter 671 OAR Chapter 806

For the purposes of this Directive the term “Professional-of-Record” (POR) is intended to encompass all professional disciplines included in ODOT Architectural and Engineering (A&E) contracts, including those listed above.

POR’s are held accountable to two professional legal duties:

- 1) to **have** the *appropriate technical competence* necessary for the task and
- 2) to **use** the *appropriate care and professional judgment* in applying his/her professional skill to the task.

These legal duties form the basis for “Standard of Care” required from the POR. Embedded in these two legal duties are three important concepts.

First, a professional must limit his/her professional practice to areas where he/she is competent. Each individual professional is responsible for assessing his/her own abilities.

Second, a professional needs to utilize care and judgment when practicing. He/she needs to be aware of and follow industry practices and do so with the appropriate attention to detail.

Third, a professional needs to know what the state of the practice is in the project’s location, for the task involved, given the project’s unique circumstances. The field of engineering is not stagnant. Research is continually being conducted and new design theories, new materials, new understanding of the properties of existing materials and new procedures for construction and maintenance are constantly being developed. The standard of care may be

measured differently when one is initially relying on research and theory, versus later, when the state of practice is well established and documented and/or regulated through design codes, policies and procedures.

Although at all times a professional must exercise sound technical judgment when performing his/her duties, it is important to understand that meeting the standard of care does not mean that projects are engineered 100 percent during the design phase of development. It is often cost prohibitive or logistically impossible to gather all field information to have 100 percent confidence in the engineered solution. As an example, borings are taken to analyze and model soil conditions when building bridge foundations, yet soil conditions can vary between borings.

It is also often impossible to gather enough information to successfully detail all engineering information in a set of contract documents. For instance when repairing the superstructure of a bridge, often the details necessary to rebuild the bridge cannot be fully defined with 100 percent confidence without removing the deck to verify dimensions, which doesn't happen until the project is under construction.

In the examples above, accepted documented industry practice, in the form of design codes, manuals, policies, standard drawings, details and specifications, help address appropriate level of engineering effort for a variety of project elements. The level of uncertainty regarding field conditions or the level of risk of failure of an element is often accounted for by the use of "Factors of Safety" in the design process, which again is addressed in documented industry practice.

ODOT will often require the use of specific directives and standards in the development of projects. And while this creates a basis for "accepted documented industry practice", it does not relieve the Consultant of the responsibility of checking for the appropriateness of all applicable practices and standards to be used in performing their Services.

It is the Consultant's responsibility to inform and demonstrate to ODOT if directives or standards required by ODOT in performance of the work are insufficient, in conflict with applicable standards, or otherwise create a problem for the design. If ODOT is so notified and continues to require the same standards and/or directives demonstrated as being problematic, the Consultant shall be considered as conforming to the standard of care under the Agreement with respect to the standards and directives.

Consultant Contract Professional Accountability

A Consultant may fall below the standard of care in two main areas:

- Errors – plan or specification details or contract administration actions which are incorrect, conflicting, insufficient or ambiguous.
- Omissions – the plans, specifications or contract administration actions are silent on an issue that should otherwise be addressed in the documents.

It should be noted that the Consultant could also fail to meet the standard of care by non-compliance with Professional Practice statutes and state regulations as outlined above and which are outside the authority of ODOT and the scope of this Directive.

The relationship between ODOT and the Consultant is one of Owner – Independent Contractor and thus the contract is used as a mechanism to clarify performance expectations and ensure accountability of both parties. That relationship is most effective when the parties are cooperating, within the confines of the contract, towards a common goal.

ODOT uses three main contract components to define the expected risk issues and financial responsibility - Indemnity, Insurance and Standard of Care.

Indemnity & Insurance

All public sector employees, including professional staff are protected from personal liability in the performance of their duties by the Oregon Tort Claims Act. ORS 30.285 specifically states:

(1) The governing body of any public body shall defend, save harmless and indemnify any of its officers, employees and agents, whether elective or appointive, against any tort claim or demand, whether groundless or otherwise, arising out of an alleged act or omission occurring in the performance of duty.

(2) The provisions of subsection (1) of this section do not apply in case of malfeasance in office or willful or wanton neglect of duty.

Private sector consultants, by definition cannot be covered by the Oregon Tort Claims Act. The entity they are employed with or themselves may be liable for general liability claims for their torts, including negligence, as well as for professional liability claims. ODOT requires the Consultant to indemnify, defend and hold ODOT harmless for the Consultant's general performance under the contract and for the Consultant's professional negligence. ODOT also requires the Consultant to carry General and Professional Liability Insurance, at limits which best protect ODOT and the public against potential damages caused by the Consultant's negligent performance of work under the contract.

Standard of Care

ODOT includes the definition of Standard of Care in the Terms and Conditions portion of Architectural and Engineering (A&E) contracts. For the standard of care definition that applies to a current project, refer to the standard of care language included in the contract for the project. Following is a sample definition for standard of care:

“The Consultant shall perform all Services in accordance with the degree of skill and care ordinarily used by competent practitioners of the same professional discipline under similar circumstances, taking into consideration the contemporary state of the practice and the project conditions.”

The Indemnity, Insurance and Consultant Standard of Care contract language holds the Consultant accountable for the technical accuracy and quality of their work. However, mistakes can and do occur, which may or may not amount to a departure from standard of care. Thus, it is important to have a claims process detailed in the contract language available for use when there is a “problem” perceived as caused by the performance of the Consultant.

The intent of this claims process is to identify E&O issues and associated costs early and notify the Consultant and Construction Contractor immediately so all parties can work

together to resolve the issue quickly. The hope is to be able to mitigate where possible and avoid potential future damage claims. The claims process enables the parties to work together to solve the issue at hand and keep the project on track, while preserving each party's right (along with the proper documentation) to assess/negotiate potential cost responsibilities at a later date, if it is determined that the standard of care has not been met.

RESPONSIBILITIES

Responsibility	Action
ODOT Procurement Office	<ul style="list-style-type: none"> • Maintain website with current Agency definitions and contractual requirements for: <ul style="list-style-type: none"> ○ Standard of Care ○ Indemnity ○ Insurance ○ E&O Claims Process • Ensure current language incorporated in all new consultant design contracts.
Agency Consultant Contract Administrator	<ul style="list-style-type: none"> • Pursuant to Contract E&O Claims Process, immediately notify Consultant when suspected E&O issues arise. • Work with Consultant to correct, minimize or mitigate effect of E&O issue. • Maintain Agency documentation file of E&O issue. • Track all Agency related costs to E&O issue. • Provide Agency documents to Consultant as needed or requested. • Work with Consultant to determine cost responsibility. • Code all negotiated settlements with appropriate Change Order Code. <p><u>Claims Procedure</u></p> <ul style="list-style-type: none"> • Request review from Chief Engineer when unable to reach agreement with Consultant on cost recovery responsibilities related to E&O issues. <p><u>Cost Evaluation and Recovery</u></p> <ul style="list-style-type: none"> • Work with appropriate agency staff (TI, TRC or others) to determine costs associated with E&O issues, including consideration of all mitigating factors. • Negotiate with Consultant regarding cost responsibility. • Escalate cost recovery negotiations to Chief Engineer when unable to reach resolution.

<p>Chief Engineer</p>	<p><u>Claims Procedure</u></p> <ul style="list-style-type: none"> • Select Review Option (1, 2 or 3) • Select Agency TI to review issue (Option 2 or 3). • Receive recommendation from Agency TI (as individual or chair of TRC) regarding whether standard of care was met (Option 2 or 3). • Make final Agency decision regarding standard of care. <p><u>Cost Evaluation and Recovery</u></p> <ul style="list-style-type: none"> • Upon Agency CA request, Chief Engineer or designee shall utilize Agency cost information (from Agency CA, Agency TI, TRC or others) to negotiate with Consultant regarding cost responsibility. • In the event a settlement agreement is not reached, Chief Engineer in consultation with the Region Manager and the Department of Justice may choose to file an E&O claim against the Consultant.
<p>Agency Technical Investigator</p>	<p><u>Claims Procedure</u></p> <ul style="list-style-type: none"> • Review all records and interview Agency CA and Consultant. • If TRC not required – make recommendation to Chief Engineer regarding whether standard of care was met. • If TRC required – select at least 3 additional technical experts from a roster of Agency, ACEC or other technical experts. <ul style="list-style-type: none"> ○ Chair TRC and facilitate group in evaluation of standard of care. ○ Make recommendation on behalf of TRC to Chief Engineer regarding whether standard of care was met. <p><u>Cost Evaluation and Recovery</u></p> <ul style="list-style-type: none"> • As requested by the Chief Engineer, identify and analyze costs associated with E&O issue, taking into consideration all mitigating factors. • Provide cost data for Chief Engineer or designee for cost negotiations with Consultant.
<p>Technical Review Committee</p>	<p><u>Claims Procedure</u></p> <ul style="list-style-type: none"> • Convened by Agency TI. • Review all records and interview Agency CA and Consultant. • Make recommendation to Chief Engineer regarding standard of care evaluation.

	<p><u>Cost Evaluation and Recovery</u></p> <ul style="list-style-type: none"> • As requested by Chief Engineer, identify and analyze costs associated with E&O issue, taking into consideration all mitigating factors. • Provide cost data for Chief Engineer or designee for cost negotiations with Consultant.
<p>Consultant</p>	<ul style="list-style-type: none"> • Perform contract work to meet terms of contract and standard of care. • Raise identified concerns regarding potential conflict between Terms of the Contract and ability to meet standard of care prior to signing WOC. • Upon identification or notification of potential E&O issues, provide requested records and documents promptly to the Agency CA. • Work with Agency CA to correct, mitigate or minimize effects of issue promptly. • Document all steps and costs associated with issue. • Work with Agency CA to determine cost responsibility.

ACTION REQUIRED

This Directive is mandatory for all ODOT Construction Contracts utilizing Consultant prepared construction plans and contract specifications or Consultant construction engineering and inspection.

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