

Arizona Department of Transportation

Errors and Omissions on Projects

Contents

Letter to Users1

1. Errors and Omissions on Projects

1.1 Purpose.....1-1
1.1.1 Guideline1-1
1.2 Background.....1-2
1.3 Definitions1-3

2. Discovery, Mitigation, and Resolution of Errors and Omissions on Projects

2.1 Procedures.....2-1
2.1 Actions2-1
2.1 Responsibility.....2-1

Appendix A: Flow Chart

Chapter 1

Errors and Omissions on Projects

1.1 Purpose

To document the guidelines, procedures, and responsibilities for the Arizona Department of Transportation (ADOT) on assessing and processing errors and omissions for consultant and in-house projects discovered during design advertising or construction and to establish recommendations for resolution with the consultant design company or recommendations for settlement to the applicable ADOT Division Director.

1.1.1 Guideline

ADOT expects engineering consultants and in-house designers preparing construction documents on transportation projects to exercise an appropriate standard of care and provide quality services to ADOT. ADOT will provide or make available in hard copy or through the ADOT's Web site all ADOT manuals, specifications, drawings, guidelines and procedures needed in support of the consultant contract.

ADOT will take steps to address the defective designs, plans or specifications, identify corrective actions, and resolve the consequences that occur as a result of the defective design. The Project Manager will take appropriate steps once notified by the Resident Engineer of a potential error or omission in deciding if the error or omission is the result of negligence or gross negligence. The Project manager will partner with the consultant or in-house team in order to resolve the issue at the lowest level possible and in the best interests of all concerned parties in the shortest and least costly method possible.

ADOT will take action to recover costs for errors and omissions attributed to the negligence or gross negligence of a consultant in accordance with the procedures outlined in this guideline. In a similar manner, ADOT will document in-house design error and omissions costs.

The Errors and Omissions Claims Review Board made up of the following individuals will convene when required:

- a. Project Management Group (PMG) Manager as chair
- b. Risk Management Representative
- c. American Council of Engineering Companies (ACEC) representative as determined jointly by ADOT Project Management Group and ACEC. The ACEC representative

cannot be affiliated with the Consultant Firm (or any subconsultant) involved in the design of the project.

d. Deputy State Engineer -Development

Consultants and in-house design teams shall track hours and dollars expended on error and omissions issues with separate task/work codes. Consultants shall still include these hours and direct expenses on their monthly post design invoices and simply indicate that these charges are not reimbursable.

1.2 Background

On occasion, errors and omissions are the result of design negligence or gross negligence. Errors and omissions are normally identified during construction, but could also be identified during the design and advertising phases.

The discovery of an error or omission triggers the gathering of information on the scope of the problem, actions and responsibilities of the various parties, and the potential validity and extent of any claims that may arise.

“The Federal Highway Administration’s (FHWA) general policy is that each error-and-omissions issue should be considered on its own merits. In general, a consultant should not be held responsible for additional construction costs resulting from such errors so long as they are not the result of gross negligence or carelessness. Unless the agency-consultant agreement holds otherwise, ‘federal-aid participation may be justified for the type of consultant errors that might occasionally occur despite the exercise of normal diligence’ if: 1) The error is not due to gross negligence or carelessness; and 2) Carelessness, negligence, incompetence, or understaffing by the state agency are not contributing factors.” (Best Practices in the Management of Design Errors and Omission, Chapter 2, Federal Highway Administration Policy and Data, Philosophy and Policy Guidance as prepared by Michael J. Markow, P.E., Consultant, Teaticket, MA, March 2009.)

Title 23 of the Code of Federal Regulations requires State DOTs to have written procedures “in determining the extent to which the consultant, who is responsible for the professional quality, technical accuracy, and coordination of services, may be reasonably liable for cost resulting from errors or deficiencies in design furnished under its contract.” (§23 CFR 172.9(a)(6))

One of the biggest areas of contention is betterments requested by the owner during construction and the concept of premium cost as defined in “Definitions” section.

Examples:

- 1) A pipe quantity was calculated incorrectly due to an error on the plans requiring an increase in the amount of pipe for the project. The contractor can provide the additional quantity at the bid item price. Since this was a project requirement that otherwise would have been included in the project documents and can be provided at the bid item price, this betterment and increase in cost shall not be borne by the Designer of Record.
- 2) The embankment quantity was calculated incorrectly requiring 500,000 CY of borrow instead of 400,000 CY per original bid plans. The borrow bid item price was \$5/CY. The change order price for the additional borrow was \$8/CY because original source pit was exhausted and new pit was 20 miles further. Since the Designer of Record failed to adhere to the standard of care, the Designer of Record is responsible for the additional borrow premium cost (100,000 @ \$3/CY) required for the project—not 100,000 @ \$8/CY.

1.3 Definitions

Consultant: -
A professional retained by the Department to provide services.

Error: -
An incorrect, conflicting, insufficient, or ambiguous plan and/or specification; use of an inappropriate design criteria or standard.

Omission: -
A failure to include an element, feature, system, or equipment necessary to the complete function of a project; a failure to perform.

Standard of Care:
The degree of skill, attentiveness, caution, and care ordinarily exercised by competent practitioners of the same professional discipline under similar circumstances.

Negligence: -
Failure of a professional to meet the standard of care in the performance of professional services.

Premium Cost:
Costs associated with E&O items that are higher than the line item bid costs due to the occurrence of E&O item.

Chapter 2

Discovery, Mitigation, and Resolution of Errors and Omissions on Projects

2.0 Procedure

Responsibility: ADOT, Consultant, or Contractor Personnel

2.1 Actions

1. Notify ADOT Resident Engineer (RE) of a design conflict, problem, or potential error or omission if in the Advertising or Construction Phase.
2. Provide as much supporting information and documentation as appropriate.

2.2 Responsibility: RE

3. RE notifies the project team in writing (ADOT PM, ADOT RE, Consultant or In-House Designer, Engineering Consultant Services) of a potential project issue.
4. RE coordinate regarding the design conflict, problem, or potential error and omission issue taking into account all information and documentation available.
5. Determine the magnitude of the issue and engage the Consultant or In-House Designer in the resolution of the issue.

Responsibility: PM

6. Enlist the Consultant or In-House Designer in resolving the issue and provide all information and documentation received in writing, and provide opportunity for design engineer to participate in solutions.
7. Work with Consultants or In-House Designer and RE to resolve design problems.
8. Discuss financial responsibility with the Consultant.

Responsibility: Consultant or In-House Designer

9. Determine if the issue will be corrected or escalated for resolution and notify the PM that the Consultant/Designer will:
 - a. Take actions to correct the issue and will negotiate financial responsibility with the PM. The level of financial responsibility could be partial or complete responsibility depending on the issue.

OR

- b. Not accept responsibility for the issue.

Responsibility: PM

- 10. Escalate to the District Engineer and PMG Group Manager if a resolution cannot be achieved with the Consultant/Designer

Responsibility: District Engineer

- 11. In conjunction with the Consultant or In-House design team, determine the urgency of the issue and whether to fix regardless of responsibility.
- 12. Facilitate resolution of the issue.
- 13. Send formal notification of claim if resolution unsuccessful.
- 14. Contact PMG Group Manager and request the Errors and Omissions Claims Review Board be convened.

Responsibility: Errors and Omissions Claims Review Board

- 15. Schedule meeting and invite PM, RE, Consultant, and/or In-House Designer and others as appropriate, to attend the informal review.
- 16. Hear the ADOT claim and the Consultant or In-House Designer's response. Present all supporting documentation regarding the claim to the Board in writing on the day of the hearing.
- 17. Determine recommendation for resolution of the claim in a separate meeting and submit to the applicable Division Director within 30 calendar days of the claim hearing.

Responsibility: Division Director

- 18. Notify Consultant/Designer of the decision of the Department within 15 calendar days of the Errors and Omissions Claim Review Board decision.
- 19. If consultant does not agree with the action of the Review Claim Board decision, notify internal parties to determine if legal action will be taken.

Appendix A: Errors and Omissions Process

Attachment – Errors and Omissions Process

Error & Omissions Policy Flowchart

