BRIDGE DESIGN QUALIFICATIONS REQUIREMENTS

FOR LPAs CERTIFIED IN BRIDGE DESIGN

# BACKGROUND AND PURPOSE

When a certified Local Public Agency (LPA) is certified in Bridge Design, the certified LPA may oversee and administer the delivery of a project containing bridge component(s) and/or other transportation related structure(s) (collectively referred to as “Bridge Design” projects) provided it meets the following requirements, which are subject to ODOT approval: (1) minimum staffing qualifications; (2) adheres to applicable Bridge Design standards; (3) has documented quality assurance and control processes for Bridge Design components (including design deviation processes); and (4) successfully delivers a minimum of two “demonstration projects” (required per Section B of LAG manual).

This document provides the minimum staffing qualifications for a certified LPA to become certified in the area of Bridge Design. It also provides instructions on how to seek ODOT approval of a certified LPA’s proposed qualified staff. The minimum applicable standards for Bridge Design are set forth in the terms of the Local Agency Certification Program Agreement and in Section C, Chapter 14 of the Local Agency Guidelines for Certified Local Public Agencies (“LAG”) manual. An LPA certified in Bridge Design must document its quality assurance and control procedures for Bridge Design components in its ODOT-approved Quality Program Plan (“QPP”) (required per Section B of LAG manual) prior to commencing its first demonstration project. (See the Sample Certified LPA QPP Attachment: Bridge Design for an outline of the elements to be address in the certified LPA’s QPP.)

# STAFFING REQUIREMENTS

For a certified LPA to deliver a Bridge Design project that will be designed primarily in-house, the LPA must staff the project with at least two of the following to design, oversee, and administer the project:

* 1. **Qualified Agency Bridge Lead**: An in-house staff member who represents the certified LPA in the delivery of a project containing bridge(s) and/or other transportation related structure(s) and who has all of the following qualifications:
     1. Licensing: Possesses a professional license as a civil or structural engineer in the State of Oregon.
     2. Scoping: Provided consultation and expertise in project scoping in the area of bridges.
     3. Design or Design Checker: Performed the duties of a Bridge Designer or Bridge Design Checker on a **minimum of 3** **bridge designs**. The requisite bridge designs shall have been executed in accordance with the AASHTO standards.
        + As a bridge designer, the individual shall have been directly responsible for the development of design calculations, drawings, specifications, and contract documents, and review of shop drawings related to a specific bridge design.
        + As a Bridge Design Checker, the individual shall have been responsible for performing a full technical check of the structural design calculations, drawings, specifications, and contract documents.
     4. Design Review: Performed the duties of a Bridge Design Reviewer on a **minimum of 2** **bridge projects**. The requisite bridge designs shall have been executed in accordance with the AASHTO standards. As a Bridge Design Reviewer, the individual shall have been directly responsible for reviewing work and deliverables prepared by the Bridge Designer/Bridge Design Checker and ensured that work was progressing in a manner to meet project schedule and budget requirements.
     5. Consultant Selection: Participated in qualifications-based procurement and selection processes for architectural and engineering (A&E) consultant services for bridge design on a **minimum of 2 projects**.
  2. **Qualified Bridge Design:** An in-house staff member who represents the Agency in the delivery of a Bridge Design project and who has all of the following qualifications:
     1. Licensing: Possesses a professional license as a civil or structural engineer in the State of Oregon.
     2. Design, Design Checker, Design Review: Performed the duties of a designer, design checker, or design reviewer on a **minimum of 2 bridge designs**. The requisite bridge designs shall have been executed in accordance with the AASHTO standards.
        + As a bridge designer, the individual shall have been directly responsible for the development of design calculations, drawings, specifications, and contract documents, and review of shop drawings related to a specific bridge design.
        + As a bridge design checker, the individual shall have been responsible for performing a full technical check of the structural design calculations, drawings, specifications, and contract documents
        + As a design reviewer, the individual shall have performed the duties of a Bridge Design Reviewer on a minimum of 2 bridge projects. The requisite bridge designs shall have been executed in accordance with the AASHTO standards. As a Bridge Design Reviewer, the individual shall have been directly responsible for reviewing work and deliverables prepared by the Bridge Designer/Bridge Design Checker and ensured that work was progressing in a manner to meet project schedule and budget requirements.
  3. **Qualified Agency Project Manager**: An in-house staff member who represents the certified LPA in the delivery of a Bridge Design project and who **has at least 5 years of experience** managing projects including all of the following responsibilities:
     1. Participated in a qualifications-based procurement and selection processes for A&E consultant services for Dridge Design.
     2. Provided consultation and expertise in project scoping in the area of Bridge Design.
     3. Performed review of Bridge Design deliverables prepared by other consultants for conformance to accepted Agency standards and obtain necessary design deviations as necessary.
     4. Coordinated the reviews and approvals of all Bridge Design deliverables including the resolution of design and detail issues.
     5. Administered Bridge Design contracts.

# APPROVALS

Prior to entering into its first a project agreement for a Bridge Design project delivered through the Certification Program, the certified LPA shall notify its Regional Local Agency Liaison and ODOT’s Certification Program Manager at [(ODOTCertification@odot.state.or.us)](mailto:(ODOTCertification@odot.state.or.us) of its intent to deliver a project using the certified Bridge Design components. With the notice, the certified LPA must include information on how it will meet the qualified staffing requirements identified herein. Approved Bridge Design staff must be shown on the Certified LPA Key Qualified Staff form (734-5091). The Regional Local Agency Liaison and the Certification Program Office will coordinate with the ODOT Bridge Section in the review and approval of the certified LPA’s proposed qualified staff. The certified LPA shall notify ODOT of changes in bridge design qualified staff as soon as practicable. New qualified staff are subject to the above-described review and approval process.

The certified LPAs approved qualified Bridge Design staff and their role in overseeing and administering the bridge or structural design elements of the project must be identified in the relevant supplemental project agreement.