

NATHAN J. ZYLSTRA, P.E.

PRINCIPAL AND PROJECT MANAGER, REICHHARDT & EBE ENGINEERING, INC



Education

B.S., Civil Engineering, 2001
University of Washington, Seattle WA

Registration

P.E. State of Washington

Affiliations

American Society of Civil Engineering
(ASCE)

Boys & Girls Club of Whatcom County,
Lynden Chapter

Experience

15 years

Joined Firm

2001

Relevant Expertise

Project Management and Planning – Comprehensive planning for projects of all types from the initial concept, to feasibility analysis, to securing funding, through project design and construction.

Transportation Design – Roadway geometric design, urban geometric design, channelization, traffic signals, roundabouts and multi-modal facilities including trails.

Utility Design – Water, sanitary sewer, storm drainage and coordination of franchise utilities.

Bridge Design – Project management of multi-discipline teams for design of roadway and pedestrian bridges.

Construction Management – Complete construction management services for projects of all types including third party CM or management of in-house designs, including Federal Aid project documentation and compliance.

EXPERIENCE SUMMARY

Nathan has 15 years experience in civil design, construction and construction management focusing on municipal projects. His broad range of experience includes design and construction management of roadways, traffic signals, roundabouts, bridges and trails as well as water, sanitary sewer and storm drainage utilities. His experience also includes complete project management including overall project direction and scheduling, management of multi-discipline design teams, grant funding compliance and project permitting. In addition to design, he has been heavily involved in construction management of municipal projects of all types, providing complete construction management services ranging from municipal oversight of private development to third party construction management.

MAIN ST. / FISHTRAP CREEK CULVERT REPLACEMENT

City of Lynden, WA

R&E's scope of work includes preparation of design PS&E and Construction Management for the federally funded replacement of the Main Street culvert at Fishtrap Creek. The existing culvert will be removed and replaced with a 96 foot single span bridge structure using precast concrete girders, cast in place bridge deck and supported on cast in place concrete pile foundations. Other work also includes structural earth walls, utility underground conversion, water, sewer and storm drainage improvements as well as decorative street lighting. Particular design challenges include a channel skew of 45 degrees to the roadway, high potential for headcut upon removal of the existing culvert which could have an effect on channel bank stability up and downstream of the project. Additionally Main Street is a major east/west arterial street which is driving a tight construction sequence and timeline. The project is funded with FHWA – ER money.

DOWNTOWN FLOOD PROTECTION PROJECT PHASE 2 – CM

City of Mount Vernon, WA

R&E is providing complete construction management for this landmark project, including resident engineer, inspection, materials testing, design team coordination, specialty inspections and complete contract administration. The construction consists of a wide range of construction specialties from sheet pile installation, to reinforced concrete to detailed landscape architecture. Particular project challenges include the demolition of an elevated parking structure on the water side of the banks of the Skagit River as well as unknown subsurface conditions including concrete building foundations and contaminated soils. This project is the first flood control project in the nation being completed without funding or oversight from the U.S. Army Corps of Engineers.

WATER TREATMENT PLANT PHASE 1

City of Lynden, WA

R&E completed the design and construction management for the offsite utilities and preliminary frontage improvements for Lynden's new Water Treatment plant located at the intersection of S. 6th St. and Riverview Rd. The work included design and installation of all utilities to service the new plant including but not limited to raw water supply, power and communications, stormwater conveyance, and stormwater quality facility. The project also included mass excavation of approximately 36,000 CY of unsuitable soils and placement of structural fill to support the new plant and frontage road, as well as the design of approximately 600 feet of Riverview Rd. to service the site.