Karen Walsh

SENIOR BRIDGE ENGINEER

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SUMMARY

Senior bridge engineer and PE with 11 years of bridge design experience on highway, rail-over and river crossings for state and county owners. Leads design to AASHTO LRFD using MDX, LARSA, MIDAS and LPILE, and serves as engineer of record on bridge projects up to $85 million.

SKILLS

- Bridge Design
- AASHTO LRFD
- MDX
- LARSA
- MIDAS
- LPILE
- Mathcad
- MicroStation
- Excel
- Oral and Written Communication Skills

EXPERIENCE

Senior Bridge Engineer 03/2020 - Present

Hudson Valley Bridge Engineers Albany, NY

Bridge and transportation firm serving NYSDOT, counties and the state thruway.

- Lead bridge design for **12** projects as engineer of record, including an $85M 5-span river crossing.
- Analyze curved steel girders in LARSA 4D and MDX and check pier foundations with LPILE.
- Review plans and calculations from 6 engineers and designers before each NYSDOT submission.
- Write scopes and fee proposals that won 5 bridge contracts worth $9M in design fees.
- Train 4 engineers in Mathcad substructure templates and AASHTO LRFD load combinations.

Bridge Engineer 07/2017 - 02/2020

Mohawk Infrastructure Consultants Syracuse, NY

Transportation engineering firm working for NYSDOT regions and Central New York counties.

- Designed 20 prestressed and steel bridge replacements with MIDAS Civil and Mathcad.
- Evaluated 50 county bridges for posting decisions and drew rehabilitation plans in MicroStation.
- Coordinated railroad reviews on 3 rail-over bridges with 2 freight railroads.
- Delivered 4 deck replacement packages 2 weeks ahead of the NYSDOT letting date.

Junior Bridge Engineer 06/2015 - 06/2017

Mohawk Infrastructure Consultants Syracuse, NY

Bridge design group, working toward the PE license.

- Checked 300 girder and bearing calculations in Excel against AASHTO LRFD.
- Drafted 80 bridge plan sheets in MicroStation for 6 replacement projects.
- Recorded field measurements on 25 bridge inspections for rehabilitation design.

EDUCATION

Master of Engineering 05/2015

Rensselaer Polytechnic Institute Troy, NY

Civil Engineering

CERTIFICATES

Professional Engineer (PE)

New York State Education Department

2019