

National World War II Memorial Washington, D.C.

Civil and Structural Engineering









Client Reference:

Friedrich St. Florian, Architect 146 Westminster St. Providence, RI 02903 (401) 831-8400

Gilbane Building Co. 7 Jackson Walkway Providence, RI 02903 (401) 456-5800

CMS Collaborative – Fountain Design 1100 Water Street, 2C Santa Cruz, CA 95062 (831) 425-3743 Located on the National Mall between the Lincoln Memorial and the Washington Monument, 56 stone pillars, standing 17 ft above grade, rim the perimeter of the imposing 7.5 acre World War II Memorial. The ring of pillars is broken at the northern and southern ends by two memorial arches, representing the Atlantic and Pacific Theatres.

Poor soil conditions plagued the site, "There was no competent soil until bedrock, about 30 – 40 feet below existing grade." said Lawrence P. Rebel, senior project manager Gilbane Building Co. Nevertheless, designers modeled a complex four-fountain system to fit utility piping into subterranean vaults built some 40 feet below grade. Problems arose. During construction, Mesiti-Miller Engineering was called in to address last minute issues of underground pipe restraint as well as thermal expansion and contraction.

The solution required MME to provide a complete redesign of the piping support system within six weeks.