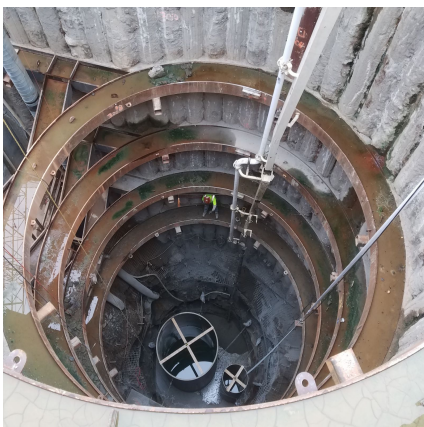


## Division PR-B - CSO-021 Diversion Facilities - Drop Shaft Washington, D.C.



### PROJECT OVERVIEW AND CHALLENGES

Bradshaw was contracted to install a drop shaft in rock on a small footprint bordered by the Kennedy Center for the Performing Arts, the Potomac River and the Theodore Roosevelt Bridge. The drop shaft contained two 108" sanitary sewer interceptors which will eventually be connected to DC Water's large diameter combined sewer overflow mitigation tunnels currently being constructed. The Kennedy Center's renovation will open long before DC Water's tunnels are ready for the flow, so the sewer infrastructure was installed during the renovation. The drop shaft was through rock requiring drill-and-blast excavation in close proximity to very sensitive adjacent structures and under extreme security of the Nation's Capital. Through intense coordination between the project team and local regulatory authorities, the five blasts were completed safely and without disruption to Washington, DC.



### PROJECT INFORMATION - 571

#### OWNER:

DC Water & Sewer Authority  
DC Clean Rivers Project  
202-787-4460

#### ENGINEER:

Jacobs & Associates  
202-787-4678

#### CONTRACTOR:

James G. Davis Construction /  
Corman Construction

#### COMPLETION DATE:

10/25/2017

#### GEOLOGY:

Gneiss

#### EXCAVATION METHOD:

Blasting

#### MINING DIMENSIONS:

40 VF x 23' Ø

#### FINAL LINING:

Rock Bolts with Shotcrete  
48" and 120" FRP Drop Pipes

#### FOR MORE INFORMATION:

Todd Brown, Project Manager  
410-970-8300  
tbrown@bradshawcc.com  
Refer to Project 571