

Big Cut, Big Fill

The Atglen & Susquehanna in Providence Township



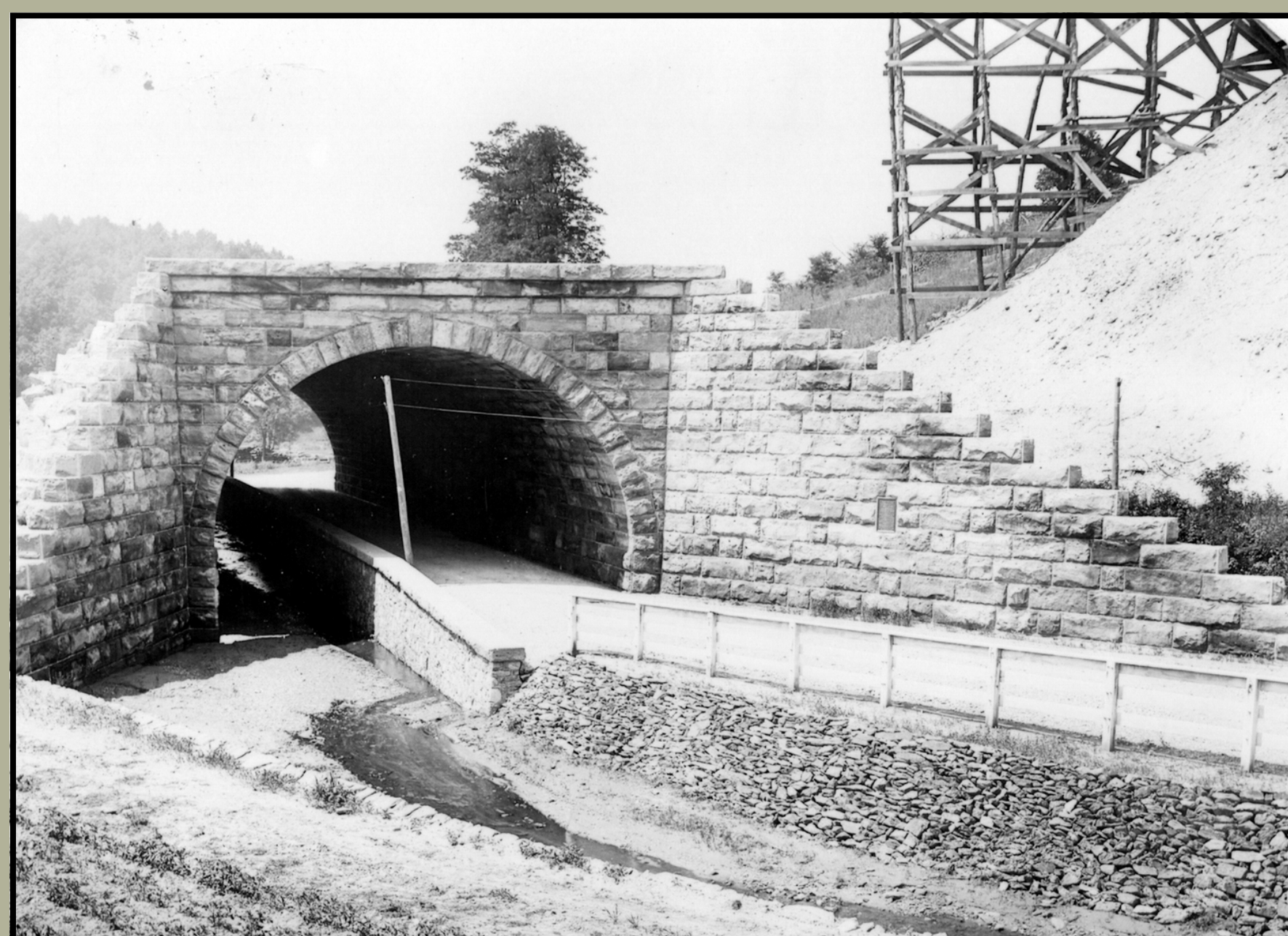
Kline Negative Collection, Railroad Museum of Pennsylvania, Strasburg, PA.

Eight A&S section contracts were awarded in the spring of 1903 for masonry and grading though excavation might have more accurately described work in Providence. McManus was first to begin work. Compressed air drills (foreground of image above) sunk pilot holes in rocky sections for dynamite blasting. Brutish steam shovels removed the debris in descending layers, along with a crew of 300 men under

McManus. Some of the cut material formed the towering berm over what eventually became separate north and south bound tunnels for Route 272 (lower left images).

Completion of the A&S (1906) coincided with mandatory retirement (age 70) for the PRR's notable Chief Engineer, William H. Brown (b.1836 - d.1910).

Born in Little Britain Township, Brown served the PRR for 44 years. In his 36 years as Chief, the PRR was physically transformed by a succession of engineering triumphs. Brown and McManus had concurrent careers and numerous joint projects with the PRR. For the last twenty years of Brown's life, the two were next door neighbors in Philadelphia's Powelton Village.



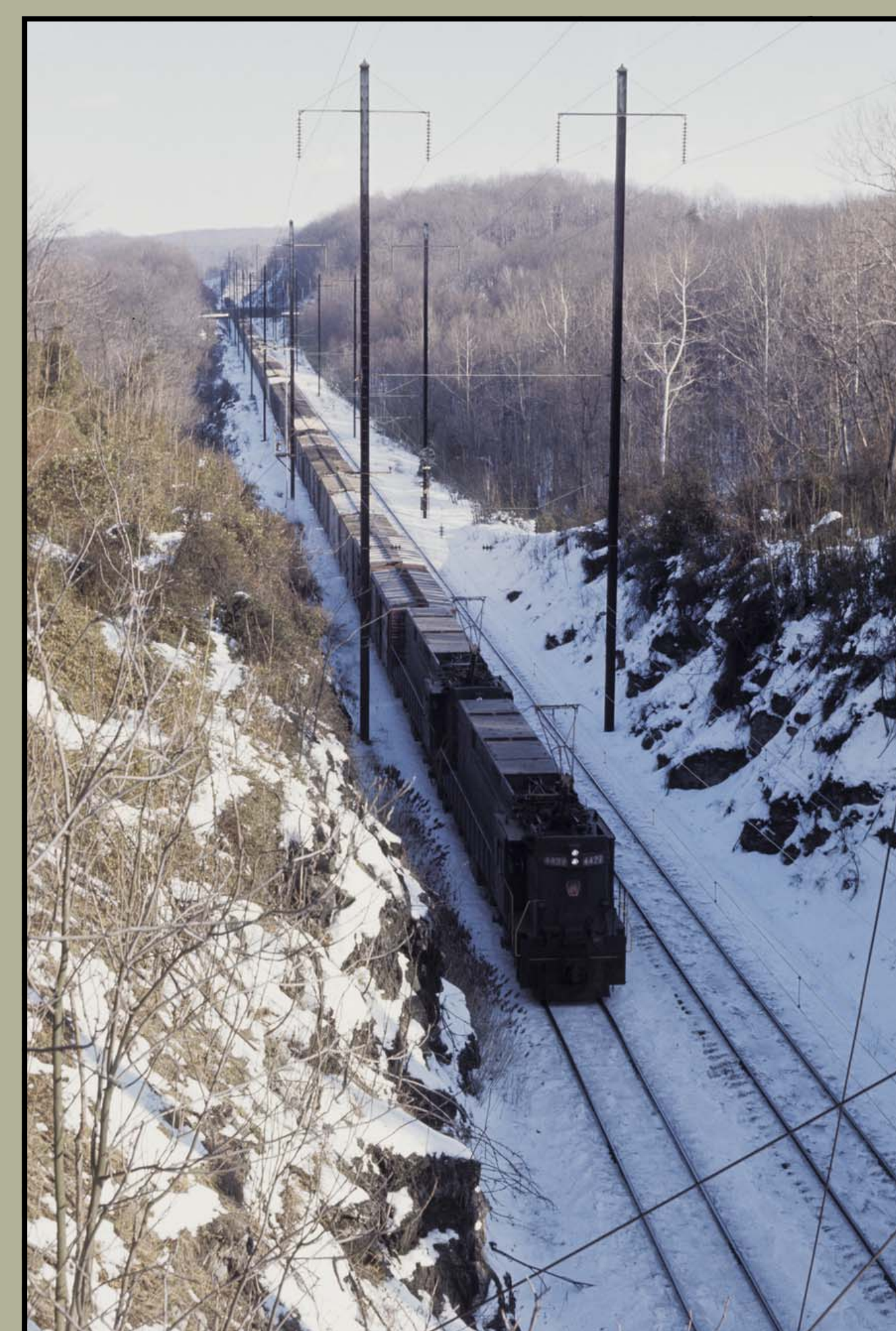
Columbia Historic Preservation Society, Columbia, PA.



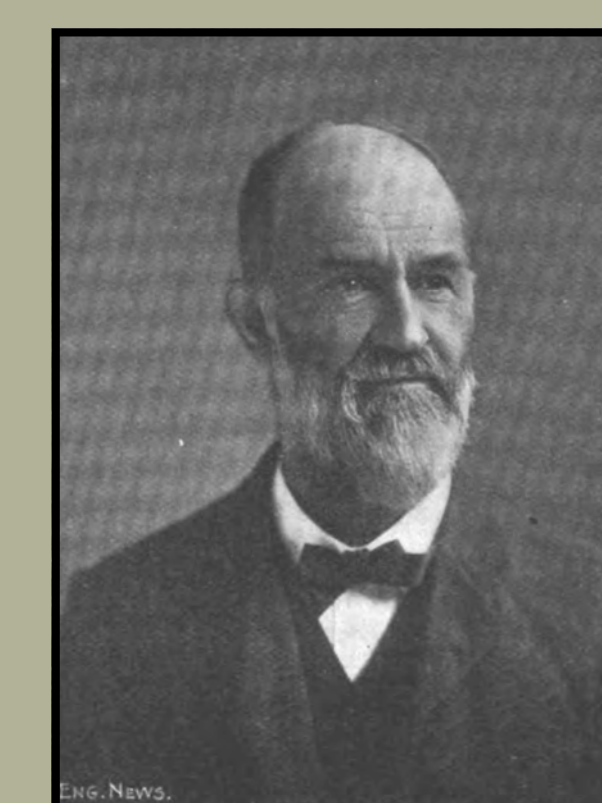
Shuman Slide, Railroad Museum of Pennsylvania, Strasburg, PA.

No other section of the eastern A&S more fully demonstrated the Pennsylvania Railroad's (PRR) commitment to re-shape the landscape for an optimum freight road than its seven miles through Providence Township. The gentle compound curve (on paper) became a canyon few residents could have anticipated. The A&S bisected farms with gaping, unstable slopes. It spanned the route with twelve new road bridges (upper right image) and crossed another dozen streams. Unwilling to compromise its goal of minimal gradient for trains, the A&S found no naturally accommodating corridor through Providence. The PRR incised one.

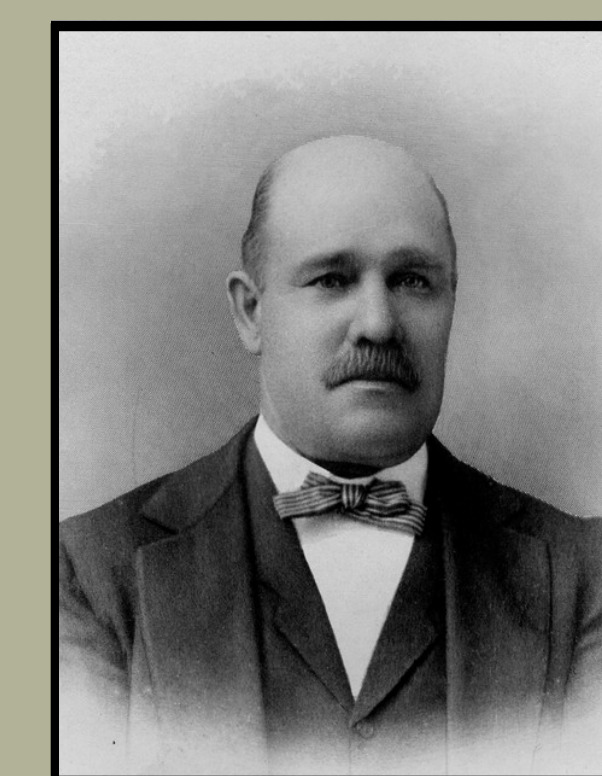
It was likely no accident that one of the nation's most experienced railroad contractors, McManus Construction Company of Philadelphia, was awarded the arduous Providence section. Work extended westward from Quarryville where an existing railroad to Lancaster hauled in materials and massive steam shovels. At least three temporary rail spurs trailed off the older railroad to supply A&S work sites. In the cuts, temporary construction track bobbed along the deepening route, requiring constant relaying to stay ahead of the track-bound shovel (center right images). McManus removed an estimated 1,300,000 cubic yards of rock and earth over seven cuts, as deep as ninety feet.



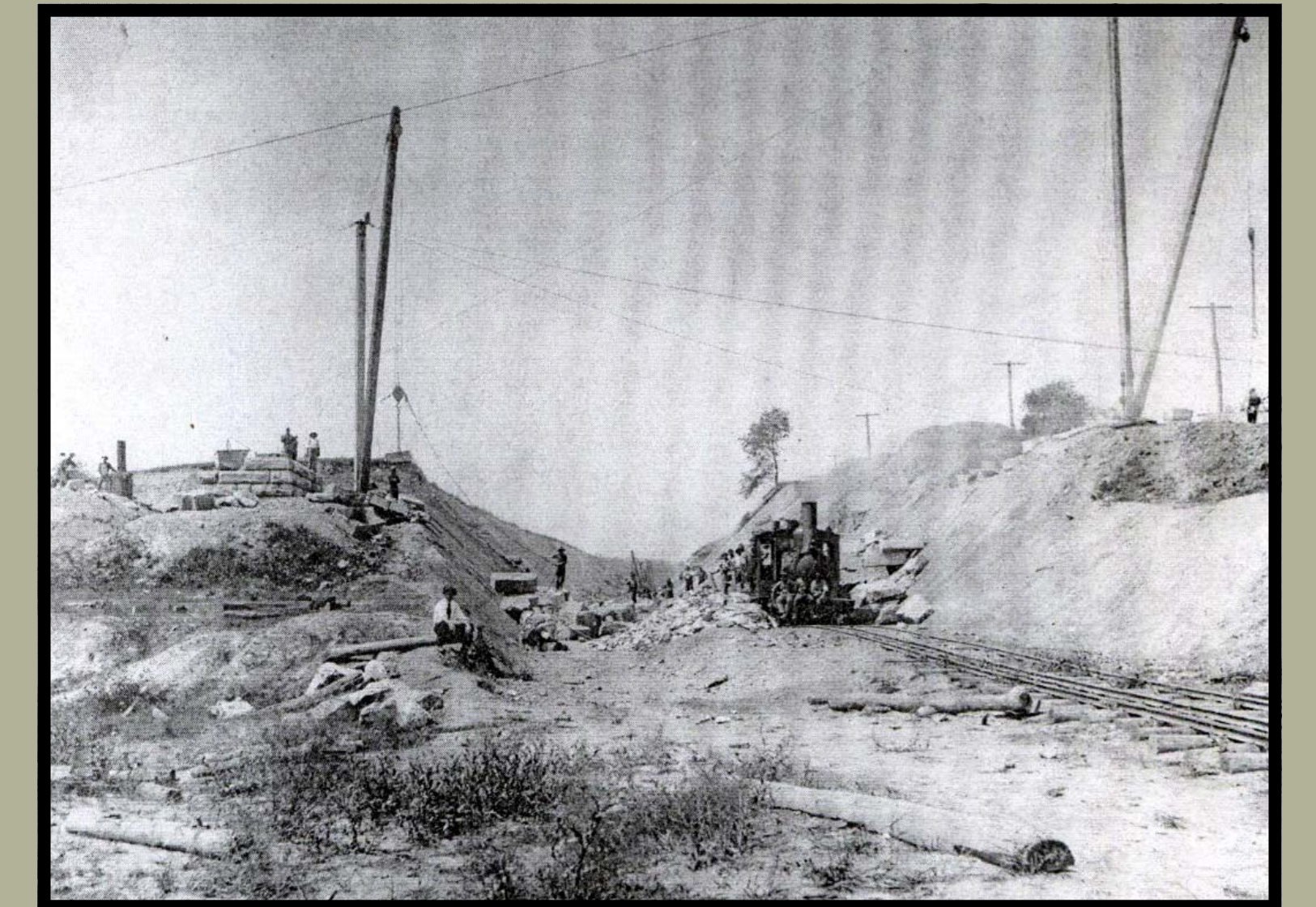
Shuman Slide, Railroad Museum of Pennsylvania, Strasburg, PA.



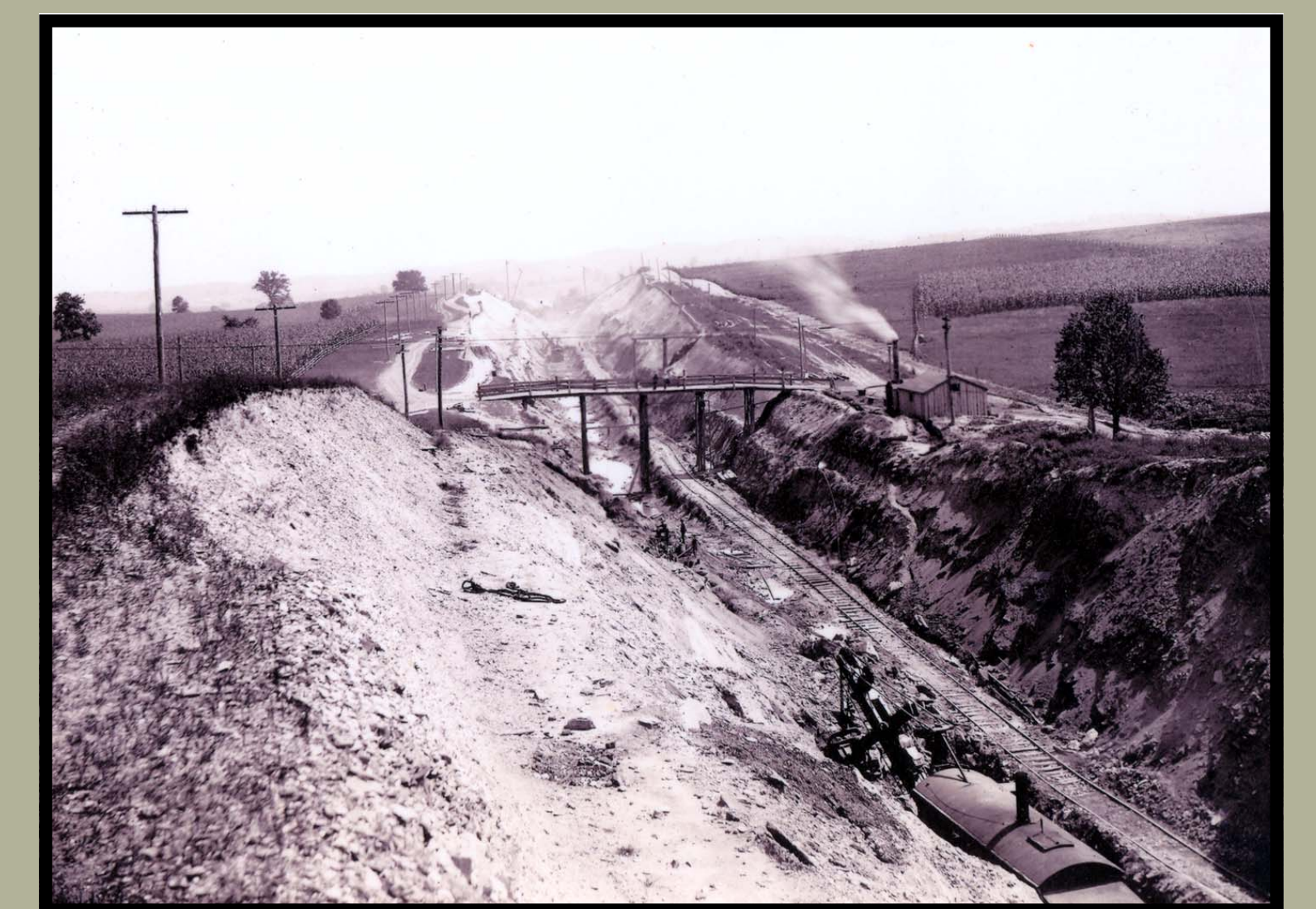
William H. Brown, Chief Engineer
Pennsylvania Railroad



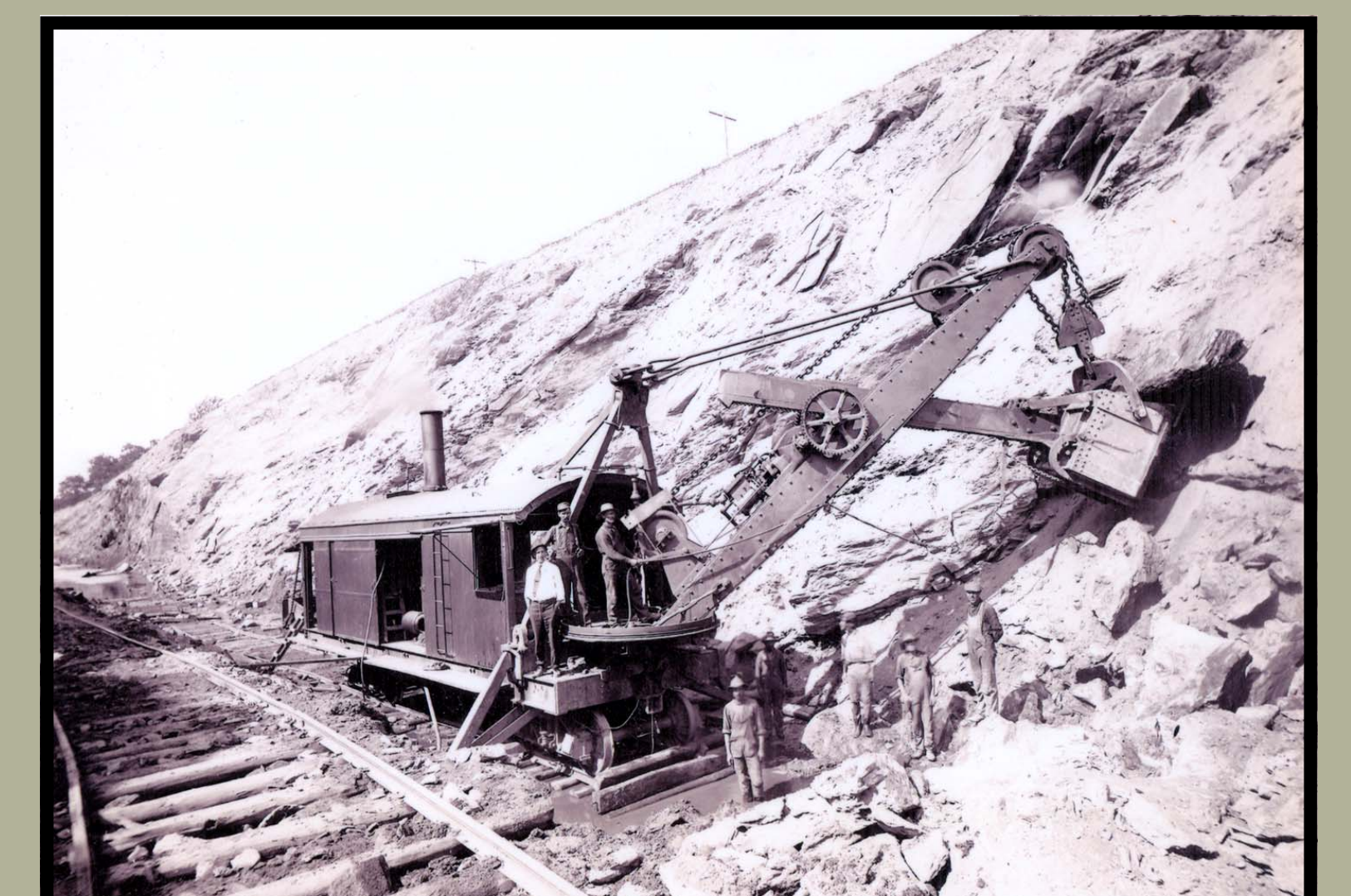
Patricius McManus, Contractor
A&S Section 3, Providence Twp.



Lancaster County Historical Society, Lancaster, PA.



Columbia Historic Preservation Society, Columbia, PA.



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