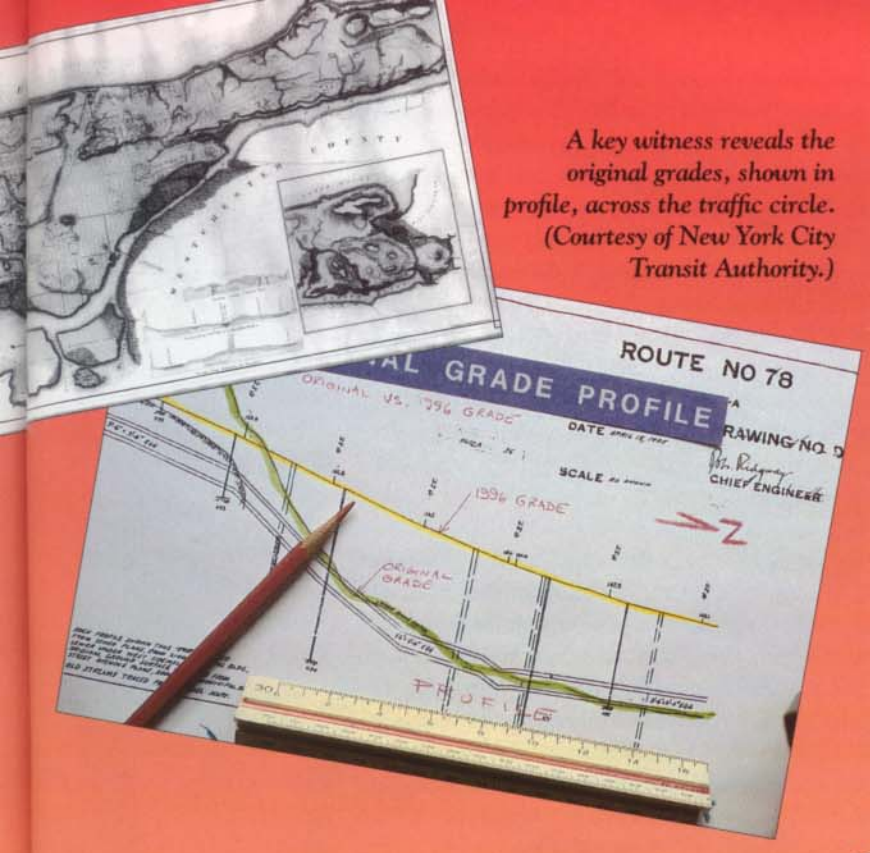
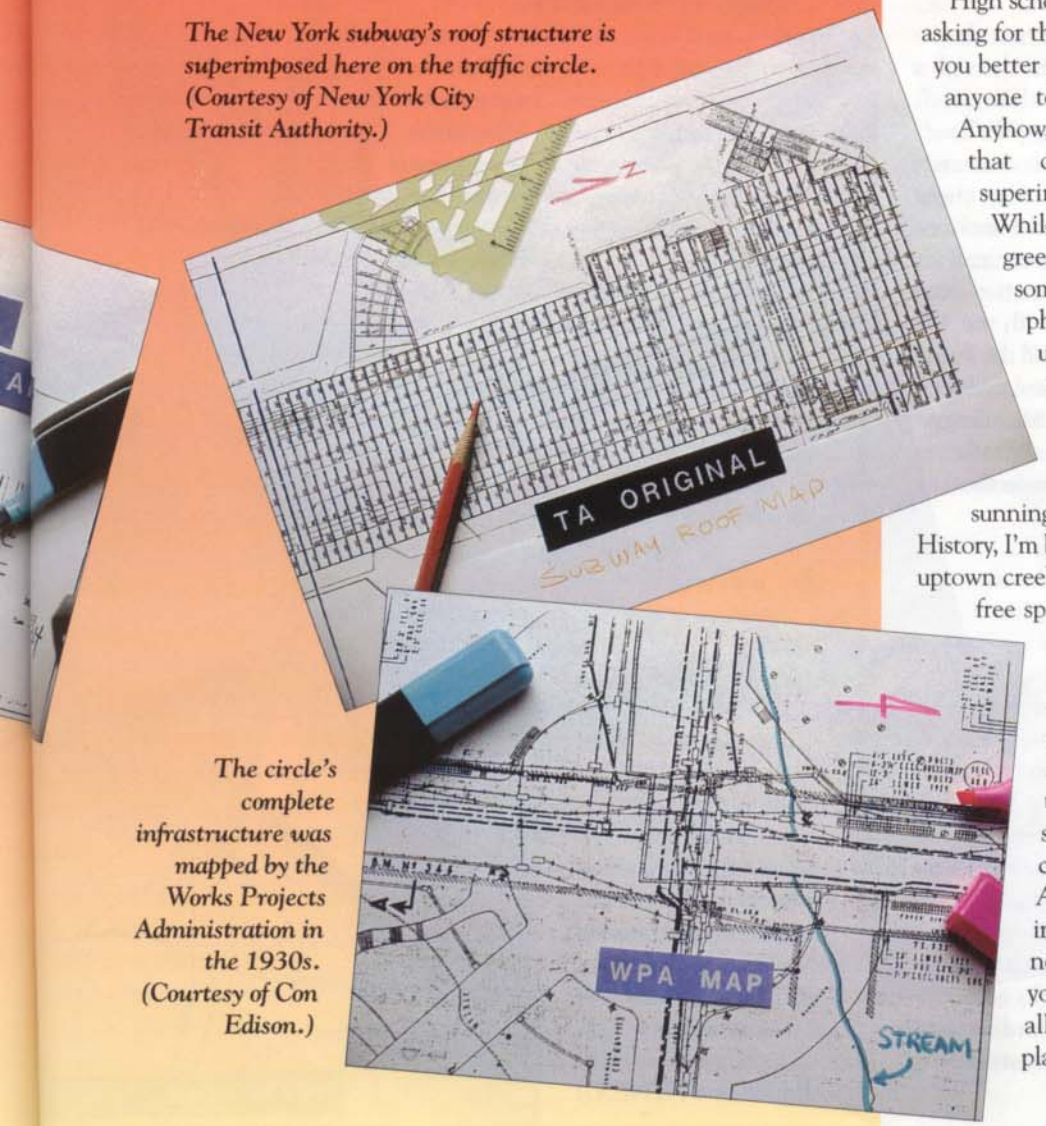


A key witness reveals the original grades, shown in profile, across the traffic circle. (Courtesy of New York City Transit Authority.)



The New York subway's roof structure is superimposed here on the traffic circle. (Courtesy of New York City Transit Authority.)

The circle's complete infrastructure was mapped by the Works Projects Administration in the 1930s. (Courtesy of Con Edison.)

installation of the subway under the circle. The records just happen to include a map showing the original geography of the area circa 1800. It shows a stream flowing across the top of the circle, and attached profiles suggest that the area was raised up to its current elevation with as much as thirty feet of fill. Other maps show the location of their vent structures, subway tunnels, roofs, stairways, etc. I print out the sheets I need and tip my hat to Mr. Davis.

Was there really a stream, or were the subway plans just showing some kind of drainage ditch? I hop back on the C train and make for the New York Historical Society. I go through their data bank of old maps and get them to pull "Viele's Map," so named for the venerable nineteenth-century sanitary engineer General Egbert L. Viele. During the Civil War he observed that well-drained army encampments discouraged cholera and malaria. This observation became an obsession, and upon his return to New York, he dubbed himself a "sanitary engineer" and set about establishing a comprehensive drainage plan for Manhattan Island. Next thing you know, he's a cartographer of the City's surface drainage.

High school French will do you wrong if you go asking for the "Vee-yay" map. Around these parts you better pronounce that "Vee-lay" if you want anyone to know what you're talking about. Anyhow, it's a swell lithograph, long as a Buick, that depicts New York's street grid superimposed on the original geography. While it's smartly done in earthy hues of red, green, and blue, you'd think Vee-lay somehow had some advance knowledge of photocopiers. The thing is practically unXeroxable. So I run my finger up the map, and there it is — the circle — with a stream running across the top and a pond just to the east.

Stalking past the feckless crowd sunning on the steps of the Museum of Natural History, I'm busy trying to get my brain around this uptown creek idea. See, it's not like there's a lot of free space under the streets where a watercourse could flow. From one to six feet down you've got crisscrossing electric, telephone, gas, subway conduit, drainage, and all manner of rubble. At six-to-ten feet you have the larger electric and telephone duct banks, smaller sewers, old foundations, and in this case, the roof and stairs of the subway. At ten to twenty-five feet you've got interceptor sewers and the subway tunnel blocking the stream's path. Then you've got brick and concrete manholes all over the place. There just isn't any place for a stream to flow.