

Risk Management with Performance-based Geoengineering Monitoring: APM Tunnel Extension at Hartsfield-Jackson International Airport

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ABSTRACT

Atlanta's International Airport is adding a new \$1.2 Billion International Terminal. The Automated People Mover (APM) trains are extended beneath an existing terminal to the new one via twin open-cut tunnels as wide as 67 feet. The excavation was braced by a soldier pile/lagging/tieback system and underpinning piers to depths of about 40 feet. Movement of the adjacent existing tunnel and building was a concern due to unbalanced earth loads and the potential for unexpected behavior.