

# "EFFECTIVE CONSTRUCTION BLASTING DAMAGE CONTROL"

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## ABSTRACT

Extensive blasting was required to construct an underground tunnel for a 90 inch sewerage relief line. The tunnel and required excavation extended under an upper middle-class residential area in Atlanta, Georgia for more than a mile and a half and required the use of more than a half million pounds of explosives in the immediate vicinity of houses and residential apartments valued at more than 16 million dollars. Other houses and property valued at more than 80 million dollars were within range to claim blasting damages. An effective blasting damage control program was carried out which limited the number of blasting damage claims to less than 2-1/2% of the total number of potential claims. All but three of the small number of blasting damage claims which were made were effectively denied without any resulting legal actions and less than \$3,800 was paid for settlement of the three claims.

W. L. Hailey & Co., Inc. successfully completed this project by using employees with solid backgrounds and years of experience in blasting and tunnel excavation from similar projects and by using an independent third party engineering company (Vibration Control Engineering, Inc.) for safe blasting assurance and protection against unwarranted damage claims. This paper discusses the details of the construction company's review and direction of the blasting damage control program and the use of the third party consultant for pre-blast inspection, as a public relations link, for monitoring of seismic and noise disturbances, to review and certify blasting activities and records, and to maintain legal, "Statute of Limitations" type file. All of these activities were performed on a cost effective basis and this paper discusses the criteria and methods used in accomplishing the results.