Hayduk Enterprises, Inc.

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BLASTING PLAN FOR: Croton Overlook, Yorktown N.Y.

GENERAL GUIDELINES

- 1. All blasting will be performed in compliance with Federal, State, and Local regulations, including transportation and storage of explosives. Blasting, explosive-handling, and monitoring operations will be conducted in accordance with the latest Occupational Safety and Health Administration (OSHA) standards, 29 CFR 1926.900 1926.914 and, Occupational Health and Safety, Chapter 17 Paragraphs 77.551 through 77.965, Chapter 2310 Part 39 of Title 12 of the Official Compilation of Codes, Rules and Regulations of the State of York
- 2. The contractor shall use controlled blasting techniques and shall modify the blasting round as to keep the air blast over pressure, vibrations and noise within the limits herein specified: Bureau of Mines Criteria from report R1-8507, Blasters shall have a minimum of one seismograph location per blast. Contractors shall exercise all possible care in drilling and blasting operations to minimize outbreak and blast damage of adjacent unexcavated ground.
- 3. Blast designs for each shot may vary according to the depth of cut, rock formation and scale distance.
- 4. Depth of boreholes to be determined by depth required to achieve specific grade plus the necessary sub-drilling.
- 5. Prior to blasting an audible horn will be sounded. For the warning, two short blasts will be sounded 30 seconds prior to the blast. One long blast of the horn will be sounded for detonation of the shot. All clear signal will consist of three short blasts of the horn. All personnel, vehicles, and equipment in the blast area will be cleared to be a safe distance prior to detonation of the shot. Traffic will be controlled using flagmen on both the east and west or north and sound lanes of the closest route and will be stopped when blasting.
- 6. A minimum of one seismograph will be utilized to monitor the peak particle velocity, acceleration and frequency at the nearest structures.
- 7. Blasting will be conducted between 9:30 a.m. and 3:30 p.m., Monday through Friday.
- 8. A non electric detonating system shall be used.
- 9. Utilities will be notified within the blast area.

GENERAL INFORMATION

Blaster: Raymond Hayduk License #: NY License # 2-37277-6

Donald Watkins # 05-4796 George Alden # 05-4795

Company: Hayduk Enterprises, Inc.

Florence Hayduk NY Own & Possess #5-41202-O Raymond Hayduk NY Own & Possess #4-37277-O

County/Township:

Location: Route 9G, Hyde Park, New York

UTILITIES

- (a) Blasts shall be designed and conducted so that they provide the greatest relief possible in a direction away from the utility lines and to keep the resulting vibration and actual ground movement to the lowest possible level.
- (b) Blasting shall use a type of explosive specifically designed to minimize the likelihood of propagation between explosive charges.
- (c) When blasting within 200 feet (60.96 meters) of a utility line, blast holes may not exceed 3 1/2 inches (7.62 x 10^{-2} meters) in diameter.

Distance to nearest:

Maximum air blast: 133dbl

Peak particle Velocity not to exceed: 2.0

BLAST LOADING

Diameter of Boreholes: 3 1/2"

Depth of Boreholes: Min. 6' to Max. 12'

Spacing of Boreholes: Min. 3' to Max. 5'

Pattern: Trench

Holes: 1 to 100 per shot

Stemming: Crushed Stone 3/8"

Primers: Boosters, D-Gel

Initiators: Non- Electric

DATE

BLASTER IN CHARGE