## **DOUGLAS EXPLOSIVES SERVICES**

2052 PHILPSBURG-BIGLER HIGHWAY PHILIPSBURG PA. 16866

Remcon Inc. 101 Scotch Pine Road Dillsburg Pa. 17019

Lebanon School District Proposed Blasting

### Re: Proposed Blast Plan For Lebanon School Project

Please accept the following preliminary blasting plan for the above referenced project. Currently blasting is planned to commence the week of 01/16/23. The proposed blasting will be considered controlled blasting. The use of small diameter blast holes, 3 inch in diameter, will be used. The holes will be loaded with light explosive charges in a manner to effectively loosen the rock for removable. Any areas with exposed rock surface will be covered with a layer of clay to help prevent any flyrock.

#### **Blast Plan**

- 1) The dates blasting is to occur are yet to be determined. Blasting will be coordinated with Remcon Inc. who will coordinate with owner and engineer.
- 2) Explosive type is ANFO and or Emulsion based products. No Nitroglycerine (Dynamite) will be used.
- 3)Maximum shot hole depth expected is 12 feet deep. The blast holes will be 3 inch in diameter.
  - 4) The number of holes is 1 to 200. The spacing between holes will be 4 to 5 feet.
  - 5) The delay pattern will be 25 milliseconds between holes.
  - 6) Delay types are non-electric.
- 7) Depth of overburden or clay will vary in each hole and will be logged for the blaster.
- 8) Depth of blastholes will be determined by the depth needed to achieve flowline of trench or subgrade elevation. The anticipated maximum depth is 12 feet.
- 9) Maximum charge per hole will be calculated so that the scaled distance formula will not be below 25. Adequate stemming will be used to prevent any flyock.

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#### **Public Protection-Control Devices**

- 1) Anticipated blasting schedule is Monday through Friday between 9:00 A.M. to 3:00 P.M. Blasting times can be flexible to accommodate other work and peak traffic hours.
- 2) Public alert and warning system will consist of a series of three horn tones or sirens at least one minute prior to detonation. One long horn or siren after the blast will indicate the all-clear signal.
- 3) All explosives will be stored off site and only the amount for one day usage will be transported to the blast site. All explosives not used will be returned to Explosives approved magazine location off site.
- 4) Traffic will be stopped for approximately 3 to 5 minutes at a safe distance from the blast.
- 5) Douglas Explosives and or (CONTRACTOR) personnel will be positioned to ensure that pedestrians do not enter the blast area before detonation occurs.
- 6) A D.E.P. Blasting Activity Permit has been submitted and approved for the project.

## **Blast Monitoring Plan**

1) A seismograph will be placed at the building closest to the blast. Additional seismographs could be placed at other locations if necessary.

#### **Misfires**

In the event a misfire would occur, the blaster shall provide proper safeguards for excluding all employees from the danger zone. No other work shall be done except that necessary to remove the hazard of the misfire and only those employees necessary to do the work shall remain in the danger zone. No drilling, digging, or picking shall be permitted until all missed holes have been detonated or the authorized representative has approved that work can proceed. With today's technology misfires are very rare and the ultimate goal is to prevent any misfire from occurring.

Sincerely, Jeffrey L. Bloom Sales and Technical Representative

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