J.A. McDONALD, INC.

PO Box 132, Lyndon Center, VT 05850 (802) 626-5201

December 11, 2014

Tom Mancini, Resident Engineer
Vermont Agency of Transportation
1 National Life Drive
Montpelier, VT 05633-5001

RE: Waterbury IM 089-2(43) – Exit 10 Rock Blasting - Traffic Control Narrative

Dear Tom:

Following is a detailed time-line narrative of J.A. McDonald's traffic control plan for rock blasting at the On/Off ramps at Exit 10. A plan sheet is also included, showing the locations and mile markers (MM) for blasting advanced warning signs, "Sweep" vehicles and UTOs.

Morning of Blast:

1. Install/Uncover Blasting Zone advanced warning signs as shown on attached plan. **"Turn off two-way radio and cell phone" signs not required as blast plan will use Non-electric Blasting Caps**.

2. Advanced notifications to emergency services.

½ - 1 Hour Prior to Blast:

3. UTO arrival. Blasting & Traffic control Procedures reviewed and contact info exchanged. Briefing to include Blaster in Charge (BOC), JAM Supervisor, Beck & Bellucci Supervisor, UTOs, "Sweep" vehicle operators, spotters and VTrans RE.

15 Minutes prior to Blast:

4. UTOs and "Sweep" vehicles move into position as follows:

   (2) EA UTOs and (1) EA "Sweep" @ MM 59.5 NB – Shoulder

   (2) EA UTOs and (1) EA "Sweep" @ MM 67.7 SB – Shoulder

   (1) EA UTO @ Route 100/Ramp D "Spur" Traffic Light Intersection

   (1) EA UTO @ Route 100/Blush Hill/Stowe St. Intersection

The BOC will be lead on timing of blast and traffic operations. BOC and JAM Supervisor to be positioned together in a location as chosen by the BOC, with combined Cell and or 2-Way Radio communication with the UTOs, "Sweep" vehicles, spotters and VTrans personnel.

7 Minutes prior to Blast:

5. BOC will call a 7 minute warning and commence I89 NB & SB rolling roadblocks. Rolling roadblocks to operate at a constant speed of 20-25 mph. "Sweep" vehicle (with flashing strobe light) will follow last vehicles ahead of the rolling road block into the construction zone and then stop at the blasting zone "Hold Point" (HP). I89 blast zone "Hold Points" will be located @ MM 63.5 NB and @ MM 63.7 SB. At both HP locations, the "Sweep" vehicle operator can visually see the interstate lane to the opposing HP. When the "Sweep" vehicle operators have stopped at the NB & SB HPs and confirmed cleared traffic, they will each notify the BOC. NB Exit 10 exiting vehicles ahead of the rolling road block will be allowed to exit and continue North or South on Route 100 until clear of the blast zone. BOC and or spotter positioned near off-ramp/Route 100 intersection to visually assure all clear prior to BOC blowing 1 minute whistle.

5 Minutes prior to Blast:

6. BOC sounds "5 Minute" whistle. Final preparations for Blast.

7. UTOs stop Route 100 traffic at intersections as noted above. I89 off-ramp and Route 100 traffic allowed to clear out of blast zone.

1 Minute prior to Blast:

8. BOC sounds "1 Minute" whistle. Final "All Clear" verification with "Sweep" vehicles and spotters.

9. After 1 minute, BOC sets off blast.

Post Blast:

10. BOC will confirm that the blast zone is safe for vehicle passage before sounding the "All Clear" whistle.

11. "All Clear" whistle sounded. "Sweep" vehicles and UTOs notified to release traffic to normal operation.

12. After traffic has resumed to normal flow, blasting zone signs will be removed or covered.

Rolling Road Block Speed & Distance Calculation

UTO traveling @ 20-25 mph = 0.33 - 0.41Miles per Minute (MPM)

0.33 – 0.41 MPM x 7 minute warning = 2.31 – 2.87 miles traveled

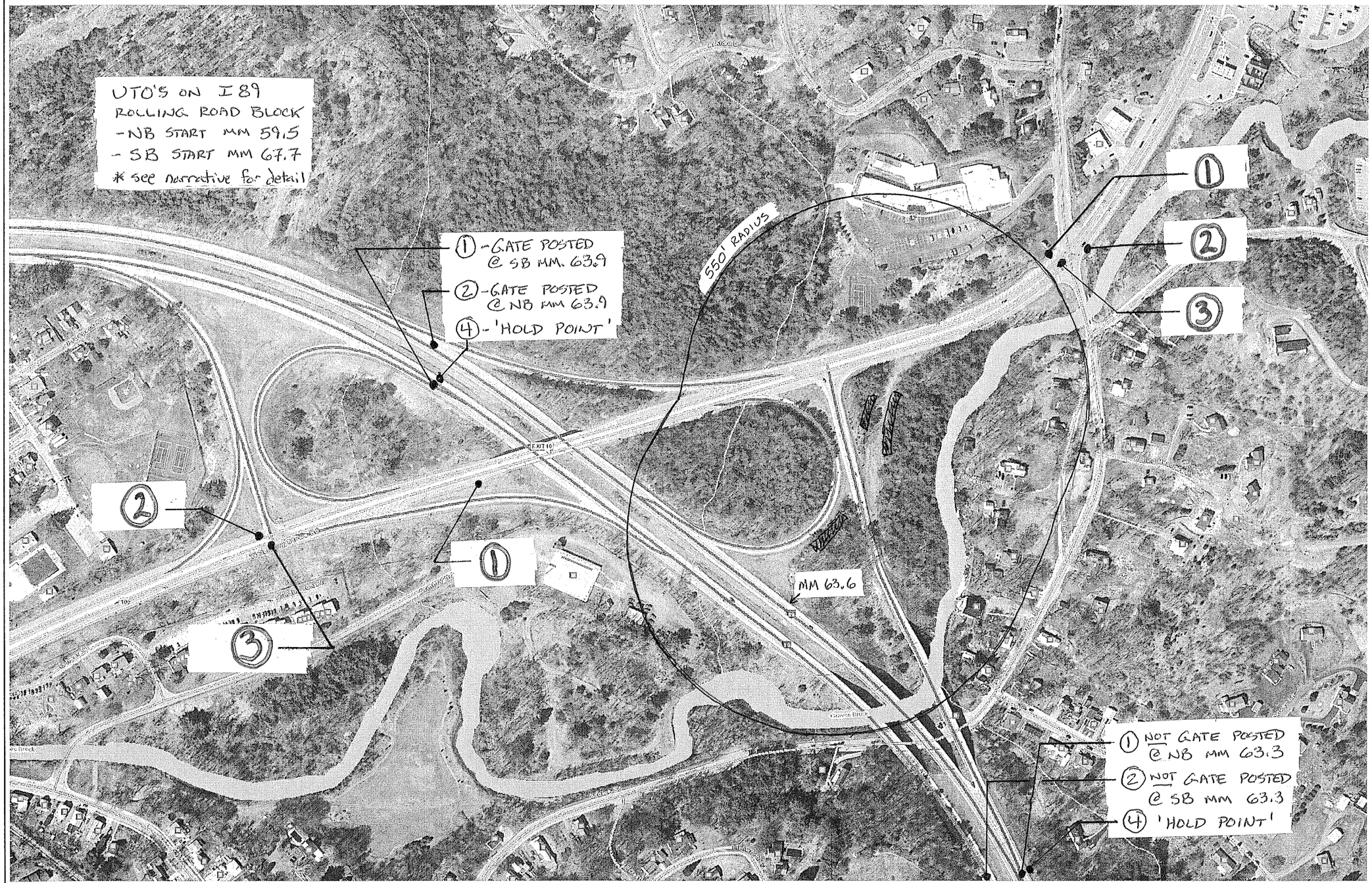
Rolling block starts 4 miles from blast zone, so, with blast occurring at 7 minutes from warning, the rolling road block has 1.13 – 1.69 miles (2.5 – 5 minutes) of additional rolling time before reaching the blast zone "hold" point, allowing for inspection and clearing of the site before releasing traffic.

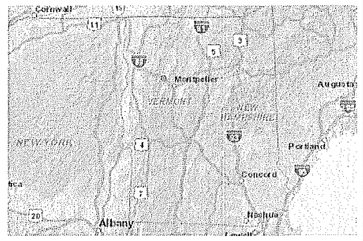
VERMONT

Waterbury IM 089-2(43) - Blasting Sign Package

VT Center for Geographic Information

vermont.gov





LEGEND

- Airports
- Rail Lines
- Town Boundaries
- County Boundaries
- Buildings
- Village Boundaries
- Buildings
- VT State Boundary

① BLASTING ZONE AHEAD

1000 FT. IS MINIMUM DISTANCE. CONSULT M.U.T.C.D. FOR INFORMATION CONCERNING BLASTING SIGNS.

W22-1

② END BLASTING ZONE

③ 'UTO'

④ 'sweep' Vehicle Hold Point

1: 3,160

March 12, 2015

0.10 0 0.05 0.10 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

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VCGI

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NOTES

Blasting at Exit 10