

MEETING MINUTES
ELM STREET ROCK SLIDE, PROGRESS MEETING NO. 12
conducted at the site trailer on Elm Street, Montpelier, VT
Wednesday, April 5, 2006
10:00 a.m. - 11:00 a.m.

Attendance:

Tom McArdle, City of Montpelier	David Marcoux – Janod Contractors
Steven Millard, Golder Associates Inc.	Jay Smerekanicz – Golder Associates Inc.
Chris Benda – VTrans	Pete Ingraham – Golder Associates Inc.

Topics of Discussion:

1. VTrans Project Review:
 - o The City will contact Bill McManus (VTrans) to set up a meeting with VTrans to review project financing under the FHWA Emergency Response Program.
2. Janod Progress/Schedule:
 - o Two of Janod's workers were out sick Wednesday (4/5/06), and the site foreman is not feeling well, leaving only five personnel working on site. Janod plans on bringing a 3rd drill rig and three more personnel on site by the beginning of next week.
3. Area 4B Rock Drape:
 - o Golder is planning to submit the rock drape preliminary design drawings for Area 4B by the end of this week or early next week.
4. Limits of Work:
 - o The City requested Golder to prepare two letters on behalf of the City regarding the limits of the City's work to the southwest (i.e., parking lot) and to the northeast (i.e., 120 Elm Street).
5. Area 3B and northeast upper corner of Area 2:
 - o Golder submitted a letter on April 3, 2006 regarding potential stabilization methods for the steep soil/loose rock conditions in Area 3B (i.e., above the Area 2 highwall and northeast of Area 3A), and the dilated rock masses in the upper northeast corner of the Area 2 highwall. Golder recommended the limit of work for the northeast side of Area 2 as the removal of trees within 6 to 8 feet of the slope crest. Golder recommends removal of the trees to reduce the potential for rock fall due to root jacking. The City requested estimated costs from Janod for the Tecco system stabilization for Area 3B, and estimated costs for the two stabilization options at the upper northeast corner of Area 2 (either consolidation grouting and pins, or ring-net lashing system).
6. Shotcrete Wall at Cliff Street:
 - o Janod has covered about 1/3 of the first layer of reinforcing steel (i.e., welded wire fabric and rebar). Janod is covering about 3 columns of rock nails per day

with 5 inches of shotcrete, or about 15 ft x 25 ft = 375 ft² / day. Two loads of shotcrete (40 bags) were delivered to the site this week.

7. Cliff Street Guide Rail:

- Golder is working with VTrans on the guide rail design for the top of the shotcrete wall. The preferred design will incorporate a moment concrete slab placed over the shotcrete wall, which will include a pedestal/curb for mounting of the guide rail. The guide rail may include a handrail. Golder plans on submitting preliminary guide rail design plans by the end of this week or early next week. The moment slab will not need any connection to the shotcrete wall. The moment slab will be about 8 feet long and about 15 inches thick. Janod is not shooting the upper 18 inches of shotcrete on the shotcrete wall as per the March 2006 design drawings, as this would have to be removed for the slab. Loose soils behind the shotcrete wall and beneath the moment slab will likely need to be removed and replaced with crushed stone, filter fabric and an insulation layer. The City will likely bring in another contractor to perform the guide rail construction, as this type of work is not normally conducted by Janod.
- Golder will collect approximate moment slab quantities for cost estimating purposes, including length of guide rail, moment slab concrete volume, and backfill volume.
- Vermont Survey has contacted Golder regarding control points for the final shotcrete wall location, but due to the current work activity at the top of Cliff Street, no date has been set for them to establish local control points. Golder will contact Vermont Survey to arrange a date for them to establish the control points.

8. Rock Nail Testing:

- Due to the inclement weather this week, the need to keep the shotcrete process going, and the temporary loss of manpower due to sickness, Janod has not been able to conduct the rock nail testing. Janod plans to conduct the testing this week.

9. Janod Billing:

- The City requested Janod's invoices to reflect the unique pay item numbers used in the most recent cost estimate submitted by Janod (i.e., dated March 31, 2006). The most recent invoice included costs for the reinforcing steel, yet the cost estimate assumed the costs for the steel are included in the shotcrete unit price. Janod plans to resubmit the cost estimate and most recent invoice to include a unique pay item number for the reinforcing steel.

Action Items:

1. Golder will coordinated with Janod to finalize the estimated quantities sheet and invoicing to include a line item for the reinforcing steel.
2. Golder is planning to submit by the end of this week or early next week preliminary design drawings for the rock drape at Area 4B and the guide rail/moment slab design. The drawings will be submitted to the project team, i.e., the City, VTrans and Janod.