

STATE OF  
COLORADO

Ebert - DNR, Jared &lt;jared.ebert@state.co.us&gt;

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## Climax Mine, M-1977-493, Reclamation Cost Estimate

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Lazuk, Raymond &lt;rlazuk@fmi.com&gt;

Thu, Mar 28, 2019 at 1:29 PM

To: "Ebert - DNR, Jared" &lt;jared.ebert@state.co.us&gt;

Cc: Andrew Hardy &lt;Andrew.Hardy@ajax-ltd.com&gt;, "Kelts, Diana" &lt;dkelts@fmi.com&gt;

Hi Jared,

We reviewed the materials you sent with the revised DRMS estimate and would like to discuss a few remaining items before you finalize the surety increase. Andrew with Ajax put together the notes below for your consideration and discussion in a call next week. Note that these also would have an associated impact on indirect costs.

1. Geogrid (Tenmile TSF). We provided two new unit rates for the furnish and installation of Tensar geogrid products. DRMS utilized an average unit rate of the 2 quotes. We used the lower value of \$4.25/SY based on a conversation AJAX had with the Tensar rep. following receipt of their emailed quotes. The discussion with Tensar confirmed using the lower rate based on the attached Lake Belle View Restoration Project application for the TX160 geogrid product which utilized a 2-ft soil cover over geogrid over "saturated silty lake sediments with very low shear strength." Similar to Climax, the Lake Belle View Restoration Project used the TX160 geogrid for supporting both the soil cover itself and for construction equipment. **The cost difference between DRMS and Climax is approximately \$275,000.**

2. Revegetation (site-wide). For the major revegetation activities, Climax utilized 2 actual quotes (which later formed the basis of an actual construction contract) for the DRMS-approved reclamation of the nearby Jones Gravel Pit in Leadville. These quotes are entirely consistent with costs which we have experienced in recent years for revegetation of our mine waste facilities. DRMS states its cost sources as RS Means, "DRMS survey cost" and "DMG survey data." Also, as implied in the Climax reclamation cost estimate, we anticipate that drill seeding will be our preferred method for revegetation for most of our closure applications. We therefore respectfully request DRMS consider our successful site-specific history and unmatched knowledge with revegetation techniques and the associated actual unit rates based on over 20 years and thousands of acres of reclamation success at 11,000-ft amsl. In fact, we believe the economies of scale required by our closure plan for the future revegetation of approximately 4 square miles of land will ultimately provide for even more cost discounts in a competitive bidding market. Specific details are listed as follows:

a. Flat surfaces and gentle slopes STANDARD MIX, 1,466 ac. **~\$400,000 cost difference.**

i. DRMS drill seeding \$1,402/ac. RS Means, DRMS survey cost, DMG survey data.

ii. Climax drill seeding \$1,127/ac. Actual costs.

b. Steep slopes STANDARD MIX, 263 ac. **~\$400,000 cost difference.**

i. DRMS hydroseeding \$2,804/ac. (DRMS drill seeding rate x2). RS Means, unknown.

ii. Climax drill seeding \$1,127/ac. Actual costs.

c. Flat surfaces and gentle slopes ALPINE MIX, 1,466 ac. *Similar unit rates.*

i. DRMS drill seeding \$1,163/ac. RS Means, DRMS survey cost, DMG survey data.

ii. Climax drill seeding \$1,127/ac. Actual costs.

d. Steep slopes ALPINE MIX, 475 ac. ~\$580,000 cost difference.

i. DRMS hydroseeding \$2,325/ac. (Climax drill seeding rate x2). RS Means, unknown.

ii. Climax drill seeding \$1,127/ac. Actual costs.

3. Demolition (site-wide). It doesn't appear that DRMS has accounted for the 30% discount for the demolition of 3-Mill (\$836,000 reduction) and the New Mill (\$897,000 reduction). Additionally, we have made an arithmetic error in our demolition estimate for the New Mill wherein we mistakenly utilized a steel demolition unit rate of \$0.37/CF instead of \$0.28/CF which will decrease our total closure cost about another \$900,000.

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Our preferred day and time for a 30-60 minute call is next Tuesday at 9:00 am. Let us know if that works or if we need to move the time up or down. I will send out an Outlook invitation with call-in when I hear back from you. We look forward to a good discussion and final resolution of the reclamation obligation.

Thanks,

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2019 Update-Geogrid TX160 Backup\_Tensar.pdf  
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