

## Tuttle, Mike

---

**From:** Mike Jensen [Mikej@haies.net]  
**Sent:** Tuesday, September 18, 2012 9:21 AM  
**To:** Tuttle, Mike  
**Cc:** timcharlwood@gmail.com; 'Greg Hansen'  
**Subject:** The Sanctuary - Latest review comments  
**Attachments:** The Sanctuary Sheet 3 REV 2.pdf; The Sanctuary Detention Basins REV 2.pdf; The Sanctuary Sheet 2 REV 2.pdf

1. A Storm Water Construction Activity Permit is required. – **Tim Charlwood to get permit**
2. Please indicate the retaining walls construction dates on the plan. Month and Year are fine. **Added dates and notes to drawings - See attached**
3. We need details for detention ponds. We were told that we were going to be given cross sections of the ponds and applicable details. **See attached**
4. How are the smaller rain storms going to be detained? It appears that there is no orifice plate.

**The discharge from smaller storms would be below the maximum storm water discharge rate allowed for the subdivision. Practically speaking, installing orifice plates would cause the storm water piping to plug up with debris and not function properly. The several basins and check dams through which smaller storms would travel will slow the water sufficiently.**

### **Matthew Meyer, P.E.**

5. Private drive requires 20' driving surface good for 75,000 lb load. Fire marshal requires an engineer's letter buying off on the construction. **We have contacted Andy at Earthtec and he said that the road design is adequate for the load – waiting for a letter stating the same.**
6. See the attached pdfs for additional comments. **Revised Drawings - See attached**

If you need anything else, please call or email.

Thank You,  
Mike Jensen



Neither the footer nor anything else in this e-mail is intended or constitutes an electronic signature and/or legally binding agreement in the absence of an express statement or Hansen and Associates policy and/or procedure to the contrary. This e-mail and any attachments hereto are Hansen and Associates property and may contain legally privileged, confidential and/or proprietary information. The recipient of this e-mail is prohibited from distributing, copying, forwarding or in any way disseminating any material contained within this e-mail without prior permission from the author. If you receive this e-mail in error, please immediately notify the author and delete the e-mail. Hansen and Associates disclaims all responsibility and liability for the consequences of any person who fails to abide by the terms herein.

## Tuttle, Mike

---

**From:** Clint Hansen [clinh@haies.net]  
**Sent:** Friday, October 12, 2012 2:19 PM  
**To:** timcharlwood@gmail.com  
**Cc:** 'Greg Hansen'; mikej@haies.net; Tuttle, Mike; matthewmeyerpe@hotmail.com  
**Subject:** RE: The Sanctuary - At your own risk, Construction Information  
**Attachments:** The Sanctuary Detention Basins REV 2.pdf; The Sanctuary Sheet 2 REV 2.pdf; The Sanctuary Sheet 3 REV 2.pdf

I just want to remind you all that the construction going on at The Sanctuary is all at your own risk. I still have never received all the updated information from my review on 2012-09-11, <https://miradi.co.weber.ut.us/reviews/view/821>. Please look at the attached PDF in that review as well. I know that we received the storm information, but I never did receive written responses to the review. **We responded to your 9/11 Review on 9/18, attached is the drawings for that review and below is the actual email sent from Mike Jensen of our company to you.**

While observing the construction of the detention pond it appeared that the fill on the down-hill side of the pond was very porous. Please provide a letter from a licensed engineer that the pond will perform as designed. **Our Engineer's Signature is Both on the Storm Water Plan and the Civil Drawings, but if you insist on another signature we will get you one.**

I need roadbase compaction tests, the gradation tests for road base, updated mix design for asphalt showing <25% RAP. **Tim will address this issue**

It appears that there is only 4" of roadbase where the blue redheads are installed just down from the turn around. There should be 6" of road base per the plan. Tim stated that he didn't think the contractor was to that point yet. It appeared to me that they were to final grade according to the redheads that were installed. **Tim will address this issue**

Please update the SWPPP, please refer to the inspection that I sent on 10/11/2012. **We will update the SWPPP first of the Week**

It appears that the rock planters at the bottom it doesn't appear that the bottom rocks were keyed in very well, and the material appears to have just been poured into the planter boxes without any compaction. Please provide a letter from an engineer stating that the planter boxes have been installed per the design requirements. **We will have our Civil Engineer look at the Planter Boxes and address this issue first of next week.**

I've still never heard if they want me up there this afternoon. I tentatively scheduled coming up to look at the road base thicknesses. Tim was going to verify with the contractor that they were going to be ready. I'm not going to plan on it anymore unless I hear from someone.

**From:** Mike Jensen [<mailto:Mikej@haies.net>]  
**Sent:** Tuesday, September 18, 2012 9:21 AM  
**To:** 'Tuttle, Mike'  
**Cc:** 'timcharlwood@gmail.com'; 'Greg Hansen'  
**Subject:** The Sanctuary - Latest review comments

1. A Storm Water Construction Activity Permit is required. – **Tim Charlwood to get permit**
2. Please indicate the retaining walls construction dates on the plan. Month and Year are fine. **Added dates and notes to drawings - See attached**
3. We need details for detention ponds. We were told that we were going to be given cross sections of the ponds and applicable details. **See attached**
4. How are the smaller rain storms going to be detained? It appears that there is no orifice plate.

**The discharge from smaller storms would be below the maximum storm water discharge rate allowed for the subdivision. Practically speaking, installing orifice plates would cause the storm**

**water piping to plug up with debris and not function properly. The several basins and check dams through which smaller storms would travel will slow the water sufficiently.**

**Matthew Meyer, P.E.**

5. Private drive requires 20' driving surface good for 75,000 lb load. Fire marshal requires an engineer's letter buying off on the construction. **We have contacted Andy at Earthtec and he said that the road design is adequate for the load – waiting for a letter stating the same.**
6. See the attached pdfs for additional comments. **Revised Drawings - See attached**

Sincerely,  
Clinton G. Hansen, PLS



Neither the footer nor anything else in this e-mail is intended or constitutes an electronic signature and/or legally binding agreement in the absence of an express statement or Hansen and Associates policy and/or procedure to the contrary. This e-mail and any attachments hereto are Hansen and Associates property and may contain legally privileged, confidential and/or proprietary information. The recipient of this e-mail is prohibited from distributing, copying, forwarding or in any way disseminating any material contained within this e-mail without prior permission from the author. If you receive this e-mail in error, please immediately notify the author and delete the e-mail. Hansen and Associates disclaims all responsibility and liability for the consequences of any person who fails to abide by the terms herein.



# Earthtec Engineering, Inc.

133 North 1330 West  
Orem, Utah - 84057  
Phone (801) 225-5711  
Fax (801) 225-3363

1596 W. 2650 S. #108  
Ogden, Utah - 84401  
Phone (801) 399-9516  
Fax (801) 399-9842

September 19, 2012

Tim Charlwood  
PO Box 980400  
Park City, UT 84098

**Re: Pavement Section Review  
The Sanctuary  
Huntsville, Utah  
Project No. 12-0086G**

Mr. Charlwood:

As you requested, we have completed our review of the proposed pavement sections for the subject site. Our scope of work included review of drawings provided by Hansen Associates, engineering analyses, and the preparation of this letter.

### **Plan Review and Information Gathering**

Based on our review of the drawings provided by Hansen and Associates, the proposed private roadway cross-section will consist of a minimum of 3 inches of asphaltic concrete placed over a minimum of 6 inches of properly compacted road base placed over a minimum of 8 inches of properly compacted sub base. The proposed 20 foot wide private driveway cross-section will consist of a minimum of 6 inches of properly compacted road base placed over a minimum of 8 inches of properly compacted sub base.

A geotechnical report<sup>1</sup> was previously prepared for the subdivision by Earthtec Testing and Engineering, P.C., dated August 23, 2007. This report was reviewed prior to the preparation of this letter.

### **Conclusions and Recommendations**

We understand that the pavement sections are required to support occasional loading by a 75,000 pound fire truck. The referenced geotechnical study indicates that the pavement section is designed for standard light commercial traffic and is not intended to support frequent heavy wheel loads. However, the proposed pavement sections are intended to support occasional heavy wheel loads such as garbage trucks, delivery trucks, and the occasional fire truck. All other recommendations in the referenced report should be followed during the construction of the roads, including the proper placement and compaction of the grading fills, sub base, and road base.

### **Closure**

The conclusions and recommendations presented in this report are based on the information provided, our experience with similar conditions, and assumptions made by Earthtec Testing and Engineering, P.C. at the time of the referenced geotechnical study, which we assume to be

<sup>1</sup> "Geotechnical Study, Golden Eagle Ranch, Huntsville, Utah," ETE Job No. 07-1950, August 23, 2007.

accurate and correct. If conditions are different during construction than presented herein, please advise us so that any appropriate modifications can be made. Our observations, analyses, conclusions and recommendations were conducted within the limits prescribed by our client, with the usual thoroughness and competence of the engineering profession in the area. No other warranty or representation, either expressed or implied, is intended in our proposals, contracts or reports.

We appreciate the opportunity of providing our services on this project. If we can answer questions or be of further service, please call.

Respectfully;  
**EARTHTEC ENGINEERING, INC.**

Andrew M. Harris, P.E.  
Engineering Manager

Attachments: None