

**To Boulder Town Planning Commission, Boulder Town Council & Boulder Town Residents
Committee Chairwoman, Commissioner, Mayor, Council Members and Residents**

August 24, 2020

OVERVIEW

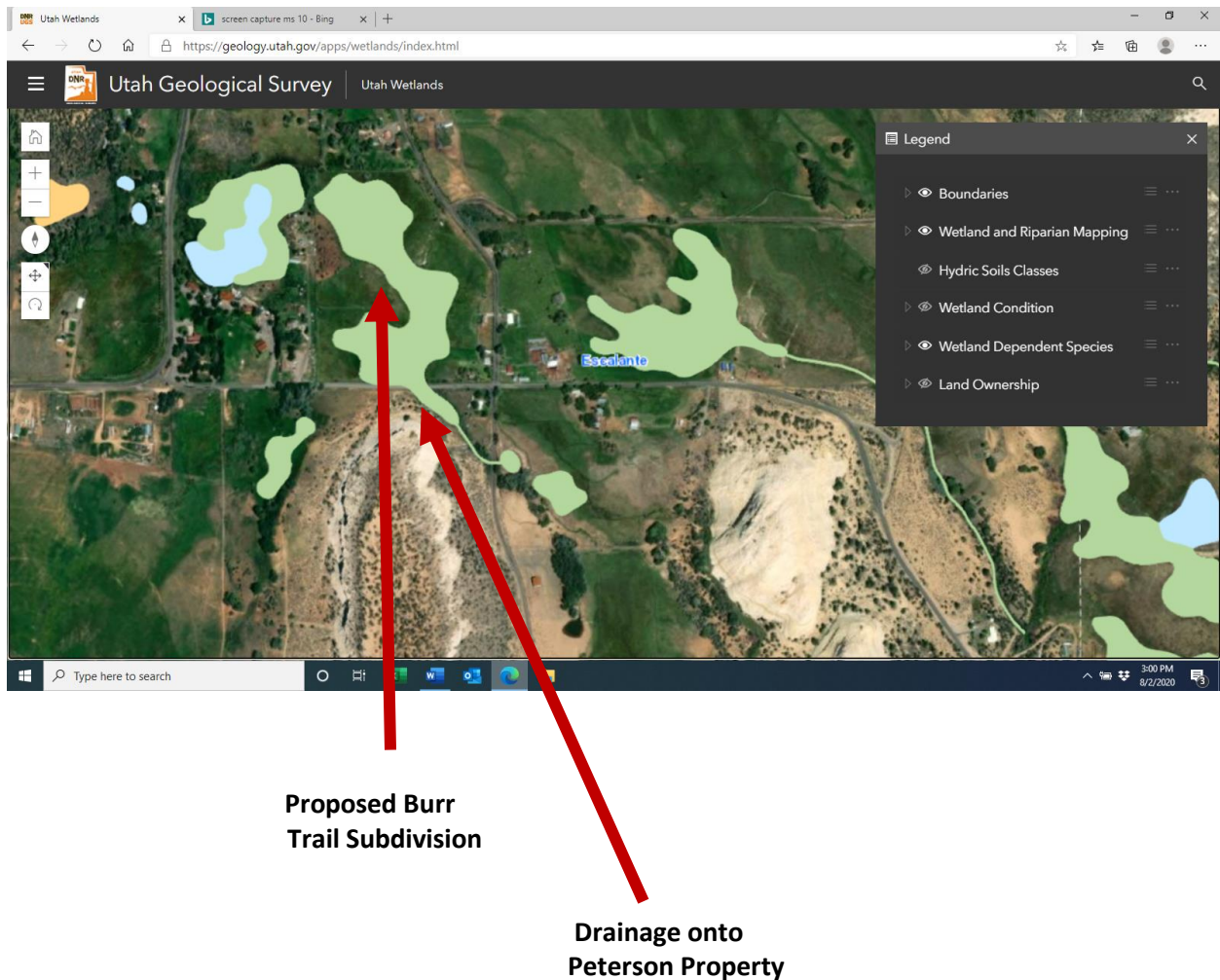
My name is Allan Oldham. My wife and I have a home located near the proposed Burr Trail Meadows Subdivision. The zoning approval of the subdivision will not be addressed in this letter.

This letter addresses the technical aspects of the Burr Trail Meadows Subdivision. The goal is to create a transparent spirit of cooperation regarding all matters of a technical nature.

However, there must be accountability for the technical decisions made. What specific individual made a specific technical decision? Most system failures are preventable. They occur when technical aspects are ignored. In my experience it is much easier to determine how a system failed than it is to determine who was responsible for the failure.

I work so my involvement with the Burr Trail Subdivision will mostly be after hours and weekends. But I can be contacted anytime at 480-369-6511.

WHO WILL BE DIRECTLY IMPACTED BY THE BURR TRAIL SUBDIVISION?



The above map from the Utah Geological Survey indicates that about 15 to 20 houses will be directly impacted by the proposed subdivision: 12 new houses in the subdivision, an existing house on the same property and nearby houses.

The 2018 US Census estimates the population of Boulder to be approximately 240 people. For now, estimate two people in 15 homes; that is 30 people. So approximately 13% of the population of Boulder will be impacted. *Note: 0% of the Town Council (the decision makers) or Hoyt Construction will be impacted in the same manner.*

12 new homes, by intent, will be purchased by families with limited financial means. Families with limited financial income can not afford the ramifications of a project gone awry years after the General Contractor has moved on. Engineering studies provide a measure of protection to these families. *That's part of the reason Federal construction codes were developed; to protect the 13%.*

BRIEFF REVIEW OF SOME TECHNICAL ISSUES

A new subdivision in a wetland, using a concept that isn't proven on this scale warrants engineering oversight.

Below is a list of technical issues to be considered. This does not represent all technical issues, just those that are easy to identify.

1. Have the proper government authorities been notified?
2. How will the new subdivision impact drainage?
3. What are the effects of wetlands on the new houses; will mitigation measures be required?
4. How will the cluster of septic tanks behave with the soil conditions present?
5. What measures will be required to prevent detrimental soil settlement?
6. What will be the impact on the Town of Boulder infrastructure?
7. How many people can the current infrastructure of Boulder support?
8. Will a Storm Water Pollution and Prevention Plan (SWPPP) be submitted?
9. Will a Spill Prevention Containment and Countermeasures Plan be required?
10. Will roads meet the AASHTO Low-Volume Roads Manual?

Answers to questions like these are generally addressed by an individual, who has fulfilled education and experience requirements and passed rigorous exams that, under State licensure laws, permits them to offer **engineering** services directly to the public.

Generally, questions like this are addressed in a feasibility study prior to starting construction. The feasibility study is followed up with a set of specifications that govern the project.

A proposed project may be popular. That doesn't make it practical. A technical feasibility study helps protect the Town of Boulder.

The following questions may not be technical, but they relate to the technical issues.

11. **Who will pay for the cost of the new infrastructure required for the Burr Trail Meadows subdivision?**
12. **Who will pay for new infrastructure once the current infrastructure has been maxed out?**
13. **Has a benefit/cost analysis been performed to determine effects on the Town once the project is completed and the general contractor is no longer involved?**

A fiscal failure is still a failure.

BRIEF REVIEW OF “PART OF THE ENGINEERING WORLD”

Engineers perform work according to a written “Scope of Work”. Often, more than one type of engineer will work on a project. A simple example is shown below.

A commercial building will commonly have the following.

- Licensed architects stamp.
- Licensed engineer stamp for a soils report.
- Licensed engineer stamp for the structural analysis.
- Licensed engineer stamp for the mechanical systems.
- Licensed engineer stamp for the electrical systems.

So, engineering work for the structural components would not cover the electrical components. They are different disciplines which incorporate different subjects of study.

To this end, if a contractor puts forth a subdivision plan which is stamped by a professional engineer, it means the subdivision has been laid out in accordance with applicable building codes. It does not necessarily cover environmental or drainage issues. It all depends on the engineering Scope of Work.

The engineering Scope of Work should be available for public review. How else can a general contractor be held accountable? The price of engineering services is private. The engineering performed is not.

Elements of construction regarding earthquakes, windstorms, and floods are based on loads that are incorporated into construction codes. It is the role of the engineer to determine the effects of design conditions on a proposed project.

The ramifications of the project, for better or worse, will be felt long after the general contractor is gone.

Note: if it is the intent of the builder to gradually add more homes, then be upfront and do the engineering for all homes. Otherwise there will be additional engineering for each phase.

A STARTING POINT FOR TECHNICAL MATTERS: ESTABLISH ACCOUNTABILITY EARLY

Start with the first issue from page one of this letter. Other issues will be addressed in later letters.

1. Have the proper government authorities been notified?

Part A

If construction is to occur in a wetland, one should make sure there are no issues with the “Army Corp of Engineers”.

During the September 13th planning commission zoom meeting, Curtis Oberhansley stated the Army Corp of Engineers did not need to be involved. We now have technical accountability for this issue.

Question: does Curtis Oberhansley represent the Town of Boulder or Tom Hoyt?

Note: The Army Corp of Engineers represent some of the highest levels of engineering. They can have a major impact on a wetlands project. They are reasonable folks who like thorough engineering. It is prudent to get written notification from the Army Corp of Engineers to make sure they do not have issues with a proposed project.

Nobody wants a construction project that gets shut down in mid process and proves too costly to fix. This can create an eyesore for years.

Part B

If construction is to occur in a drainage area one should make sure there are no issues with “The State of Utah Department of Environmental Quality, Division of Water Quality”.

Does the contractor intend to contact “The State of Utah Department of Environmental Quality, Division of Water Quality”?

There are other agencies that will require notification, but if a project can't get past Part A and Part B there is no sense in going further.

Sincerely,

Allan Oldham SE (Utah) PE (California)
280 E Burr Trail Rd., Boulder
Local phone: (435) 335-7996
Cell Phone: (801) 310-3074/(480)-369-6511
Email: adoldham76@gmail.com