



April 11, 2022

Project: *Harmony Ranch Subdivision*
Re: *Engineering Review #3*
Reeve Job: *7569-01*

Below please find our response to the comments from Weber County Engineering, dated December 22, 2021.

1. The storm drain calculations on sheet 11 of 18 will need to be updated to clarify the retention calculations. The drawings will need to be updated to show the control structures and outfalls for the detention pond release flows. Rolled curb and gutter has a limited capacity to carry storm water, so a rock swale may be required to manage the runoff. Additional inlets and/or calculations of storm water spread will be needed to verify that the runoff coming down the gutter will enter the inlets and not go out of the curb or bypass the single inlets.
 - a. Calculations have been completed to provide detention at all three basins and a release rate of 0.1 cfs/acre, as per County standards. This has been updated within the plans to show the control structures and outfalls for the detention pond release flows.
2. There are redlines on the plans that are uploaded to Frontier that will need to be addressed.
 - a. Comments addressed below.
3. The storm drain pipes will need to be cleaned and videoed to verify the condition of the pipe. The County does not have records of the installation inspections and these pipes may not be acceptable to the County.
 - a. Contractor to provide cleaning and video.
4. The parking stalls shown in the public right-of-way and extending into private property will need to be removed. The County will not maintain these stalls.
 - a. Parking stalls have been removed.
5. A note will need to be added to the plat stating: "Due to the topography and the location of this subdivision all owners will accept responsibility for any storm water runoff from the road adjacent to this property until curb and gutter is installed."
 - a. Note added to plat.
6. The owner's dedication on the plat will need to be adjusted to clarify the use of common and open space for the detention ponds.
 - a. Owner's dedication adjusted for clarification.

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7. There are conditions listed in a letter of agreement that is recorded to the property as Entry # 2369318. These conditions will need to be included in the plat and plans.
 - a. Conditions have been included in the plat and plans.

8. Because soil conditions vary throughout the county, it is now necessary to provide an engineered pavement design showing required sub-base, road-base, fabric, and asphalt thickness as needed for soil type. Asphalt thickness shall not be less than 3 inches. The county engineer is now requiring a minimum of 8" of 4" minus sub-base and 6" road-base. Compaction tests on both will be required.
 - a. Engineering pavement design provided in the Geotechnical Report.

9. The roads cross-section on sheet 2 of the improvement drawings will need to be updated to reflect a 60-foot right-of-way and a 10-foot asphalt path. Please call out a chip seal instead of a UDOT seal coat.
 - a. Updated to 60-foot right-of-way and a 10-foot asphalt path. Chip seal has been called out in place of a UDOT seal coat.

10. An excavation permit is required for all work done within the existing right-of-way.
 - a. Excavation permit will be obtained by Client.

11. All improvements need to be either installed or escrowed for prior to recording of the subdivision.
 - a. Noted.

12. A Storm Water Construction Activity Permit is required for any construction that:
 - disturbs more than 5000 square feet of land surface area, or
 - consist of the excavation and/or fill of more than 200 cubic yards of material, or
 - requires a building permit for which excavation or fill is a part of the construction, and less than five acres shall apply for a county permit.
 - a. To be obtained by Client.

13. A Storm Water Pollution Prevention Plan (SWPPP) is now required to be submitted for all new development where construction is required. The State now requires that a Utah Discharge Pollution Elimination Systems (UPDES) permit be acquired for all new development. A copy of the permit needs to be submitted to the county before final approval. Permits can now be obtained online thru the Utah State Department of Environmental Quality at the following web site: <https://secure.utah.gov/swp/client> (<https://secure.utah.gov/swp/client>).
 - a. A SWPPP has been provided for the proposed development.



14. After all items have been addressed a stamped copy of the improvement drawings will be required.

- a. A stamped copy of the improvement drawings has been provided.

Redline Comments

Sheet 2

1. Update labels and widths.
 - a. Labels and widths updated.
2. Adjust to match with plans.
 - a. Adjusted to match plans.

Sheet 3

1. Double inlets.
 - a. Changed to double inlets.

Sheet 4

1. Outside of property lines.
 - a. Drainage inlets replaced with one inlet along the west side of the T-intersection.
2. Is a storm drain box missing?
 - a. Revised.

Sheet 5

1. FH distance from TBC? 18"
 - a. Existing FHs called out to be relocated in park strip.
2. 1' min. cover over SD pipe.
 - a. SD depths modified.

Sheet 6

1. What is this line?
 - a. Existing 36" SD pipe. Revised.
2. Is this a culvert?
 - a. Existing 36" SD pipe. Revised.
3. Are these accidental valves?
 - a. Valves removed.



4. Where is the end of the cul-de-sac?
 - a. Profile revised.

Sheet 7

1. Relocated to where?
 - a. Outside of proposed hard surface area (label updated).
2. Pipe material, slope & size.
 - a. Pipe material, slope and size included in profile.

Sheet 8

1. What surface improvements will be installed for the temporary turnaround?
 - a. Modified to show base material temporary turnarounds on each side of street.
2. Please clean up the structures, it is not clear how many inlets are existing.
 - a. Modified to provide clearer layout of SD. All SD in this area is existing.

Sheet 9

1. Please include the delineation of the areas that each pond will serve.
 - a. Drainage areas included for each basin.
1. Culvert size?
 - a. Just an existing 36" SD pipe. Further labeled on plan sheets to clarify.

Sheet 10

1. FH?
 - a. Modified.
2. Will runoff puddle here?
 - a. See modified proposed surface at location. Water will be able to flow directly into roadway from south.

Sheet 11

1. Is this from infiltration?
 - a. Volume out is from the allowed release rate out of the basin once LID has been effectively stored. Basin has been modified on plans to show outfall pipes, structures, and location.

Sheet 13

1. What is this discharging to? Provide info on surrounding grades.
 - a. Existing swale. See grading sheet for more information regarding the existing grades and elevations.

Reeve & Associates, Inc.



We appreciate your review and trust we have updated and/or clarified all of your comments. If you have any questions, or we can be of further assistance, please let us know.

Sincerely,

A handwritten signature in blue ink that reads 'Jeremy Draper'.

Jeremy Draper, PE, MBA
Civil Engineering Director
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A handwritten signature in black ink that reads 'Trip Bumgarner'.

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