

April 11, 2023

Scottsdale/Gold Dust Apartments
2-DR-2023
Civil Comment response Water/Sewer Reports

Water Report

Reviewer: Anita Pritchard

1. The apartment count for the indoor and outdoor water demands is 222, not 214. The "Site Plan - Project Data" document identifies the project data. Update the modeling to account for the increased unit count. **We have confirmed with the architect that there are 215 total units in the building, inclusive of the live work units. (pg. 7)**
2. Per 2021 IFC Section B104, the fire flow calculation area shall be the total flow area of all floor levels. The 93,569 sf value is only for one floor level. The required fire flow is no less than 2000 GPM. Update the modeling and report accordingly. **Grand total square footage 384,995. The new required flow per IFC table is 8,000 gpm. Reduced to 2,000 gpm. (pg. 7)**
3. PRV required per DSPM 6-1.407. **(pg. 20)**
4. 20' water easement required for the onsite fire hydrant and line, DSPM 6-1.419. **The water easement extended to include fire hydrant. (pg. 20)**

Sewer Report

Reviewer: Anita Pritchard

1. The "Site Plan" project data indicates that there are 215 residential units and 7 live work units for a total of 222 units. There is also a diagram (Live/Work Floor Plans) showing that the live work units include kitchens, bathroom, and bedrooms, and need to be included in the count for bedrooms. **We have confirmed with the architect that there are 215 total units in the building, inclusive of the live work units. (pg. 4)**
2. Text change water to sewer. **Text updated (pg. 4)**
3. Sewer separation from storm 6' per DSPM 7-1.407. **The storm drain moved north 6 feet. (pg. 12)**
4. SS lines crossing less than 2 feet below a storm drain (SD), culvert or under large structures, such as box culverts and bridges, will require the additional protection using restrained SS lines crossing less than 2 feet below a storm drain (SD), culvert or under large structures, such as box culverts and bridges, will require the additional protection using restrained joint DIP C-900/905 PVC with concrete encasement. SS lines crossing over SD's and culverts should have a minimum of 1-foot vertical clearance and be adequately restrained. DSPM 7-1.407. **All SD and SS crossings have more than 2 feet of separation (pg. 12)**
5. Minimum of 2' vertical distance required if SD crosses over SS, 1' if SS crosses over SD and sewer must be restrained. DSPM 7-1.407.D. **All SD and SS crossings have more than 2 feet of separation (pg. 12)**

6. SS lines crossing less than 2 feet below a storm drain (SD), culvert or under large structures, such as box culverts and bridges, will require the additional protection using restrained SS lines crossing less than 2 feet below a storm drain (SD), culvert or under large structures, such as box culverts and bridges, will require the additional protection using restrained joint DIP C-900/905 PVC with concrete encasement. SS lines crossing over SD's and culverts should have a minimum of 1-foot vertical clearance and be adequately restrained. DSPM 7-1.407. **All SD and SS crossings have more than 2 feet of separation (pg. 13)**

Drainage Report

Reviewer: Jennifer Lynch

1. Include the results of the scour analysis (riprap sizing and total scour depth, as well as how the erosive potential will be mitigated) as part of the report narrative with the final plans. **The results of the scour analysis and riprap sizing have been added to Section 5.4 of the report. (pg. 9)**
2. Include a description of how the first flush outflows will be treated before draining. **First Flush will be treated in drywell see description in section 5.1 and the calculations in Appendix D. (pg. 9)**
3. In the pre-app meeting, it was mentioned that a Pre-v-Post analysis would be required. Please include a description of that analysis within the text of the report with the final plans. **Pre-vs-Post description added to section 5.1. (pg. 10)**
4. Call out riprap sizing on final plans. **Noted. Riprap sizing will be added to final plans. (pg. 15)**
5. How deep is this riprap? Will it protect the proposed structure from lateral erosion? Will there be a flood wall in place to provide that protection? **Please refer to the rip rap detail on Sheet C4.1 of the project plans. Also, this information has been added to report Section 5.4. (pg. 16)**
6. Update notes in final plans. **Notes will be updated in final plans. (pg. 17)**
7. State the study this information is from. **The exhibit has been updated with the study information. (pg. 35)**
8. The n-value of 0.019 is not mentioned in the report. Where did it come from? Also, all bank stations are at the limits of the cross sections, please revise in final plans. (typ for all HEC-RAS). **The n-value of .019 has been added to Table 1 - MANNING'S N VALUE. Bank stations have been adjusted at locations where a defined bank is evident; in many cases the entire section is reasonable to consider as 'channel'. (pg. 38)**