



# CENTURION ENGINEERS, INC.

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Date: 12 June 2023

Subject: **Mod Court Townhomes**

**207 East 45<sup>th</sup> Street**

**SUBFY2023-0001**

**Lots 24 and 25, Block 2, FAS #1**

**Tax Parcels R2734500592 & R2734500593**

**Land Area = 1.38 Acres**

Pages: 4

Media: Transmitted via E-mail

On behalf of Garden City, as the city engineer, we have completed a cursory review of the application for the subject project. A full review of the construction plans for the project will occur after initial project entitlement. This application is for development of a twenty-three lot subdivision.

We have not performed a complete review of the information submitted for the application. Changes during the entitlement process could impact the information and require changes. The purpose of this project review is to provide a pre-review and not cover all details.

### ***Ada County Highway District***

Approval of the project by the Ada County Highway District must occur.

### ***North Ada County Fire and Rescue District***

Approval of the project from the North Ada County Fire and Rescue District (NACFRD) must occur. We note a letter from NACFRD dated 26 April 2023. For our review, approval of fire hydrant locations and available fire flow is the primary need.

### ***Irrigation Facilities***

The project is proposing gravity irrigation construction. Approval of the irrigation entity is required.

### ***Pressure Irrigation***

The final plat notes that the project will have a pressure irrigation system (see note 6). Please provide plans and a pressure irrigation report outlining the water available and the water needed for the operation of the system.

### ***Storm Water Report / Permeable Pavers***

The submittal includes a Hydrology Report. Said report will be thoroughly reviewed during the construction plan review process with staff of Public Works. The following are general comments prior to that review.

The project is proposing to use permeable pavers. The HOA will be responsible for replacement of the entire paver section should the city need to complete repairs/replacement of water/sewer facilities under the pavers. This needs to be addressed on the final plat and within the HOA documents (C,C&Rs).

Sewer service lines under pavers will not be maintained by the city. Said service lines will be private. This needs to be addressed on the final plat and within the HOA documents (C,C&Rs).

City water mainlines under and within 10-feet of permeable pavers should be ductile iron pipe.

Please note that Garden City uses the Boise City storm water design manual and not ACHD information. Boise's manual uses different storm IDF data. Additionally, there are other requirements specific to permeable pavers in the manual that must be adhered to. Two notable ones are a maximum run-on ratio for adjacent surfaces and roof drains cannot discharge below the pavers.

Structures are not allowed within 10-feet of permeable pavers unless specifically addressed by the project's structural engineer. The project's geotechnical engineer may also address this issue.

It appears that a 12-inch layer of filter sand may be required under the paver section. Has Atlas provided a structural paver section design? We note comment 6 in the NACFRD letter that may require a structural analysis of the pavers/roadway system.

### ***Water and Sewer Connections***

The submittal includes water/sewer plans. Said plans will be thoroughly reviewed during the construction plan review process with staff of Public Works.

New water and sewer mains/services must be reviewed and approved by the city's Public Works Department. The applicant is responsible to verify that adequate water system supply is available to provide any fire suppression water needs. The applicant is responsible to confirm/verify that adequate sewer capacity is available and that the existing system depth is adequate to serve the site.

Water mains that serve fire hydrants must be at least 8-inch diameter. This is not the lateral that connects to the hydrant.

The plans must adhere to DEQ requirements on both main and service horizontal and vertical separations. We particularly expect conflicts with vertical separations of services.

### ***QLPE Review of Water/Sewer Plans***

Please advise if the applicant wishes to have the city perform a QLPE review of the water/sewer plans. If so, the city will charge for the review. Additionally, the project engineer must complete and provide the three DEQ checklists for the project.

### ***Site Grading and Drainage Plan***

A site grading and drainage plan will be required when development is proposed. Said plan must be reviewed and approved by the city.

A storm water design report and a drainage system operation and maintenance manual for handling of storm water prepared by an Idaho licensed design professional will be required. Compliance with the storm water ordinance and policies of the city will be required. Drainage must be maintained on-site.

The report must address all roof drainage, its conveyance and disposal.

Site grading must match perimeter property elevations.

A site geotechnical report has been provided. The storm water design must provide for at least three feet of vertical separation between the bottom of the storm water facility and the seasonal high groundwater. See the above heading of "Storm Water Report / Permeable Pavers" for more information.

### ***Stormwater Operation and Maintenance Agreement***

The landowner must enter into an agreement with the city that will be recorded addressing mandatory maintenance of the site's storm water system. The agreement must be fully executed, have approved plans attached and be recorded by the city with final plan approval.

### ***Stormwater Operation and Management Plan***

Provide a stormwater system operation and maintenance manual for review and approval by the city. Please be sure the manual defines failure of the storm water system.

### ***FEMA Flood Maps***

The applicant should review the original FEMA work maps (not the current adopted maps) as the city has been placed in seclusion. The current maps (June 2020) do not display the possible future risk of the flooding potential of the Boise River. If the lowest floor building elevation is below the draft map BFE, a Flood Risk Acknowledgement form will be required from the landowner/developer. The project should be elevated above the future BFE.

We note on sheet C4.00 of the construction plan set that the BFE is listed as 2645.30; however, the FEMA work maps show a BFE in the area of approximately 2648. This is a notable difference.

### ***Existing Easement***

Please advise on the impact of an easement noted in Instrument Number 388831.

### ***Preliminary Plat Comments***

The preliminary plat (3 sheets) included in the application is dated 15 March 2023 with no revisions.

Just a comment – preliminary plat sheet C0.0 note 3 is a reiteration of an Idaho State law. Garden City does not require the note on the preliminary or final plat.

Preliminary plat sheet C0.0 notes 5 and 6 note “Chandler’s Place”. These should be changed to the correct project name.

Please add a note providing intent and general information on the proposed pressure irrigation system to serve the project.

### ***Final Plat Comments***

Please provide an Ada County surveyor’s office approval of the name “Mod Court Townhomes Subdivision”.

The wording of final plat note 5 should be reviewed and simplified regarding interests of the city. Please just combine the city’s blanket water/sewer easement in one phrase.

The city’s water/sewer easement must extend to and beyond all city improvement including manholes, fire hydrants, valving and water meters.

Final plat note 5 includes a reference to “Chandler’s Place” - please correct.

We have no other comments regarding this request at this time.