



CENTURION | B&A ENGINEERS, INC.

Consulting Engineers and Land Surveyors
2323 S. Vista Ave, Ste 206, Boise, ID 83705
Telephone 208.343.3381 | www.centengr.com



To: **Garden City Planning**

Copy: **Jenah Thornborrow
Betty Gumm
Hanna Veal
Colin Schmidt
James Pavelek
Troy Vaughn
Chad Vaughn
Olesya Durfey
Kena Champion
Building**

From: **Joe Canning, PE/PLS**
Telephone: 208.343.3381
E-Mail: jdcanning@centengr.com

Date: 3 October 2022

Subject: **Elle Estates Subdivision – Adams Multifamily
4800 North Adams Street
SUBFY2022-0004
Tax Parcel R2734523137
Land Area = 0.632 Acres**

Pages: 5

Media: Transmitted via E-mail

On behalf of Garden City, as the city engineer, we have completed a review of the application for the subject project. This project is a 14 unit townhouse subdivision.

Any approval of the project should be conditioned upon successfully addressing items presented in this review.

Professional of Record

Plans, even preliminary plans, need to be stamped, signed, and dated by the professional of record to be submitted to the city for review. Some sheets are stamped with preliminary or with a seal, but not signed and dated.

Subdivision Name Reservation

Please provide a name approved by the Ada County Surveyor's office. We understand the project's name will be "Elle Estates Subdivision". None of the submitted drawings include a subdivision name.

Preliminary Plat

For our review, the preliminary plat should at least include the following:

- Approved subdivision name
- Notes defining housing lots and common lots
- Define the access to the units and materials proposed
- Depict a method of storm water mitigation
- Depict proposed improvements including water and sewer
- Describe the proposed irrigation system

Final Plat

For our review, the final plat should have an approved subdivision name.

Note 3 states irrigation water will not be provided. Please provide a request for a waiver of the city's pressure irrigation requirement per code. Said waiver may or may not be approved. If not approved, the project will be required to install a pressure irrigation system using available surface water.

Note 4 references the city of Boise. Please revise.

The notes must create a Garden City water and sanitary sewer easement including all mainlines, services, fire hydrants and other appurtenances.

Please address the easements described in Instrument Numbers 8905457 and 102053501 noted in the title report.

Street Names

Is the internal road a private road? We expect due to the number of units proposed, Ada County will require the road to be named. Please provide county approved names, if necessary.

Original Parcel

The land is portions of Lots 1 and 2 of Block 23 of FAS #3. Please provide evidence the land is an original parcel per city code.

Pressure Irrigation System

As the project is a land subdivision, city code requires a pressure irrigation system, unless a waiver of the requirement is requested and approved by the city. City code provides the requirements for the system and the waiver.

Erosion and Sediment Control

Prior to performing any grading on the site, the applicant must prepare and have approved by the city an erosion and sediment control plan.

Restricted Build Agreement

Will the applicant plan on creating a Restricted Build Agreement (RBA)?

QLPE Plan Review

Will the applicant desire the city to perform a QLPE review?

Irrigation Facilities

It appears gravity irrigation work is proposed. Provide an approval of the project from the irrigation entity, including depiction/creation of easements. The applicant must review the project and determine if an Army Corps of Engineers 404 permit will be necessary to obtain.

Ada County Highway District

Approval of the project by the Ada County Highway District will be required.

Fire District Approval

Approval of the project by the North Ada County Fire and Rescue District will be required. Should fire flow requirements exceed those available, the land use, improvement of off-site city water lines or other efforts may be necessary to obtain approval of plans.

The review by the District will need to include review of locations of fire hydrants.

Water and Sewer Connections

Water and sewer service 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.

Please provide a plan-profile of the water and sewer planned for the project for city review and approval. Please note that water line mains under or within 10 feet of permeable pavers need to be ductile iron pipe when possible. Water lines must be looped where possible. Dead-end lines, if unavoidable, must terminate with a blow-off.

Are any fire hydrants required? If so, the minimum mainline running by the fire hydrant connection must be 8-inch pipe.

Plan sheet 2 of 3 depicts two gate valves at the 90° bend in the project. With the current line layout, neither valve is necessary. And the 90° bend should be two 45° flange bends.

Plan sheet 2 of 3 depicts a separate 6-inch water "service" line to serve the common area. Is 6-inch necessary? We usually see a much smaller service connected internally to the mainline in the project.

Please add sanitary sewer service line cleanouts to each service line at the property line per Garden City standard notes.

The project appears to have a portion of the drainage treated with permeable pavers. Please note that the city will not replace/repair storm drainage systems placed over city water/sewer lines. Final plat notes and information within the project C,C&Rs must state this.

Preliminary Drainage Study

Please provide a drainage basin map for the project. There appears to be more than two drainage basins. However, any discharge to ACHD right-of-way would be another basin?

There is text noting roof drainage; but, from the grading plan, it is not clear how said drainage will be intercepted and carried to the internal storm water system along 48th and Adams. Drainage is expected to remain on-site, unless some area is specifically approved to leave the site by the ACHD (to right-of-way).

Please provide text within the study discussing both the depth and elevation of groundwater. The geotech report notes seasonal high water is expected to be 3 feet. The city requires a minimum of 3 feet of vertical separation to seasonal high groundwater.

The geotech report recommends an infiltration rate of 0.5 inches per hour. Please add information in the study of system drain times.

The project appears to have a portion of the drainage treated with permeable pavers. Please add text on the paver design, allowable run-on ratios and drain times.

We note a masonry retaining wall within the site that is referenced as keynote 7, and "618-3". What is this? If the wall contains a footing (as it appears), will the footing be able to be installed without impacting adjoining properties. When the wall needs repair/replacement in the future, will said repair be possible without impacting adjoining properties?

Please add design sizes of the storm water systems to accommodate at least the 50-year storm design storm event volume (the study includes this volume, but does not fully define the impoundment) and peak Q's created by a 10-minute storm event.

We note site plan revisions submitted to the city on 8 September may impact the report contents.

Site Grading and Drainage Plan

A complete site grading and drainage plan will be required. The plan submitted is preliminary in nature and not adequate to fully review. Said plan must be reviewed and approved by the city.

Approval of the preliminary plat does not relieve the applicant from meeting the city's storm water requirements. Should the development require changes due to conflicts with the site layout and storm water requirements, said changes would be required.

Please add perimeter ground elevations to the plan to review to assure site grading/improvements will not impact adjoining lands.

The geotech report contains a recommendation for a pavement section. Please include within the plans as the minimum section.

Storm Water Operation and Management Manual

Please provide a system operation and maintenance manual for review and approval.

Storm Water Operation and Management 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 after the final plan approval.

Please provide the agreement for review and approval.

FEMA Flood Maps

The site is currently located in FEMA Zone X. The applicant should review the original FEMA work maps (not the current adopted maps) as the city has been placed in seclusion. These are available on the city's website. 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.

We note the submitted information notes a BFE of ± 2639 , however the work maps note an elevation of ± 2640.6 .

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