STAFF REPORT 11/04/2024 **PERMIT NO. 702**

ITEM: Floodplain Permit application for proposed elevation of a residential structure in the floodway of a tributary to Bishop Creek. This permit was postponed during the October 21, 2024 meeting.

BACKGROUND:
APPLICANT: Jobin Cherian
ENGINEER: Urban James Engineering, Uwem Ekpenyong P.E.

624 Sinclair Ave. is located in the floodway in the upper reaches of a tributary to Bishop Creek. It is a two story duplex constructed in 1977. The property was purchased in March of 2023 by Resilient Visionary Investments at which time they were informed that floodplain permits would be required to proceed with renovations of the structure. The previous owner had began renovations without obtaining permits. The interior of the structure had been stripped down to studs and windows, siding and possibly roofing had already been replaced. It was determined at that time that this would constitute a substantial improvement and the structure would have to come into full compliance with the Flood Hazard Ordinance before a permit could be issued. Cost of renovations were estimated to be $80 thousand dollars and the County Assessor value of the structure was estimated at approximately $70 thousand dollars.

Detailed engineering plans are included in the packet submitted with the application. The BFE for this location is 1164.0'. According the applicant's engineer, the existing slab elevation is 1163.52'. The proposed plan would leave the slab at existing elevation and elevate the structure so that the lowest finished floor elevation would be 1167.19' and be mounted on concrete piers. This would amount to elevating the residence approximately 3.7' and place the first finished floor elevation at 3.19' above the BFE. In the engineer's statement, it is indicated that this would allow for the structure to meet the ordinance requirements and leave room for structural, electrical and mechanical underfloor elements to be installed more than 2 feet about the BFE as well. The applicant has also indicated that if it is decided to enclose the foundation space, that 1227 square inches of flood venting will be installed no higher than 1 foot above grade with a minimum of two openings on each side of the structure.

Updated: The applicant's engineer submitted plans for the addition of 4 sets of landings and stairs for the both front and back doors of the duplex. In addition, calculations were created for determining compensatory storage and a site plan to indicate the location of the compensatory storage.

STAFF ANALYSIS:
Site located in Little River Basin or Tributaries? yes__ no✓

According to the latest DFIRM, this project is located in the floodway of a tributary of Bishop Creek (Zone AE).

Applicable Ordinance Sections:		Subject Area:
36-533	(e)(2)(a) ……..……..	Fill restrictions in the floodplain
	(e)(2)(e) ...…….	Compensatory storage
	(e)(2)(j) ...…….	Utilities constructed to minimize flood damage
	(e)3(a) ……..…..……	Elevation of Structures
	(f)(3)(8) …….....	No rise considerations

(e)(2)(a) and (e)(2)(e) Fill Restrictions in the Floodplain and Compensatory Storage – The use of fill is restricted in the floodplain unless compensatory storage is provided.

> The plans indicate the existing structure will be elevated off of the existing slab by approximately 3.7'. In addition, there will be 4 sets of stairs installed for both front and rear entrance into the duplex. The engineering plans indicate a total of 55.25 cubic feet of compensatory storage is required and will be provided by creating a 20' x 6'x 0.5' (100 cubic feet) swale in the rear of the property, as indicated on the site plans.

(e)2(j) - All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

> The applicant has indicated all electrical and mechanical underfloor elements will be installed at least 2.0' above the BFE.

(e)3(a) Elevation of Structures – Residential structures shall be constructed on fill including any attendant utility and sanitary facilities, shall be designed so that the lowest floor (including basement) is elevated at least two feet above base flood elevation and the fill shall be at a level no lower than 1 foot above the base flood elevation for the particular area and shall extend at such elevation at least (15) fifteen feet beyond the limits of any structure or building erected thereon.

> The project engineer has indicated that the existing structure will be elevated and placed on piers so that the lowest finished floor elevation is 3.19' above the BFE. It was indicated that all structural, electrical, and mechanical underfloor elements to be installed at least 2.0' above the BFE.

(f)(3)(8) No Rise Considerations – For proposed development within any flood hazard area (except for those designated as regulatory floodways), certification that a rise of no more than 0.05 ft. will occur in the BFE on any adjacent property as a result of the proposed work is required.

> The project engineer has indicated in their No-Rise statement that this activity will cause no rise on any adjacent property.

RECOMMENDATION: Staff recommends Floodplain Permit Application #702 be approved with the following condition:

1. Elevation Certificate provided for the residential structure prior to final acceptance. Elevation of electrical and mechanical components should also be provided and verified by staff. Staff will also confirm that flood venting meets requirements of the ordinance.
2. Survey elevations taken of compensatory storage before construction and as-built drawings with elevations taken after to confirm volume should be provided to Staff.

ACTION TAKEN: _____