

DESIGN & CONSTRUCTION MANUAL DESIGN CRITERIA MODIFICATION REQUEST

PROJECT NAME: Summit Point Apartments, Phase II

ADDRESS: 504 NE Chipman Road

PERMIT NUMBER: PL2022056, Commercial Final Development Plan

OWNER'S NAME: _Summit Point Phase II, LLC

TO: Deputy Director of Public Works / City Engineer

In accordance with the City of Lee's Summit's Design and Construction Manual (DCM), I wish to apply for a modification to one or more provisions of the code as I feel that the spirit and intent of the DCM is observed and the public health, welfare and safety are assured. The following articulates my request for your review and action. (NOTE: Cite specific code sections, justification and all appropriate supporting documents.) Please see attached Letter and Exhibit

SUBMITTED BY:		
NAME: CFS Engineers, PA, Thomas E. Ingram, PE	_ ()OWNER (X)OWNER'S AGENT	
ADDRESS: <u>1421 E 104th St, Kansas City, MO 64131</u> CITY, STATE, ZIP:	PHONE #: <u>(913) 620-4084-</u>	
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KENT MONTER, P.E.		
DEVELOPMENT ENGINEERING MANAGER	(X) APPROVAL () DENIAL	
SIGNATURE: Kent Monter this the continued this Kent Monter	DATE: July 27, 2022	
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JEFF THORN, P.E.		
WATER UTILITIES ASSITANT DIRECTOR OF ENGINEERING SEI	RVICES () APPROVED () DENIAL	
SIGNATURE:		
GEORGE M. BINGER III, P.E.		
DEPUTY DIRECTOR OF PUBLIC WORKS/CITY ENGINEER		
SIGNATURE: Dave Lohe	DATE: 7-27-2022	
COMMENTS: <u>I have reviewed the waiver request letter subr</u>	mitted by CES Engineers and L concur with their	
	for approval of the design modification (waiver)	
request.	Tor approval of the design medilication (marter)	
1044001		

A COPY MUST BE ATTACHED TO THE APPROVED PLANS ON THE JOB SITE

Development Services | 220 SE Green Street | Lee's Summit, MO 64063 P: 816.969.1200 | F: 816. 969.1221 | <u>cityofls.net</u>



July 12, 2022

1421 E. 104th Street Suite 100 Kansas City, Missouri 64131 (816) 333-4477 Office

cfse.com

Other Offices: Kansas City, Kansas Lawrence, Kansas Holton, Kansas Topeka, Kansas Springfield, Missouri Jefferson City, Missouri

Board of Directors: Kenneth M. Blair, P.E. Kevin K. Holland, P.E. Daniel W. Holloway, P.E. Lance W. Scott, P.E. Sabin A. Yañez, P.E.

Senior Associates: Aaron J. Gaspers, P.E. Michelle L. Mahoney, P.E. Michael J. Morrissey, P.E. Todd R. Polk, P.E. Lucas W. Williams, P.E.

Associates: Adam M. McEachron, P.E. Gene E. Petersen, P.E. Andrew Robertson, PE, PTOE, PTP Jimmy L. Adams, CWI Casey Moore To: Kent Monter, PE Lee's Summit Public Works Development Engineering Manager 220 SE Green Street Lee's Summit, Missouri 64063 816-969-1229 Kent.Monter@cityofls.net

Re: Summit Point Apartments Request for a Waiver 20 ft Clearance Between a Building and Maximum 100-Year Overflow Elevation Under Clogged Outlet Conditions CFS Project #21-5065

Dear Kent,

On behalf of the Developers of the proposed Summit Point Apartments, CFS Engineers, PA, would like to request a waiver from the City's requirement for providing a minimum 20 ft setback between a proposed building and the peak 100 year water surface elevation for the clogged condition/zero available storage in a stormwater detention basin (See Exhibit-1, Detention Basin Setback Waiver).

The Summit Point Apartments has a proposed stormwater detention basin located by the northeast corner of the site, and the proposed multi-family residential building C1-2 would be located directly to the west. Drainage calculations were performed for the proposed stormwater detention basin to calculate the maximum 100-year water surface elevation in the event that the primary outlet works were clogged. The proposed building C1-2 has a finish floor elevation of 1005.00 ft (there is no basement). The proposed stormwater detention basin was designed with a 30 ft wide emergency overflow spillway with a crest elevation of 1001.31 ft. In the event that the detention basin was completely full up to the emergency overflow spillway's crest elevation and the outlet pipes were completely clogged and unable to convey any outflow, the maximum water surface elevation from a second 100-year storm event was calculated to rise to approximately 1002.31 ft. Based on the grading configuration for the proposed stormwater detention basin and the location of proposed multi-family residential building C1-2, the closest separation distance between the building wall and the peak 100-year clogged water surface elevation would be approximately 16.0 ft. The building's finish floor elevation of 1005.00 ft would be 2.69 ft higher than the peak 100-year clogged water surface elevation of approximately 1002.31 ft.



On the eastern side of the proposed stormwater detention basin, the peak 100-year clogged water surface elevation of approximately 1002.31 ft would be approximately 15.0 ft from the east property line of the site. The neighboring houses in the English Manor residential subdivision are setback approximately 20 ft from the property line, and would be over 35 ft from the peak 100-year clogged water surface elevation.

The proposed stormwater detention basin was designed with an outlet structure utilizing a 4 inch diameter low-flow orifice at flowline 994.85 ft, and a 33 inch wide rectangular overflow weir at crest elevation 997.50 ft. The calculated 100-year water surface elevation with the proposed outlet structure operating unobstructed was approximately 1000.81 ft.

The finish floor of Building C1-2 would be approximately 2.69 ft higher and separated by a distance of approximately 16.0 ft from the limits of an extreme storm event with 100-year clogged conditions in the site's stormwater detention basin. The eastern property line would be approximately 15.0 ft from the extreme storm clogged conditions limits. Based on the elevation difference between the building and the extreme clogged flood condition limits, CFS Engineers, PA, is requesting that the City grant the project a waiver from the minimum 20 ft setback to a 15 ft setback distance for Building C1-2 and for the east property line. If you have questions or need additional information, please call of email.

CFS Engineers, PA Sincerely

Thomas E. Ingram, PE



