



Royal Palm Multifamily RPD

Schedule of Deviations and Justifications

4. Deviation from LDC §10-329(d)(4) which requires 6:1 lake bank slopes to allow for 4:1 lake bank slopes.

JUSTIFICATION: The proposed 4:1 lake bank slope is requested to allow for increased accessible recreational greenspace within the apartment project, while accommodating the required on-site water storage. Turf Reinforcement Mat (TRM) in combination with enhanced herbaceous plantings and native grasses are proposed along the entirety of the 4:1 lake bank slope to mitigate erosion and improve water quality. The enhanced herbaceous plantings and native grasses along the 4:1 slope will be in addition to the planted littoral shelf requirement per Sec. 10-418. (2) and compensatory littoral shelf per Sec. 10-418. (3).

5. Deviation from LDC §10-261(a): The applicant is requesting an administrative deviation from LDC Section 10-261(a) requirement for a new multifamily residential development to provide sufficient on-site space for recyclable materials collection containers at a rate of 96 square feet for the first 25 units plus 8 square feet for each additional dwelling unit (2,902 square feet required), to allow space for a minimum of 1,324 square feet for recyclable materials collection containers.

JUSTIFICATION: The requested deviation is included in LDC Section 10-104(a)(1) list of provisions where the Development Services Director is authorized to grant administrative deviations. The request is to allow one location for the trash compactor and recyclable area instead of requiring multiple stops for solid waste collection throughout the development. Consistent with LDC 10-261(d), sufficient space for the compactor and receiver is provided. LDC Section 10-261(a) provides the breakdown between garbage and recyclable area for the first 25 dwelling units (DU), then combines the requirement for DU over 25. Historically, the recyclable calculation for the first 25 DU is 96 SF out of 216 SF total so 44%. 44% of 8 is 3.5 SF per unit for recyclable collection for each dwelling unit above 25. We acknowledge that the revised code in October 2024 separated the garbage requirement from the recycling per the requirements below.

First 25 DU =	96 SF
376 DU – 25 DU =	351 DU
351 DU x 8.0 SF =	2,808 SF
Total Required per LDC:	2,904 SF recyclable collection

DEVIATION CALCULATIONS

First 25 DU =	96 SF
376 DU – 25 DU =	351 DU
351 DU x <u>3.5</u> SF (44%) =	1,228 SF

Total per Deviation: 1,324 SF recyclable collection

Provided: Minimum 225 square feet allows for adequate room for an 8 CY dumpster (Waste Pro dimensions: 80" width X 64" depth X 80" height) with required minimum 2' clearance on all sides.

According to Lee County's 2023 Concurrency Report, historic level-of-service demand for recyclables has consistently been 0.6 pounds/person/day for 2018 through 2022. According to U.S. Census bureau Population Estimates, the number of persons per household for 2019-2023 is 2.54 pph. $371 \text{ DU} \times 2.54 \text{ pph} = 943 \text{ people}$ $943 \times 0.6 \text{ lbs recyclables/person/day} = 565.8 \text{ lbs/day} \times 365 = 206,517 \text{ lbs/year} / 52 = 3,971 \text{ lbs/week}$. According to the following excerpts from the Volume-to-Weight Conversion Factors from U.S. Environmental Protection Agency Office of Resource Conservation and Recovery dated April 2016, commingled recyclables are estimated at 262 pounds per cubic yard. $3,971 \text{ lbs}/262 \text{ lbs per CY} = 15 \text{ CY}$.

The minimum 225 SF recyclable collection area allows for two 8 CY recyclable containers providing 16 CY for container storage area. The development will coordinate with Lee County Solid Waste regarding the frequency of service at the time of development.

Volume-to-Weight Conversion Factors
U.S. Environmental Protection Agency
Office of Resource Conservation and Recovery
April 2016

Standard Volume-to-Weight Conversion Factors

Recyclable Materials	Volume	Estimated Weight (lbs)
Containers (Plastic bottles, Aluminum cans, Steel cans, Glass bottles) and Paper		
Commingled Recyclables	cubic yard	262

This deviation has previously been approved for developments with over 300 dwelling units and has proven successful. The requested deviation is internal to the site and enhances the achievement of the objectives of the planned development and will protect public health, safety and welfare. The provided collection area has been situated off the internal parking lot aisles. The solid waste collection area enclosure meets setbacks, consistent with LDC Section 10-261(e) requirement that enclosures may not be located within or encroach into the required perimeter landscape buffer width. The request is also consistent with the applicable criteria for administrative deviations contained in LDC Section 10-104(b): (1) The alternative proposed to the standards contained herein is based on sound engineering practices (2) The alternative is no less consistent with the health, safety and welfare of abutting landowners and the general public than the standard from which the deviation is being requested; (3) not applicable; (4) The granting of the deviation is not inconsistent with

any specific policy directive of the Board of County Commissioners, any other ordinance or any Lee Plan provision; and (5) not applicable; and (6) not applicable.