Filed pursuant to Rule 424(b)(3) Registration No. 333-274329



Wheeler Real Estate Investment Trust, Inc.

This is Prospectus Supplement No. 21 (this "Prospectus Supplement") to our Prospectus, dated September 29, 2023 (the 'Prospectus"), relating to the issuance from time to time by Wheeler Real Estate Investment Trust, Inc. of up to 101,100,000 shares of our common stock, par value \$0.01 ("Common Stock"). Terms used but not defined in this Prospectus Supplement have the meanings ascribed to them in the Prospectus.

We have attached to this Prospectus Supplement our Current Report on Form 8-K filed on June 3, 2024. The attached information updates and supplements, and should be read together with, the Prospectus, as supplemented from time to time.

Investing in our Common Stock involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading *Risk* Factors" beginning on page 4 of the Prospectus, and under similar headings in any amendments or supplements to the Prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of the Prospectus. Any representation to the contrary is a criminal offense.

The date of this Prospectus Supplement is June 3, 2024.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of report (date of earliest event reported): June 3, 2024

WHEELER REAL ESTATE INVESTMENT TRUST, INC.

(Exact name of registrant as specified in its charter)

Maryland	001-35713	45-2681082
(State or other jurisdiction of incorporation or organization)	(Commission File Number)	(IRS Employer Identification No.)

2529 Virginia Beach Blvd.		
Virginia Beach, VA		

(Address of principal executive offices)

23452

(Zip code)

Registrant's telephone number, including area code: (757) 627-9088

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligations of the registrant under any of the following provisions:

- U Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (\$230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (\$240.12b-2 of this chapter). Emerging growth company \Box

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \Box

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.01 par value per share	WHLR	Nasdaq Capital Market
Series B Convertible Preferred Stock	WHLRP	Nasdaq Capital Market
Series D Cumulative Convertible Preferred Stock	WHLRD	Nasdaq Capital Market
7.00% Subordinated Convertible Notes due 2031	WHLRL	Nasdaq Capital Market

Item 8.01. Other Events.

On June 3, 2024, the Company received a letter from the Listing Qualifications Department of The Nasdaq Stock Market LLC notifying the Company that, based on the closing bid price of the Company's common stock having been at least \$1.00 per share for the required period, the Company has regained compliance with Nasdaq Listing Rule 5550(a)(2) and the minimum bid price deficiency matter previously disclosed by the Company on December 13, 2023 is now closed.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

WHEELER REAL ESTATE INVESTMENT TRUST, INC.

By:

/s/ M. Andrew Franklin Name: M. Andrew Franklin Title: Chief Executive Officer and President

Dated: June 3, 2024