Prospectus Supplement No. 14
(To Prospectus dated September 11, 2026)

Filed pursuant to Rule 424(b)(3)
Registration No. 333-298634

Wheeler Real Estate Investment Trust, Inc.

This is Prospectus Supplement No. 14 (this "Prospectus Supplement") to our Prospectus, dated September 11, 2026 (the "Prospectus"), relating to the offer and sale of up to 710,466 shares of Series B Preferred Stock, without par value (the "Series B Preferred Stock"), of Wheeler Real Estate Investment Trust, Inc. by the selling stockholders identified in the Prospectus. 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 November 19, 2026. The attached information updates and supplements, and should be read together with, the Prospectus, as supplemented from time to time.

Investing in our Series B Preferred Stock involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "*Risk Factors*" beginning on page 6 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 November 19, 2026.

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): **November 18, 2026**

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	**23452**
(Address of principal executive offices)	(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:

☐ 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 ☐

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. ☐

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 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 November 18, 2026, the Company determined that interest on its 7.00% Subordinated Convertible Notes due 2031 (the "Notes") payable on December 31, 2026 to holders of record of the Notes at the close of business at 5:00 p.m., New York City time, on December 1, 2026, shall be in the form of the Company's Series D Cumulative Convertible Preferred Stock.

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: November 19, 2026