

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. ☐

Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

(c) On July 20, 2026, Hanover Bancorp, Inc. (the “Company”), the parent holding company of Hanover Community Bank (the “Bank”), issued a press release announcing the appointment of Kevin O’Connor as President of the Company and the Bank, effective as of July 27, 2026.

Mr. O’Connor, age 63, has served as Long Island Market President at Valley Bank since January 2025. Prior to that time, Mr. O’Connor was Principal at KMO Strategy from November 2023 to January 2025 and served as Chief Executive Officer of Dime Community Bank, the successor organization to Bridgehampton National Bank, from February 2021 to August 2023 following the 2021 merger between the two institutions. Mr. O’Connor served as Chief Executive Officer and President of Bridgehampton National Bank from October 2007 to February 2021.

In connection with his appointment, Mr. O’Connor will receive an annual base salary commensurate with other senior executive officers of the Company and will have the opportunity to receive annual incentive compensation under the Company’s short-term incentive plan and long-term incentive program, subject to the satisfaction of the predetermined performance criteria established by the Compensation Committee of the Company’s Board of Directors. Mr. O’Connor will also receive an initial restricted stock award for 10,000 shares of Company common stock, within 30 days of his hire date, which will vest over a five-year period.

There is no arrangement or understanding between Mr. O’Connor and any other persons pursuant to which Mr. O’Connor was appointed as President of the Company and the Bank. Furthermore, except as disclosed herein, Mr. O’Connor does not have any related party transactions with the Company or the Bank that would require disclosure under Item 404(a) of Regulation S-K.

A copy of the Company’s press release announcing the appointment of Mr. O’Connor as President of the Company and the Bank is included as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits

(d) Exhibits

Exhibit No.	Description
99.1	Press Release dated July 20, 2026
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURE

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.

HANOVER BANCORP, INC.

Date: July 20, 2026

By: /s/ Lance P. Burke

Lance P. Burke

Senior Executive Vice President and
Chief Financial Officer

**FOR IMMEDIATE RELEASE**

Investor and Press Contact:

Michael P. Puorro

Chairman, President & Chief Executive Officer

(516) 548-8500

Hanover Bancorp, Inc. Appoints Kevin O'Connor President

MINEOLA, NY – July 20, 2026 -- Hanover Bancorp, Inc. (NASDAQ: HNVR) ("the Company") and Hanover Community Bank (the "Bank"), announced that they have named Kevin O'Connor to the position of President of the Company and the Bank effective July 27, 2026. In this role, Mr. O'Connor will fuel expansion and regional growth throughout the Long Island market by strengthening client relationships and unlocking new business opportunities and strategic initiatives in this underserved market.

"Kevin is a highly respected banking leader whose deep market knowledge, relationship-driven approach and longstanding commitment to Long Island will be an outstanding addition to Hanover Bank," said Michael P. Puorro, Chairman, President and Chief Executive Officer of Hanover Bancorp, Inc. "We look forward to welcoming Kevin to the team and partnering with him as we continue to expand our presence and deliver exceptional service to clients across the region. Kevin's reputation and credibility within the Wall Street community will be complementary as we leverage our experience in an effort to successfully execute our growth strategies and maximize shareholder value."



Mr. O'Connor brings more than 35 years of banking experience to Hanover Bank. He most recently served as Long Island Market President at Valley Bank. Prior to Valley, he served as Chief Executive Officer of Dime Community Bank, the successor organization to Bridgehampton National Bank following the 2021 merger between the two institutions. Mr. O'Connor served as Chief Executive Officer and President of Bridgehampton National Bank beginning in 2007, leading the Long Island-based institution through a period of significant organic growth and financial success. He has also held senior executive roles at North Fork Bank and KPMG and was recognized by Long Island Business News as one of Long Island's top CEOs.

Mr. O'Connor currently serves on the Board of Directors and executive committee of HIA-LI and is an executive committee member of the Board of Trustees for Suffolk County Community College. He is Chair of the Board of Directors of the Long Island chapter of Habitat for Humanity and serves on the boards of United Veterans Beacon House and Pursuit Lending, a non-profit community-focused lender. He is also the former Long Island and New York State chair of the New York Bankers Association.

"I am excited to join Hanover Bank and work with Mike and the team to continue its growth across Long Island," said Mr. O'Connor. "Hanover has built a strong reputation for relationship banking, local decision-making and client-focused service, and I look forward to building on our commitment to support businesses, families and communities throughout the region."

About Hanover Community Bank and Hanover Bancorp, Inc.

Hanover Bancorp, Inc. (NASDAQ: HNVR), is the bank holding company for Hanover Community Bank, a community commercial bank focusing on highly personalized and efficient services and products responsive to client needs. Management and the Board of Directors are comprised of a select group of successful local businesspeople who are committed to the success of the Bank by knowing and understanding the metro-New York area's financial needs and opportunities. Backed by state-of-the-art technology, Hanover offers a full range of financial services.

Hanover offers a complete suite of consumer, commercial, and municipal banking products and services, including multifamily and commercial mortgages, residential loans, business loans and lines of credit. Hanover also offers its customers access to 24-hour ATM service with no fees attached, free checking with interest, telephone banking, advanced technologies in mobile and internet banking for our consumer and business customers, safe deposit boxes and much more. The Company's corporate administrative office is located in Mineola, New York where it also operates a full-service branch office along with additional branch locations in Garden City Park, Hauppauge, Port Jefferson, Forest Hills, Flushing, Sunset Park, Rockefeller Center and Bowery, New York, and Freehold, New Jersey.

Hanover Community Bank is a member of the Federal Deposit Insurance Corporation and is an Equal Housing/Equal Opportunity Lender. For further information, call (516) 548-8500 or visit the Bank's website at www.hanoverbank.com.

Forward-Looking Statements

This release may contain certain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 and may be identified by the use of such words as "may," "believe," "expect," "anticipate," "should," "plan," "estimate," "predict," "continue," "intend," and "potential" or the negative of these terms or other comparable terminology. Examples of forward-looking statements include, but are not limited to, estimates with respect to the financial condition, results of operations and business of Hanover Bancorp, Inc. Any or all of the forward-looking statements in this release and in any other public statements made by Hanover Bancorp, Inc. may turn out to be incorrect as a result of inaccurate assumptions that Hanover Bancorp, Inc. might make or by known or unknown risks and uncertainties. There are a number of important factors that could cause future results to differ materially from historical performance and these forward-looking statements. Factors that might cause such a difference include, but are not limited to: (1) the impact of a pandemic or other health crises and the government's response to such pandemic or crises on our operations as well as those of our customers and on the economy generally and in our market area specifically; (2) competitive pressures among depository institutions may increase significantly; (3) changes in the interest rate environment may reduce interest margins; (4) loan origination and sale volumes, charge-offs and credit loss provisions may vary substantially from period to period; (5) general economic conditions may be less favorable than expected; (6) political developments, wars or other hostilities may disrupt or increase volatility in securities markets or other economic conditions; (7) legislative or regulatory changes or actions may adversely affect the businesses in which Hanover Bancorp, Inc. is engaged; (8) the impacts of tariffs, sanctions and other trade policies of the United States and its global trading counterparts; (9) changing political conditions and the outcome of federal, state, and local elections and the resulting economic and other impact on the areas in which

we conduct business; (10) changes and trends in the securities markets may adversely impact Hanover Bancorp, Inc.; (11) a delayed or incomplete resolution of regulatory issues could adversely impact our planning; (12) difficulties in integrating any businesses that we may acquire, which may increase our expenses and delay the achievement of any benefits that we may expect from such acquisitions; (13) our ability to successfully execute our growth strategies; (14) our ability to hire and retain key personnel; (15) the impact of reputation risk created by the developments discussed above on such matters as business generation and retention, funding and liquidity could be significant; and (16) the outcome of any future regulatory and legal investigations and proceedings may not be anticipated. Further information on other factors that could affect the financial results of Hanover Bancorp, Inc. are included in our Annual Report on Form 10-K under Item 1A - Risk Factors, as updated by our subsequent filings with the Securities and Exchange Commission. Consequently, no forward-looking statement can be guaranteed. Hanover Bancorp, Inc. does not intend to update any of the forward-looking statements after the date of this release or to conform these statements to actual events.