

☐ Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

☒ Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan for the purchase or sale of equity securities of the issuer that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10.

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>GRAE SETH</u> (Last) (First) (Middle) <u>C/O LIGHTBRIDGE CORPORATION</u> <u>11710 PLAZA AMERICA DRIVE, SUITE 2000</u> (Street) <u>RESTON</u> <u>VA</u> <u>20190</u> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>LIGHTBRIDGE Corp [LTBR]</u> 3. Date of Earliest Transaction (Month/Day/Year) <u>10/10/2025</u> 4. If Amendment, Date of Original Filed (Month/Day/Year)	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>President and CEO</u> 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person
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Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	10/10/2025		M		7,616 ⁽¹⁾	A	\$10.8	760,932	D	
Common Stock	10/10/2025		S		7,616 ⁽¹⁾	D	\$25.84 ⁽²⁾	753,316	D	

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Employee Stock Option (right to buy)	\$10.8	10/10/2025		M			7,616 ⁽¹⁾	(3)	08/06/2028	Common Stock	7,616	\$0	20,600	D	
Employee Stock Option (right to buy)	\$12.6							(3)	10/26/2027	Common Stock	40,233		40,233	D	
Employee Stock Option (right to buy)	\$18.48							(3)	11/09/2026	Common Stock	18,199		18,199	D	
Employee Stock Option (right to buy)	\$55.2							(3)	11/20/2025	Common Stock	17,430		17,430	D	

Explanation of Responses:

1. The reported exercise of 7,616 employee stock options and sale of 7,616 shares of common stock were effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on September 12, 2024.
2. The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$25.80 to \$25.92, inclusive. The reporting person undertakes to provide to Lightbridge Corporation, any security holder of Lightbridge Corporation, or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the ranges set forth in this footnote.
3. This option is fully vested as of the date of this report.

/s/ Seth Grae

10/10/2025

** Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.