As filed with the Securities and Exchange Commission on July 24, 2020.

Registration No. 333-239644

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 2
to

FORM S-1

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

VERTEX, INC.

(Exact name of registrant as specified in its charter)

Delaware	**7372**	**23-2081753**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

2301 Renaissance Blvd
King of Prussia, Pennsylvania 19406
(800) 355-3500
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

David DeStefano
President, Chief Executive Officer and Chairperson
Vertex, Inc.
2301 Renaissance Blvd
King of Prussia, Pennsylvania 19406
(800) 355-3500
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Marc D. Jaffe **Joel H. Trotter** **Latham & Watkins LLP** **555 Eleventh Street, NW** **Washington, DC 20004** **(202) 637-2200**	**Bryan T. R. Rowland** **Vertex, Inc.** **2301 Renaissance Blvd** **King of Prussia, PA 19406** **(800) 355-3500**	**Gregory A. Fernicola** **Ryan J. Dzierniejko** **Skadden, Arps, Slate, Meagher & Flom LLP** **One Manhattan West** **New York, NY 10001** **(212) 735-3000**

Approximate date of commencement of proposed sale to public:
As soon as practicable after this Registration Statement is declared effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. o

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer o	Accelerated filer o	Non-accelerated filer ☒	Smaller reporting company o 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 to Section 7(a)(2)(B) of the Securities Act. o

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	**Amount to be Registered[(1)]**	**Proposed Maximum Offering Price per Share[(1)]**	**Proposed Maximum Aggregate Offering Price[(1)(2)]**	**Amount of Registration Fee[(3)]**
Class A common stock, $0.001 par value per share	24,322,500	$ 16.00	$ 389,160,000	$ 50,512.97

(1) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(a) under the Securities Act of 1933, as amended (the "Securities Act").

(2) Includes the additional shares that the underwriters have the option to purchase from the Registrant.

(3) Previously paid.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act, or until the registration statement shall become effective on such date as the Securities and Exchange Commission (the "SEC"), acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

Vertex, Inc. is filing this Amendment No. 2 to the Registration Statement on Form S-1 (File No. 333-239644) solely to file Exhibits 1.1, 4.1 and 4.2 and to update previously filed Exhibits 3.1 and 10.15. Accordingly, this amendment consists only of the facing page, this explanatory note, Part II of the Registration Statement, the signature pages to the Registration Statement and the filed exhibits. No changes are being made to the preliminary prospectus or Items 14, 15 or 17 of Part II to the Registration Statement. Accordingly, the preliminary prospectus has been omitted from this filing.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the costs and expenses, other than the underwriting discounts and commissions, payable by the registrant in connection with the offering and sale of the Class A common stock being registered. All amounts shown are estimates except for the SEC registration fee, the Financial Industry Regulatory Authority, Inc. ("FINRA") filing fee and the exchange listing fee.

	Amount Paid or to Be Paid
SEC registration fee	$ 50,513
FINRA filing fee	58,874
Exchange listing fee	25,000
Printing and engraving expenses	250,000
Legal fees and expenses	3,000,000
Accounting fees and expenses	1,700,000
Transfer agent and registrar fees and expenses	450,000
Miscellaneous expenses	810,613
Total	$ 6,345,000

Item 14. Indemnification of Directors and Officers

Section 102 of the General Corporation Law of the State of Delaware permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his or her duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. We expect to adopt an amended and restated certificate of incorporation, or Amended Charter, which will become effective upon the consummation of this offering, and which will provide that none of our directors shall be personally liable to us or to our stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except to the extent that the General Corporation Law of the State of Delaware prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the General Corporation Law of the State of Delaware provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust or other enterprise in related capacities, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he or she was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding by reason of such position, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and

reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Upon consummation of this offering, our Amended Charter and our amended and restated bylaws, or Amended Bylaws, will provide indemnification for our directors and officers to the fullest extent permitted by the General Corporation Law of the State of Delaware, subject to certain limited exceptions. We will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than an action by or in the right of us) by reason of the fact that he or she is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. Our Amended Charter and Amended Bylaws will provide that we will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of us to procure a judgment in our favor by reason of the fact that the Indemnitee is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to us, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by us against all expenses (including attorneys' fees) actually and reasonably incurred in connection therewith. Expenses must be advanced to an Indemnitee under certain circumstances.

We have entered into indemnification agreements with each of our directors. Prior to the consummation of this offering, we entered into separate indemnification agreements with each of our executive officers. Each indemnification agreement provides, or will provide, among other things, for indemnification to the fullest extent permitted by law and our Amended Charter and Amended Bylaws against any and all expenses, judgments, fines, penalties and amounts paid in settlement of any claim. The indemnification agreements will provide for the advancement or payment of all expenses to the indemnitee and for the reimbursement to us if it is found that such indemnitee is not entitled to such indemnification under applicable law and our Amended Charter and Amended Bylaws.

We maintain a general liability insurance policy that covers certain liabilities of directors and officers of our corporation arising out of claims based on acts or omissions in their capacities as directors or officers.

In any underwriting agreement we enter into in connection with the sale of common stock being registered hereby, the underwriters will agree to indemnify, under certain conditions, us, our directors, our officers and persons who control us within the meaning of the Securities Act of 1933, as amended (the "Securities Act") against certain liabilities.

Item 15. Recent Sales of Unregistered Securities

The following sets forth information regarding all unregistered securities sold by us since January 1, 2017:

2007 Plan-Related Issuances

From January 1, 2017 through February 5, 2020, we granted to our directors, officers and employees 1,950,331 SARs as the long term equity incentive component of our compensation program under the 2007 Plan. The SARs generally entitle their holder, upon exercise, to receive from us an amount in cash equal to the appreciation of the shares subject to the award between the grant date and the exercise date. In connection with this offering, holders of outstanding SARs were offered the opportunity to amend outstanding SARs, whether vested or unvested, so that they become options to purchase shares of our Class A common stock. These options will cover an equal number of shares as the amended SARs and have an exercise price per share equal to the base price of an amended SAR, subject to any stock split that occurs in connection with this offering. The SARs granted between January 1, 2017 and February 5, 2020 have exercise prices ranging from $8.00 to $14.10 under our 2007 Plan prior to giving effect to the stock split to be effectuated in connection with this offering.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions, or any public offering. Unless otherwise stated, the sales of the above securities were deemed to be exempt from registration under the Securities Act in reliance on Rule 701 promulgated under Section 3(b) of the Securities Act as transactions by an issuer pursuant to benefit plans and contracts relating to compensation as provided under Rule 701. All recipients had adequate access, through their relationships with us, to information about us. The issuance of these securities were made without any general solicitation or advertising.

Item 16. Exhibits and Financial Statement Schedules

(a) Exhibits

A list of exhibits required to be filed under this item is set forth on the Exhibit Index of this registration statement and is incorporated in this Item 16(a) by reference.

(b) Financial Statement Schedules.

Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes thereto.

Item 17. Undertakings

The undersigned Registrant hereby undertakes to provide to the underwriter at the closing specified in the underwriting agreements certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the

question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

INDEX TO EXHIBITS

The following exhibits are filed as part of this registration statement.

Exhibit No.	
1.1	Form of Underwriting Agreement.
3.1	Form of Amended and Restated Certificate of Incorporation of Vertex, Inc.
3.2**	Form of Amended and Restated Bylaws of Vertex, Inc.
4.1	Specimen Stock Certificate evidencing the shares of Class A common stock.
4.2	Form of Third Amended and Restated Stockholders' Agreement.
5.1**	Opinion of Latham & Watkins LLP.
10.1**	Credit Agreement by and among Vertex, Inc., the guarantors party thereto, PNC Bank, National Association, and the lenders party thereto, dated as of March 31, 2020.
10.2**	First Amendment to Loan Documents, by and among Vertex, Inc., the guarantors party thereto, the lenders party thereto and PNC Bank, National Association, dated as of April 3, 2020.
10.3#**	Form of Indemnification Agreement between Vertex, Inc. and each of its Executive Officers and Directors.
10.4**	2007 Stock Appreciation Rights Plan
10.5#**	Form of Executive Employment Agreement, as amended and restated, by and between Vertex, Inc. and Lisa Butler.
10.6#**	Executive Employment Agreement, as amended and restated, by and between Vertex, Inc. and David DeStefano.
10.7#**	Form of Executive Employment Agreement, as amended and restated, by and between Vertex, Inc. and Bryan Rowland.
10.8#**	Form of Executive Employment Agreement, as amended and restated, by and between Vertex, Inc. and John Schwab.
10.9**	Form of S Corporation Termination and Tax Sharing Agreement.
10.10#**	Vertex Inc. & Subsidiaries 2010 Long-Term Rewards Plan
10.11#**	Vertex Inc. & Subsidiaries 2018 Long-Term Rewards Plan
10.12#**	Form of Stock Option Amendment Agreement
10.13#**	Form of Option Award Agreement under 2020 Incentive Award Plan for Amended Options
10.14#**	Form of Option Award Agreement under 2020 Incentive Award Plan for Amended Stock Appreciation Rights
10.15#	Vertex, Inc. 2020 Incentive Award Plan
10.16#**	Form of Option Award Agreement under 2020 Incentive Award Plan
10.17#**	Form of Restricted Stock Award Agreement under 2020 Incentive Award Plan
10.18#**	Form of Restricted Stock Unit Award Agreement under 2020 Incentive Award Plan

Exhibit No.	
10.19#**	Form of Stock Award Agreement under 2020 Incentive Award Plan
10.20#**	Form of Option Transfer Agreement
10.21#**	Vertex, Inc. 2020 Employee Stock Purchase Plan
10.22#**	Vertex, Inc. Non-Employee Director Compensation Program
16.1**	Letter of Baker Tilly Virchow Krause, LLP to the Securities and Exchange Commission.
21.1**	List of Subsidiaries.
23.1**	Consent of Latham & Watkins LLP (included in Exhibit 5.1).
23.2**	Consent of Crowe LLP.
24.1**	Powers of Attorney (included on the signature pages).

** Previously filed.

# Indicates a management contract or compensatory plan.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of King of Prussia, state of Pennsylvania, on July 24, 2020.

Vertex, Inc.

By: /s/ DAVID DESTEFANO

David DeStefano
President, Chief Executive Officer and Chairperson

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ DAVID DESTEFANO David DeStefano	President, Chief Executive Officer and Chairperson (Principal Executive Officer)	July 24, 2020
/s/ JOHN SCHWAB John Schwab	Chief Financial Officer (Principal Financial Officer)	July 24, 2020
** Lisa Butler	Chief Accounting Officer (Principal Accounting Officer)	July 24, 2020
** Eric Andersen	Director	July 24, 2020
** Terrence Kyle	Director	July 24, 2020
** Kevin Robert	Director	July 24, 2020
** J. Richard Stamm	Director	July 24, 2020

Signature	Title	Date
**		
Amanda Westphal Radcliffe	Director	July 24, 2020
**		
Stefanie Westphal Thompson	Director	July 24, 2020
**		
Jeffrey Westphal	Director	July 24, 2020

**By: /s/ DAVID DESTEFANO

David DeStefano
Attorney-in-Fact

QuickLinks

Exhibit 1.1

Vertex, Inc.

Class A Common Stock, par value $0.001 per share

Underwriting Agreement

[·], 2020

Goldman Sachs & Co. LLC
Morgan Stanley & Co. LLC
As representatives (the "Representatives") of the several Underwriters named in Schedule I hereto,

c/o Goldman Sachs & Co. LLC,
200 West Street,
New York, New York 10282-2198.

c/o Morgan Stanley & Co. LLC,
1585 Broadway,
New York, New York 10036.

Ladies and Gentlemen:

Vertex, Inc., a Delaware corporation (the "Company"), proposes, subject to the terms and conditions stated in this agreement (this "Agreement"), to issue and sell to the Underwriters named in Schedule I hereto (the "Underwriters"), for whom you are acting as Representatives, an aggregate of [·] shares (the "Firm Shares") of Class A common stock, par value $0.001 per share (the "Class A Stock" and, together with the Company's Class B common stock, par value $0.001 per share, collectively, the "Stock") of the Company, and certain stockholders of the Company named in Schedule II hereto (the "Selling Stockholders"), together with the Company, propose, subject to the terms and conditions stated in this this Agreement, to sell to the several Underwriters up to an additional [·] shares of Class A Stock (the "Optional Shares"), at the election of the Underwriters. Optional Shares shall be purchased first from the Selling Stockholders, pro rata, in the amount up to those set forth on Schedule II hereto, prior to purchasing any Optional Shares from the Company. The Firm Shares and the Optional Shares that the Underwriters elect to purchase pursuant to Section 3 hereof being collectively called the "Shares").

The Company hereby acknowledges that, in connection with the offering of the Shares, Goldman Sachs & Co. LLC (the "Directed Share Underwriter") has agreed to reserve up to [·] Firm Shares to be purchased by it under this Agreement for sale at the initial public offering price at the direction of the Company to certain officers, employees, business associates and related persons of the Company (collectively, "Participants"). The Shares to be sold by the Directed Share Underwriter pursuant to the Directed Share Program are hereinafter called the "Directed Shares." Any Directed Shares not confirmed for purchase by the deadline established therefor by the Directed Share Underwriter in consultation with the Company will be offered to the public by the Underwriters as set forth in the Prospectus (as defined below). The number of Firm Shares available for sale to the general public will be reduced to the extent that Participants purchase Reserved Shares. It is

understood that any number of those so designated to participate in the Directed Share Program may decline to do so.

1. The Company represents and warrants to, and agrees with, each of the Underwriters that:

(a) A registration statement on Form S-1 (File No. 333-239644) (the "Initial Registration Statement") in respect of the Shares has been filed with the Securities and Exchange Commission (the "Commission"); the Initial Registration Statement and any post-effective amendment thereto, each in the form heretofore delivered to you, have been declared effective by the Commission in such form; other than a registration statement, if any, increasing the size of the offering (a "Rule 462(b) Registration Statement"), filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended (the "Act"), which became effective upon filing, no other document with respect to the Initial Registration Statement has been filed with the Commission; and no stop order suspending the effectiveness of the Initial Registration Statement, any post-effective amendment thereto or the Rule 462(b) Registration Statement, if any, has been issued and no proceeding for that purpose has been initiated or, to the knowledge of the Company, threatened by the Commission (any preliminary prospectus included in the Initial Registration Statement or filed with the Commission pursuant to Rule 424(a) of the rules and regulations of the Commission under the Act is hereinafter called a "Preliminary Prospectus"; the various parts of the Initial Registration Statement and the Rule 462(b) Registration Statement, if any, including all exhibits thereto and including the information contained in the form of final prospectus filed with the Commission pursuant to Rule 424(b) under the Act in accordance with Section 6(a) hereof and deemed by virtue of Rule 430A under the Act to be part of the Initial Registration Statement at the time it was declared effective, each as amended at the time such part of the Initial Registration Statement became effective or such part of the Rule 462(b) Registration Statement, if any, became or hereafter becomes effective, are hereinafter collectively called the "Registration Statement"; the Preliminary Prospectus relating to the Shares that was included in the Registration Statement immediately prior to the Applicable Time (as defined in Section 1(c) hereof) is hereinafter called the "Pricing Prospectus"; and such final prospectus, in the form first filed pursuant to Rule 424(b) under the Act, is hereinafter called the "Prospectus"; any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the Act or Rule 163B under the Act is hereinafter called a "Testing-the-Waters Communication"; and any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Act is hereinafter called a "Written Testing-the-Waters Communication"; and any "issuer free writing prospectus" as defined in Rule 433 under the Act relating to the Shares is hereinafter called an "Issuer Free Writing Prospectus");

(b) (i) No order preventing or suspending the use of any Preliminary Prospectus or any Issuer Free Writing Prospectus has been issued by the Commission, and (ii) each Preliminary Prospectus, at the time of filing thereof, conformed in all material respects to the requirements of the Act and the rules and regulations of the Commission thereunder, and did not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; *provided*, *however*, that this representation and warranty shall not apply to any statements or omissions made in reliance upon and in conformity with the Underwriter Information (as defined in Section 10(b) of this Agreement);

(c) For the purposes of this Agreement, the "Applicable Time" is [·] [a.m.] [p.m.] (Eastern time) on the date of this Agreement. The Pricing Prospectus, as supplemented by the information listed on Schedule III(b) hereto, taken together (collectively, the "Pricing Disclosure Package"), as of the Applicable Time, did not, and as of each Time of Delivery (as defined in Section 5(a) of this Agreement) will not, include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; and each Issuer Free Writing Prospectus and each Testing-the-Waters Communication does not conflict with the information contained in the Registration Statement, the Pricing Prospectus or the Prospectus and each Issuer Free Writing Prospectus and each Written Testing-the-Waters Communication, as supplemented by and taken together with the Pricing Disclosure Package, as of the Applicable Time, did not, and as of each Time of Delivery will not, include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that this representation and warranty shall not apply to statements or omissions made in reliance upon and in conformity with the Underwriter Information;

(d) The Registration Statement conforms, and the Prospectus and any further amendments or supplements to the Registration Statement and the Prospectus will conform, in all material respects to the requirements of the Act and the rules and regulations of the Commission thereunder and do not and will not, as of the applicable effective date as to each part of the Registration Statement, as of the applicable filing date as to the Prospectus and any amendment or supplement thereto, and as of each Time of Delivery, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; provided, however, that this representation and warranty shall not apply to any statements or omissions made in reliance upon and in conformity with the Underwriter Information;

(e) Neither the Company nor any of its subsidiaries has, since the date of the latest audited financial statements included in the Pricing Prospectus, (i) sustained any material loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree or (ii) entered into any transaction or agreement (whether or not in the ordinary course of business) that is material to the Company and its subsidiaries taken as a whole or incurred any liability or obligation, direct or contingent, that is material to the Company and its subsidiaries taken as a whole, in each case otherwise than as set forth or contemplated in the Pricing Prospectus; and, since the respective dates as of which information is given in the Registration Statement and the Pricing Prospectus, there has not been (x) any change in the capital stock (other than as a result of (i) the exercise of stock options or the award, if any, of restricted stock units or restricted stock as described in the Pricing Prospectus and the Prospectus and in each case pursuant to the Company's equity plans that are described in the Pricing Prospectus and the Prospectus, (ii) the amendment of stock appreciation rights into stock options as described in the Pricing Prospectus and the Prospectus or (iii) the issuance, if any, of stock upon conversion of Company securities as described in the Pricing Prospectus and the Prospectus) or long-term debt of the Company or any of its subsidiaries or (y) any Material Adverse Effect (as defined below); as used in this Agreement, "Material Adverse Effect" shall mean any material adverse change or effect, or any development involving a prospective material adverse change or effect, in or affecting (i) the business,

properties, general affairs, management, financial position, stockholders' equity or results of operations of the Company and its subsidiaries, taken as a whole, except as set forth or contemplated in the Pricing Prospectus, or (ii) the ability of the Company to perform its obligations under this Agreement, including the issuance and sale of the Shares, or to consummate the transactions contemplated in the Pricing Prospectus and the Prospectus ;

(f) The Company and its subsidiaries do not own any real property. Except as would not reasonably be expected to have a Material Adverse Effect, the Company and its subsidiaries have good and marketable title to all personal property (other than with respect to Intellectual Property (as defined below), title to which is addressed exclusively in Section 1(y) below) owned by them, in each case free and clear of all liens, encumbrances and defects except such as are described in the Pricing Prospectus or such as do not affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company and its subsidiaries; and any real property and buildings held under lease by the Company and its subsidiaries are held by them under valid, subsisting and enforceable leases (subject to the effects of (i) bankruptcy, insolvency, fraudulent conveyance, fraudulent transfer, reorganization, moratorium or other similar laws relating to or affecting the rights or remedies of creditors generally; (ii) the application of general principles of equity; and (iii) applicable law and public policy with respect to rights to indemnity and contribution) with such exceptions as are not material and do not interfere with the use made and proposed to be made of such property and buildings by the Company and its subsidiaries;

(g) Each of the Company and each of its subsidiaries has been (i) duly organized and is validly existing and in good standing under the laws of its jurisdiction of organization, with power and authority (corporate and other) to own its properties and conduct its business as described in the Pricing Prospectus, and (ii) duly qualified as a foreign corporation for the transaction of business and is in good standing under the laws of each other jurisdiction in which it owns or leases properties or conducts any business so as to require such qualification, except, in the case of this clause (ii), where the failure to be so qualified or in good standing would not, individually or in the aggregate, have a Material Adverse Effect, and each subsidiary of the Company required to be identified in the Registration Statement is set forth on Exhibit 21.1 thereto;

(h) The Company has an authorized capitalization as set forth in the Pricing Prospectus and all of the issued shares of capital stock of the Company, including the Shares to be sold by the Selling Stockholders, have been duly and validly authorized and issued and are fully paid and non-assessable and conform to the description of the Stock contained in the Pricing Disclosure Package and Prospectus; and all of the issued shares of capital stock and equity interests of each subsidiary of the Company have been duly and validly authorized and issued, are fully paid and non-assessable and (except, in the case of any foreign subsidiary, for directors' qualifying shares) are owned directly or indirectly by the Company, free and clear of all liens, encumbrances, equities or claims, except for such liens or encumbrances described in the Pricing Prospectus and the Prospectus;

(i) The Shares to be issued and sold by the Company to the Underwriters hereunder have been duly and validly authorized and, when issued and delivered against payment therefor as provided herein, will be duly and validly issued and fully paid and non-assessable and will conform to the description of the Stock contained in the Pricing Disclosure Package and the

Prospectus; and the issuance of the Shares is not subject to any preemptive or similar rights, in each case other than rights which have been complied with or waived;

(j) The issue and sale of the Shares and the compliance by the Company with this Agreement and the consummation by the Company of the transactions contemplated in this Agreement and the Pricing Prospectus will not conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, (i) any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or any of its subsidiaries is a party or by which the Company or any of its subsidiaries is bound or to which any of the property or assets of the Company or any of its subsidiaries is subject, except, in the case of this clause (i) for such defaults, breaches, or violations that would not, individually or in the aggregate, have a Material Adverse Effect, (ii) the certificate of incorporation or by-laws (or other applicable organizational document) of the Company or any of its subsidiaries, or (iii) any statute or any judgment, order, rule or regulation of any court or governmental agency or body having jurisdiction over the Company or any of its subsidiaries or any of their properties except, in the case of this clause (iii) for such defaults, breaches, or violations that would not, individually or in the aggregate, have a Material Adverse Effect; and no consent, approval, authorization, order, registration or qualification of or with any such court or governmental agency or body is required for the issue and sale of the Shares or the consummation by the Company of the transactions contemplated by this Agreement, except such as have been obtained under the Act, the registration of the Class A Stock under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the approval by the Financial Industry Regulatory Authority ("FINRA") of the underwriting terms and arrangements and such consents, approvals, authorizations, registrations or qualifications as may be required under state securities or Blue Sky laws in connection with the purchase and distribution of the Shares by the Underwriters;

(k) Neither the Company nor any of its subsidiaries is (i) in violation of its certificate of incorporation or by-laws (or other applicable organizational document), (ii) in violation of any statute or any judgment, order, rule or regulation of any court or governmental agency or body having jurisdiction over the Company or any of its subsidiaries or any of their properties, or (iii) in default in the performance or observance of any obligation, agreement, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement, lease or other agreement or instrument to which it is a party or by which it or any of its properties may be bound, except, in the case of the foregoing clauses (ii) and (iii), for such defaults as would not, individually or in the aggregate, have a Material Adverse Effect;

(l) The statements set forth in the Pricing Prospectus and Prospectus under the caption "Description of Capital Stock", insofar as they purport to constitute a summary of the terms of the Stock, and under the caption "Material U.S. Federal Income Tax Consequences to Non-U.S. Holders", insofar as they purport to constitute a summary of U.S. federal income tax laws and regulations with respect thereto, are accurate in all material respects;

(m) Other than as set forth in the Pricing Prospectus, there are no legal or governmental proceedings pending to which the Company or any of its subsidiaries or, to the Company's knowledge, any officer or director of the Company, is a party or of which any property of the Company or any of its subsidiaries or, to the Company's knowledge, any officer or director of the Company, is the subject which, if determined adversely to the Company or any of its subsidiaries (or such officer or director), would individually or in the aggregate

have a Material Adverse Effect; and, to the Company's knowledge, no such proceedings are threatened or contemplated by governmental authorities or others;

(n) The Company is not and, after giving effect to the offering and sale of the Shares and the application of the proceeds thereof, will not be an "investment company", as such term is defined in the Investment Company Act of 1940, as amended (the "Investment Company Act");

(o) At the time of filing the Initial Registration Statement and any post-effective amendment thereto, at the earliest time thereafter that the Company or any offering participant made a bona fide offer (within the meaning of Rule 164(h)(2) under the Act) of the Shares, and at the date hereof, the Company was not and is not an "ineligible issuer," as defined under Rule 405 under the Act;

(p) Crowe LLP, who has certified certain financial statements of the Company and its subsidiaries, is an independent registered public accounting firm as required by the Act and the rules and regulations of the Commission thereunder;

(q) The Company maintains a system of internal control over financial reporting (as such term is defined in Rule 13a-15(f) under the Exchange Act) that (i) complies with the requirements of the Exchange Act applicable to the Company, (ii) has been designed by the Company's principal executive officer and principal financial officer, or under their supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles applied in the United States ("GAAP") and (iii) is sufficient to provide reasonable assurance that (A) transactions are executed in accordance with management's general or specific authorization, (B) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain accountability for assets, (C) access to assets is permitted only in accordance with management's general or specific authorization and (D) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences; and except as disclosed in the Pricing Prospectus, the Company's internal control over financial reporting is effective and the Company is not aware of any material weaknesses in its internal control over financial reporting;

(r) Since the date of the latest audited financial statements included in the Pricing Prospectus, there has been no change in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting;

(s) The Company maintains disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Exchange Act) that comply with the requirements of the Exchange Act applicable to the Company; such disclosure controls and procedures have been designed to provide reasonable assurance that material information relating to the Company and its subsidiaries is made known to the Company's principal executive officer and principal financial officer by others within those entities; and such disclosure controls and procedures are effective;

(t) This Agreement has been duly authorized, executed and delivered by the Company;

(u) None of the Company or any of its subsidiaries nor any director or officer of the Company or any of its subsidiaries nor, to the knowledge of the Company, any agent, employee,

affiliate, representative or other person associated with or acting on behalf of the Company or any of its subsidiaries has (i) made, offered, promised or authorized any unlawful contribution, gift, entertainment or other unlawful expense (or taken any act in furtherance thereof) directly or indirectly, to any government official (including any officer or employee of a government or government-owned or controlled entity or of a public international organization, or any person acting in an official capacity for or on behalf of any of the foregoing, or any political party or party official or candidate for political office) in order to influence official action, or to any person in violation of any applicable anti-corruption laws; (ii) made, offered, promised or authorized any direct or indirect unlawful payment; (iii) will directly or indirectly, use the proceeds of the offering of the Shares in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any person in violation of any applicable anti-corruption laws; or (iv) violated or is in violation of any provision of the Foreign Corrupt Practices Act of 1977, the Bribery Act 2010 of the United Kingdom or any other applicable anti-bribery or anti-corruption law and have instituted and maintained and will continue to maintain policies and procedures reasonably designed to promote and achieve compliance with all applicable anti-bribery and anti-corruption laws;

(v) The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with (i) all the applicable financial recordkeeping and reporting requirements of applicable anti-money laundering laws, including, but not limited to, the Bank Secrecy Act of 1970, as amended by the USA PATRIOT ACT of 2001, and the rules and regulations promulgated thereunder, and (ii) the applicable anti-money laundering laws of the various jurisdictions in which the Company and its subsidiaries conduct business and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "Money Laundering Laws") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its subsidiaries with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened;

(w) None of the Company or any of its subsidiaries nor any director or officer of the Company or any of its subsidiaries nor, to the knowledge of the Company, any agent, employee, representative or affiliate of the Company or any of its subsidiaries is currently the subject or the target of any sanctions administered or enforced by the U.S. Government, including, without limitation, the Office of Foreign Assets Control of the U.S. Department of the Treasury ("OFAC"), or the U.S. Department of State and including, without limitation, the designation as a "specially designated national" or "blocked person," the European Union, Her Majesty's Treasury, the United Nations Security Council, or other relevant sanctions authority (collectively, "Sanctions"), nor is the Company or any of its subsidiaries located, organized or resident in a country or territory that is the subject or target of Sanctions (including, without limitation, Crimea, Cuba, Iran, North Korea and Syria), and the Company will not directly or indirectly use the proceeds of the offering of the Shares hereunder, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity (i) to fund or facilitate any activities of or business with any person, or in any country or territory, that, at the time of such funding, is the subject or the target of Sanctions or (ii) in any other manner that will result in a violation by any person (including any person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions, and the Company and each of its subsidiaries have not knowingly engaged in, are not now knowingly engaged in, and will not engage in,

any dealings or transactions with any Person, or in any country or territory, that at the time of the dealing or transaction is or was the subject of Sanctions;

(x) The financial statements included in the Registration Statement, the Pricing Prospectus and the Prospectus, together with the related schedules and notes, present fairly the financial position of the Company and its subsidiaries at the dates indicated and the statement of operations, stockholders' equity and cash flows of the Company and its subsidiaries for the periods specified; said financial statements have been prepared in conformity with GAAP applied on a consistent basis throughout the periods involved. The supporting schedules, if any, present fairly in accordance with GAAP the information required to be stated therein. The selected financial data and the summary financial information included in the Registration Statement, the Pricing Prospectus and the Prospectus present fairly in all material respects the information shown therein and have been compiled on a basis consistent with that of the audited financial statements included therein. Except as included therein, no historical or pro forma financial statements or supporting schedules are required to be included in the Registration Statement, the Pricing Prospectus or the Prospectus under the Act or the rules and regulations promulgated thereunder. All disclosures contained in the Registration Statement, the Pricing Prospectus and the Prospectus regarding "non-GAAP financial measures" (as such term is defined by the rules and regulations of the Commission) comply in all material respects with Regulation G of the Exchange Act and Item 10 of Regulation S-K of the Act, to the extent applicable;

(y) Except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse effect, (i) the Company and its subsidiaries own or have the right to use all patents, patent applications, trademarks, service marks, trade names, trademark registrations, service mark registrations, domain names and other source indicators, copyrights and copyrightable works, know-how, trade secrets, systems, procedures, proprietary or confidential information and all other worldwide intellectual property, industrial property and proprietary rights (collectively, "Intellectual Property") used in the conduct of their respective businesses; (ii) the Company's and its subsidiaries' conduct of their respective businesses does not infringe, misappropriate or otherwise violate any Intellectual Property of any person; (iii) in the last three (3) years, neither the Company nor any of its subsidiaries have received any written notice of any claim relating to any infringement, misappropriation or other violation of any Intellectual Property of any person; and (iv) to the knowledge of the Company, the Intellectual Property of the Company and its subsidiaries is not being infringed, misappropriated or otherwise violated by any person;

(z) The Company and its subsidiaries possess all licenses, sub-licenses, certificates, permits and other authorizations issued by, and have made all declarations and filings with, the appropriate federal, state, local or foreign governmental or regulatory authorities that are necessary for the ownership or lease of their respective properties or the conduct of their respective businesses as described in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus, except where the failure to possess or make the same would not, individually or in the aggregate, have a Material Adverse Effect; and except as described in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus, neither the Company nor any of its subsidiaries has received notice of any revocation or modification of any such license, sub-license, certificate, permit or authorization or has any reason to believe that any such license, sub-license, certificate, permit or authorization will not be renewed in the ordinary course;

(aa) Except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, (i) the information technology assets and equipment, computers, systems, networks, hardware, software, websites, applications, and databases owned, leased or licensed by the Company and its subsidiaries (collectively, "IT Systems") are adequate for, and operate and perform in all material respects as required in connection with, the operation of the business of the Company and its subsidiaries as currently conducted and, to the knowledge of the Company, are free and clear of all material bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants; (ii) the Company and its subsidiaries have implemented and maintained commercially reasonable controls, policies, procedures, and safeguards designed to maintain and protect their material confidential information and the integrity, continuous operation, redundancy and security of all IT Systems and data (including all personal, personally identifiable, sensitive, confidential or regulated data ("Personal Data")) used in connection with their businesses; (iii) to the Company's knowledge, there have been no breaches or other violations of the IT Systems that have resulted in unauthorized access, use, disclosure, modification, corruption or loss of any such Personal Data, except for those that have been remedied without material cost or liability or the duty to notify any other person, nor any incidents under internal review or investigations relating to the same and (iv) the Company and its subsidiaries are presently in material compliance with all applicable laws or statutes and all judgments, orders, rules and regulations of any court, arbitrator, or governmental or regulatory authority with jurisdiction over the Company and its subsidiaries, and all contractual obligations, in each case relating to the privacy and security of IT Systems and Personal Data and to the protection of such IT Systems and Personal Data from unauthorized use, access, misappropriation or modification;

(bb) The Company and its subsidiaries, taken as a whole, are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are, in the reasonable judgment of the Company, prudent and customary in the business in which it is engaged; and the Company has no reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not reasonably be expected to have a Material Adverse Effect;

(cc) (i) The Company and each of its subsidiaries have filed all federal, state, local and foreign tax returns required to be filed through the date of this Agreement or have requested extensions thereof and have paid all taxes required to be paid thereon, except where failure to file such tax returns or pay such taxes would not reasonably be expected to have a Material Adverse Effect; and (ii) no unpaid tax deficiency has been determined adversely to the Company or any of its subsidiaries which has had (nor has the Company or any of its subsidiaries received written notice of any tax deficiency that will be assessed or, to the Company's knowledge, has been proposed by any taxing authority, which could reasonably be expected to be determined adversely to the Company or its subsidiaries and which could reasonably be expected to have) a Material Adverse Effect;

(dd) From the time of initial confidential submission of a registration statement relating to the Shares with the Commission through the date hereof, the Company has been and is an "emerging growth company" as defined in Section 2(a)(19) of the Act (an "Emerging Growth Company");

(ee) The Registration Statement, the Pricing Disclosure Package, the Pricing Prospectus, the Prospectus, any Issuer Free Writing Prospectuses and any Written Testing-the-Waters Communication comply in all material respects, and any further amendments or supplements thereto will comply in all material respects, with any applicable laws or regulations of foreign jurisdictions in which the Pricing Disclosure Package, the Pricing Prospectus, the Prospectus, and any Preliminary Prospectus, any Issuer Free Writing Prospectus and any Written Testing-the-Waters Communication, as amended or supplemented, if applicable, are distributed in connection with the Directed Share Program;

(ff) No authorization, approval, consent, license, order, registration or qualification of or with any government, governmental instrumentality or court, other than such as have been obtained, is necessary under the securities laws and regulations of foreign jurisdictions in which the Directed Shares are offered outside the United States;

(gg) The Company has specifically directed in writing the allocation of Shares to each Participant in the Directed Share Program, and neither the Directed Share Underwriter nor any other Underwriter has had any involvement or influence, directly or indirectly, in such allocation decision; and

(hh) The Company has not offered, or caused the Directed Share Underwriter or its affiliates to offer, Firm Shares to any person pursuant to the Directed Share Program (i) for any consideration other than the cash payment of the initial public offering price per share or (ii) with the specific intent to unlawfully influence (x) a customer or supplier of the Company to alter the customer or supplier's terms, level or type of business with the Company or (y) a trade journalist or publication to write or publish favorable information about the Company or its products.

2. Each of the Selling Stockholders severally represents and warrants to, and agrees with, each of the Underwriters and the Company that:

(a) All consents, approvals, authorizations and orders necessary for the execution and delivery by such Selling Stockholder of this Agreement and the Power of Attorney and the Custody Agreement referred to below, and for the sale and delivery of the Shares to be sold by such Selling Stockholder hereunder, have been obtained (except such as have been obtained under the Act, the registration of the Class A Stock under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the approval by the Financial Industry Regulatory Authority ("FINRA") of the underwriting terms and arrangements and such consents, approvals, authorizations, registrations or qualifications as may be required under state securities or Blue Sky laws in connection with the purchase and distribution of the Shares by the Underwriters); and such Selling Stockholder has full right, power and authority to enter into this Agreement, the Power of Attorney and the Custody Agreement and to sell, assign, transfer and deliver the Shares to be sold by such Selling Stockholder hereunder;

(b) The sale of the Shares to be sold by such Selling Stockholder hereunder and the execution, delivery and performance by such Selling Stockholder of this Agreement, the Power of Attorney and the Custody Agreement and the consummation of the transactions herein and therein contemplated will not (i) conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, any statute, indenture, mortgage, deed of trust, loan agreement, lease or other agreement or instrument to which such Selling Stockholder is a party or by which such Selling Stockholder is bound or to which any of the property or assets of such Selling Stockholder is subject, or (ii) result in any violation of the

provisions of any statute or any judgment, order, rule or regulation of any court or governmental agency or body having jurisdiction over such Selling Stockholder or any of its subsidiaries or any property or assets of such Selling Stockholder except, in the case of (i) and (ii), for such conflicts, breaches or violations as would not, individually or in the aggregate, reasonably be expected to have a material adverse effect on such Selling Stockholder's ability to perform its obligations under this Agreement, the Power of Attorney and the Custody Agreement (a "Selling Stockholder Material Adverse Effect"); and no consent, approval, authorization, order, registration or qualification of or with any such court or governmental body or agency is required for the performance by such Selling Stockholder of its obligations under this Agreement, the Power of Attorney and the Custody Agreement and the consummation by such Selling Stockholder of the transactions contemplated by this Agreement, the Power of Attorney and the Custody Agreement in connection with the Shares to be sold by such Selling Stockholder hereunder, except the registration under the Act of the Shares and such consents, approvals, authorizations, orders, registrations or qualifications as may be required under state securities or Blue Sky laws in connection with the purchase and distribution of the Shares by the Underwriters;

(c) Such Selling Stockholder has, and immediately prior to the Time of Delivery (as defined in Section 5 hereof) such Selling Stockholder will have, good and valid title to, or a valid "security entitlement" within the meaning of Section 8-501 of the New York Uniform Commercial Code in respect of, the Shares to be sold by such Selling Stockholder hereunder, free and clear of all liens, encumbrances, equities or claims; and, upon delivery of such Shares and payment therefor pursuant hereto, good and valid title to such Shares, free and clear of all liens, encumbrances, equities or claims, will pass to the several Underwriters;

(d) On or prior to the date of the Pricing Prospectus, such Selling Stockholder has executed and delivered to the Underwriters an agreement substantially in the form of Exhibit A hereto.

(e) Such Selling Stockholder has not taken and will not take, directly or indirectly, any action that is designed to or that has constituted or might reasonably be expected to cause or result in stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Shares;

(f) To the extent that any statements or omissions made in the Registration Statement, any Preliminary Prospectus, the Prospectus or any amendment or supplement thereto are made in reliance upon and in conformity with the Selling Stockholder Information (as defined below), such Registration Statement and Preliminary Prospectus did, and the Prospectus and any further amendments or supplements to the Registration Statement and the Prospectus will, when they become effective or are filed with the Commission, as the case may be, conform in all material respects to the requirements of the Act and the rules and regulations of the Commission thereunder and not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading;

(g) In order to document the Underwriters' compliance with the reporting and withholding provisions of the Tax Equity and Fiscal Responsibility Act of 1982 with respect to the transactions herein contemplated, such Selling Stockholder will deliver to you prior to or at the Time of Delivery a properly completed and executed United States Treasury Department Form W-9 (or other applicable form or statement specified by Treasury Department regulations in lieu thereof);

(h) Certificates in negotiable form or book-entry securities entitlements representing all of the Shares to be sold by such Selling Stockholder hereunder have been placed in custody under a Custody Agreement, in the form heretofore furnished to the Underwriters (the "Custody Agreement"), duly executed and delivered by such Selling Stockholder to [·], as custodian (the "Custodian"), and such Selling Stockholder has duly executed and delivered a Power of Attorney, in the form heretofore furnished to the Underwriters (the "Power of Attorney"), appointing [·] and [·], and each of them, as such Selling Stockholder's attorneys-in-fact (the "Attorneys-in-Fact") with authority to execute and deliver this Agreement on behalf of such Selling Stockholder, to determine the purchase price to be paid by the Underwriters to the Selling Stockholders as provided in Section 3 hereof, to authorize the delivery of the Shares to be sold by such Selling Stockholder hereunder and otherwise to act on behalf of such Selling Stockholder in connection with the transactions contemplated by this Agreement and the Custody Agreement;

(i) The Shares held in custody for such Selling Stockholder under the Custody Agreement are subject to the interests of the Underwriters hereunder; the arrangements made by such Selling Stockholder for such custody, and the appointment by such Selling Stockholder of the Attorneys-in-Fact by the Power of Attorney, are to that extent irrevocable; the obligations of the Selling Stockholders hereunder shall not be terminated by operation of law, whether by the death or incapacity of any individual Selling Stockholder or, in the case of an estate or trust, by the death or incapacity of any executor or trustee or the termination of such estate or trust, or in the case of a partnership or corporation, by the dissolution of such partnership, limited liability company or corporation, or by the occurrence of any other event; if any individual Selling Stockholder or any such executor or trustee should die or become incapacitated, or if any such estate or trust should be terminated, or if any such partnership, limited liability company or corporation should be dissolved, or if any other such event should occur, before the delivery of the Shares to be sold by such Selling Stockholder hereunder, certificates representing the Shares to be sold by such Selling Stockholder hereunder shall be delivered by or on behalf of the Selling Stockholders in accordance with the terms and conditions of this Agreement and of the Custody Agreements; and actions taken by the Attorneys-in-Fact pursuant to the Powers of Attorney shall be as valid as if such death, incapacity, termination, dissolution or other event had not occurred, regardless of whether or not the Custodian, the Attorneys-in-Fact, or any of them, shall have received notice of such death, incapacity, termination, dissolution or other event;

(j) Such Selling Stockholder (i) is not the subject of any Sanctions, (ii) has not knowingly engaged in, is not now knowingly engaged in, and will not engage in, any dealings or transactions with any person, or in any country or territory, that at the time of the dealing or transaction is or was the subject of Sanctions, (iii) has not taken nor will not take any action in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value to any government official (including any officer or employee of a government or government-owned or controlled entity or of a public international organization, or any person acting in an official capacity for or on behalf of any of the foregoing, or any political party or party official or candidate for political office) in order to influence official action, or to any person in violation of Money Laundering Laws or any applicable anti-bribery or anti-corruption laws and (iv) will not directly or indirectly use the proceeds of the offering of the Shares hereunder, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity, (a) to fund or facilitate any activities of or business with any person, or in any country

or territory, that, at the time of such funding, is the subject or the target of Sanctions, or in any other manner that will result in a violation by any person (including any person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions, or (b) in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any person in violation of any Money Laundering Laws or any applicable anti-bribery or anti-corruption laws; and

(k) Such Selling Stockholder is not prompted by any material information concerning the Company or any of its subsidiaries that is not disclosed in the Pricing Prospectus to sell its Shares pursuant to this Agreement.

3. Subject to the terms and conditions herein set forth, (a) the Company agrees to issue and sell to each of the Underwriters, and each of the Underwriters agrees, severally and not jointly, to purchase from the Company, at a purchase price per share of $[·], the number of Firm Shares set forth opposite the name of such Underwriter in Schedule I hereto and (b) in the event and to the extent that the Underwriters shall exercise the election to purchase Optional Shares as provided below, the Company agrees to issue and sell and each of the Selling Stockholders, as and to the extent indicated in Schedule II hereto, agrees to sell to each of the Underwriters, and each of the Underwriters agrees, severally and not jointly, to purchase from the Company and such Selling Stockholder, at the purchase price per share set forth in clause (a) of this Section 3 (provided that the purchase price per Optional Share shall be reduced by an amount per share equal to any dividends or distributions declared by the Company and payable on the Firm Shares but not payable on the Optional Shares), that portion of the number of Optional Shares as to which such election shall have been exercised (to be adjusted by you so as to eliminate fractional shares) determined by multiplying such number of Optional Shares by a fraction, the numerator of which is the maximum number of Optional Shares which such Underwriter is entitled to purchase as set forth opposite the name of such Underwriter in Schedule I hereto and the denominator of which is the maximum number of Optional Shares that all of the Underwriters are entitled to purchase hereunder. The Optional Shares shall be purchased first from the Selling Stockholders, pro rata, in the amount up to those set forth on Schedule II hereto, prior to purchasing any Optional Shares from the Company.

The Company and the Selling Stockholders, as and to the extent indicated in Schedule II hereto, hereby grant to the Underwriters the right to purchase at their election up to [·] Optional Shares, at the purchase price per share set forth in the paragraph above, for the sole purpose of covering sales of shares in excess of the number of Firm Shares, provided that the purchase price per Optional Share shall be reduced by an amount per share equal to any dividends or distributions declared by the Company and payable on the Firm Shares but not payable on the Optional Shares. Any such election to purchase Optional Shares shall be made in proportion to the maximum number of Optional Shares to be sold by the Company and all Selling Stockholders as set forth in Schedule I and II hereto, respectively, initially with respect to the Optional Shares to be sold by the Selling Stockholders in proportion to the maximum number of Optional Shares to be sold by each Selling Stockholder as set forth in Schedule II hereto and then the Company as set forth in Schedule I hereto. Any such election to purchase Optional Shares may be exercised only by written notice from you to the Company and the Attorneys-in-Fact, given within a period of 30 calendar days after the date of this Agreement, setting forth the aggregate number of Optional Shares to be purchased and the date on which such Optional Shares are to be delivered, as determined by you but in no event earlier than the First Time of Delivery (as defined in Section 5 hereof) or, unless you and the Company otherwise agree in writing, earlier than two or later than ten business days after the date of such notice.

4. Upon the authorization by you of the release of the Firm Shares, the several

Underwriters propose to offer the Firm Shares for sale upon the terms and conditions set forth in the Pricing Prospectus and the Prospectus.

5. (a) The Shares to be purchased by each Underwriter hereunder, in definitive or book-entry form, and in such authorized denominations and registered in such names as the Representatives may request upon at least forty-eight hours' prior notice to the Company and the Selling Stockholders shall be delivered by or on behalf of the Company and the Selling Stockholders to the Representatives, through the facilities of the Depository Trust Company ("DTC"), for the account of such Underwriter, against payment by or on behalf of such Underwriter of the purchase price therefor by wire transfer of Federal (same-day) funds to the account specified by the Company and the Custodian to the Representatives at least forty-eight hours in advance. The Company and the Selling Stockholders will cause the certificates, if any, representing the Shares to be made available for checking and packaging at least twenty-four hours prior to the Time of Delivery (as defined below) with respect thereto at the office of DTC or its designated custodian (the "Designated Office"). The time and date of such delivery and payment shall be, with respect to the Firm Shares, 9:30 a.m., New York City time, on [·], 2020 or such other time and date as the Representatives and the Company may agree upon in writing, and, with respect to the Optional Shares, 9:30 a.m., New York time, on the date specified by the Representatives in the written notice given by the Representatives of the Underwriters' election to purchase such Optional Shares, or such other time and date as the Representatives, the Company and the Attorneys-in-Fact may agree upon in writing. Such time and date for delivery of the Firm Shares is herein called the "First Time of Delivery," such time and date for delivery of the Optional Shares, if not the First Time of Delivery, is herein called the "Second Time of Delivery," and each such time and date for delivery is herein called a "Time of Delivery."

(b) The documents to be delivered at each Time of Delivery by or on behalf of the parties hereto pursuant to Section 9 hereof, including the cross receipt for the Shares and any additional documents requested by the Underwriters pursuant to Section 9(l) hereof, will be delivered at the offices of Skadden, Arps, Slate, Meagher & Flom LLP, One Manhattan West, New York, New York 10001 (the "Closing Location"), and the Shares will be delivered at the Designated Office, all at such Time of Delivery. A meeting will be held at the Closing Location at [·] p.m., New York City time, on the New York Business Day next preceding such Time of Delivery, at which meeting the final drafts of the documents to be delivered pursuant to the preceding sentence will be available for review by the parties hereto. For the purposes of this Section 5, "New York Business Day" shall mean each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in New York City are generally authorized or obligated by law or executive order to close.

6. The Company agrees with each of the Underwriters:

(a) To prepare the Prospectus in a form approved by you and to file such Prospectus pursuant to Rule 424(b) under the Act not later than the Commission's close of business on the second business day following the execution and delivery of this Agreement, or, if applicable, such earlier time as may be required by Rule 430A(a)(3) under the Act; to make no further amendment or any supplement to the Registration Statement or the Prospectus prior to the last Time of Delivery which shall be disapproved by you promptly after reasonable notice thereof; to advise you, promptly after it receives notice thereof, of the time when any amendment to the Registration Statement has been filed or becomes effective or any amendment or supplement to the Prospectus has been filed and to furnish you with copies thereof; to file promptly all material required to be filed by the Company with the Commission pursuant to Rule 433(d) under the Act; to advise you, promptly after

it receives notice thereof, of the issuance by the Commission of any stop order or of any order preventing or suspending the use of any Preliminary Prospectus or other prospectus in respect of the Shares, of the suspension of the qualification of the Shares for offering or sale in any jurisdiction, of the initiation or threatening of any proceeding for any such purpose, or of any request by the Commission for the amending or supplementing of the Registration Statement or the Prospectus or for additional information; and, in the event of the issuance of any stop order or of any order preventing or suspending the use of any Preliminary Prospectus or other prospectus in respect of the Shares or suspending any such qualification, to promptly use its best efforts to obtain the withdrawal of such order;

(b) Promptly from time to time to take such action as you may reasonably request to qualify the Shares for offering and sale under the securities laws of such jurisdictions as you may request and to comply with such laws so as to permit the continuance of sales and dealings therein in such jurisdictions for as long as may be necessary to complete the distribution of the Shares, provided that in connection therewith the Company shall not be required to qualify as a foreign corporation (where not otherwise required) or to file a general consent to service of process in any jurisdiction (where not otherwise required);

(c) Prior to 10:00 a.m., New York City time, on the New York Business Day next succeeding the date of this Agreement and from time to time, to furnish the Underwriters with written and electronic copies of the Prospectus in New York City in such quantities as you may reasonably request, and, if the delivery of a prospectus (or in lieu thereof, the notice referred to in Rule 173(a) under the Act) is required at any time prior to the expiration of nine months after the time of issue of the Prospectus in connection with the offering or sale of the Shares and if at such time any event shall have occurred as a result of which the Prospectus as then amended or supplemented would include an untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made when such Prospectus (or in lieu thereof, the notice referred to in Rule 173(a) under the Act) is delivered, not misleading, or, if for any other reason it shall be necessary during such same period to amend or supplement the Prospectus in order to comply with the Act, to notify you and upon your request to prepare and furnish without charge to each Underwriter and to any dealer in securities as many written and electronic copies as you may from time to time reasonably request of an amended Prospectus or a supplement to the Prospectus which will correct such statement or omission or effect such compliance; and in case any Underwriter is required to deliver a prospectus (or in lieu thereof, the notice referred to in Rule 173(a) under the Act) in connection with sales of any of the Shares at any time nine months or more after the time of issue of the Prospectus, upon your request but at the expense of such Underwriter, to prepare and deliver to such Underwriter as many written and electronic copies as you may request of an amended or supplemented Prospectus complying with Section 10(a)(3) of the Act;

(d) To make generally available to its securityholders as soon as practicable, but in any event not later than sixteen months after the effective date of the Registration Statement (as defined in Rule 158(c) under the Act), an earnings statement of the Company and its subsidiaries (which need not be audited) complying with Section 11(a) of the Act and the rules and regulations of the Commission thereunder (including, at the option of the Company, Rule 158); provided, however, that the Company will be deemed to have furnished such statement to its securityholders if it is filed by the Company on the Commission's Electronic Data Gathering Analysis and Retrieval System ("EDGAR");

(e)(1) During the period beginning from the date hereof and continuing to and including the date 180 days after the date of the Prospectus (the "Lock-Up Period"), not to (i) offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise transfer or dispose of, directly or indirectly, or file with or confidentially submit to the Commission a registration statement under the Act relating to, any securities of the Company that are substantially similar to the Shares, including but not limited to any options or warrants to purchase shares of Stock or any securities that are convertible into or exchangeable for, or that represent the right to receive, Stock or any such substantially similar securities, (ii) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Stock or any such other securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Stock or such other securities, in cash or otherwise (other than, with respect to either clause (i) or (ii), the Shares to be sold hereunder or any shares sold or granted pursuant to equity incentive plans of the Company, or upon the conversion or exchange of convertible or exchangeable securities outstanding as of, the date of this Agreement, as described in the Pricing Prospectus and Prospectus) or (iii) otherwise publicly announce any intention to engage in or cause any action or activity described in clause (i) above or transaction or arrangement described in clause (ii) above, without prior written consent of the Representatives;

(e)(2) If the Representatives, in their sole discretion, agree to release or waive the restrictions set forth in a lock-up letter described in Section 9(i) hereof for an officer or director of the Company and provides the Company with notice of the impending release or waiver at least three business days before the effective date of the release or waiver, the Company agrees to announce the impending release or waiver by a press release substantially in the form of Annex I hereto through a major news service at least two business days before the effective date of the release or waiver;

(f) During a period of three years from the effective date of the Registration Statement, so long as the Company is subject to the reporting requirement of Section 13 or 15(d) of the Exchange Act, to furnish to its stockholders as soon as practicable after the end of each fiscal year an annual report (including a balance sheet and statements of income, stockholders' equity and cash flows of the Company and its consolidated subsidiaries certified by independent public accountants) and, as soon as practicable after the end of each of the first three quarters of each fiscal year (beginning with the fiscal quarter ending after the effective date of the Registration Statement), to make available to its stockholders consolidated summary financial information of the Company and its subsidiaries for such quarter in reasonable detail; provided that no reports, documents or other information need to be furnished pursuant to this Section 6(f) to the extent they are available on EDGAR or any successor thereto;

(g) During a period of three years from the effective date of the Registration Statement, so long as the Company is subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, to furnish to you copies of all reports or other communications (financial or other) furnished to stockholders, and to deliver to you (i) as soon as they are available, copies of any reports and financial statements furnished to or filed with the Commission or any national securities exchange on which any class of securities of the Company is listed to the extent they are not available on EDGAR; and (ii) such additional information concerning the business and financial condition of the Company as you may from time to time reasonably request (such financial statements to be on a consolidated basis to the extent the accounts of the Company and its subsidiaries are consolidated in reports furnished to its stockholders generally or to the Commission); provided that no such reports, documents or other information need to be furnished pursuant to this Section 6(g) to the

extent they are available on EDGAR or any successor thereto or to the extent the provision of such reports, documents or other information would require public disclosure by the Company under Regulation FD;

(h) To use the net proceeds received by it from the sale of the Shares pursuant to this Agreement in the manner specified in the Pricing Prospectus under the caption "Use of Proceeds";

(i) To use its best efforts to list for quotation the Shares on the Nasdaq Stock Market Inc.'s National Market ("NASDAQ");

(j) To file with the Commission such information on Form 10-Q or Form 10-K as may be required by Rule 463 under the Act;

(k) If the Company elects to rely upon Rule 462(b), the Company shall file a Rule 462(b) Registration Statement with the Commission in compliance with Rule 462(b) by 10:00 P.M., Washington, D.C. time, on the date of this Agreement, and the Company shall at the time of filing either pay to the Commission the filing fee for the Rule 462(b) Registration Statement or give irrevocable instructions for the payment of such fee pursuant to Rule 111(b) under the Act;

(l) Upon written request of any Underwriter, to furnish, or cause to be furnished, to such Underwriter an electronic version of the Company's trademarks, servicemarks and corporate logo for use on the website, if any, operated by such Underwriter for the purpose of facilitating the on-line offering of the Shares (the "License"); provided, however, that the License shall be used solely for the purpose described above, is granted without any fee and may not be assigned, transferred or sublicensed by any Underwriter, and the Company shall have the right to review, approve of or revoke any such use under the License;

(m) To promptly notify you if the Company ceases to be an Emerging Growth Company at any time prior to the later of (i) completion of the distribution of the Shares within the meaning of the Act and (ii) completion of the Lock-Up Period referred to in Section 6(e) hereof; and

(n) To comply with all applicable securities and other laws, rules and regulations in each jurisdiction in which the Directed Shares are offered in connection with the Directed Share Program.

7. (a) The Company represents and agrees that, without the prior consent of the Representatives, it has not made and will not make any offer relating to the Shares that would constitute a "free writing prospectus" as defined in Rule 405 under the Act; each Selling Stockholder represents and agrees that, without the prior consent of the Company and the Representatives, it has not made and will not make any offer relating to the Shares that would constitute a free writing prospectus; and each Underwriter represents and agrees that, without the prior consent of the Company and the Representatives, it has not made and will not make any offer relating to the Shares that would constitute a free writing prospectus required to be filed with the Commission; any such free writing prospectus the use of which has been consented to by the Company and the Representatives is listed on Schedule III(a) hereto;

(b) The Company has complied and will comply with the requirements of Rule 433 under the Act applicable to any Issuer Free Writing Prospectus, including timely filing with the Commission or retention where required and legending; and the Company represents that it has

satisfied and agrees that it will satisfy the conditions under Rule 433 under the Act to avoid a requirement to file with the Commission any electronic road show;

(c) The Company agrees that if at any time following issuance of an Issuer Free Writing Prospectus or Written Testing-the-Waters Communication prepared or authorized by it any event occurred or occurs as a result of which such Issuer Free Writing Prospectus or Written Testing-the-Waters Communication would conflict with the information in the Registration Statement, the Pricing Prospectus or the Prospectus or would include an untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances then prevailing, not misleading, the Company will give prompt notice thereof to the Representatives and, if requested by the Representatives, will prepare and furnish without charge to each Underwriter an Issuer Free Writing Prospectus, Written Testing-the-Waters Communication or other document which will correct such conflict, statement or omission; provided, however, that this representation and warranty shall not apply to any statements or omissions made in reliance upon and in conformity with the Underwriter Information;

(d) The Company represents and agrees that (i) it has not engaged in, or authorized any other person to engage in, any Testing-the-Waters Communications, other than Testing-the-Waters Communications with the prior consent of the Representatives with entities that the Company reasonably believes are qualified institutional buyers as defined in Rule 144A under the Act or institutions that are accredited investors as defined in Rule 501(a)(1), (a)(2), (a)(3), (a)(7) or (a)(8) under the Act; and (ii) it has not distributed, or authorized any other person to distribute, any Written Testing-the-Waters Communications, other than those distributed with the prior consent of the Representatives that are listed on Schedule III(c) hereto; and the Company reconfirms that the Underwriters have been authorized to act on its behalf in engaging in Testing-the-Waters Communications; and

(e) Each Underwriter represents and agrees that any Testing-the-Waters Communications undertaken by it were with entities that such Underwriter reasonably believes are qualified institutional buyers as defined in Rule 144A under the Act or institutions that are accredited investors as defined in Rule 501(a)(1), (a)(2), (a)(3), (a)(7) or (a)(8) under the Act.

8. The Company and each of the Selling Stockholders covenant and agree with one another and with the several Underwriters that (a) the Company will pay or cause to be paid the following: (i) the fees, disbursements and expenses of the Company's counsel and accountants and counsel for the Selling Stockholders in connection with the registration of the Shares under the Act and all other expenses in connection with the preparation, printing, reproduction and filing of the Registration Statement, any Preliminary Prospectus, any Written Testing-the-Waters Communication, any Issuer Free Writing Prospectus and the Prospectus and amendments and supplements thereto and the mailing and delivering of copies thereof to the Underwriters and dealers; (ii) the cost of printing or producing this Agreement, the Blue Sky Memorandum, closing documents (including any compilations thereof) and any other documents in connection with the offering, purchase, sale and delivery of the Shares; (iii) all expenses in connection with the qualification of the Shares for offering and sale under state securities laws as provided in Section 6(b) hereof, including the reasonably incurred and documented fees and disbursements of counsel for the Underwriters in connection with such qualification and in connection with the Blue Sky survey (iv) all fees and expenses in connection with listing the Shares on NASDAQ; (v) the filing fees incident to, and the reasonably incurred and documented fees and disbursements of counsel for the Underwriters in

connection with, any required review by FINRA of the terms of the sale of the Shares; (vi) the cost of preparing stock certificates; (vii) the cost and charges of any transfer agent or registrar; (viii) all fees and disbursements of counsel for the Underwriters in connection with the Directed Share Program and stamp duties, similar taxes or duties or other taxes, if any, incurred by the Underwriters in connection with the Directed Share Program; (ix) the costs and expenses of the Company relating to investor presentations on any "road show" undertaken in connection with the marketing of the offering of the Shares, including, without limitation, expenses associated with the preparation or dissemination of any electronic road show, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations with the prior approval of the Company, travel and lodging expenses of the representatives and officers of the Company and any such consultants (which, for the avoidance of doubt, shall not include the Underwriters and their representatives) and (x) all other costs and expenses incident to the performance of its obligations hereunder which are not otherwise specifically provided for in this Section; provided that the aggregate amount payable by the Company with respect to fees and disbursements of counsel for the Underwriters pursuant to subsections (iii) and (v) shall not exceed $50,000); and (b) such Selling Stockholder will pay or cause to be paid all costs and expenses incident to the performance of such Selling Stockholder's obligations hereunder which are not otherwise specifically provided for in this Section, including all expenses and taxes incident to the sale and delivery of the Shares to be sold by such Selling Stockholder to the Underwriters hereunder. In connection with clause (b) of the preceding sentence, the Representatives agree to pay any New York State stock transfer tax, and the Selling Stockholder agrees to reimburse the Representatives for associated carrying costs if such tax payment is not rebated on the day of payment and for any portion of such tax payment not rebated. It is understood, however, that, except as provided in this Section, and Sections 10, 11, and 14 hereof, (i) the Underwriters will pay all of their own costs and expenses, including the fees of their counsel, stock transfer taxes on resale of any of the Shares by them, and any advertising expenses connected with any offers they may make, (ii) the Company will bear all of the Company's (but not the Underwriters') travel expenses and the Underwriters will bear all of the Underwriters' (but not the Company's) travel expenses, in each case, in connection with any "roadshow" presentation to investors and (iii) notwithstanding the immediately preceding clause, the Company, on the one hand, and the Underwriters, on the other hand, shall each pay 50% of the cost of any chartered aircraft used in connection with any "roadshow" presentation to investors. Nothing in this Section 8 shall affect any agreement that the Company and the Selling Stockholders may make for the sharing of any costs and expenses related to the matters covered by this Section 8.

9. The obligations of the Underwriters hereunder**,** as to the Shares to be delivered at each Time of Delivery, shall be subject, in their discretion, to the condition that all representations and warranties and other statements of the Company and the Selling Stockholders herein are, at and as of the Applicable Time and such Time of Delivery, true and correct, the condition that the Company and the Selling Stockholders shall have performed all of its and their obligations hereunder theretofore to be performed, and the following additional conditions:

(a) The Prospectus shall have been filed with the Commission pursuant to Rule 424(b) under the Act within the applicable time period prescribed for such filing by the rules and regulations under the Act and in accordance with Section 6(a) hereof; all material required to be filed by the Company pursuant to Rule 433(d) under the Act shall have been filed with the Commission within the applicable time period prescribed for such filing by Rule 433; if the Company has elected to rely upon Rule 462(b) under the Act, the Rule

462(b) Registration Statement shall have become effective by 10:00 P.M., Washington, D.C. time, on the date of this Agreement; no stop order suspending the effectiveness of the Registration Statement or any part thereof shall have been issued and no proceeding for that purpose shall have been initiated or threatened by the Commission; no stop order suspending or preventing the use of the Pricing Prospectus, Prospectus or any Issuer Free Writing Prospectus shall have been initiated or threatened by the Commission; and all requests for additional information on the part of the Commission shall have been complied with to your reasonable satisfaction;

(b) Skadden Arps, Slate, Meagher & Flom LLP, counsel for the Underwriters, shall have furnished to you such written opinion or opinions and negative assurance letter, dated such Time of Delivery, in form and substance satisfactory to you and such counsel shall have received such papers and information as they may reasonably request to enable them to pass upon such matters;

(c) Latham & Watkins LLP, counsel for the Company, shall have furnished to you their written opinion and negative assurance letter, dated such Time of Delivery, in form and substance satisfactory to you;

(d) Bryan Rowland, counsel for the Selling Stockholders, shall have furnished to you their written opinion, dated such Time of Delivery, in form and substance satisfactory to you;

(e) On the date of the Prospectus at a time prior to the execution of this Agreement, at 9:30 a.m., New York City time, on the effective date of any post-effective amendment to the Registration Statement filed subsequent to the date of this Agreement and also at each Time of Delivery, Crowe LLP shall have furnished to you a letter or letters, dated the respective dates of delivery thereof, in form and substance satisfactory to you;

(f) (i) Neither the Company nor any of its subsidiaries, taken as a whole, shall have sustained since the date of the latest audited financial statements included in the Pricing Prospectus any loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, otherwise than as set forth or contemplated in the Pricing Prospectus, and (ii) since the respective dates as of which information is given in the Pricing Prospectus there shall not have been any change in the capital stock (other than as a result of (A) the exercise or settlement (including any “net” or “cashless” exercises or settlements), if any, of stock options, stock appreciation rights or restricted stock units or the award, if any, of stock options, restricted stock units or restricted stock or the vesting of restricted stock units or restricted stock, in each case, pursuant to the Company’s equity plans that are described in the Pricing Prospectus and the Prospectus) or long-term debt of the Company or any of its subsidiaries or any change or effect, or any development involving a prospective change or effect, in or affecting (x) the business, properties, general affairs, management, financial position, stockholders’ equity or results of operations of the Company and its subsidiaries, taken as a whole, except as set forth or contemplated in the Pricing Prospectus and the Prospectus, or (y) the ability of the Company to perform its obligations under this Agreement, including the issuance and sale of the Shares, or to consummate the transactions contemplated in the Pricing Prospectus and the Prospectus, the effect of which, in any such case described in clause (i) or (ii), is in your judgment so material and adverse as to make it impracticable or inadvisable to proceed with the public

offering or the delivery of the Shares being delivered at such Time of Delivery on the terms and in the manner contemplated in the Pricing Prospectus and the Prospectus;

(g) On or after the Applicable Time, to the extent the Company has rated securities, (i) no downgrading shall have occurred in the rating accorded the Company's securities by any "nationally recognized statistical rating organization", as that term is defined by the Commission for purposes of Rule 436(g)(2) under the Act, and (ii) no such organization shall have publicly announced that it has under surveillance or review, with possible negative implications, its rating of any of the Company's securities;

(h) On or after the Applicable Time there shall not have occurred any of the following: (i) a suspension or material limitation in trading in securities generally on the Exchange or on NASDAQ; (ii) a suspension or material limitation in trading in the Company's securities on NASDAQ; (iii) a general moratorium on commercial banking activities declared by either Federal or New York State authorities or a material disruption in commercial banking or securities settlement or clearance services in the United States; (iv) the outbreak or escalation of hostilities involving the United States or the declaration by the United States of a national emergency or war or (v) the occurrence of any other calamity or crisis or any change in financial, political or economic conditions in the United States or elsewhere, if the effect of any such event specified in clause (iv) or (v) in your judgment makes it impracticable or inadvisable to proceed with the public offering or the delivery of the Shares being delivered at such Time of Delivery on the terms and in the manner contemplated in the Pricing Prospectus and the Prospectus;

(i) The Shares to be sold at such Time of Delivery shall have been duly listed for quotation on NASDAQ;

(j) The Company shall have obtained and delivered to the Underwriters executed copies of an agreement, in the form set forth on Exhibit A hereto, from securityholders, officers and directors of the Company;

(k) The Company shall have complied with the provisions of Section 6(c) hereof with respect to the furnishing of prospectuses on the New York Business Day next succeeding the date of this Agreement;

(l) On the date of the Prospectus at a time prior to the execution of this Agreement, at 9:30 a.m., New York City time, on the effective date of any post-effective amendment to the Registration Statement filed subsequent to the date of this Agreement and also at each Time of Delivery, the Company shall deliver to the Underwriters a certificate of the Chief Financial Officer of the Company in form and substance satisfactory to the Representatives; and

(m) The Company and the Selling Stockholders shall have furnished or caused to be furnished to you at such Time of Delivery certificates of officers of the Company and of the Selling Stockholders, respectively, satisfactory to you as to the accuracy of the representations and warranties of the Company and the Selling Stockholders, respectively, herein at and as of such Time of Delivery, as to the performance by the Company and the Selling Stockholders of all of their obligations hereunder to be performed at or prior to such Time of Delivery, and the Company shall have furnished or caused to be furnished certificates as to the matters set forth in subsections (a) and (e) of this Section and as to such other matters as you may reasonably request.

10. (a) The Company will indemnify and hold harmless each Underwriter against any losses, claims, damages or liabilities, joint or several, to which such Underwriter may become subject, under the Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, any Preliminary Prospectus, the Pricing Prospectus or the Prospectus, or any amendment or supplement thereto, any Issuer Free Writing Prospectus, any "roadshow" as defined in Rule 433(h) under the Act (a "roadshow"), any "issuer information" filed or required to be filed pursuant to Rule 433(d) under the Act or any Testing-the-Waters Communication, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse each Underwriter for any legal or other expenses reasonably incurred by such Underwriter in connection with investigating or defending any such action or claim as such expenses are incurred; *provided*, *however*, that the Company shall not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in the Registration Statement, any Preliminary Prospectus, the Pricing Prospectus or the Prospectus, or any amendment or supplement thereto, or any Issuer Free Writing Prospectus or any Testing-the-Waters Communication, in reliance upon and in conformity with the Underwriter Information.

(b) Each Selling Stockholder, will, severally and not jointly, indemnify and hold harmless each Underwriter against any losses, claims, damages or liabilities, joint or several, to which such Underwriter may become subject, under the Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, any Preliminary Prospectus, the Pricing Prospectus or the Prospectus, or any amendment or supplement thereto, any Issuer Free Writing Prospectus, any roadshow or any Testing-the-Waters Communication, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in the Registration Statement, any Preliminary Prospectus, the Pricing Prospectus or the Prospectus, or any amendment or supplement thereto or any Issuer Free Writing Prospectus, or any roadshow or any Testing-the-Waters Communication, in reliance upon and in conformity with the Selling Stockholder Information provided by such Selling Stockholder, it being understood and agreed that the only such information furnished by any Selling Stockholder consists of the Selling Stockholder Information relating to such Selling Stockholder; and will reimburse each Underwriter for any legal or other expenses reasonably incurred by such Underwriter in connection with investigating or defending any such action or claim as such expenses are incurred; provided, however, that such Selling Stockholder shall not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in the Registration Statement, any Preliminary Prospectus, the Pricing Prospectus or the Prospectus or any amendment or supplement thereto or any Issuer Free Writing Prospectus in reliance upon and in conformity with the Underwriter Information; and provided, further, that the liability of each Selling Stockholder pursuant to this subsection (b) shall not exceed the proceeds (net of any underwriting discounts and commissions but before deducting expenses) from the sale of the Optional Shares sold by such Selling Stockholder hereunder (the "Selling Stockholder Proceeds"). As used in this Agreement with respect to a Selling Stockholder and an applicable

document, "Selling Stockholder Information" shall mean the written information furnished to the Company by such Selling Stockholder expressly for use therein.

(c) Each Underwriter, severally and not jointly, will indemnify and hold harmless the Company and each Selling Stockholder against any losses, claims, damages or liabilities to which the Company or such Selling Stockholder may become subject, under the Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, any Preliminary Prospectus, the Pricing Prospectus or the Prospectus, or any amendment or supplement thereto, or any Issuer Free Writing Prospectus, or any roadshow, or any Testing-the-Waters Communication, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in the Registration Statement, any Preliminary Prospectus, the Pricing Prospectus or the Prospectus, or any amendment or supplement thereto, or any Issuer Free Writing Prospectus, or any roadshow or any Testing-the-Waters Communication, in reliance upon and in conformity with the Underwriter Information; and will reimburse the Company and each Selling Stockholder for any legal or other expenses reasonably incurred by the Company or such Selling Stockholder in connection with investigating or defending any such action or claim as such expenses are incurred. As used in this Agreement with respect to an Underwriter and an applicable document, "Underwriter Information" shall mean the written information furnished to the Company by such Underwriter through the Representatives expressly for use therein; it being understood and agreed upon that the only such information furnished by any Underwriter consists of the following information in the Prospectus furnished on behalf of each Underwriter: the concession and reallowance figures appearing in the [·] paragraph under the caption "Underwriting", and the information contained in the [·] paragraph under the caption "Underwriting."

(d) Promptly after receipt by an indemnified party under subsection (a), (b) or (c) above of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under such subsection, notify the indemnifying party in writing of the commencement thereof; provided that the failure to notify the indemnifying party shall not relieve it from any liability that it may have under the preceding paragraphs of this Section 10 except to the extent that it has been materially prejudiced (through the forfeiture of substantive rights or defenses) by such failure; and provided further that the failure to notify the indemnifying party shall not relieve it from any liability that it may have to an indemnified party otherwise than under the preceding paragraphs of this Section 10. In case any such action shall be brought against any indemnified party and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate therein and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel reasonably satisfactory to such indemnified party (who shall not, except with the consent of the indemnified party, be counsel to the indemnifying party), and, after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party under such subsection for any legal expenses of other counsel or any other expenses, in each case subsequently incurred by such indemnified party, in connection with the defense thereof other than reasonable costs of investigation. No indemnifying party shall, without the written consent of the indemnified party, effect the settlement or compromise of, or consent to the entry of any judgment with respect to, any pending or threatened action or claim in respect of which indemnification or contribution may be

sought hereunder (whether or not the indemnified party is an actual or potential party to such action or claim) unless such settlement, compromise or judgment (i) includes an unconditional release of the indemnified party from all liability arising out of such action or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act, by or on behalf of any indemnified party.

(e) If the indemnification provided for in this Section 10 is unavailable to or insufficient to hold harmless an indemnified party under subsection (a), (b) or (c) above in respect of any losses, claims, damages or liabilities (or actions in respect thereof) referred to therein, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (or actions in respect thereof) in such proportion as is appropriate to reflect the relative benefits received by the Company and the Selling Stockholders on the one hand and the Underwriters on the other from the offering of the Shares. If, however, the allocation provided by the immediately preceding sentence is not permitted by applicable law, then each indemnifying party shall contribute to such amount paid or payable by such indemnified party in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of the Company and the Selling Stockholders on the one hand and the Underwriters on the other in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities (or actions in respect thereof), as well as any other relevant equitable considerations. The relative benefits received by the Company and the Selling Stockholders on the one hand and the Underwriters on the other shall be deemed to be in the same proportion as the total net proceeds from the offering (before deducting expenses) received by the Company and the Selling Stockholders bear to the total underwriting discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover page of the Prospectus. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or the Selling Stockholders on the one hand or the Underwriters on the other and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company, each of the Selling Stockholders and the Underwriters agree that it would not be just and equitable if contribution pursuant to this subsection (e) were determined by *pro rata* allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to above in this subsection (e). The amount paid or payable by an indemnified party as a result of the losses, claims, damages or liabilities (or actions in respect thereof) referred to above in this subsection (e) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this subsection (e), no Underwriter shall be required to contribute any amount in excess of the amount by which the total price at which the Shares underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages which such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission; and (ii) the contribution by the Selling Stockholders pursuant to this subsection (e) shall not exceed the Selling Stockholder Proceeds (reduced by any amounts such Selling Stockholder is obligated to pay under subsection (b) above). No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations in this subsection (e) to contribute are several in proportion to their respective underwriting obligations and

not joint, and the Selling Stockholders' obligations in this subsection (e) to contribute are several in proportion to their Selling Stockholder Proceeds and not joint.

(f) The obligations of the Company and the Selling Stockholders under this Section 10 shall be in addition to any liability which the Company and the Selling Stockholders may otherwise have and shall extend, upon the same terms and conditions, to each employee, officer and director of each Underwriter and each person, if any, who controls any Underwriter within the meaning of the Act and each broker-dealer or other affiliate of any Underwriter; and the obligations of the Underwriters under this Section 10 shall be in addition to any liability which the respective Underwriters may otherwise have and shall extend, upon the same terms and conditions, to each officer and director of the Company (including any person who, with his or her consent, is named in the Registration Statement as about to become a director of the Company) and to each person, if any, who controls the Company or any Selling Stockholder within the meaning of the Act.

11. (a) The Company will indemnify and hold harmless the Directed Share Underwriter against any losses, claims, damages and liabilities to which the Directed Share Underwriter may become subject, under the Act or otherwise, insofar as such losses, claims damages or liabilities (or actions in respect thereof) (i) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in any material prepared by or with the consent of the Company for distribution to Participants in connection with the Directed Share Program or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) arise out of or are based upon the failure of any Participant to pay for and accept delivery of Directed Shares that the Participant agreed to purchase, or (iii) are related to, arise out of or are in connection with the Directed Share Program, and will reimburse the Directed Share Underwriter for any legal or other expenses reasonably incurred by the Directed Share Underwriter in connection with investigating or defending any such action or claim as such expenses are incurred; provided, however, that with respect to clauses (ii) and (iii) above, the Company shall not be liable in any such case to the extent that any such loss, claim, damage or liability is finally judicially determined to have resulted from the bad faith or gross negligence of the Directed Share Underwriter.

(b) Promptly after receipt by the Directed Share Underwriter of notice of the commencement of any action, the Directed Share Underwriter shall, if a claim in respect thereof is to be made against the Company, notify the Company in writing of the commencement thereof; provided that the failure to notify the Company shall not relieve the Company from any liability that it may have under the preceding paragraph of this Section 11 except to the extent that it has been materially prejudiced (through the forfeiture of substantive rights or defenses) by such failure; and provided further that the failure to notify the Company shall not relieve it from any liability that it may have to the Directed Share Underwriter otherwise than under the preceding paragraph of this Section 11. In case any such action shall be brought against the Directed Share Underwriter and it shall notify the Company of the commencement thereof, the Company shall be entitled to participate therein and, to the extent that it shall wish, to assume the defense thereof, with counsel satisfactory to the Directed Share Underwriter (who shall not, except with the consent of the Directed Share Underwriter, be counsel to the Company), and, after notice from the Company to the Directed Share Underwriter of its election so to assume the defense thereof, the Company shall not be liable to the Directed Share Underwriter under this subsection for any legal expenses of other counsel or any other expenses, in each case subsequently incurred by the Directed Share Underwriter, in connection with the defense thereof other than reasonable costs of investigation. The Company shall not, without the written consent of the Directed Share Underwriter, effect the settlement or compromise

of, or consent to the entry of any judgment with respect to, any pending or threatened action or claim in respect of which indemnification or contribution may be sought hereunder (whether or not the Directed Share Underwriter is an actual or potential party to such action or claim) unless such settlement, compromise or judgment (i) includes an unconditional release of the Directed Share Underwriter from all liability arising out of such action or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act, by or on behalf of the Directed Share Underwriter.

(c) If the indemnification provided for in this Section 11 is unavailable to or insufficient to hold harmless the Directed Share Underwriter under subsection (a) above in respect of any losses, claims, damages or liabilities (or actions in respect thereof) referred to therein, then the Company shall contribute to the amount paid or payable by the Directed Share Underwriter as a result of such losses, claims, damages or liabilities (or actions in respect thereof) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Directed Share Underwriter on the other from the offering of the Directed Shares. If, however, the allocation provided by the immediately preceding sentence is not permitted by applicable law, then the Company shall contribute to such amount paid or payable by the Directed Share Underwriter in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of the Company on the one hand and the Directed Share Underwriter on the other in connection with any statements or omissions which resulted in such losses, claims, damages or liabilities (or actions in respect thereof), as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Directed Share Underwriter on the other shall be deemed to be in the same proportion as the total net proceeds from the offering of the Directed Shares (before deducting expenses) received by the Company bear to the total underwriting discounts and commissions received by the Directed Share Underwriter for the Directed Shares. If the loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement of a material fact or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, the relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company on the one hand or the Directed Share Underwriter on the other and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Directed Share Underwriter agree that it would not be just and equitable if contribution pursuant to this subsection (c) were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to above in this subsection (c). The amount paid or payable by the Directed Share Underwriter as a result of the losses, claims, damages or liabilities (or actions in respect thereof) referred to above in this subsection (c) shall be deemed to include any legal or other expenses reasonably incurred by the Directed Share Underwriter in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this subsection (c), the Directed Share Underwriter shall not be required to contribute any amount in excess of the amount by which the total price at which the Directed Shares sold by it and distributed to the Participants exceeds the amount of any damages which the Directed Share Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

(d) The obligations of the Company under this Section 11 shall be in addition to any liability which the Company may otherwise have and shall extend, upon the same terms and conditions, to each employee, officer and director of the Directed Share Underwriter and each person, if any, who controls the Directed Share Underwriter within the meaning of the Act and each broker-dealer or other affiliate of the Directed Share Underwriter.

12. (a) If any Underwriter shall default in its obligation to purchase the Shares which it has agreed to purchase hereunder at a Time of Delivery, you may in your discretion arrange for you or another party or other parties to purchase such Shares on the terms contained herein. If within thirty-six hours after such default by any Underwriter you do not arrange for the purchase of such Shares, then the Company shall be entitled to a further period of thirty-six hours within which to procure another party or other parties satisfactory to you to purchase such Shares on such terms. In the event that, within the respective prescribed periods, you notify the Company that you have so arranged for the purchase of such Shares, or the Company notifies you that it has so arranged for the purchase of such Shares, you or the Company shall have the right to postpone such Time of Delivery for a period of not more than seven days, in order to effect whatever changes may thereby be made necessary in the Registration Statement or the Prospectus, or in any other documents or arrangements, and the Company agrees to file promptly any amendments or supplements to the Registration Statement or the Prospectus which in your opinion may thereby be made necessary. The term "Underwriter" as used in this Agreement shall include any person substituted under this Section with like effect as if such person had originally been a party to this Agreement with respect to such Shares.

(b) If, after giving effect to any arrangements for the purchase of the Shares of a defaulting Underwriter or Underwriters by you and the Company as provided in subsection (a) above, the aggregate number of such Shares which remains unpurchased does not exceed one-eleventh of the aggregate number of all the Shares to be purchased at such Time of Delivery, then the Company shall have the right to require each non-defaulting Underwriter to purchase the number of Shares which such Underwriter agreed to purchase hereunder at such Time of Delivery and, in addition, to require each non-defaulting Underwriter to purchase its pro rata share (based on the number of Shares which such Underwriter agreed to purchase hereunder) of the Shares of such defaulting Underwriter or Underwriters for which such arrangements have not been made; but nothing herein shall relieve a defaulting Underwriter from liability for its default.

(c) If, after giving effect to any arrangements for the purchase of the Shares of a defaulting Underwriter or Underwriters by you and the Company as provided in subsection (a) above, the aggregate number of such Shares which remains unpurchased exceeds one-eleventh of the aggregate number of all the Shares to be purchased at such Time of Delivery, or if the Company shall not exercise the right described in subsection (b) above to require non-defaulting Underwriters to purchase Shares of a defaulting Underwriter or Underwriters, then this Agreement (or, with respect to the Second Time of Delivery, the obligations of the Underwriters to purchase and of the Company and the Selling Stockholders to sell the Optional Shares) shall thereupon terminate, without liability on the part of any non-defaulting Underwriter, the Company or the Selling Stockholders, except for the expenses to be borne by the Company, the Selling Stockholders and the Underwriters as provided in Section 8 hereof and the indemnity and contribution agreements in Sections 10 and 11 hereof; but nothing herein shall relieve a defaulting Underwriter from liability for its default.

13. The respective indemnities, agreements, representations, warranties and other statements of the Company, the Selling Stockholders and the several Underwriters, as set forth in

this Agreement or made by or on behalf of them, respectively, pursuant to this Agreement, shall remain in full force and effect, regardless of any investigation (or any statement as to the results thereof) made by or on behalf of any Underwriter or any controlling person of any Underwriter, or the Company, or any of the Selling Stockholders, or any officer or director or controlling person of the Company, or any controlling person of any Selling Stockholder, and shall survive delivery of and payment for the Shares.

14. If this Agreement shall be terminated pursuant to Section 12 hereof, neither the Company nor the Selling Stockholders shall then be under any liability to any Underwriter except as provided in Sections 8 and 10 hereof; but, if for any other reason (other than those set forth in clauses (i), (iii), (iv) and (v) of Section 9(h)), any Shares are not delivered by or on behalf of the Company and the Selling Stockholders as provided herein, the Company will reimburse the Underwriters through you for all out-of-pocket expenses approved in writing by you, including reasonably incurred and documented fees and disbursements of counsel, reasonably incurred by the Underwriters in making preparations for the purchase, sale and delivery of the Shares not so delivered, but the Company and the Selling Stockholders shall then be under no further liability to any Underwriter except as provided in Sections 8 and 10 hereof.

15. In all dealings hereunder, the Representatives shall act on behalf of each of the Underwriters, and the parties hereto shall be entitled to act and rely upon any statement, request, notice or agreement on behalf of any Underwriter made or given by the Representatives; and in all dealings with any Selling Stockholder hereunder, you and the Company shall be entitled to act and rely upon any statement, request, notice or agreement on behalf of such Selling Stockholder made or given by any or all of the Attorneys-in-Fact for such Selling Stockholder.

All statements, requests, notices and agreements hereunder shall be in writing, and if to the Underwriters shall be delivered or sent by mail, telex or facsimile transmission to you as the Representatives: in care of Goldman Sachs & Co. LLC, 200 West Street, New York, New York 10282-2198, Attention: Registration Department; in care of Morgan Stanley & Co. LLC, 1585 Broadway, New York, New York 10036, Attention: Equity Syndicate Desk; if to the Company shall be delivered or sent by mail, telex or facsimile transmission to the address of the Company set forth in the Registration Statement, Attention: Secretary; and if to any Selling Stockholder shall be delivered or sent by mail, telex or facsimile transmission to counsel for such Selling Stockholder at [·]; provided, however, that any notice to an Underwriter pursuant to Section 10(c) hereof shall be delivered or sent by mail, telex or facsimile transmission to such Underwriter at its address set forth in its Underwriters' Questionnaire, or telex constituting such Questionnaire, which address will be supplied to the Company or the Selling Stockholders by you upon request; provided, however, that notices under subsection 6(e) shall be in writing, and if to the Underwriters shall be delivered or sent by mail, telex or facsimile transmission to you as the Representatives at Goldman Sachs & Co. LLC, 200 West Street, New York, New York 10282-2198, Attention: Control Room and Morgan Stanley & Co. LLC, 1585 Broadway, New York, New York 10036, Attention: [·]. Any such statements, requests, notices or agreements shall take effect upon receipt thereof.

In accordance with the requirements of the USA Patriot Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)), the Underwriters are required to obtain, verify and record information that identifies their respective clients, including the Company and the Selling Stockholders, which information may include the name and address of their respective clients, as well as other information that will allow the Underwriters to properly identify their respective clients.

16. This Agreement shall be binding upon, and inure solely to the benefit of, the Underwriters, the Company and the Selling Stockholders and, to the extent provided in Sections 10 and 13 hereof, the officers and directors of the Company and each person who controls the Company, any Selling Stockholder or any Underwriter, and their respective heirs, executors, administrators, successors and assigns, and no other person shall acquire or have any right under or by virtue of this Agreement. No purchaser of any of the Shares from any Underwriter shall be deemed a successor or assign by reason merely of such purchase.

17. Time shall be of the essence of this Agreement. As used herein, the term "business day" shall mean any day when the Commission's office in Washington, D.C. is open for business.

18. The Company and the Selling Stockholders acknowledge and agree that (i) the purchase and sale of the Shares pursuant to this Agreement is an arm's-length commercial transaction between the Company and the Selling Stockholders, on the one hand, and the several Underwriters, on the other, and does not constitute a recommendation, investment advice, or solicitation of any action by the Underwriters, (ii) in connection therewith and with the process leading to such transaction each Underwriter is acting solely as a principal and not the agent or fiduciary of the Company or any Selling Stockholder, (iii) no Underwriter has assumed an advisory or fiduciary responsibility in favor of the Company or any Selling Stockholder with respect to the offering contemplated hereby or the process leading thereto (irrespective of whether such Underwriter has advised or is currently advising the Company or any Selling Stockholder on other matters) or any other obligation to the Company or any Selling Stockholder except the obligations expressly set forth in this Agreement, (iv) the Company and each Selling Stockholder has consulted its own legal and financial advisors to the extent it deemed appropriate and (v) none of the activities of the Underwriters in connection with the transactions contemplated herein constitutes a recommendation, investment advice or solicitation of any action by the Underwriters with respect to any entity or natural person. The Company and each Selling Stockholder agrees that it will not claim that the Underwriters, or any of them, has rendered advisory services of any nature or respect, or owes a fiduciary or similar duty to the Company or any Selling Stockholder, in connection with such transaction or the process leading thereto.

19. This Agreement supersedes all prior agreements and understandings (whether written or oral) between the Company, the Selling Stockholders and the Underwriters, or any of them, with respect to the subject matter hereof.

20. This Agreement and any transaction contemplated by this Agreement and any claim, controversy or dispute arising under or related thereto shall be governed by and construed in accordance with the laws of the State of New York without regard to principles of conflict of laws that would result in the application of any other law than the laws of the State of New York. The Company, each Selling Stockholder and each of the Underwriters agree that any suit or proceeding arising in respect of this Agreement or any transaction contemplated by this Agreement will be tried exclusively in the U.S. District Court for the Southern District of New York or, if that court does not have subject matter jurisdiction, in any state court located in The City and County of New York and the Company, each Selling Stockholder and each of the Underwriters agree to submit to the jurisdiction of, and to venue in, such courts.

21. The Company, each Selling Stockholder and each of the Underwriters hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

22. This Agreement may be executed by any one or more of the parties hereto in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same instrument.

23. Notwithstanding anything herein to the contrary, the Company and the Selling Stockholders are authorized to disclose to any persons the U.S. federal and state income tax treatment and tax structure of the potential transaction and all materials of any kind (including tax opinions and other tax analyses) provided to the Company and the Selling Stockholders relating to that treatment and structure, without the Underwriters imposing any limitation of any kind. However, any information relating to the tax treatment and tax structure shall remain confidential (and the foregoing sentence shall not apply) to the extent necessary to enable any person to comply with securities laws. For this purpose, "tax structure" is limited to any facts that may be relevant to that treatment.

24. Recognition of the U.S. Special Resolution Regimes.

(a) In the event that any Underwriter that is a Covered Entity becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer from such Underwriter of this Agreement, and any interest and obligation in or under this Agreement, will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Agreement, and any such interest and obligation, were governed by the laws of the United States or a state of the United States.

(b) In the event that any Underwriter that is a Covered Entity or a BHC Act Affiliate of such Underwriter becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under this Agreement that may be exercised against such Underwriter are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if this Agreement were governed by the laws of the United States or a state of the United States.

(c) As used in this section:

"BHC Act Affiliate" has the meaning assigned to the term "affiliate" in, and shall be interpreted in accordance with, 12 U.S.C. § 1841(k).

"Covered Entity" means any of the following:

(i) a "covered entity" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b);

(ii) a "covered bank" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or

(iii) a "covered FSI" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b).

"Default Right" has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable.

"U.S. Special Resolution Regime" means each of (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder.

[*Signature Pages to Follow*]

If the foregoing is in accordance with your understanding, please sign and return to us one for the Company and each of the Representatives plus one for each counsel and the Custodian counterparts hereof, and upon the acceptance hereof by you, on behalf of each of the Underwriters, this letter and such acceptance hereof shall constitute a binding agreement among each of the Underwriters, the Company and each of the Selling Stockholders. It is understood that your acceptance of this letter on behalf of each of the Underwriters is pursuant to the authority set forth in a form of Agreement among Underwriters, the form of which shall be submitted to the Company and the Selling Stockholders for examination upon request, but without warranty on your part as to the authority of the signers thereof.

Very truly yours,

VERTEX, INC.

By: _____
Name:
Title:

[*Signature Page to Underwriting Agreement*]

[NAMES OF SELLING STOCKHOLDERS]

By: _____
Name:
Title:

[*Signature Page to Underwriting Agreement*]

Accepted as of the date hereof:

GOLDMAN SACHS & CO. LLC

By: _____
Name:
Title:

By: _____
Name:
Title:

On behalf of each of the Underwriters

MORGAN STANLEY & CO. LLC

By: _____
Name:
Title:

On behalf of each of the Underwriters

SCHEDULE I

Underwriter	Total Number of Firm Shares to be Purchased	Number of Optional Shares to be Purchased if Maximum Option Exercised
Goldman Sachs & Co. LLC		
Morgan Stanley & Co. LLC		
BofA Securities, Inc.		
Citigroup Global Markets Inc.		
Jefferies LLC		
JMP Securities LLC		
Stifel, Nicolaus & Company, Incorporated		
William Blair & Company, L.L.C.		
CastleOak Securities, L.P.		
Total		

SCHEDULE II

Selling Stockholder	Number of Optional Shares to be Purchased if Maximum Option Exercised
[Names of Selling Stockholders]	
Total	

SCHEDULE III

(a) Issuer Free Writing Prospectuses not included in the Pricing Disclosure Package:
Electronic roadshow dated [·], 2020

(b) Information other than the Pricing Prospectus that comprise the Pricing Disclosure Package:
The initial public offering price per share for the Shares is $[·]
The number of Shares purchased by the Underwriters is [·]

(c) Written Testing-the-Waters Communications:
[ ]

ANNEX I

[Form of Press Release]

Vertex, Inc.
[·], 2020

Vertex, Inc. (the "Company") announced today that Goldman Sachs & Co. LLC and Morgan Stanley & Co. LLC, the lead book-running managers in the Company's recent public sale of shares of Class A common stock, are [waiving] [releasing] a lock-up restriction with respect to shares of the Company's common stock held by [certain officers or directors] [an officer or director] of the Company. The [waiver] [release] will take effect on , 20 , and the shares may be sold on or after such date.

This press release is not an offer for sale of the securities in the United States or in any other jurisdiction where such offer is prohibited, and such securities may not be offered or sold in the United States absent registration or an exemption from registration under the United States Securities Act of 1933, as amended.

Exhibit A

[Form of Lock-Up]

Exhibit 3.1

AMENDED AND RESTATED

CERTIFICATE OF INCORPORATION OF

VERTEX, INC.

Vertex, Inc., a corporation organized and existing under the General Corporation Law of the State of Delaware (the "DGCL"), hereby certifies as follows:

1. The name of the corporation is Vertex, Inc. The date of the filing of its original certificate of incorporation with the Secretary of State of the State of Delaware was June 26, 2020.

2. This Amended and Restated Certificate of Incorporation (this "Certificate of Incorporation"), which restates, integrates and further amends the certificate of incorporation of this corporation as heretofore amended and restated, has been duly adopted by the corporation in accordance with Sections 242 and 245 of the DGCL and has been adopted by the requisite vote of the stockholders of the corporation, acting by written consent in lieu of a meeting in accordance with Section 228 of the DGCL.

3. The certificate of incorporation of this corporation is hereby amended and restated in its entirety to read as follows:

ARTICLE I

NAME

The name of the corporation is "Vertex, Inc." (hereinafter called the "Corporation").

ARTICLE II

REGISTERED OFFICE AND AGENT

The address of the Corporation's registered office in the State of Delaware is 251 Little Falls Drive, Wilmington, New Castle County, Delaware 19808. The name of its registered agent at such address is Corporation Service Company.

ARTICLE III

PURPOSE

The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the DGCL.

ARTICLE IV

CAPITAL STOCK

Section 1. Authorized Shares

The total number of shares of all classes of capital stock which the Corporation shall have authority to issue is 480,000,000 shares, consisting of 300,000,000 shares of Class A Common Stock, par value $0.001 per share ("Class A Common Stock"), 150,000,000 shares of Class B Common Stock, par value $0.001 per share ("Class B Common Stock", and together with the Class A Common Stock, the "Common Stock"), and 30,000,000 shares of Preferred Stock, par value $0.001 per share ("Preferred Stock"). Subject to the rights of the holders of any series of Preferred Stock, the number of authorized shares of Class A Common Stock, Class B Common Stock or Preferred Stock may be increased or decreased (but not below (i) the number of shares thereof then outstanding and (ii) with respect to the Class A Common Stock, the number of shares of Class A Common Stock reserved pursuant to Section 2(i) of this Article IV) by the affirmative vote of the holders of capital stock representing a majority of the voting power of all the then-outstanding shares of capital stock of the Corporation entitled to vote thereon irrespective of the provisions of Section 242(b)(2) of the DGCL.

Section 2. Class A Common Stock and Class B Common Stock

The following is a statement of the designations and the powers, preferences, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of Common Stock of the Corporation.

Unless otherwise indicated, references to "Sections" or "Subsections" in this Section 2 of this Article IV refer to sections and subsections of Section 2 of this Article IV.

(a) Equal Status; General. Except as otherwise provided in this Certificate of Incorporation or required by applicable law, shares of Class A Common Stock and Class B Common Stock shall have the same rights, privileges and powers, rank equally (including as to dividends and distributions, and upon any liquidation, dissolution, distribution of assets or winding up of the Corporation), share ratably and be identical in all respects and as to all matters. The voting, dividend, liquidation and other rights, powers and preferences of the holders of Class A Common Stock and Class B Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock of any series as may be designated by the Board of Directors of the Corporation (the "Board") upon any issuance of the Preferred Stock of any series.

(b) Voting. Except as otherwise required by applicable law, at all meetings of stockholders and on all matters submitted to a vote of stockholders of the Corporation generally, each holder of Class A Common Stock, as such, shall have the right to one (1) vote per share of Class A Common Stock held of record by such holder and each holder of Class B Common Stock, as such, shall have the right to ten (10) votes per share of Class B Common Stock held of record by such holder. Except as otherwise required by applicable law or provided in this Certificate of

Incorporation, the holders of shares of Class A Common Stock and Class B Common Stock, as such, shall (i) at all times vote together as a single class on all matters (including the election of directors) submitted to a vote of the stockholders of the Corporation generally, (ii) be entitled to notice of any stockholders' meeting in accordance with the Amended and Restated Bylaws of the Corporation (as the same may be amended and/or restated from time to time, the "Bylaws"), and (iii) be entitled to vote upon such matters and in such manner as may be provided by applicable law; *provided*, *however*, that, except as otherwise required by applicable law, holders of Class A Common Stock and Class B Common Stock as such, shall not be entitled to vote on any amendment to this Certificate of Incorporation that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to this Certificate of Incorporation or applicable law. There shall be no cumulative voting.

(c) Dividend Rights. Shares of Class A Common Stock and Class B Common Stock shall be treated equally, identically and ratably, on a per share basis, with respect to any dividends as may be declared and paid from time to time by the Board out of any assets of the Corporation legally available therefor; *provided*, *however*, that in the event a dividend is paid in the form of shares of Class A Common Stock or Class B Common Stock (or rights to acquire, or securities convertible into or exchangeable for, such shares), then holders of Class A Common Stock shall be entitled to receive shares of Class A Common Stock (or rights to acquire, or securities convertible into or exchangeable for, such shares, as the case may be), and holders of Class B Common Stock shall be entitled to receive shares of Class B Common Stock (or rights to acquire, or securities convertible into or exchangeable for, such shares, as the case may be), with holders of shares of Class A Common Stock and Class B Common Stock receiving, on a per share basis, an identical number of shares of Class A Common Stock or Class B Common Stock (or rights to acquire, or securities convertible into or exchangeable for, such shares, as the case may be), as applicable. Notwithstanding the foregoing, the Board may pay or make a disparate dividend per share of Class A Common Stock or Class B Common Stock (whether in the amount of such dividend payable per share, the form in which such dividend is payable, the timing of the payment, or otherwise) if such disparate dividend is approved by the affirmative vote of the holders of a majority of the outstanding shares of Class A Common Stock and Class B Common Stock, each voting separately as a class.

(d) Subdivisions, Combinations or Reclassifications. Shares of Class A Common Stock or Class B Common Stock may not be subdivided, combined or reclassified unless the shares of the other class is concurrently therewith proportionately subdivided, combined or reclassified in a manner that maintains the same proportionate equity ownership between the holders of the outstanding Class A Common Stock and Class B Common Stock on the record date for such subdivision, combination or reclassification; *provided*, *however*, that shares of one such class may be subdivided, combined or reclassified in a different or disproportionate manner if such subdivision, combination or reclassification is approved by the affirmative vote of the holders of a majority of the outstanding shares of Class A Common Stock and Class B Common Stock, each voting separately as a class.

(e) Liquidation, Dissolution or Winding Up. Subject to the preferential or other rights of any holders of Preferred Stock then outstanding, upon the dissolution, distribution of assets, liquidation or winding up of the Corporation, whether voluntary or involuntary, holders of

Class A Common Stock and Class B Common Stock will be entitled to receive ratably all assets of the Corporation available for distribution to its stockholders unless disparate or different treatment of the shares of each such class with respect to distributions upon any such liquidation, dissolution, distribution of assets or winding up is approved by the affirmative vote of the holders of a majority of the outstanding shares of Class A Common Stock and Class B Common Stock, each voting separately as a class.

(f) Certain Transactions.

(1) Merger or Consolidation. In the case of any distribution or payment in respect of the shares of Class A Common Stock or Class B Common Stock, or any consideration into which such shares are converted, upon the consolidation or merger of the Corporation with or into any other entity, such distribution, payment or consideration that the holders of shares of Class A Common Stock or Class B Common Stock have the right to receive, or the right to elect to receive, shall be made ratably on a per share basis among the holders of the Class A Common Stock and Class B Common Stock as a single class; *provided*, *however*, that shares of such classes may receive, or have the right to elect to receive, different or disproportionate consideration in connection with such consolidation, merger or other transaction if (a) the only difference in the per share consideration to the holders of the Class A Common Stock and Class B Common Stock is that any securities distributed to the holder of, or issuable upon the conversion of, a share of Class B Common Stock have ten (10) times the voting power of any securities distributed to the holder of, or issuable upon the conversion of, a share of Class A Common Stock or (b) such different or disproportionate consideration is approved by the affirmative vote of the holders of a majority of the outstanding shares of Class A Common Stock and Class B Common Stock, each voting separately as a class.

(2) Third-Party Tender or Exchange Offers. The Corporation may not enter into any agreement pursuant to which a third party may by tender or exchange offer acquire any shares of Class A Common Stock or Class B Common Stock unless the holders of (a) the Class A Common Stock shall have the right to receive, or the right to elect to receive, the same form of consideration and the same amount of consideration on a per share basis as the holders of the Class B Common Stock would receive, or have the right to elect to receive, and (b) the Class B Common Stock shall have the right to receive, or the right to elect to receive, the same form of consideration and the same amount of consideration on a per share basis as the holders of the Class A Common Stock would receive, or have the right to elect to receive; *provided*, *however*, that shares of such classes may receive, or have the right to elect to receive, different or disproportionate consideration in connection with such tender or exchange offer if (a) the only difference in the per share consideration to the holders of the Class A Common Stock and Class B Common Stock is that any securities exchanged for a share of Class B Common Stock have ten (10) times the voting power of any securities exchanged for a share of Class A Common Stock or (b) such different or disproportionate consideration is approved by the affirmative vote of the holders of a majority of the outstanding shares of Class A Common Stock and Class B Common Stock, each voting separately as a class.

(g) Special Approval Rights. Notwithstanding any other provision of this Certificate of Incorporation, so long as any shares of Class B Common Stock remain outstanding, the Corporation shall not, and shall cause all direct or indirect subsidiaries of the Corporation to

not, take any of the following actions (whether by merger, consolidation or otherwise) without the prior affirmative vote of the holders of a majority of the outstanding shares of Class B Common Stock, voting as a separate class:

(1) Amend or modify this Certificate of Incorporation, the Bylaws, or any other Organizational Documents of the Corporation, in a manner adverse to the holders of Class B Common Stock; or

(2) a Change of Control Transaction.

(h) Conversion.

(1) Optional Conversion of Class B Common Stock. Each share of Class B Common Stock shall be convertible into one (1) fully paid and nonassessable share of Class A Common Stock at the option of the holder thereof at any time upon written notice to the Corporation (an "Optional Class B Conversion Event"). Before any holder of Class B Common Stock shall be entitled to convert any shares of Class B Common Stock into shares of Class A Common Stock pursuant to this Section 2(h)(1), such holder shall surrender the certificate or certificates therefor (if any), duly endorsed, at the principal corporate office of the Corporation or of any transfer agent for the Class B Common Stock, and shall provide written notice to the Corporation at its principal corporate office, of such conversion election and shall state therein the name or names (i) in which the certificate or certificates representing the shares of Class A Common Stock into which the shares of Class B Common Stock are so converted are to be issued (if such shares of Class A Common Stock are certificated) or (ii) in which such shares of Class A Common Stock are to be registered in book-entry form (if such shares of Class A Common Stock are uncertificated). If the shares of Class A Common Stock into which the shares of Class B Common Stock are to be converted are to be issued in a name or names other than the name of the holder of the shares of Class B Common Stock being converted, such notice shall be accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the holder. The Corporation shall, as soon as practicable thereafter, issue and deliver at such office to such holder, or to the nominee or nominees of such holder, a certificate or certificates representing the number of shares of Class A Common Stock to which such holder shall be entitled upon such conversion (if such shares of Class A Common Stock are certificated) or shall register such shares of Class A Common Stock in book-entry form (if such shares of Class A Common Stock are uncertificated). Any conversion made pursuant to this Section 2(h)(1) shall be deemed to be effective immediately prior to the close of business on the date of such surrender of the shares of Class B Common Stock to be converted following or contemporaneously with the provision of written notice of such conversion election as required by this Section 2(h)(1) (the "Optional Conversion Effective Time"), the shares of Class A Common Stock issuable upon such conversion shall be deemed to be outstanding as of the Optional Conversion Effective Time, and the Person or Persons entitled to receive the shares of Class A Common Stock issuable upon such conversion shall be deemed to be the record holder or holders of such shares of Class A Common Stock as of the Optional Conversion Effective Time. Notwithstanding anything herein to the contrary, shares of Class B Common Stock represented by a lost, stolen or destroyed stock certificate may be converted pursuant to an Optional Class B Conversion Event if the holder thereof notifies the Corporation or its transfer agent that such certificate has been lost, stolen or destroyed and makes an affidavit of that fact acceptable to the Corporation and executes an

agreement acceptable to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificate. Each share of Class B Common Stock that is converted pursuant to this Section 2(h)(1) shall thereupon automatically be retired and shall not be available for reissuance.

(2) Automatic Conversion of Class B Common Stock. Each share of Class B Common Stock shall automatically convert into one (1) fully paid and nonassessable share of Class A Common Stock upon the occurrence of an event described below (a "Mandatory Class B Conversion Event"):

(A) Transfers; Grants of Voting Control. Each share of Class B Common Stock shall automatically, without further action by the Corporation or the holder thereof, convert into one (1) fully paid and nonassessable share of Class A Common Stock upon (i) the occurrence of a Transfer, other than a Permitted Transfer, of such share of Class B Common Stock; or (ii) the grant by a Qualified Stockholder of Voting Control to any Person other than a Qualified Person, a trustee of a Qualified Trust, or an Applicable Proxy.

(B) Reduction in Voting Power. Each outstanding share of Class B Common Stock shall automatically, without further action by the Corporation or the holder thereof, convert into one (1) fully paid and nonassessable share of Class A Common Stock upon the first date on which the voting power of all then-outstanding shares of Class B Common Stock represents less than ten percent (10%) of the combined voting power of all then-outstanding shares of Common Stock.

(C) Affirmative Vote. Each outstanding share of Class B Common Stock shall automatically, without further action by the Corporation or the holder thereof, convert into one (1) fully paid and nonassessable share of Class A Common Stock upon the date specified by the holders of at least seventy-five percent (75%) of the then outstanding shares of Class B Common Stock, voting as a separate class.

(3) Certificates. Each outstanding stock certificate (if shares are in certificated form) that, immediately prior to the occurrence of a Mandatory Class B Conversion Event, represented one or more shares of Class B Common Stock subject to such Mandatory Class B Conversion Event shall, upon such Mandatory Class B Conversion Event, be deemed to represent an equal number of shares of Class A Common Stock, without the need for surrender or exchange thereof. The Corporation shall, upon the request of any holder whose shares of Class B Common Stock have been converted into shares of Class A Common Stock as a result of a Mandatory Class B Conversion Event and upon surrender by such holder to the Corporation of the outstanding certificate(s) formerly representing such holder's shares of Class B Common Stock, if any (or, in the case of any lost, stolen or destroyed certificate, upon such holder providing an affidavit of that fact acceptable to the Corporation and executing an agreement acceptable to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificate), issue and deliver to such holder certificate(s) representing the shares of Class A Common Stock into which such holder's shares of Class B Common Stock were converted as a result of such Mandatory Class B Conversion Event (if such shares are certificated) or, if such shares are uncertificated, register such shares in book-entry form. Each share of Class B Common

Stock that is converted pursuant to this Section 2(h)(3) shall thereupon automatically be retired and shall not be available for reissuance.

(4) Policies and Procedures. The Corporation may, from time to time, establish such policies and procedures, not in violation of applicable law or the other provisions of this Certificate of Incorporation or the Bylaws, relating to the conversion of the Class B Common Stock into Class A Common Stock, as it may deem necessary or advisable in connection therewith. If the Corporation has reason to believe that a Transfer, an Optional Class B Conversion Event or Mandatory Class B Conversion Event giving rise to a conversion of shares of Class B Common Stock into Class A Common Stock has occurred but has not theretofore been reflected on the books of the Corporation (or in book-entry as maintained by the transfer agent of the Corporation), the Corporation may request that the holder of such shares furnish affidavits or other evidence to the Corporation as the Corporation deems necessary to determine whether a conversion of shares of Class B Common Stock to Class A Common Stock has occurred, and if such holder does not within ten (10) days after the date of such request furnish sufficient evidence to the Corporation (in the manner provided in the request) to enable the Corporation to determine that no such conversion has occurred, any such shares of Class B Common Stock, to the extent not previously converted, shall be automatically converted into shares of Class A Common Stock and the same shall thereupon be registered on the books and records of the Corporation (or in book-entry as maintained by the transfer agent of the Corporation). In connection with any action of stockholders taken at a meeting, the stock ledger of the Corporation (or in book-entry as maintained by the transfer agent of the Corporation) shall be presumptive evidence as to who are the stockholders entitled to vote in person or by proxy at any meeting of stockholders and the class or classes or series of shares held by each such stockholder and the number of shares of each class or classes or series held by such stockholder.

(i) Reservation of Stock. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Class A Common Stock, solely for the purpose of effecting the conversion of the shares of Class B Common Stock, such number of shares of Class A Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of Class B Common Stock into shares of Class A Common Stock.

(j) Protective Provision. The Corporation shall not, whether by merger, consolidation or otherwise, amend, alter, repeal or waive any provision of Section 2 of this Article IV (or adopt any provision inconsistent therewith), unless such action is first approved by the affirmative vote (or written consent) of the holders of a majority of the then-outstanding shares of Class B Common Stock, voting as a separate class, in addition to any other vote required by applicable law, this Certificate of Incorporation or the Bylaws.

(k) Definitions. For purposes of this Article IV:

(1) "2001 Trust" means each of (i) those two separate and distinct trusts for the respective primary benefit of Antoinette R. Radcliffe and Kailey A. Radcliffe under The Trust of Amanda W. Radcliffe dated October 5, 2001, and that certain trust known as the "Third Party Funded Special Needs Trust for Callum W. Radcliffe" dated May 15, 2015, (ii) those three separate and distinct trusts for the respective primary benefit of Anne Marie Westphal, Kyle R. Westphal and Jacob J. Westphal under The Trust of Jeffrey R. Westphal dated October 5, 2001,

and (iii) those four separate and distinct trusts for the respective primary benefit of Andrea P. Schmerin (f/k/a Andrea P. Lucas), Melanie H. Lucas, Mackenzie S. Lucas and Samantha W. Lucas under The Trust of Stefanie W. Lucas dated October 5, 2001.

(2) "2009 Trust" means each of (i) The Amanda W. Radcliffe Generation-Skipping Trust, (ii) The 2009 Jeffrey R. Westphal Generation-Skipping Trust and (iii) The 2009 Stefanie W. Lucas Generation-Skipping Trust.

(3) "Applicable Proxy" means the President of the Corporation and any other person designated by the Board, and each of them, whom a holder of Class B Common Stock (a "Class B Stockholder") has constituted and appointed as such Class B Stockholder's true and lawful proxy and attorney-in-fact, with full power of substitution, to represent and vote all of such Class B Stockholder's shares of Common Stock in accordance with the obligations of such Class B Stockholder to vote such Class B Stockholder's shares of Common Stock pursuant to an agreement entered into with the Corporation and other Class B Stockholders (the "Voting Obligations"), so long as:

(A) the Applicable Proxy may exercise the irrevocable proxy granted to it at any time any Class B Stockholder fails to vote (including by failing to cause such Class B Stockholder's shares to be present at the meeting) or attempts to vote (whether by proxy, in person or by written consent) in a manner that does not comply with the Voting Obligations;

(B) the proxies and powers granted by such Class B Stockholder to the Applicable Proxy shall be irrevocable until the termination of the agreement to which the Voting Obligations relate and shall, to the fullest extent permitted by law, survive the death, incompetency and disability of each such Class B Stockholder who is an individual and the existence of each such Class B Stockholder that is a trust or other entity; and

(C) the Applicable Proxy may not use such irrevocable proxy unless a Class B Stockholder fails to vote (including by failing to cause such Class B Stockholder's shares to be present at the meeting) or attempts to vote (whether by proxy, in person or by written consent) in a manner that does not comply with the Voting Obligations and, to the extent the Applicable Proxy uses such irrevocable proxy, it will only vote such Class B Stockholder's shares of Common Stock with respect to the matters specified in, and in accordance with the provisions of the Voting Obligations.

(4) "Business Day" means any day other than a Saturday, Sunday or other day in the City of New York on which banking institutions are authorized or required by applicable law or regulations to close.

(5) "Change of Control Transaction" means (i) the sale, lease, exchange, or other disposition (other than liens and encumbrances created in the ordinary course of business, including liens or encumbrances to secure indebtedness for borrowed money that are approved by the Board, so long as no foreclosure occurs in respect of any such lien or encumbrance) of all or substantially all of the Corporation's property and assets (which shall for such purpose include the property and assets of any direct or indirect subsidiary of the Corporation), *provided* that any sale, lease, exchange or other disposition of property or assets

exclusively between or among the Corporation and any direct or indirect subsidiary or subsidiaries of the Corporation shall not be deemed a "Change of Control Transaction"; (ii) the sale, lease, exchange, or other disposition (other than liens and encumbrances created in the ordinary course of business, including liens or encumbrances to secure indebtedness for borrowed money that are approved by the Board, so long as no foreclosure occurs in respect of any such lien or encumbrance) of assets of the Corporation (which shall for such purpose include the property and assets of any direct or indirect subsidiary of the Corporation) that generated at least fifty percent (50%) of the consolidated annual revenues of the Corporation and its direct and indirect subsidiaries, taken as a whole, as of the most recent audited annual income statement preceding the execution and delivery of an agreement to effect such sale, lease, exchange or other disposition; (iii) the merger, consolidation, business combination, or other similar transaction of the Corporation with any other entity, other than a merger, consolidation, business combination, or other similar transaction that would result in the voting securities of the Corporation outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or its Parent) more than fifty percent (50%) of the total voting power represented by the voting securities of the Corporation (or of the surviving entity, or in the case that the Corporation or the surviving entity is a wholly owned subsidiary following the transaction, of its ultimate Parent) and more than fifty percent (50%) of the total number of outstanding shares of the Corporation's (or the surviving entity's, or in the case that the Corporation or the surviving entity is a wholly owned subsidiary following the transaction, of the ultimate Parent's) capital stock, in each case as outstanding immediately after such merger, consolidation, business combination, or other similar transaction, and the stockholders of the Corporation immediately prior to the merger, consolidation, business combination, or other similar transaction continuing to own voting securities of the Corporation, the surviving entity or its Parent immediately following the merger, consolidation, business combination, or other similar transaction in substantially the same proportions (vis a vis each other) as such stockholders owned of the voting securities of the Corporation immediately prior to the transaction; and (iv) a recapitalization, liquidation, dissolution, or other similar transaction involving the Corporation or any of its subsidiaries.

(6) "Family Member" means, for any individual, (i) a lineal descendant of such individual by blood or adoption (a "Descendant"), (ii) any spouse or widow or widower of such Descendant (but not a divorced former spouse or a spouse from whom such Descendant currently is, or at the time of his or her death was, legally separated) or (iii) any stepchild or lineal descendant by blood or adoption of a stepchild of such Descendant. Notwithstanding the foregoing, an adopted person whose adoption did not either occur during the adopted person's minority or reflect an earlier parent-child relationship with the adopting parent that had existed during the adopted person's minority, shall not be treated as the child of his or her adopted parent, and such adopted person and his or her lineal descendants shall not be treated as the lineal descendants of the adopted parent or of any ancestor of the adopted parent.

(7) "Fiduciary" means a Person who (a) is an executor, personal representative, administrator, trustee, manager, managing member, general partner, director,

officer or any other agent of a Person and (b) manages, controls or otherwise has decision-making authority with respect to such Person.

(8) "Founder" means Amanda W. Radcliffe, Jeffrey R. Westphal, or Stefanie W. Thompson (formerly known as Stefanie W. Lucas).

(9) "Founder Qualified Stockholder" means a Qualified Stockholder who is also a Founder.

(10) "IPO Date" means the date of the consummation of the Corporation's initial public offering of shares of its Class A Common Stock.

(11) "Liquidation Event" means any liquidation, dissolution, or winding up of the Corporation, whether voluntary or involuntary, or any Change of Control Transaction.

(12) "Organizational Documents" means, with respect to any Person (other than an individual), (a) the certificate or articles of association or incorporation or organization or limited partnership or limited liability company, and any joint venture, limited liability company, operating or partnership agreement and other similar documents adopted or filed in connection with the creation, formation or organization of such Person and (b) all bylaws, regulations and similar documents or agreements relating to the organization or governance of such Person, in each case, as amended or supplemented.

(13) "Parent" of an entity means any entity that directly or indirectly owns or controls a majority of the voting power of the voting securities of such entity.

(14) "Permitted Entity" means with respect to a Qualified Stockholder:

(A) a Qualified Trust;

(B) a Qualified Foundation;

(C) any general partnership, limited partnership, limited liability company, corporation, public benefit corporation or other entity exclusively owned by (i) one or more Qualified Stockholders, (ii) one or more Family Members of such Qualified Stockholders and/or (iii) any other Permitted Entity of such Qualified Stockholders; or

(D) the estate of a Qualified Stockholder upon the death of such Qualified Stockholder, including the executor or personal representative of such estate to the extent

the executor or personal representative is acting in the capacity of executor or personal representative of such estate;

Except as explicitly provided for herein, a Permitted Entity of a Qualified Stockholder shall not cease to be a Permitted Entity of that Qualified Stockholder solely by reason of the death of that Qualified Stockholder.

(15) "Permitted Transfer" means, and is restricted to, any Transfer of a share of Class B Common Stock:

(A) by a Qualified Stockholder (or, in the case of a deceased Founder Qualified Stockholder, the executor or personal representative of the estate of such deceased Founder Qualified Stockholder) to (i) any other Qualified Stockholder or (ii) any Qualified Extended Family Member;

(B) by a Qualified Stockholder (or, in the case of a deceased Founder Qualified Stockholder, the executor or personal representative of the estate of such deceased Founder Qualified Stockholder) to any Permitted Entity of such Qualified Stockholder or of a Qualified Extended Family Member, *so long as* Voting Control over such shares is exercised by (i) such Qualified Stockholder, (ii) a Founder or Qualified Extended Family Member, (iii) a trustee of a Qualified Trust, or (iv) a Fiduciary of such Permitted Entity who is selected by such Qualified Stockholder, and whom such Qualified Stockholder has the power to remove and replace with another Fiduciary selected by such Qualified Stockholder;

(C) by a Permitted Entity of a Qualified Stockholder (or, in the case of a deceased Founder Qualified Stockholder, the executor or personal representative of the estate of such deceased Founder Qualified Stockholder) to (i) such Qualified Stockholder or one or more Qualified Extended Family Members, (ii) any other Permitted Entity of such Qualified Stockholder or (iii) any Permitted Entity of a Qualified Extended Family Member;

(D) to a broker or other nominee; *provided* that the transferor, immediately following such Transfer, retains (i) Voting Control, (ii) control over the disposition of such shares, and (iii) the economic consequences of ownership of such shares; or

(E) approved in advance by the Board, or a duly authorized committee of the Board, upon a determination that such Transfer is consistent with the purposes of the foregoing provisions of this definition of "Permitted Transfer."

For the avoidance of doubt, (i) the direct Transfer of any share or shares of Class B Common Stock by a holder thereof to any other Person shall qualify as a "Permitted Transfer" within the meaning of this Section, if such Transfer could have been completed indirectly through one or more transactions involving more than one Transfer, so long as each Transfer in such transaction or transactions would otherwise have qualified as a "Permitted Transfer" within the meaning of this Section; and (ii) each of the foregoing clauses (A) through (E) constitutes a "Permitted Transfer" within the meaning of this Section without regard to any other clause of this

Section (or any requirement of, or proviso in, any such clause) as may be applicable to such Transfer.

(16) "Permitted Transferee" means a transferee of shares of Class B Common Stock received in a Permitted Transfer.

(17) "Person" means any individual, partnership, corporation, limited liability company, association, trust, estate, or other entity.

(18) "Qualified Foundation" means any foundation that is primarily for the benefit of one or more Qualified Persons.

(19) "Qualified Extended Family Member" means a Family Member of Rainer J. Westphal.

(20) "Qualified Person" means (i) Rainer J. Westphal, (ii) a Founder, or (iii) any Qualified Extended Family Member.

(21) "Qualified Stockholder" means:

(A) any registered holder of a share of Class B Common Stock as of 11:59 p.m. Eastern Time on the IPO Date;

(B) the initial record holder of any shares of Class B Common Stock that are originally issued by the Corporation after the IPO Date upon the approval of the Board or the Compensation Committee of the Board;

(C) each natural Person who Transferred shares of or equity awards for Class B Common Stock (including any option or warrant exercisable or convertible into, or any RSU or restricted stock that can be settled in shares of, Class B Common Stock) to a Permitted Entity;

(D) any Qualified Person; and

(E) any Permitted Transferee.

(22) "Qualified Trust" means each 2009 Trust, each 2001 Trust and any other trust that (i) is primarily for the benefit of one or more Qualified Persons, and (ii) as to which no person other than a Qualified Person or another Qualified Trust is currently eligible or entitled to receive any distribution of income or principal from the trust. For avoidance of doubt, the mere possibility that, by reason of exercise of a power of appointment granted in the governing instrument or otherwise, Persons other than Qualified Persons or other Qualified Trusts might at some future date become eligible or entitled to receive distributions of income or principal from the trust shall not prevent a trust from being considered a Qualified Trust.

(23) "Transfer" means any sale, exchange, gift, bequest, pledge, hypothecation, encumbrance, descent or distribution pursuant to intestacy laws or other operation

of law, or any other direct or indirect disposition of Class B Common Stock which would change the legal or beneficial ownership thereof, including without limitation the creation of any form of common or joint ownership in Class B Common Stock between a holder of Class B Common Stock and one or more Persons. A Transfer shall also be deemed to have occurred with respect to a share of Class B Common Stock beneficially held by (x) an entity that is a Permitted Entity if there occurs any act or circumstance that causes such entity to no longer be a Permitted Entity or (y) an entity that is a Qualified Stockholder if there occurs a Transfer on a cumulative basis, from and after the IPO Date, of a majority of the voting power of the voting securities of such entity or any direct or indirect Parent of such entity. In addition, for the avoidance of doubt, a Transfer shall be deemed to have occurred if a holder that is a partnership, limited partnership, limited liability company or corporation distributes or otherwise transfers its shares of Class B Common Stock to its partners, stockholders, members or other equity owners. Notwithstanding the foregoing, none of the following (individually or in combination) shall be considered a Transfer:

(A) the granting of a revocable proxy to (i) an officer or director of the Corporation at the request of the Board in connection with actions to be taken at an annual or special meeting of stockholders or any other action of the stockholders permitted by this Certificate of Incorporation; (ii) a Qualified Person or (iii) the trustee of a Qualified Trust;

(B) the granting of a proxy to an Applicable Proxy;

(C) entering into a voting trust, agreement or arrangement (with or without granting a proxy) solely with stockholders who are holders of Class B Common Stock, which voting trust, agreement or arrangement does not involve any payment of cash, securities or other property to the holder of the shares subject thereto other than the mutual promise to vote shares in a designated manner; for the avoidance of doubt, any voting trust, agreement or arrangement entered into prior to the IPO Date shall not constitute a Transfer;

(D) the assignment, pledging, hypothecation or encumbrance ("Pledge") by a holder of Class B Common Stock (the "Pledging Stockholder") of shares of Class B Common Stock (the "Pledged Interest") to an individual or entity (the "Pledgee") for the purpose of securing the obligation of the Pledging Stockholder or any other Person to repay a loan or to render any other performance, so long as the Pledging Stockholder continues to exercise Voting Control over the Pledged Interest; *provided that* (i) no Pledge nor any related loan, obligation or other performance shall be conditioned upon or in any way related to the financial performance or position of the Corporation, or require a guarantee or other form of support by the Corporation or any other holder of Class B Common Stock, (ii) no Pledging Stockholder shall engage in any transaction (including a Pledge) with the Pledgee without first providing the Corporation with five (5) Business Days' prior notice of the proposed transaction with the Pledgee, and (iii) no Pledging Stockholder shall engage in any transaction (including a Pledge) with the Pledgee without first entering into an agreement (the "Pledge Agreement") with the Pledgee that expressly requires that, should the Pledgee desire and if the Pledge Agreement otherwise permits, the Pledgee may take for itself or Transfer to any Person other than the Pledging Stockholder the title to the Pledged Interest only if, prior to so taking or Transferring the Pledged Interest, the Pledgee shall allow the

Corporation or one or more holders of Class B Common Stock to assume the Pledging Stockholder's obligations under the Pledge Agreement; *provided further*, that a foreclosure on the Pledged Interest or other similar action by the Pledgee shall constitute a "Transfer" unless such foreclosure or similar action qualifies as a Permitted Transfer at such time;

(E) any change in the trustee(s) or the Person(s) and/or entity(ies) having or exercising Voting Control over shares of Class B Common Stock of a Permitted Entity, *provided* that following such change such Permitted Entity continues to be a Permitted Entity and a Founder, a Family Member of such Founder or a trustee of a Qualified Trust continues to have Voting Control over the shares of Class B Common Stock held by such Permitted Entity;

(F) the Transfer of Class B Common Stock pursuant to the terms of a planned trading program effected pursuant to Rule 10b5-1 under the Securities Exchange Act of 1934, as amended, that has been approved by at least a majority of the disinterest members of (i) the Board or (ii) a committee of the Board authorized to take such action; *provided, however*, that a sale of such shares of Class B Common Stock pursuant to such plan shall constitute a "Transfer" at the time of such sale;

(G) in connection with a Change of Control Transaction that has been approved by the Board, (1) the entering into a support, voting, tender or similar agreement or arrangement (with or without a proxy), (2) the granting of any proxy and/or (3) the tendering of any shares in any tender or exchange offer for all of the outstanding shares of Class A Common Stock and Class B Common Stock, in each case that has also been approved by the Board;

(H) due to the fact that the spouse of any holder of shares of Class B Common Stock possesses or obtains an interest in such holder's shares of Class B Common Stock arising solely by reason of the application of the community property laws of any jurisdiction, so long as no other event or circumstance shall exist or have occurred that constitutes a "Transfer" of such shares of Class B Common Stock; *provided* that any transfer of shares by any holder of shares of Class B Common Stock to such holder's spouse, including a transfer in connection with a divorce proceeding, domestic relations order or similar legal requirement, shall constitute a "Transfer" of such shares of Class B Common Stock unless otherwise exempt from the definition of Transfer; and/or

(I) in connection with a Liquidation Event that has been approved by the Board, the entering into a support, voting, tender or similar agreement, arrangement or understanding (with or without granting a proxy) or consummating the actions or transactions contemplated therein (including, without limitation, tendering shares of Class B Common Stock in connection with a Liquidation Event, the consummation of a Liquidation Event or the sale, assignment, transfer, conveyance, hypothecation or other transfer or disposition of shares of Class B Common Stock or any legal or beneficial interest in shares of Class B Common Stock in connection with a Liquidation Event), in each case that has also been approved by the Board.

(24) "Voting Control" means, with respect to a share of Class B Common Stock, the power (whether exclusive or shared) to vote or direct the voting of such share by proxy,

voting agreement or otherwise. Notwithstanding the foregoing, none of the following (individually or in combination) shall be considered a grant of Voting Control:

(A) the granting of a revocable proxy to (1) an officer or director of the Corporation at the request of the Board in connection with actions to be taken at an annual or special meeting of stockholders or any other action of the stockholders permitted by this Certificate of Incorporation, (2) a Qualified Person or, (3) the trustee of a Qualified Trust;

(B) the granting of a proxy to an Applicable Proxy;

(C) entering into a voting trust, agreement or arrangement (with or without granting a proxy) solely with stockholders who are holders of Class B Common Stock, which voting trust, agreement or arrangement does not involve any payment of cash, securities or other property to the holder of the shares subject thereto other than the mutual promise to vote shares in a designated manner;

(D) the Pledge by a Pledging Stockholder of Pledged Interest to a Pledgee for the purpose of securing the obligation of the Pledging Stockholder or any other Person to repay a loan or to render any other performance, so long as the Pledging Stockholder continues to exercise Voting Control over the Pledged Interest; *provided that* (i) no Pledge nor any related loan, obligation or other performance shall be conditioned upon or in any way related to the financial performance or position of the Corporation, or require a guarantee or other form of support by the Corporation or any other holder of Class B Common Stock, (ii) no Pledging Stockholder shall engage in any transaction (including a Pledge) with the Pledgee without first providing the Corporation with five (5) Business Days' prior notice of the proposed transaction with the Pledgee, and (iii) no Pledging Stockholder shall engage in any transaction (including a Pledge) with the Pledgee without first entering into a Pledge Agreement with the Pledgee that expressly requires that, should the Pledgee desire and if the Pledge Agreement otherwise permits, the Pledgee may take for itself or Transfer to any Person other than the Pledging Stockholder the title to the Pledged Interest only if, prior to so taking or Transferring the Pledged Interest, the Pledgee shall allow the Corporation or one or more holders of Class B Common Stock to assume the Pledging Stockholder's obligations under the Pledge Agreement; *provided further*, that a foreclosure on the Pledged Interest or other similar action by the Pledgee shall constitute a grant of Voting Control unless such foreclosure or similar action qualifies as a Permitted Transfer at such time;

(E) any change in the trustee(s) or the Person(s) and/or entity(ies) having or exercising Voting Control over shares of Class B Common Stock of a Permitted Entity, *provided* that following such change such Permitted Entity continues to be a Permitted Entity and a Founder, a Family Member of such Founder or a trustee of a Qualified Trust continues to have Voting Control over the shares of Class B Common Stock held by such Permitted Entity;

(F) the Transfer of Class B Common Stock pursuant to the terms of a planned trading program effected pursuant to Rule 10b5-1 under the Securities Exchange Act of 1934, as amended, that has been approved by at least a majority of the disinterest members of (i) the Board or (ii) a committee of the Board authorized to take such action; *provided, however*,

that a sale of such shares of Class B Common Stock pursuant to such plan shall constitute a grant of Voting Control at the time of such sale;

(G) in connection with a Change of Control Transaction that has been approved by the Board, (1) the entering into a support, voting, tender or similar agreement or arrangement (with or without a proxy), (2) the granting of any proxy and/or (3) the tendering of any shares in any tender or exchange offer for all of the outstanding shares of Class A Common Stock and Class B Common Stock, in each case that has also been approved by the Board;

(H) due to the fact that the spouse of any holder of shares of Class B Common Stock possesses or obtains an interest in such holder's shares of Class B Common Stock arising solely by reason of the application of the community property laws of any jurisdiction, so long as no other event or circumstance shall exist or have occurred that constitutes a "Transfer" of such shares of Class B Common Stock; *provided* that any transfer of shares by any holder of shares of Class B Common Stock to such holder's spouse, including a transfer in connection with a divorce proceeding, domestic relations order or similar legal requirement, shall constitute a grant of Voting Control of such shares of Class B Common Stock unless otherwise exempt from constituting a grant of Voting Control; and/or

(I) in connection with a Liquidation Event that has been approved by the Board, the entering into a support, voting, tender or similar agreement, arrangement or understanding (with or without granting a proxy) or consummating the actions or transactions contemplated therein (including, without limitation, tendering shares of Class B Common Stock in connection with a Liquidation Event, the consummation of a Liquidation Event or the sale, assignment, transfer, conveyance, hypothecation or other transfer or disposition of shares of Class B Common Stock or any legal or beneficial interest in shares of Class B Common Stock in connection with a Liquidation Event), in each case that has also been approved by the Board.

Section 3. Preferred Stock

Preferred Stock may be issued from time to time in one or more series, each of such series to have such terms as stated or expressed herein and in the resolution or resolutions providing for the issue of such series adopted by the Board as hereinafter provided. Subject to the rights of the holders of any series of Preferred Stock and except as otherwise provided by law, any shares of Preferred Stock that may be redeemed, purchased or acquired by the Corporation may be reissued by the Corporation.

Authority is hereby expressly granted to the Board from time to time to issue the Preferred Stock in one or more series and in connection with the creation of any such series, by adopting a resolution or resolutions providing for the issuance of the shares thereof and by filing a certificate of designations relating thereto in accordance with the DGCL, to determine and fix the number of shares of such series and such voting powers, full or limited, or no voting powers, and such designations, preferences and relative participating, optional or other special rights, and qualifications, limitations or restrictions thereof, including without limitation thereof, dividend rights, conversion rights, redemption privileges and liquidation preferences, as shall be stated and expressed in such resolutions, all to the full extent now or hereafter permitted by the DGCL.

Without limiting the generality of the foregoing, the resolutions providing for issuance of any series of Preferred Stock may provide that such series shall be superior, equal or junior to any other series of Preferred Stock to the extent permitted by law.

Section 4. Stock Split

Immediately upon the filing and effectiveness of this Certificate of Incorporation with the Secretary of State of the State of Delaware (the "Effective Time"), a forward stock split of the Common Stock shall become effective, pursuant to which each share of Class A Common Stock outstanding and held of record by each stockholder of the Corporation or held by the Corporation in treasury immediately prior to the Effective Time shall automatically and without further action on the part of the Corporation or any holder thereof be reclassified and changed into three (3) validly issued, fully paid and non-assessable shares of Class A Common Stock and each share of Class B Common Stock outstanding and held of record by each stockholder of the Corporation or held by the Corporation in treasury immediately prior to the Effective Time shall automatically and without further action on the part of the Corporation or any holder thereof be reclassified and changed into three (3) validly issued, fully paid and non-assessable shares of Class B Common Stock (the "Stock Split"**)**. Each stock certificate representing shares of Class A Common Stock or Class B Common Stock that was issued prior to the Effective Time shall, after the Effective Time, automatically and without the necessity of presenting the same for exchange, be deemed to represent the number of shares of Class A Common Stock or Class B Common Stock, respectively, into which such shares were reclassified pursuant to the Stock Split, and the holders of record thereof shall be entitled to receive, upon surrender of such certificate to the Corporation, a new certificate evidencing and representing the applicable number of shares of Class A Common Stock or Class B Common Stock resulting from the Stock Split.

ARTICLE V

AMENDMENT OF THE CERTIFICATE OF INCORPORATION

The Corporation reserves the right to amend, alter, change, adopt or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon stockholders herein are granted subject to this reservation; *provided, however,* that notwithstanding any other provision of this Certificate of Incorporation or any provision of law that might otherwise permit a lesser vote or no vote, but in addition to any vote of the holders of shares of any class or series of capital stock of the Corporation required by law or by this Certificate of Incorporation, the affirmative vote of the holders of a majority of the voting power of the then-outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required to amend or repeal, or adopt any provision of this Certificate of Incorporation inconsistent with Articles IV, V, VI, VII, VIII, IX, X, XI and XII; *provided further,* that so long as any shares of Class B Common Stock remain outstanding, the Corporation shall not, without the prior affirmative vote of the holders of a majority of the outstanding shares of Class B Common Stock, voting as a separate class, in addition to any other vote required by applicable law or this Certificate of Incorporation, directly or indirectly, whether by amendment, or through merger, recapitalization, consolidation or otherwise amend, alter, change, repeal or adopt any provision of this Certificate of Incorporation (1) in a manner that is inconsistent with, or that otherwise alters or changes, any of the voting, conversion, dividend or liquidation provisions of the shares of Class B Common Stock or other rights, powers, preferences or privileges of the shares of Class B Common Stock; (2) to provide for each share of Class A Common Stock to have more than one (1) vote per share or any rights to a separate class vote of the holders of shares of Class A Common Stock other than as provided by this Certificate of Incorporation or required by the DGCL; or (3) to otherwise adversely impact the rights, powers, preferences or privileges of the shares of Class B Common Stock in a manner that is disparate from the manner in which it affects the rights, powers, preferences or privileges of the shares of Class A Common Stock; *provided further*, so long as any shares of Class A Common Stock remain outstanding, the Corporation shall not, without the prior affirmative vote of the holders of a majority of the outstanding shares of Class A Common Stock, voting as a separate class, in addition to any other vote required by applicable law or this Certificate of Incorporation, directly or indirectly, whether by amendment, or through merger recapitalization, consolidation or otherwise amend, alter, change, repeal or adopt any provision of this Certificate of Incorporation, to provide for each share of Class B Common Stock to have more than ten (10) votes per share or any rights to a separate class vote of the holders of shares of Class B Common Stock other than as provided by this Certificate of Incorporation or required by the DGCL. For the avoidance of doubt, nothing in the immediately preceding provisos shall limit the rights of the Board as specified in Section 3 of Article IV or in Article VI of this Certificate of Incorporation.

ARTICLE VI

AMENDMENT OF THE BYLAWS

In furtherance and not in limitation of the powers conferred upon it by the DGCL, the Board shall have the power to adopt, amend, alter or repeal the Bylaws. The stockholders shall also have the power to adopt, amend, alter or repeal the Bylaws; provided, however, that, in addition to any vote of the holders of any class or series of stock of the Corporation required by law or by this Certificate of Incorporation, such action by stockholders shall require the affirmative vote of the holders of at least a majority of the voting power of all of the then-outstanding shares of the capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class.

ARTICLE VII

CORPORATE OPPORTUNITIES

To the fullest extent permitted by law, the Corporation renounces any interest or expectancy of the Corporation pursuant to Section 122(17) of the DGCL in, or in being offered an opportunity to participate in, any Excluded Opportunity. An "Excluded Opportunity" is any matter, transaction, business opportunity or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of, any director of the Corporation who is not an employee or officer of the Corporation or any of its subsidiaries (a "Covered Person"), unless such matter, transaction, business opportunity or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person's capacity as a director of the Corporation.

ARTICLE VIII

BOARD OF DIRECTORS

Section 1. General Powers

The business and affairs of the Corporation shall be managed by or under the direction of the Board, except as otherwise provided by law.

Section 2. Number of Directors; Election of Directors

Subject to the rights of holders of any series of Preferred Stock to elect directors, the number of the directors of the Corporation shall be fixed from time to time by resolution of the Board.

Section 3. Classes of Directors

Subject to the rights of holders of any series of Preferred Stock to elect directors, the Board shall be divided into three classes, designated Class I, Class II and Class III. Each class shall consist, as nearly as may be possible, of one third of the total number of directors constituting the entire Board. The Board is authorized to assign members of the Board already in office to Class I, Class II or Class III at the time such classification becomes effective.

Section 4. Terms of Office

Subject to the rights of holders of any series of Preferred Stock to elect directors, each director shall serve for a term ending on the date of the third annual meeting of stockholders following the annual meeting of stockholders at which such director was elected; provided that each director initially assigned to Class I shall serve for a term expiring at the Corporation's first annual meeting of stockholders held following the time at which the initial classification of the Board becomes effective; each director initially assigned to Class II shall serve for a term expiring at the Corporation's second annual meeting of stockholders held following the time at which the initial classification of the Board becomes effective; and each director initially assigned to Class III shall serve for a term expiring at the Corporation's third annual meeting of stockholders held following the time at which the initial classification of the Board becomes effective; provided further, that the term of each director shall continue until the election and qualification of his or her successor and be subject to his or her earlier death, disqualification, resignation or removal.

Section 5. Vacancies

Subject to the rights of holders of any series of Preferred Stock, any newly created directorship that results from an increase in the number of directors or any vacancy on the Board that results from the death, resignation, disqualification or removal of any director or from any other cause shall be filled solely by the affirmative vote of a majority of the total number of directors then in office, even if less than a quorum, or by a sole remaining director and shall not be filled by the stockholders. Any director elected to fill a newly created directorship or vacancy in accordance with the preceding sentence shall hold office until the next annual meeting of stockholders held to elect the class of directors to which such director is elected and until his or her successor shall be elected and qualified, subject to his or her earlier death, disqualification, resignation or removal.

Section 6. Removal

Subject to the rights of the holders of any series of Preferred Stock, (i) for so long as the holders of Class B Common Stock hold at least a majority of the voting power of the outstanding shares of Common Stock of the Corporation, any director or the entire Board may be removed from office at any time, with or without cause, by the holders of a majority in voting power of the shares of capital stock of the Corporation then entitled to vote at an election of directors and (ii) if the holders of Class B Common Stock no longer hold at least a majority of the voting power of the outstanding shares of Common Stock of the Corporation, any director or the entire Board may be removed from office at any time, but only for cause, by the holders of a majority in voting power of the shares of capital stock of the Corporation then entitled to vote at an election of directors.

Section 7. Committees

Pursuant to the Bylaws of the Corporation, the Board may establish one or more committees to which may be delegated any or all of the powers and duties of the Board to the full extent permitted by law.

Section 8. Stockholder Nominations and Introduction of Business.

Advance notice of stockholder nominations for election of directors and other business to be brought by stockholders before a meeting of stockholders shall be given in the manner provided by the Bylaws.

Section 9. Preferred Stock Directors.

During any period when the holders of any series of Preferred Stock have the right to elect additional directors as provided for or fixed pursuant to the provisions of Article IV hereof or any certificate of designation of any series of Preferred Stock, then upon commencement and for the duration of the period during which such right continues: (i) the then otherwise total number of authorized directors of the Corporation shall automatically be increased by such specified number of directors, and the holders of such Preferred Stock shall be entitled to elect the additional directors so provided for or fixed pursuant to said provisions, and (ii) each such additional director shall serve until such director's successor shall have been duly elected and qualified, or until such director's right to hold such office terminates pursuant to said provisions, whichever occurs earlier, subject to his earlier death, disqualification, resignation or removal. Except as otherwise provided for or fixed pursuant to the provisions of Article IV hereof or any certificate of designation of any series of Preferred Stock, whenever the holders of any series of Preferred Stock having such right to elect additional directors are divested of such right pursuant to the provisions of such stock, all such additional directors elected by the holders of such stock, or elected or appointed to fill any vacancies resulting from the death, resignation, disqualification or removal of such additional directors shall automatically cease to be qualified as directors, the terms of office of all such directors shall forthwith terminate and the total authorized number of directors of the Corporation shall be reduced accordingly.

ARTICLE IX

ELECTION OF DIRECTORS

Unless and except to the extent that the Bylaws shall so require, the election of directors of the Corporation need not be by written ballot.

ARTICLE X

LIMITATION OF DIRECTOR LIABILITY

To the fullest extent permitted by the DGCL as the same exists or as may hereafter be amended, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director; *provided*, *however*, that nothing contained in this Article X shall eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the Corporation or its stockholders, (ii) for acts or

omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) pursuant to the provisions of Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit. If the DGCL is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended. No amendment, repeal or modification of this Article X shall apply to or have any adverse effect on any right or protection of, or any limitation of the liability of, a director of the Corporation existing at the time of such amendment, repeal or modification with respect to acts or omissions occurring prior to such repeal or modification.

ARTICLE XI

INDEMNIFICATION

The Corporation may indemnify, and advance expenses to, to the fullest extent permitted by law, any person who was or is a party to or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative by reason of the fact that the person is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise.

ARTICLE XII

CONSENT OF STOCKHOLDERS IN LIEU OF MEETING

Subject to the terms of any series of Preferred Stock, (i) for so long as the holders of shares of Class B Common Stock hold at least a majority of the voting power of the outstanding shares of the Common Stock of the Corporation, any action required or permitted to be taken by the stockholders of the Corporation may be effected by consent in lieu of a meeting and (ii) if the holders of shares of Class B Common Stock no longer hold at least a majority of the voting power of the outstanding shares of the Common Stock of the Corporation, any action required or permitted to be taken by the stockholders of the Corporation must be effected at an annual or special meeting of the stockholders and may not be effected by consent in lieu of a meeting.

ARTICLE XIII

SPECIAL MEETING OF STOCKHOLDERS

Special meetings of stockholders for any purpose or purposes may be called at any time by (i) the Board, (ii) the Chairman of the Board, (iii) the Chief Executive Officer of the Corporation or (iv) for so long as any shares of Class B Common Stock remain outstanding, the holders of at least one third (1/3) of the outstanding shares of Class B Common Stock. Business transacted at

any special meeting of stockholders shall be limited to matters relating to the purpose or purposes stated in the notice of meeting.

ARTICLE XIV

SECTION 203

The Corporation shall not be governed by Section 203 of the DGCL (or any successor provision thereto) ("Section 203"), and the restrictions contained in Section 203 shall not apply to the Corporation, until immediately following the time at which both of the following conditions exist (if ever): (a) Section 203 by its terms would, but for the provisions of this Article XIV, apply to the Corporation; and (b) no holder of Class B Common Stock owns (as defined in Section 203) shares of capital stock of the Corporation representing at least fifteen percent (15%) of the voting power of all the then outstanding shares of capital stock of the Corporation, and the Corporation shall thereafter be governed by Section 203 if and for so long as Section 203 by its terms shall apply to the Corporation.

ARTICLE XV

FORUM SELECTION

Unless the Corporation consents in writing to the selection of an alternative forum, (A) the Court of Chancery (the "Chancery Court") of the State of Delaware shall, to the fullest extent permitted by law, be the sole and exclusive forum for (1) any derivative action or proceeding brought on behalf of the Corporation, (2) any action asserting a claim of breach of a fiduciary duty owed by, or any other wrongdoing by, any current or former director, officer, other employee or stockholder of the Corporation, (3) any action asserting a claim against the Corporation arising pursuant to any provision of the DGCL, this Certificate of Incorporation or the Bylaws or as to which the DGCL confers jurisdiction on the Chancery Court or (4) any action asserting a claim governed by the internal affairs doctrine, and (B) the federal district courts of the United States shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act of 1933, as amended. If any action the subject matter of which is within the scope of the preceding sentence is filed in a court other than a court located within the State of Delaware (a "Foreign Action") in the name of any stockholder, such stockholder shall, to the fullest extent permitted by applicable law, be deemed to have consented to (a) the personal jurisdiction of the state and federal courts located within the State of Delaware in connection with any action brought in any such court to enforce the preceding sentence and (b) having service of process made upon such stockholder in any such action by service upon such stockholder's counsel in the Foreign Action as agent for such stockholder. This provision will not apply to claims arising under the Securities Exchange Act of 1934, as amended,. Any Person or entity purchasing or otherwise acquiring or holding any interest in shares of capital stock of the Corporation shall be deemed to have notice of and consented to the provisions of this Article XV.

* * *

IN WITNESS WHEREOF, this Certificate of Incorporation has been executed this day of , 2020.

VERTEX, INC.

By: _____
Name:
Title:

Exhibit 4.1


NUMBER
SHARES
VERTEX
INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE
SEE REVERSE SIDE FOR CERTAIN DEFINITIONS
CUSIP 92538J 10 6
THIS CERTIFIES THAT
is the owner of
FULLY PAID AND NON-ASSESSABLE CLASS A COMMON STOCK, $0.001 PAR VALUE, OF
VERTEX, INC.
transferable on the books of the Corporation by the holder hereof in person or by Attorney upon surrender of this certificate properly endorsed. This certificate is not valid until countersigned and registered by the Transfer Agent and Registrar.
IN WITNESS WHEREOF, the said Corporation has caused this certificate to be signed by facsimile signatures of its duly authorized officers.
Dated:
TITLE
TITLE
COUNTERSIGNED AND REGISTERED:
EQUINITI TRUST COMPANY
BY
AUTHORIZED SIGNATURE
TRANSFER AGENT AND REGISTRAR

THE BOARD OF THIS CORPORATION HAS THE AUTHORITY TO CREATE AND DETERMINE THE RELATIVE RIGHTS AND PREFERENCES OF CLASSES OR SERIES OF SHARES OF CAPITAL STOCK OTHER THAN COMMON STOCK. THIS CORPORATION WILL FURNISH TO ANY SHAREHOLDER UPON WRITTEN REQUEST SENT TO ITS PRINCIPAL EXECUTIVE OFFICES, AND WITHOUT CHARGE, A FULL STATEMENT OF THE BOARD'S AUTHORITY TO CREATE AND DETERMINE THE RELATIVE RIGHTS AND PREFERENCES OF CLASSES OR SERIES OF SHARES OF CAPITAL STOCK AS WELL AS THE DESIGNATIONS, PREFERENCES, LIMITATIONS AND RELATIVE RIGHTS OF THE SHARES OF EACH CLASS OR SERIES THEN OUTSTANDING OR AUTHORIZED TO BE ISSUED.

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM – as tenants in common

TEN ENT – as tenants by entireties

JT TEN – as joint tenants with right of survivorship and not as tenants in common

UTMA – _____ Custodian _____
(Cust) (Minor)
under Uniform Transfers to Minors Act _____
(State)

Additional abbreviations may also be used though not in the above list.

For value received ____ hereby sell, assign, and transfer unto

PLEASE INSERT SOCIAL SECURITY OR OTHER IDENTIFYING NUMBER OF ASSIGNEE

_____

(PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS INCLUDING POSTAL ZIP CODE OF ASSIGNEE)

_____

_____

_____ *Shares*

of the capital stock represented by the within Certificate, and do hereby irrevocably constitute and appoint _____

_____ *Attorney*

to transfer the said stock on the books of the within-named Corporation with full power of substitution in the premises.

Dated _____

X _____

X _____

NOTICE: THE SIGNATURE TO THIS ASSIGNMENT MUST CORRESPOND WITH THE NAME AS WRITTEN UPON THE FACE OF THE CERTIFICATE IN EVERY PARTICULAR WITHOUT ALTERATION OR ENLARGEMENT OR ANY CHANGE WHATEVER.

SIGNATURE GUARANTEED

ALL GUARANTEES MUST BE MADE BY A FINANCIAL INSTITUTION (SUCH AS A BANK OR BROKER) WHICH IS A PARTICIPANT IN THE SECURITIES TRANSFER AGENTS MEDALLION PROGRAM ("STAMP"), THE NEW YORK STOCK EXCHANGE, INC. MEDALLION SIGNATURE PROGRAM ("MSP"), OR THE STOCK EXCHANGES MEDALLION PROGRAM ("SEMP") AND MUST NOT BE DATED. GUARANTEES BY A NOTARY PUBLIC ARE NOT ACCEPTABLE.

Exhibit 4.2

THIRD AMENDED AND RESTATED STOCKHOLDERS' AGREEMENT

This Third Amended and Restated Stockholders' Agreement (this "Agreement") made as of this [·] day of [·], 2020 by, between and among Vertex, Inc., a Delaware corporation (the "Company") and each Person identified on Schedule 2 hereto and any other Person who becomes a party to this Agreement pursuant to the provisions hereof (each such Person, individually, a "Stockholder" and, collectively, the "Stockholders").

Recital

On July 16, 2020, the Company converted from a Pennsylvania corporation (the "Pennsylvania Company") to a Delaware corporation by virtue of a merger of the Pennsylvania Company with and into the Company, with the Company continuing as the surviving corporation.

The Company is authorized to issue 200,000 shares of Class A common stock, par value $0.001 per share, and 99,800,000 shares of Class B common stock, par value $0.001 per share, of which 49,000 shares of Class A common stock and 40,147,500 shares of Class B common stock are presently issued and outstanding.

The Pennsylvania Company and the Stockholders, in their capacities as stockholders of the Pennsylvania Company, have been parties to that certain Second Amended and Restated Shareholders' Agreement dated February 28, 2014 (the "Prior Agreement"). The Company and each of the Stockholders desire to amend and restate the Prior Agreement in its entirety in accordance with the terms thereof and to continue to impose certain restrictions and obligations on themselves and to provide for an arrangement governing certain dispositions of shares of Common Stock.

NOW THEREFORE, in consideration of the premises, the mutual promises herein, and intending to be legally bound hereby, the parties hereto agree as follows:

1. Definitions. In addition to terms defined elsewhere in this Agreement, the following definitions shall apply to this Agreement:

"2001 Trusts" means, collectively, the AWR 2001 Trusts, the JRW 2001 Trusts, and the SWT 2001 Trusts (each, individually, a "2001 Trust").

"2009 Trusts" means, collectively, the AWR 2009 Trust, the JRW 2009 Trust, and the SWT 2009 Trust (each, individually, a "2009 Trust").

"Affiliate" means, as to any Person, any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For purposes of this definition only, "control," as used with respect to any Person, means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such Person, whether through the ownership of voting securities, by agreement or otherwise. For purposes of this definition, the terms "controlling," "controlled by" and "under common control with" have correlative meanings.

"Applicable Market Value" means the average of the Closing Price per share of Class A Stock on each of the ten (10) consecutive Trading Days ending on the Trading Day immediately preceding the relevant date of determination, provided that if the Class A Stock is not listed or regularly traded on any national or regional securities exchange or association or traded on the over-the-counter market, the Applicable Market Value shall be the Fair Market Value per share.

"AWR" means Amanda W. Radcliffe, a Stockholder hereto, as identified in Schedule 2.

"AWR 2001 Trusts" means those two separate and distinct trusts for the respective primary benefit of Antoinette R. Radcliffe and Kailey A. Radcliffe under The Trust of Amanda W. Radcliffe dated October 5, 2001, and that certain trust known as the "Third Party Funded Special Needs Trust for Callum W. Radcliffe" dated May 15, 2015, each a Stockholder hereto, as identified in Schedule 2.

"AWR 2009 Trust" means The Amanda W. Radcliffe Generation-Skipping Trust, a Stockholder hereto, as identified in Schedule 2.

"Business Day" means any day other than a Saturday, Sunday or other day in the City of New York on which banking institutions are authorized or required by applicable law or regulations to close.

"Class A Stock" means the Class A common stock, par value $0.0001 per share, of the Company which is now or hereafter owned or held by any Stockholder.

"Class B Stock" means the Class B common stock, par value $0.0001 per share, of the Company which is now or hereafter owned or held by any Stockholder.

"Closing Price" means, on any date of determination, (i) if the Class A Stock is listed on one or more National Securities Exchanges, each share of Class A Stock shall be valued at the closing price of a share of Class A Stock on the principal exchange on which the shares are then trading on the most recent Trading Day preceding such date of determination, as reported in *The Wall Street Journal* or such other source as the Company's board of directors (the "Board") deems reliable, or (ii) if the Class A Stock is not traded on a National Securities Exchange but is quoted on a national market or other quotation system, each share of Class A Stock shall be valued at the last sales price on the most recent Trading Day preceding such date of determination, as reported in *The Wall Street Journal* or such other source as the Board deems reliable, or (iii) if the Class A Stock is not publicly traded on a National Securities Exchange and is not quoted on a national market or other quotation system, each share of Class A Stock shall be valued at the Fair Market Value per share.

"Commission" means the U.S. Securities and Exchange Commission and any successor agency performing comparable functions.

"Common Stock" means the Class A Stock and Class B Stock.

"Fair Market Value" means the price per share of the Class A Stock or Class B Stock, as applicable, as determined as of a Relevant Date by a valuation prepared by a regionally or

nationally recognized investment banking or valuation firm, which valuation shall be done on a minority, non-marketable basis (if applicable to the price being determined). The investment banking or valuation firm that had most recently been engaged by the Company shall be used to determine Fair Market Value per share under this Agreement unless such firm is unavailable or the Company and the affected Stockholders agree otherwise on a replacement firm. If such existing firm is not available and the parties do not agree on a replacement firm, the investment banking or valuation firm shall be selected by the independent directors of the Company.

"Governmental Authority" means any regional, federal, state or local legislative, executive or judicial body or agency, any court of competent jurisdiction, any department, political subdivision or other governmental authority or instrumentality, or any arbitral authority, in each case, whether domestic or foreign.

"Individual Stockholders" or "Siblings" means, collectively, AWR, JRW, and SWT (each, individually, an "Individual Stockholder" or "Sibling").

"IPO" means the initial public offering of the Company of Class A Stock pursuant to the Company's registration statement on Form S-1 (File No. 333-239644) filed with and declared effective by the Commission.

"JRW" means Jeffrey R. Westphal, a Stockholder hereto, as identified in Schedule 2.

"JRW 2001 Trusts" means those three separate and distinct trusts for the respective primary benefit of Anne Marie Westphal, Kyle R. Westphal and Jacob J. Westphal under The Trust of Jeffrey R. Westphal dated October 5, 2001, each a Stockholder hereto, as identified in Schedule 2.

"JRW 2009 Trust" means The 2009 Jeffrey R. Westphal Generation-Skipping Trust, a Stockholder hereto, as identified in Schedule 2.

"National Securities Exchange" means a national securities exchange registered under Section 6(a) of the Exchange Act.

"Person" means any individual, partnership, corporation, limited liability company, association, trust, estate, or other entity.

"Proportionate Share" means, with respect to a Stockholder who is then eligible to participate in a transaction involving Class A Stock or Class B Stock pursuant to this Agreement, the percentage determined by the fraction, the numerator of which is the number of shares of the Class A Stock or Class B Stock, as applicable, held by that Stockholder and the denominator of which is the total number of shares of Class A Stock or Class B Stock, as applicable held by all Stockholders who are then eligible to participate in such transaction involving Class A Stock or Class B Stock, as applicable, pursuant to this Agreement; provided, however, that for purposes of making such determination as to a Stockholder who is an Individual Stockholder, such Stockholder may elect to include the shares of Class B Stock held by any trust which such Stockholder established or of which such Stockholder is a primary beneficiary in the numerator, and the Stockholder may elect

to apply the percentage resulting from such numerator to (i) the Individual Stockholder alone, (ii) any such trust alone, or (iii) a combination thereof in such proportions as the Stockholder may elect.

"Qualified Extended Family Member" means a Qualified Family Member of Rainer J. Westphal.

"Qualified Family Member" means, for any individual, (i) a lineal descendant of such individual by blood or adoption (a "Descendant"), (ii) any spouse or widow or widower of such Descendant (but not a divorced former spouse or a spouse from whom such Descendant currently is, or at the time of his or her death was, legally separated), or (iii) any stepchild or lineal descendant by blood or adoption of a stepchild of such Descendant. Notwithstanding the foregoing, an adopted person whose adoption did not either occur during the adopted person's minority or reflect an earlier parent-child relationship with the adopting parent that had existed during the adopted person's minority, shall not be treated as the child of his or her adopted parent, and such adopted person and his or her lineal descendants shall not be treated as the lineal descendants of the adopted parent or of any ancestor of the adopted parent.

"Qualified Foundation" means any foundation that is (i) primarily for the benefit of one or more Qualified Persons or (ii) a donor-advised fund.

"Qualified Person" means (i) Rainer J. Westphal, (ii) an Individual Stockholder, or (iii) any Qualified Extended Family Member.

"Qualified Sibling Family Member" means, for each Sibling, a Qualified Family Member of such Sibling.

"Qualified Trust" means each 2009 Trust, each 2001 Trust and any other trust that (i) is primarily for the benefit of one or more Qualified Persons, and (ii) as to which no Person other than a Qualified Person or another Qualified Trust is currently eligible or entitled to receive any distribution of income or principal from the trust. For avoidance of doubt, the mere possibility that, by reason of exercise of a power of appointment granted in the governing instrument or otherwise, Persons other than Qualified Persons or other Qualified Trusts might at some future date become eligible or entitled to receive distributions of income or principal from the trust shall not prevent a trust from being considered a Qualified Trust.

"Registrable Securities" means any of the following owned by any Stockholder: (i) any Class B Stock or other equity securities of the Company into which the Class B Stock then outstanding shall be reclassified or changed, including by reason of a merger, consolidation, reorganization, recapitalization or statutory conversion, and (ii) any equity securities of the Company then outstanding which were issued as, or were issued directly or indirectly upon the conversion, exchange or exercise of other equity securities issued or issuable as a dividend, stock split or other distribution with respect to or in replacement of any equity securities referred to in clause (i) of this definition, provided, however, that Registrable Securities shall not include any equity securities that (a) have been registered

or sold in a registered offering pursuant to the Securities Act of 1933, as amended (the "Securities Act"), (b) have been sold pursuant to Rule 144 or (c) are eligible for resale by the Stockholder under Rule 144 in any single ninety-day period without volume or manner-of-sale restrictions, as determined by the Company in its discretion after consultation with Company counsel.

"Relevant Date" means the last day of the month in which an event occurs giving rise to the necessity for determining the Fair Market Value hereunder, including, a deemed Offer under Section 6, death under Section 7, a deemed Offer under Section 8, or the notice of intent to sell under Section 9, as the case may be.

"Remaining Stockholders" means the Stockholders other than, in the case of an Offer under Section 6 hereof, the Offeree, in the case of the death of a Stockholder under Section 7 hereof, the Decedent and his or her estate, in the case of a bankruptcy or insolvency under Section 8 hereof and the bankrupt or insolvent Stockholder. "Remaining Stockholders" shall not include any Stockholder who is not a Qualified Person.

"Sibling Affiliated Group" means the associated Sibling Affiliated Stockholders of a Stockholder.

"Sibling Affiliated Stockholders" means, for each Sibling, (i) such Sibling, (ii) such Sibling's Qualified Sibling Family Members, (iii) such Sibling's Affiliates (other than the other Siblings), and (iv) any Qualified Trust relating to, and holding shares of Class B Stock on behalf of, such Sibling or such Sibling's Qualified Sibling Family Members for the primary benefit of, or other entity holding on behalf of, any one or more of such Sibling and his or her Qualified Sibling Family Members.

"Subsidiary" means with respect to any Person, any corporation, limited liability company, partnership, association, trust or other form of legal entity, of which (a) such first Person directly or indirectly owns or controls at least a majority of the securities or other interests having by their terms voting power to elect a majority of the board of directors or others performing similar functions, or (b) such first Person is a general partner or managing member (excluding partnerships in which such Person or any Subsidiary thereof does not have a majority of the voting interests in such partnership).

"SWT" means Stefanie W. Thompson (formerly known as Stefanie W. Lucas), a Stockholder hereto, as identified in Schedule 2.

"SWT 2001 Trusts" means those four separate and distinct trusts for the respective primary benefit of Andrea P. Schmerin (f/k/a Andrea P. Lucas), Melanie H. Lucas, Mackenzie S. Lucas and Samantha W. Lucas under The Trust of Stefanie W. Lucas dated October 5, 2001, each a Stockholder hereto, as identified in Schedule 2.

"SWT 2009 Trust" means The 2009 Stefanie W. Lucas Generation-Skipping Trust, a Stockholder hereto, as identified in Schedule 2.

"Trading Day" means any day on which the Class A Stock is traded on a National Securities Exchange, or, if the Class A Stock is not traded on a National Securities

Exchange, then on the principal securities exchange or securities market on which the Class A Stock is then traded.

"Transfer" means any sale, exchange, gift, bequest, pledge, hypothecation, encumbrance, descent or distribution pursuant to intestacy laws or other operation of law, or any other direct or indirect disposition of Class B Stock which would change the legal or beneficial ownership thereof, including without limitation the creation of any form of common or joint ownership in Class B Stock between a Stockholder and one or more Persons.

"Will" means a testamentary document including an individual's last Will and a so-called "living" (or "revocable") trust that is revocable by the individual during his or her lifetime and becomes irrevocable upon his or her death;

2. Restrictions on Transfer and Issue of Class B Stock. All shares of Class B Stock now owned or hereafter acquired by the Stockholders shall be issued, held and Transferred under and subject to the terms and provisions of this Agreement. Except as otherwise expressly provided herein, the Stockholders shall not Transfer any shares of Class B Stock, and any Transfer or attempt to Transfer shares of Class B Stock shall be null and void and shall be given no effect by the Company until the applicable terms and conditions of this Agreement are complied with. The Company shall not record the Transfer or attempted Transfer of any Class B Stock not made in accordance with the terms and conditions of this Agreement on the books and records of the Company. For the avoidance of doubt, in no event shall Class B Stock be owned or held by anyone who is not a Qualified Person or a Sibling Affiliated Stockholder.

3. Authorized Transfers. Notwithstanding anything to the contrary in this Agreement, including Sections 2, 4, 6, 7 and 8 hereof, each of the Transfers described in paragraphs (a), (b) and (d) of this Section 3 are expressly authorized under this Agreement:

(a) A Stockholder may Transfer all or a portion of such Stockholder's shares of Class B Stock to (i) any other Stockholder, (ii) any Qualified Extended Family Member, (iii) any Qualified Trust, or (iv) any Qualified Foundation.

(b) A Stockholder may Transfer all or a portion of such Stockholder's shares of Class B Stock (i) to the Company, (ii) to underwriters pursuant to the terms of an underwriting agreement, including in connection with the exercise of any over-allotment option granted to the underwriters in the IPO, or with the prior written consent of the lead underwriter on behalf of the underwriters in an offering by the Company and/or other selling stockholders of securities pursuant to an effective registration statement under the Securities Act, or in a private placement by the Company and/or other selling stockholders of securities that has been approved by at least a majority of the disinterested members of the Board, (iii) pursuant to the terms of any planned trading program effected pursuant to Rule 10b5-1 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that has been approved by at least a majority of the disinterested members of (A) the Board or (B) a committee of the Board authorized to take such action, or (iv) as otherwise permitted by this Agreement.

(c) In the event that any shares of Class B Stock are Transferred to a Person (including, without limitation, any Affiliate of any Stockholder) in accordance with the terms of this

Agreement who is not already a party to and bound by this Agreement, such Person shall, as a condition precedent to the consummation of such Transfer, execute and deliver to the Company a joinder agreement to this Agreement, as may further be amended from time to time, substantially in the form of Exhibit A attached hereto (a "Joinder Agreement"), and such Person shall thereupon be deemed to be a Stockholder hereunder. The Transfer of shares of Class B Stock to such Person shall not be given effect and shall not be recorded on the books and records of the Company until such Person executes and delivers to the Company a Joinder Agreement, and any Transfer or attempted Transfer in violation thereof shall be null and void.

(d) All Transfers of shares of Common Stock pursuant to those certain Share Purchase Agreements, dated July 20, 2020, by and among the Company and the parties named therein (the "Share Purchase Agreement") are expressly authorized under this Agreement.

4. Pledges. Any Stockholder (the "Pledging Stockholder") may assign, Transfer, pledge, hypothecate or encumber ("Pledge") any of his or her shares of Class B Stock (the "Pledged Interest") to an individual or entity (the "Pledgee") for the purpose of securing the obligation of the Pledging Stockholder or any other Person to repay a loan or to render any other performance, subject to each of the requirements set forth in paragraphs (a) through (d) of this Section 4:

(a) Prior to the third anniversary of this Agreement, no Stockholder may so Pledge to a Pledgee who is not a Stockholder without the prior consent of Stockholders holding at least a majority of the outstanding shares of Class B Stock if the Pledged Interest exceeds thirty percent (30%) of the shares held by such Stockholder and his or her Sibling Affiliated Group.

(b) No Pledge made pursuant to this Section 4, nor any related loan, obligation or other performance, shall be conditioned upon or in any way related to the financial performance or position of the Company, or require a guarantee or other form of support by the Company or any other Stockholder.

(c) No Pledging Stockholder shall engage in any transaction (including a Pledge) with the Pledgee without first providing the Company with five (5) Business Days' prior notice of the proposed transaction with the Pledgee.

(d) No Pledging Stockholder shall engage in any transaction (including a Pledge) with the Pledgee without first entering into an agreement (the "Pledge Agreement") with the Pledgee that expressly requires that, should the Pledgee desire and if the Pledge Agreement otherwise permits, the Pledgee may take for itself or Transfer to any Person other than the Pledging Stockholder the title to the Pledged Interest only if, prior to so taking or Transferring the Pledged Interest, the following conditions are met:

(i) The Pledgee shall allow the Company or one or more Sibling Affiliated Stockholders to assume the Pledging Stockholder's obligations under the Pledge Agreement; and

(ii) If neither the Company nor any Sibling Affiliated Stockholders elects to assume the Pledging Stockholder's obligations under the Pledge Agreement, the Pledged Interest shall be deemed Offered Stock, the Pledging Stockholder shall be

deemed an Offeree, the Pledgee shall be deemed a Third Party to whom the Offeree desires to Transfer such Offered Stock, and the Remaining Stockholders and/or the Company shall have the opportunity to purchase shares of Offered Stock through the procedures under Sections 6(a) through 6(d) hereof, provided that if the Remaining Stockholders and/or the Company do not elect to purchase all of the Offered Stock, the Offeree shall be obligated to Transfer the remaining balance of the Offered Stock as required under the Pledge Agreement.

5. Legend on Registrable Securities. Each certificate or other documents representing Registrable Securities now owned or hereafter acquired by the Stockholders shall have the following legend endorsed thereon until such time as the Registrable Securities represented thereby are no longer subject to the provisions hereof or such legend is no longer applicable (as determined by the Company in its sole discretion):

"THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, NOR UNDER ANY STATE SECURITIES LAWS, AND MAY NOT BE SOLD, TRANSFERRED, ENCUMBERED OR OTHERWISE DISPOSED OF IN THE ABSENCE OF SUCH REGISTRATION OR AN EXEMPTION THEREFROM UNDER SAID ACT OR SUCH LAWS AND THE RULES AND REGULATIONS THEREUNDER.

THE VOTING, SALE, TRANSFER, ENCUMBRANCE OR OTHER DISPOSITION OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE IS SUBJECT TO THE TERMS AND CONDITIONS OF A STOCKHOLDERS' AGREEMENT, DATED AS OF [·], 2020, AMONG VERTEX, INC. AND CERTAIN HOLDERS OF ITS CLASS B STOCK (AS THE SAME MAY BE AMENDED, MODIFIED, SUPPLEMENTED OR RESTATED FROM TIME TO TIME), A COPY OF WHICH MAY BE OBTAINED AT NO COST BY WRITTEN REQUEST MADE BY THE HOLDER OF RECORD OF THIS CERTIFICATE TO THE SECRETARY OF VERTEX, INC."

6. Rights of First Offer/Refusal.

(a) If a Stockholder (the "Offeree") desires to Transfer all or any part of Offeree's shares of Class B Stock (the "Offered Stock") to an unrelated third party that is not a Sibling Affiliated Stockholder (a "Third Party"), other than as permitted under Section 3 hereto (in which case, for the avoidance of doubt, this Section 6 will not apply), prior to soliciting an offer to buy the Offered Stock from or entering into any discussions or negotiations with any such Third Party, the Offeree shall first give notice of such desire to sell the Offered Stock to the Sibling to whom the Offeree is a Sibling Affiliated Stockholder (the "Sibling Notice"), provided that if the Offeree is Rainer J. Westphal or a Sibling, no such Sibling Notice nor Sibling Election Period shall be required, and the Offeree may instead proceed to give the Initial Notice through the provisions of

Section 6(b) hereof. Upon receipt of the Sibling Notice, the Sibling shall have the right, but not the obligation, to elect to purchase all or part of the Offered Stock (the "Sibling Election Right") or to extend the Sibling Election Right to such other of his or her Sibling Affiliated Stockholders in such proportions as the Sibling may elect in his or her sole discretion. Any such election by the Sibling or by one or more of his or her Sibling Affiliated Stockholders shall be made by giving notice of such election to the Offeree and each other Stockholder having the Sibling Election Right within ten (10) days from the Sibling's receipt of the Sibling Notice (the "Sibling Election Period"). In the event that any Stockholder does not exercise his, her or its Sibling Election Right within the Sibling Election Period, then such Stockholder shall be deemed to have irrevocably waived his, her or its right to elect to purchase shares of Offered Stock during the Sibling Election Period and during the subsequent Initial Election Period and Secondary Election Period.

(b) Upon the date that is the earlier of the conclusion of the election period or the receipt by the Offeree of a notice of election or express notice in writing rejecting the offer to purchase Offered Stock from each Stockholder having an election right associated with such election period (the "Termination Date") related to the Sibling Election Period, if there remains any Offered Stock that has not yet been elected to be purchased (the "Remaining Offered Stock"), the Offeree shall give notice to the Remaining Stockholders who have not previously waived their right to elect to purchase shares of Offered Stock (the "Eligible Remaining Stockholders") and to the Company (the "Initial Notice"). Upon receipt of the Initial Notice from the Offeree, the Eligible Remaining Stockholders shall each have the right, but not the obligation, to elect to purchase a number of shares, up to each Eligible Remaining Stockholder's Proportionate Share, of the Remaining Offered Stock (the "Initial Election Right"), by giving notice of such election to the Offeree and each other Stockholder having the Initial Election Right (the "Initial Notice of Election") within thirty (30) days from the receipt of the Initial Notice (the "Initial Election Period"). In the event that any Eligible Remaining Stockholder does not exercise his, her or its Initial Election Right within the Initial Election Period, then such Eligible Remaining Stockholder shall be deemed to have irrevocably waived his, her or its right to elect to purchase shares of Remaining Offered Stock during the Initial Election Period and during the subsequent Secondary Election Period.

(c) Upon the Termination Date related to the Initial Election Period, if there exists any Remaining Offered Stock, the Offeree shall give notice of the Remaining Offered Stock to the Eligible Remaining Stockholders and to the Company (the "Secondary Notice"). Upon receipt of the Secondary Notice, the Eligible Remaining Stockholders shall each have the right, but not the obligation, to elect to purchase a number of shares up to each Eligible Remaining Stockholder's Proportionate Share, of the Remaining Offered Stock plus any or all Remaining Offered Stock that the other Eligible Remaining Stockholders do not elect to purchase, (the "Secondary Election Right"), by giving notice of such election to the Offeree and each other Stockholder having the Secondary Election Right (the "Secondary Notice of Election") within ten (10) days from the receipt of the Secondary Notice. If any Remaining Offered Stock is over-subscribed by the Eligible Remaining Stockholders at the conclusion of such ten (10) days, any Eligible Remaining Stockholders who have previously given a Secondary Notice of Election shall each be permitted to elect to purchase their Proportionate Share, or such other amount to which such subscribing Eligible Remaining Stockholders all agree, of the over-subscribed Remaining Offered Stock, by giving an updated Secondary Notice of Election within fifteen (15) days from the receipt of the Secondary Notice (the "Secondary Election Period"). In the event that any Stockholder does not exercise his, her or its Secondary Election Right within the Secondary Election Period, then such

Stockholder shall be deemed to have irrevocably waived his, her or its right to elect to purchase shares of Offered Stock during the Secondary Election Period.

(d) Upon the Termination Date related to the Secondary Election Period, if there exists any Remaining Offered Stock, the Offeree shall give notice of the Remaining Offered Stock to the Company (the "Company Notice"). Upon receipt of the Company Notice, the Company shall have the right, but not the obligation, to elect to purchase all, but not less than all, of the Remaining Offered Stock, (the "Company Election Right"), by giving notice of such election to the Offeree within fifteen (15) days from the receipt of the Company Notice (the "Company Election Period"). In determining whether or not the Company shall purchase the Remaining Offered Stock, the Offeree (as a member of the Board, Stockholder or otherwise) shall not participate in the Company's decision-making process. In the event that the Company does not exercise its Company Election Right within the Company Election Period, then the Company shall be deemed to have irrevocably waived its right to elect to purchase the Remaining Offered Stock during the Company Election Period.

(e) Upon the Termination Date related to the Company Election Period, if there exists any Remaining Offered Stock, then the Offeree may seek a bona fide offer in writing from a Third Party (an "Offer") to purchase the Remaining Offered Stock.

(f) If, at any time, a Stockholder (whether or not an Offeree) receives an Offer to purchase all or any part of the Stockholder's Class B Stock, the Stockholder shall promptly forward the Offer to the Board. In the event that the Offer relates to Class B Stock that has not previously been offered to the Sibling to whom the Offeree is a Sibling Affiliated Stockholder, the Remaining Stockholders and Company, as applicable through the procedures of Sections 6(a) through 6(d) hereto, and the Stockholder desires to accept the Offer, the Stockholder's Class B Stock that is subject to the Offer shall be deemed Offered Stock, the Stockholder shall be deemed an Offeree under this Agreement and the Sibling to whom the Offeree is a Sibling Affiliated Stockholder, the Remaining Stockholders and the Company, as applicable, shall have the opportunity to purchase such shares of Offered Stock through the procedures under Sections 6(a) through 6(d) hereof. If all of the Offered Stock is not purchased through the procedures under Sections 6(a) through 6(d) hereof by the Sibling to whom the Offeree is a Sibling Affiliated Stockholder, the Remaining Stockholders or the Company, as applicable, then any Remaining Offered Stock may be sold by the Offeree to the Third Party, and any Remaining Offered Stock so sold to the Third Party shall automatically convert into Class A Stock in accordance with the Company's Certificate of Incorporation, as it may be amended and restated from time to time.

(g) If upon the Termination Date related to any Company Election Period there exists any Remaining Offered Stock, and all such Remaining Offered Stock is not Transferred to a Third Party within fifteen (15) days of such Termination Date, such Offer shall be deemed to have expired and any Remaining Offered Stock must be reoffered to the Sibling to whom the Offeree is a Sibling Affiliated Stockholder, the Remaining Stockholders and the Company, as applicable, through the procedures of Sections 6(a) through 6(d) hereof before it may be Transferred to any Third Party.

(h) All purchases and sales of shares of Class B Stock pursuant to this Section 6 shall occur at a sale price equal to the Applicable Market Value and shall be settled:

(i) in the case of a private placement, within three (3) Business Days; and

(ii) in the case of a public offering pursuant to a registration, within the number of Business Days specified in the applicable prospectus.

7. Death of an Individual Stockholder.

(a) In the event of a death of an Individual Stockholder (the "Decedent"), upon the subsequent occurrence of any attempt to Transfer any of Decedent's Class B Stock other than as permitted under Section 3(a) (such attempted Transfer, the "Triggering Event"), the shares of Decedent's Class B Stock subject to such attempted Transfer shall be deemed Offered Stock and the Decedent's estate shall be deemed an Offeree for purposes of this Section 7.

(b) The 2009 Trust for the benefit of the Offeree shall have the right, but not the obligation, to elect to purchase some or all of the Offered Stock (the "2009 Trust Election Right") by giving notice of such election to the Offeree (the "2009 Trust Notice of Election") within twenty (20) days from the Triggering Event (the "2009 Trust Election Period"). In the event that such 2009 Trust does not exercise its 2009 Trust Election Right within the 2009 Trust Election Period, then such 2009 Trust shall be deemed to have irrevocably waived its right to elect to purchase shares of Offered Stock during the 2009 Trust Election Period.

(c) Upon the Termination Date related to the 2009 Trust Election Period, the Offeree shall notify or cause such 2009 Trust to notify the Company and the Remaining Stockholders of the decision of such 2009 Trust as to the extent to which it will exercise its 2009 Trust Election Right (the "2009 Trust Notice"). If there exists any Remaining Offered Stock, the 2001 Trusts established by the Decedent shall then have the right, but not the obligation, to elect to purchase (in equal shares, or in such other proportions as such 2001 Trusts shall agree among themselves) some or all of the Remaining Offered Stock (the "2001 Trust Election Right") by giving notice of such election to the Offeree, the Remaining Stockholders and the Company (the "2001 Trust Notice of Election") within twenty (20) days of the receipt of the 2009 Trust Notice (the "2001 Trust Election Period"). In the event that any such 2001 Trust does not exercise its 2001 Trust Election Right within the 2001 Trust Election Period, then such 2001 Trust shall be deemed to have irrevocably waived its right to elect to purchase shares of Offered Stock during the 2001 Trust Election Period.

(d) Upon the Termination Date related to the 2001 Trust Election Period, the Offeree shall notify or cause such 2001 Trusts to notify the Company and the Remaining Stockholders of the decision of such 2001 Trusts as to the extent to which they will exercise their 2001 Trust Election Right (the "2001 Trust Notice"). If there exists any Remaining Offered Stock, such Remaining Offered Stock shall be deemed Offered Stock and the Offeree shall be deemed an Offeree for purposes of Section 6 hereof, and the Sibling to whom the Offeree is a Sibling Affiliated Stockholder, the Remaining Stockholders and the Company, as applicable, shall have the opportunity to purchase shares of Offered Stock through the procedures under Sections 6(a) through 6(d) hereof, after which, the Offeree shall have the opportunity to seek the Transfer of any Remaining Offered Stock to a Third Party through the procedures under Sections 6(e) through 6(g) hereof.

(e) All purchases and sales of shares of Class B Stock pursuant to this Section 7 shall be upon the sale terms set forth in Section 6(h) hereof.

8. Bankruptcy or Insolvency of a Stockholder.

(a) In the event a petition in bankruptcy is filed by or against a Stockholder and not dismissed within sixty (60) days from the date of filing, a Stockholder makes an assignment for the benefit of creditors, or all or substantially all of the real or personal property of a Stockholder is levied upon or sold in any judicial proceedings, any such event shall be deemed a Triggering Event, such Stockholder's shares of Class B Stock shall be deemed Offered Stock and such Stockholder shall be deemed an Offeree for the purposes of Section 7 hereof and such Stockholder shall give prompt notice thereof to the Remaining Stockholders and the Company. The Remaining Stockholders and the Company shall then have the opportunity to purchase shares of Offered Stock in accordance with the procedures set forth in Sections 7(b) through 7(d) hereof, except that (i) references to the 2009 Trust in Sections 7(b) through 7(d) shall be deemed to refer to the 2009 Trust for the benefit of the Sibling to whom the Offeree is a Sibling Affiliated Stockholder and (ii) references to the 2001 Trusts shall be deemed to refer to the 2001 Trusts established by the Sibling to whom the Offeree is a Sibling Affiliated Stockholder.

(b) All purchases and sales of shares of Class B Stock pursuant to this Section 8 shall be upon the sales terms set forth in Section 6(h) hereof.

(c) Any purported Transfer of such bankrupt or insolvent Stockholder's shares of Class B Stock other than through this Section 8, whether involuntary or otherwise, shall not be given effect, shall be null and void, and the Company shall not be required to record such Transfer on its books and records.

9. Subscription Rights.

(a) In the event the Company desires to issue, in a transaction exempt from registration under the Securities Act, any new shares of Class A Stock (or any securities convertible into, exercisable for, or exchangeable for Class A Stock) other than securities issued to any director, employee or consultant of or to the Company or any of its Subsidiaries pursuant to an equity-incentive plan approved by the Board and securities issued in connection with stock splits, stock dividends, in-kind equity distributions, recapitalizations and stockholders' rights plans (collectively, "New Securities," and, deemed for purposes of this Section 9, Offered Stock), the Company shall first provide written notice of such desire to issue the Offered Stock to each Stockholder at least ten (10) days prior to such proposed issuance, which notice shall set forth a description of the Offered Stock, the price and terms upon which the Company proposes to issue the Offered Stock, the number of shares of Offered Stock equal to such Stockholder's Proportionate Share and the aggregate purchase price therefor (the "New Securities Initial Notice"). Upon receipt of the New Securities Initial Notice, the Stockholders shall each have the right, but not the obligation, to elect to purchase a number of shares, up to each Stockholder's Proportionate Share, of the Offered Stock (the "New Securities Initial Election Right"), by giving notice of such election to the Company and each other Stockholder within five (5) days from the receipt of the New Securities Initial Notice (the "New Securities Initial Election Period"). In the event that any Stockholder does not exercise his, her or its New Securities Initial Election Right

within the New Securities Initial Election Period, then such Stockholder shall be deemed to have irrevocably waived his, her or its right to elect to purchase shares of Offered Stock during the New Securities Initial Election Period and during the subsequent New Securities Secondary Election Period.

(b) Upon the Termination Date of the New Securities Initial Election Period, if there exists any Remaining Offered Stock, the Company shall give notice of the Remaining Offered Stock to the Eligible Remaining Stockholders (the "New Securities Secondary Notice"). Upon receipt of the New Securities Secondary Notice, the Eligible Remaining Stockholders shall each have the right, but not the obligation, to elect to purchase a number of shares up to each Eligible Remaining Stockholder's Proportionate Share, of the Remaining Offered Stock plus any or all Remaining Offered Stock that the other Eligible Remaining Stockholders do not elect to purchase (the "New Securities Secondary Election Right"), by giving notice of such election to the Company and each other Eligible Remaining Stockholder (the "New Securities Secondary Notice of Election") within three (3) days from the receipt of the New Securities Secondary Notice. If any Remaining Offered Stock is over-subscribed by the Eligible Remaining Stockholders exercising their New Securities Secondary Election Right, any Eligible Remaining Stockholders who have previously given a New Securities Secondary Notice of Election shall each be permitted to elect to purchase their Proportionate Share, or such other amount to which such subscribing Eligible Remaining Stockholders all agree, of the over-subscribed Remaining Offered Stock, by giving an updated New Securities Secondary Notice of Election within two (2) days from the receipt of the New Securities Secondary Notice (the "New Securities Secondary Election Period"). In the event that any Stockholder does not exercise his, her or its New Securities Secondary Election Right within the New Securities Secondary Election Period, then such Stockholder shall be deemed to have irrevocably waived his, her or its right to elect to purchase shares of Offered Stock during the New Securities Secondary Election Period.

(c) All purchases and sales of shares of New Securities pursuant to Sections 9(a) and 9(b) hereof shall occur at the sale price and upon the other terms specified in the New Securities Initial Notice and shall be settled:

(i) in the case of a private placement, within three (3) Business Days; and

(ii) in the case of a public offering pursuant to a registration, within the number of Business Days specified in the applicable prospectus.

(d) Upon the Termination Date of the New Securities Secondary Election Period, if there exists any Remaining Offered Stock, the Company shall have seventy five (75) days thereafter (the "New Securities Issuance Period") to issue and sell the Remaining Offered Stock to one or more Third Parties at a price and upon such other terms no more favorable to the purchasers thereof than those specified in New Securities Initial Notice.

(e) Upon the conclusion of the New Securities Issuance Period, if there exists any Remaining Offered Stock, such Remaining Offered Stock must be reoffered to the Stockholders through the procedures of Sections 9(a) through 9(b) hereof before the Company may issue and sell it to one or more Third Parties.

(f) The purchase rights granted by this Section 9 shall be exercisable only by "accredited investors" as defined under Section 501 of Regulation D of the Securities Act.

(g) The exercise or non-exercise of the rights of Stockholders under this Section 9 shall not adversely affect their rights to participate in subsequent offerings of New Securities subject to Section 9.

10. Board Seats.

(a) For so long as an Individual Stockholder, together with his or her Sibling Affiliated Stockholders, holds at least five percent (5%) of all issued and outstanding shares of Common Stock, such Individual Stockholder shall have the right to designate one (1) individual (a "Nominee"), for nomination to the Board. The Company shall include, and shall use its best efforts to cause the Board (subject to the Board's fiduciary duties), whether acting through the nominating and corporate governance committee or otherwise, to include, such Nominee, in the slate of nominees recommended to the Company's stockholders for election as a director at the next annual or special meeting of stockholders at or by which directors of the Company are to be elected.

(b) Upon the death of an Individual Stockholder, so long as the Sibling Affiliated Stockholders of such Individual Stockholder hold at least five percent (5%) of all issued and outstanding Common Stock, the Qualified Family Members of such Individual Stockholder shall collectively assume the right to designate a Nominee previously held by such Individual Stockholder pursuant to Section 10(a) hereof, which right shall be exercised in such Qualified Family Members' discretion.

11. Voting.

(a) Notwithstanding anything to the contrary contained elsewhere in this Agreement, control over the voting rights of any shares of Class B Stock held by Stockholders may be exercised only by Qualified Person(s) or the trustees of a Qualified Trust. Such Persons may exercise such voting rights (i) in person, (ii) by proxy, but only if the proxy holder is a Qualified Person, the trustee of a Qualified Trust, or an Applicable Proxy under Section 11(d) hereof, (iii) by written consent, or (iv) in any other matter permitted by applicable law, but only if the Person exercising such voting rights is a Qualified Person, the trustee of a Qualified Trust, or an Applicable Proxy under Section 11(d) hereof.

(b) At any annual or special meeting of the stockholders of the Company involving the election of directors, each Stockholder shall be required to vote, or provide written consent on behalf of, all of his, her or its shares of Common Stock in favor of each Nominee to serve on the Board.

(c) For all matters other than the election of directors, voting shall be discretionary at the option of each Stockholder.

(d) In order to secure each Stockholder's obligation to vote its, his or her shares in accordance with the provisions of Section 11(b) hereof (the "Voting Obligations"), each Stockholder hereby constitutes and appoints, in connection with each vote pursuant to Section 11(b), the President of the Company and any other person designated by the Board, and each of

them (the "Applicable Proxy") as his, her or its true and lawful proxy and attorney-in-fact, with full power of substitution, to represent and vote all of such Stockholder's shares of Common Stock in accordance with such Stockholder's Voting Obligations. The Applicable Proxy may exercise the irrevocable proxy granted to it hereunder at any time any Stockholder fails to vote (including by failing to cause such Stockholder's shares to be present at the meeting) or attempts to vote (whether by proxy, in person or by written consent) in a manner that does not comply with the Voting Obligations. The proxies and powers granted by each Stockholder pursuant to this Section 11(d) are coupled with an interest and are given to secure the performance of the obligations under this Agreement. Such proxies and powers shall be irrevocable until the termination of this Agreement and shall, to the fullest extent permitted by law, survive the death, incompetency and disability of each such Stockholder who is an individual and the existence of each such Stockholder that is a trust or other entity. It is understood and agreed that the Applicable Proxy will not use such irrevocable proxy unless a Stockholder fails to vote (including by failing to cause such Stockholder's shares to be present at the meeting) or attempts to vote (whether by proxy, in person or by written consent) in a manner that does not comply with the Voting Obligations and that, to the extent the Applicable Proxy uses such irrevocable proxy, it will only vote such Stockholder's shares of Common Stock with respect to the matters specified in, and in accordance with the provisions of, Section 11(b). Except as otherwise permitted by this Agreement or by the Company's Certificate of Incorporation, as it may be amended and restated from time to time, each Stockholder hereby revokes any and all previous proxies or powers of attorney with respect to such Stockholder's shares and shall not hereafter, until the termination of this Agreement, grant, or purport to grant, any other proxy or power of attorney with respect to such shares, deposit any of such shares into a voting trust or enter into any agreement (other than this Agreement), arrangement or understanding with any person, directly or indirectly, to vote, grant any proxy or power of attorney or give instructions with respect to the voting of any of such shares, in each case, with respect to the Voting Obligations.

12. Standstill.

(a) So long as a Stockholder owns shares of Class B Stock, such Stockholder agrees that he, she or it shall not (in his, her or its capacity as a Stockholder), unless previously consented to by each member of the Board and the Stockholders holding at least a majority of the outstanding shares of Class B Stock, or otherwise permitted under this Agreement, effect, seek, offer or propose (whether publicly or otherwise) to effect, or announce any intention to effect or cause or participate in or in any way assist, facilitate or encourage any other Person to effect or seek, offer or propose (whether publicly or otherwise) to effect or participate in:

(i) any acquisition of any securities (or beneficial ownership thereof) of the Company or any of its Subsidiaries (except through the proper exercise of purchase rights granted hereunder), or rights or options to acquire any securities (or beneficial ownership thereof), other than through:

A. market-based purchases of up to an aggregate of two percent (2%) of issued and outstanding equity of the Company in any twelve (12) month period;

B. the exercise or conversion of outstanding securities; or

C. equity awards from the Company;

(ii) any tender or exchange offer, merger or other business combination involving the Company, any of the Subsidiaries or Affiliates or assets of the Company or the Subsidiaries or Affiliates constituting a significant portion of the consolidated assets of the Company and its Subsidiaries or Affiliates;

(iii) any recapitalization, restructuring, liquidation, dissolution or other extraordinary transaction with respect to the Company or any of its Subsidiaries or Affiliates; or

(iv) any "solicitation" of a "proxy" (as such terms are defined in Rule 14a-1 under the Exchange Act) or written consents with respect to any voting securities of the Company or any of its Affiliates.

(b) Each Stockholder further agrees that, if at any time during such period, such Stockholder is approached by any Person seeking such Stockholder's participation in a matter of one of the types addressed in this Section 12, such Stockholder will promptly inform the Board of the nature of the matter and the parties involved.

13. Registration Rights.

(a) *Demand Registration*.

(i) Subject to the terms of this Agreement, at any time at least one hundred and eighty (180) days following the consummation of the IPO, each Individual Stockholder, together with his or her Sibling Affiliated Group, shall be entitled to make up to ten requests to the Company for registration under and in accordance with the provisions of the Securities Act of all or part of their Registrable Securities (any such registration, a "Demand Registration"); provided, however, that with respect to any Demand Registration:

A. the anticipated aggregate offering amount of the Registrable Securities covered by any Demand Registration shall exceed $50,000,000 (net of underwriting discounts and commissions); and

B. each Sibling Affiliated Group shall be limited to one (1) such Demand Registration during each calendar year;

(ii) Within ten (10) days after receipt of any written request pursuant to this Section 13(a), the Company will give written notice of such request to all other holders of Registrable Securities and will use its reasonable best efforts to include in such registration all Registrable Securities (in accordance with the priorities set forth in Section 13(a)(iii) below) with respect to which the Company has received written requests for inclusion specifying the number of equity securities desired to be registered within ten (10) days after delivery of the Company's notice, and, thereupon the Company will use its reasonable best efforts to effect, at the earliest possible date, the registration under the Securities Act.

(iii) If the managing underwriters with respect to a Demand Registration advise the Company in writing that, in their opinion, the inclusion of the number of Registrable Securities and other securities requested to be included creates a substantial risk that the price per share of securities proposed to be included in the offering will be reduced due to the inclusion of such securities in the offering, the Company will include in such Demand Registration, prior to the inclusion of any securities which are not Registrable Securities, the number of such Registrable Securities that in the opinion of such underwriters can be sold without creating such a risk, pro rata among the respective holders of such Registrable Securities on the basis of the number of such Registrable Securities requested by such holders to be included in the applicable Demand Registration.

(iv) With respect to any Demand Registration, if the Board determines in good faith that such filing (i) would be materially detrimental to the Company, (ii) would require a disclosure of a material fact that might reasonably be expected to have a material adverse effect on the Company or any plan or proposal by the Company or any of its Subsidiaries to engage in any acquisition or disposition of assets or equity securities or any merger, consolidation, tender offer, material financing or other significant transaction, (iii) is inadvisable because the Company is planning to prepare and file a registration statement for a primary offering by the Company of its securities (which determination by the Board shall be certified in writing by an executive officer of the Company to the holders of Registrable Securities who have requested a Demand Registration) or (iv) would require the Company to prepare audited financial statements as of a date other than its fiscal year end, then the Company may postpone for up to one hundred twenty (120) days the filing or the effectiveness of a registration statement for a Demand Registration; provided, that the Company may not on any of the foregoing grounds postpone the filing or effectiveness of a registration statement for a Demand Registration for more than one hundred twenty (120) days during any twelve (12) month period (unless the holders of a majority of the unsold Registrable Securities included in such registration statement and not previously sold thereunder consent in writing to a longer postponement of the filing or effectiveness of such registration statement).

(b) *Piggyback Registrations*.

(i) At any time at least one hundred eighty (180) days following the consummation of the IPO, whenever the Company proposes to register any shares of Registrable Securities under the Securities Act for its own account or otherwise, including in response to a Demand Registration made through the procedures of Section 13(a) hereof, and the registration form to be used may be used for the registration of Registrable Securities (each, a "Piggyback Registration") (except for the registrations on Form S-8 or Form S-4 or any successor form thereto), the Company will give written notice, at least ten (10) days prior to the proposed filing of such registration statement, to the Stockholders, of its intention to effect such a registration and will use reasonable best efforts to include in such registration all Registrable Securities (in accordance with the priorities set forth in Sections 13(b)(ii) and 13(b)(iii) below) with respect to which the Company has received

written requests from Stockholders for inclusion specifying the number of equity securities desired to be registered, which request shall be delivered within ten (10) days after the delivery of the Company's notice. The Company may postpone or withdraw the filing or the effectiveness of a Piggyback Registration at any time in its sole discretion.

(ii) If a Piggyback Registration is an underwritten primary offering on behalf of the Company and the managing underwriters advise the Company in writing that in their opinion the number of Registrable Securities requested to be included in the registration creates a substantial risk that the price per share of the Registrable Securities proposed to be sold in the offering will be reduced due to the inclusion of such securities in the offering, then the managing underwriter and the Company may exclude securities (including Registrable Securities) from the registration and the underwriting, and the number of securities that may be included in such registration and underwriting shall include: (a) first, any securities that the Company proposed to sell, and (b) second, any Registrable Securities requested by Stockholders to be included in such registration pursuant to this Section 13, pro rata among the holders of such Registrable Securities on the basis of the total number of Registrable Securities which are requested by such holders to be included in such registration.

(iii) In connection with any Piggyback Registration, the Company will have such right to select the managing underwriter(s) in respect of such offering in its sole discretion.

(c) *Shelf Registrations*.

(i) Subject to the terms of this Agreement, commencing on the date on which the Company becomes eligible to register securities issued by it in the IPO on a registration statement on Form S-3 or similar short-form registration, the Company shall use its reasonable best efforts to effect, as expeditiously as possible, the filing of a shelf registration statement on Form S-3 pursuant to Rule 415 with respect to the Registrable Securities (including the prospectus, amendments and supplements to the shelf registration statement or prospectus, including pre- and post-effective amendments, all exhibits thereto and all material incorporated by reference or deemed incorporated by reference, if any, in such shelf registration statement, the "Shelf Registration Statement").

(ii) The Company shall use its reasonable best efforts to cause the Shelf Registration Statement to be declared effective by the Commission as soon as practicable after such filing, and shall use its reasonable best efforts to keep the Shelf Registration Statement effective and updated, from the date such Shelf Registration Statement is declared effective until the first date as of which all of the shares of Registrable Securities included in the Shelf Registration Statement have been sold. If the Shelf Registration Statement has been outstanding at least three years, at the end of the third year, if any securities registered under the previous Shelf Registration Statement remain unsold, the Company shall use its reasonable

best efforts to promptly refile a new shelf registration statement on Form S-3 pursuant to Rule 415 covering the Registrable Securities.

(d) *Registration Procedures*. Whenever the holders of Registrable Securities have requested that any Registrable Securities be registered pursuant to this Section 13, the Company will use its reasonable best efforts to effect the registration of such Registrable Securities in accordance with the intended method of disposition thereof and, pursuant thereto, the Company will as expeditiously as reasonably possible:

(i) prepare and, as soon as practicable after the end of the period within which requests for registration may be given to the Company, file with the Commission a registration statement with respect to such Registrable Securities and use its reasonable best efforts to cause such registration statement to become effective (provided that before filing a registration statement or prospectus, or any amendments or supplements thereto, the Company will furnish copies of all such documents proposed to be filed to one counsel designated by holders of a majority of the Registrable Securities covered by such registration statement and to the extent practicable under the circumstances, provide such counsel an opportunity to comment on any information pertaining to the holders of Registrable Securities covered by such registration statement contained therein; and the Company shall consider in good faith any corrections reasonably requested by such counsel with respect to such information);

(ii) prepare and file with the Commission such amendments and supplements to such registration statement and the prospectus(es) used in connection therewith as may be necessary to keep such registration statement effective for a period of not less than the earlier of (i) 180 days and (ii) the date that all of the securities covered by the registration statement have been sold, and comply with the provisions of the Securities Act with respect to the disposition of all securities covered by such registration statement during such period in accordance with the intended methods of disposition by the sellers thereof set forth in such registration statement;

(iii) in connection with any filing of any registration statement or prospectus or amendment or supplement thereto, cause such document (i) to comply in all material respects with the requirements of the Securities Act and the rules and regulations of the Commission thereunder and (ii) to not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading;

(iv) furnish to each seller of Registrable Securities, without charge, such number of copies of such registration statement, each amendment and supplement thereto, the prospectus(es) included in such registration statement (including each preliminary prospectus) and such other documents as such seller may reasonably request in order to facilitate the disposition of the Registrable Securities owned by such seller;

(v) use its commercially reasonable efforts to register or qualify such Registrable Securities under such securities or blue sky laws of such jurisdictions as the Stockholders reasonably request, keep each such registration or qualification effective during the period the associated registration statement is required to be kept effective, and do any and all other acts and things which may be reasonably necessary or advisable to enable such seller to consummate the disposition in such jurisdictions of the Registrable Securities owned by such seller (provided that the Company will not be required to qualify generally to do business, consent to general service of process, or subject itself or any of its Affiliates to taxation, in any jurisdiction where it would not otherwise be required to do so but for this subparagraph);

(vi) promptly notify each seller of such Registrable Securities and, if requested by such seller, confirm in writing, when a registration statement has become effective and when any post-effective amendments and supplements thereto become effective;

(vii) promptly notify each seller of such Registrable Securities, at any time when a prospectus relating thereto is required to be delivered under the Securities Act, of the happening of any event as a result of which the prospectus included in such registration statement contains an untrue statement of a material fact or omits any fact necessary to make the statements therein not misleading, and, at the request of any such seller, the Company will prepare a supplement or amendment to such prospectus so that, as thereafter delivered to the purchasers of such Registrable Securities, such prospectus will not contain any untrue statement of a material fact or omit to state any fact necessary to make the statements therein not misleading;

(viii) use commercially reasonable efforts to cause all such Registrable Securities to be listed on each securities exchange on which similar securities issued by the Company are then listed, or if no such securities are then listed, on a National Securities Exchange selected by the Company;

(ix) provide a transfer agent, registrar and CUSIP number for all such Registrable Securities not later than the effective date of such registration statement;

(x) enter into such customary agreements (including underwriting agreements in customary form) and take all such other customary actions as the holders of a majority of the Registrable Securities being sold or the underwriters, if any, reasonably request in order to expedite or facilitate the disposition of such Registrable Securities;

(xi) use commercially reasonable efforts to cooperate with each seller and the underwriter or managing underwriter, if any, to facilitate the timely preparation and delivery of certificates representing Registrable Securities to be sold and not bearing any restrictive legends; and enable such Registrable Securities to be in such denominations (consistent with the provisions of the governing documents thereof)

and registered in such names as each seller or the underwriter or managing underwriter, if any, may reasonably request at least three Business Days prior to any sale of Registrable Securities;

(xii) subject to confidentiality agreements in form and substance acceptable to the Company, make available for inspection, at such place and in such manner as determined by the Company in its sole discretion, by any seller of Registrable Securities, any underwriter participating in any disposition pursuant to such registration statement, and any attorney, accountant or other agent retained by any such seller or underwriter, financial and other records, pertinent corporate documents and properties of the Company reasonably requested by any such seller, underwriter, attorney, accountant or agent in connection with such registration statement, and cause the Company's officers, directors, employees and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant or agent in connection with such registration statement; provided, however, that any records, information or documents that are furnished by the Company and that are non-public shall be used only in connection with such registration;

(xiii) advise each seller of such Registrable Securities, promptly after it shall receive notice or obtain knowledge thereof, of the issuance of any stop order by the Commission suspending the effectiveness of such registration statement or the initiation or threatening of any proceeding for such purpose and promptly use its reasonable best efforts to prevent the issuance of any stop order or to obtain its withdrawal if such stop order should be issued;

(xiv) make available to its security holders, as soon as reasonably practicable, an earnings statement (which need not be audited) covering at least twelve (12) months which shall satisfy the provisions of Section 11(a) of the Securities Act and Rule 158 thereunder;

(xv) cooperate and assist in any filing required to be made with the Financial Industry Regulatory Authority (FINRA);

(xvi) at the request of any seller of such Registrable Securities in connection with an underwritten offering, furnish on the date or dates provided for in the underwriting agreement a letter or letters from the independent certified public accountants of the Company addressed to the underwriters and the sellers of Registrable Securities, covering such matters as such accountants, underwriters and sellers may reasonably agree upon, in which letter(s) such accountants shall state, without limiting the generality of the foregoing, that they are an independent registered public accounting firm within the meaning of the Securities Act and that in their opinion the financial statements and other financial data of the Company included in the registration statement, the prospectus(es), or any amendment or supplement thereto, comply in all material respects with the applicable accounting requirements of the Securities Act; and

(xvii) with respect to any Demand Registration, make senior executives of the Company reasonably available to assist the underwriters with respect to, and participate in, the so-called "road show" in connection with the marketing efforts for, and the distribution and sale of Registrable Securities pursuant to a registration statement.

(e) *Registration Expenses*.

(i) The Company will pay all expenses incident to the Company's performance of or compliance with this Section 13, including, but not limited to: all registration and filing fees; fees and expenses of compliance with securities or blue sky laws; printing expenses; messenger and delivery expenses; and fees and disbursements of counsel for the Company; reasonable fees and disbursements of one counsel chosen by the holders of a majority of the Registrable Securities to be included in such registration to represent all holders of Registrable Securities to be included in the registration; fees and disbursements of the Company's registered public accounting firm; and reasonable fees and disbursements of all other Persons retained by the Company (all such expenses being herein called "Registration Expenses"); provided, however, that, as between the Company and holders of Registrable Securities, all underwriting discounts and commissions and transfer taxes relating to the Registrable Securities will be borne pro rata by the holders of such Registrable Securities sold in any offering hereunder. In addition, the Company will pay its internal expenses (including, but not limited to, all salaries and expenses of its officers and employees performing legal or accounting duties), the expense of any annual audit or quarterly review, the expense of any liability insurance obtained by the Company and the expenses and fees for listing the securities to be registered on each securities exchange; provided, however, that if a Demand Registration is subsequently withdrawn at the request of a majority of the Stockholders initiating such request, the holders of Registrable Securities subject to such withdrawn registration shall forfeit such registration unless the holders of Registrable Securities to be registered pay (or reimburse the Company) for all of the Registration Expenses with respect to such withdrawn registration.

(ii) To the extent that any expenses incident to any registration are not required to be paid by the Company, each holder of Registrable Securities included in a registration will pay all such expenses which are clearly and solely attributable to the registration of such holder's Registrable Securities so included in such registration, and any other expenses not so attributable to one holder will be borne and paid by all sellers of securities included in such registration in proportion to the number of securities so included by each such seller.

(f) *Indemnification*.

(i) The Company agrees to indemnify, to the extent permitted by law, each holder of Registrable Securities and, as applicable, each of its trustees, stockholders, members, directors, managers, partners, officers and employees, and each Person who controls such holder (within the meaning of the Securities Act),

against all losses, claims, damages, liabilities and expenses (including, but not limited to, attorneys' fees and expenses) caused by any untrue or alleged untrue statement of material fact contained in any registration statement, prospectus or preliminary prospectus, or any amendment thereof or supplement thereto (including, in each case, all documents incorporated therein by reference), or any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein not misleading, except insofar as the same are caused by or contained in any information furnished in writing to the Company by such holder expressly for use therein or by such holder's failure to deliver a copy of the prospectus or any amendments or supplements thereto after the Company has furnished such holder with a sufficient number of copies of the same. In connection with an underwritten offering, the Company will indemnify such underwriters, their officers and directors and each Person who controls such underwriters (within the meaning of the Securities Act) to the same extent as provided above with respect to the indemnification of the holders of Registrable Securities. The payments required by this Section 13(f)(i) will be made periodically during the course of the investigation or defense, as and when bills are received or expenses incurred.

(ii) In connection with any registration statement in which a holder of Registrable Securities is participating, each such holder will furnish to the Company in writing such information relating to such holder as is reasonably necessary for use in connection with any such registration statement or prospectus and, to the extent permitted by law, will indemnify the Company and, as applicable, each of its directors, employees and officers and each Person who controls the Company (within the meaning of the Securities Act) against any losses, claims, damages, liabilities and expenses resulting from any untrue or alleged untrue statement of material fact contained in the registration statement, prospectus or preliminary prospectus, or any amendment thereof or supplement thereto (including, in each case, all documents incorporated therein by reference), or any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein not misleading, but only to the extent that such untrue statement or omission is contained in or omitted from any information furnished in writing by such holder for the acknowledged purpose of inclusion in such registration statement, prospectus or preliminary prospectus; provided, however, that the obligation to indemnify will be several, not joint and several, among such holders of Registrable Securities and the liability of each such holder of Registrable Securities will be in proportion to and limited to the net amount received by such holder from the sale of Registrable Securities pursuant to such registration statement, unless such loss, claim, damage, liability or expense resulted from such holder's intentionally fraudulent conduct.

(iii) Each party entitled to indemnification under this Section 13(f) (the "Indemnified Party") shall give written notice to the party required to provide indemnification (the "Indemnifying Party") promptly after such Indemnified Party has received written notice of any claim as to which indemnity may be sought, and shall permit the Indemnifying Party to assume the defense of any such claim or any litigation resulting therefrom, provided that the counsel for the Indemnifying Party

who is to conduct the defense of such claim or litigation is reasonably satisfactory to the Indemnified Party (whose approval shall not be unreasonably withheld or delayed). The Indemnified Party may participate in such defense at such Indemnified Party's expense; provided, however, that the Indemnifying Party shall bear the expense of such defense of the Indemnified Party if (i) the Indemnifying Party has agreed in writing to pay such expenses, (ii) the Indemnifying Party shall have failed to assume the defense of such claim or to employ counsel reasonably satisfactory to the Indemnified Party, or (iii) in the reasonable judgment of the Indemnified Party, based upon the written advice of such Indemnified Party's counsel, representation of both parties by the same counsel would be inappropriate due to actual or potential conflicts of interest; provided, however, that in no event shall the Indemnifying Party be liable for the fees and expenses of more than one counsel (excluding one local counsel per jurisdiction as necessary) for all Indemnified Parties in connection with any one action or separate but similar or related actions in the same jurisdiction arising out of the same event, allegations or circumstances. The Indemnified Party shall not make any settlement without the prior written consent of the Indemnifying Party, which consent shall not be unreasonably withheld or delayed. The failure of any Indemnified Party to give notice as provided herein shall relieve the Indemnifying Party of its obligations under this Section 13(f) only to the extent that such failure to give notice shall materially prejudice the Indemnifying Party in the defense of any such claim or any such litigation. No Indemnifying Party, in the defense of any such claim or litigation, shall, except with the prior written consent of each Indemnified Party, consent to entry of any judgment or enter into any settlement (a) that does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party of a release from all liability in respect to such claim or litigation in form and substance reasonably satisfactory to such Indemnified Party or (b) that includes an admission of fault, culpability or a failure to act, by or on behalf of any Indemnified Party.

(iv) The indemnification (and contribution provisions in Section 13(g) below) provided for under this Agreement will remain in full force and effect regardless of any investigation made by or on behalf of the Indemnified Party or any officer, director or controlling Person of such Indemnified Party and will survive the transfer of securities.

(g) *Contribution*.

(i) If the indemnification provided for in Section 13(f) from the Indemnifying Party is unavailable to or unenforceable by the Indemnified Party in respect to any costs, fines, penalties, losses, claims, damages, liabilities or expenses referred to herein, then the Indemnifying Party, in lieu of indemnifying such Indemnified Party, shall contribute to the amount paid or payable by such Indemnified Party as a result of such costs, fines, penalties, losses, claims, damages, liabilities or expenses in such proportion as is appropriate to reflect the relative fault of the Indemnifying Party and Indemnified Parties in connection with the actions which resulted in such losses, claims, damages, liabilities or expenses, as well as any other

relevant equitable considerations. The relative fault of such Indemnifying Party and Indemnified Parties shall be determined by reference to, among other things, whether any action in question, including any untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact, has been made by, or relates to information supplied by, such Indemnifying Party or Indemnified Parties, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such action. The amount paid or payable by a party as a result of the costs, fines, penalties, losses, claims, damages, liabilities and expenses referred to above shall be deemed to include, subject to the limitations set forth in Section 13(f), any legal or other fees or expenses reasonably incurred by such party in connection with any investigation or proceeding. Notwithstanding this Section 13(g), an indemnifying holder who is a Sibling Affiliated Stockholder shall not be required to contribute any amount in excess of the amount by which (a) the total price at which the Registrable Securities sold by such holder exceeds (b) the amount of any damages which such indemnifying holder has otherwise been required to pay by reason of the untrue or alleged untrue statement or omission or alleged omission giving rise to such payments, unless such loss, claim, damage, liability or expense in respect of which contribution is required resulted from such holder's intentionally fraudulent conduct.

(ii) The Company and the holders of Registrable Securities agree that it would not be just and equitable if contribution pursuant to this Section 13(g) were determined by pro rata allocation or by any other method of allocation which does not take into account the equitable considerations referred to in the immediately preceding paragraph. No Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation.

(h) At the request of any holder of Registrable Securities who proposes to sell securities in compliance with Rule 144, the Company will (i) forthwith furnish to such holder a written statement of compliance with the filing requirements of the Commission as set forth in Rule 144, and (ii) make available to the public and such holders such information, and take such action as is reasonably necessary, to enable the holders of Registrable Securities to make sales pursuant to Rule 144.

(i) No Person may participate in any registration pursuant to this Section 13 which is underwritten unless such Person (i) agrees to sell its securities on the basis provided in any underwriting arrangements approved by such Person or Persons entitled hereunder to approve such arrangements and (ii) completes and executes all questionnaires, powers of attorney, custody agreements, indemnities, underwriting agreements and other documents reasonably required under the terms of such underwriting arrangements.

(j) Notwithstanding any provision of this Agreement to the contrary (including, without limitation, Sections 9 and 12 and this Section 13), nothing in this Agreement shall be interpreted to preclude or otherwise restrict any Stockholder from:

(i) Purchasing shares of Class A Stock in the open market or otherwise;

(ii) Purchasing or selling shares of Common Stock pursuant to the Share Purchase Agreement; or

(iii) Selling shares of Class A Stock in connection with (A) the exercise of any over-allotment option granted to the underwriters in the IPO or (B) any follow-on offering of Class A Stock. In connection with the exercise of any over-allotment option granted to the underwriters in the IPO to purchase additional shares of Class A Stock (such shares, the "Over-Allotment Shares"), each Stockholder shall have the right, but not the obligation, to elect to transfer to the underwriters shares of such Stockholder's Class B Stock in an amount equal to or less than such Stockholder's Proportionate Share of the Over-Allotment Shares; provided, however, if a Stockholder elects not to transfer shares to the underwriters, the option to transfer a number of shares equal to such Stockholder's Proportionate Share of the Over-Allotment Shares shall be offered to the electing Stockholders.

14. Severability. All provisions of this Agreement are distinct and severable and if any clause shall be held to be invalid, illegal or against public policy, the validity or the legality of the remainder of this Agreement shall not be affected thereby.

15. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware without regard to conflicts of laws principles.

16. Jurisdiction. The parties hereto agree that any suit, action or proceeding seeking to enforce any provision of, or based on any matter arising out of or in connection with, this Agreement or the transactions contemplated hereby (whether brought by any party or any of its Affiliates or against any party or any of its Affiliates) shall be brought in the Delaware Chancery Court (or in the event, but only in the event, that such court does not have subject matter jurisdiction over such action or proceeding, the Superior Court of the State of Delaware (Complex Commercial Division) or, if subject matter jurisdiction over the action or proceeding is vested exclusively in the federal courts of the United States of America, the United States District Court for the District of Delaware) and each of the parties hereby irrevocably consents to the jurisdiction of such courts (and of the appropriate appellate courts therefrom) in any such suit, action or proceeding and irrevocably waives, to the fullest extent permitted by law, any objection that it may now or hereafter have to the laying of the venue of any such suit, action or proceeding in any such court or that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum. Process in any such suit, action or proceeding may be served on any party anywhere in the world, whether within or without the jurisdiction of any such court.

17. Waiver of Jury Trial. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATED TO THIS AGREEMENT OR TRANSACTIONS CONTEMPLATED HEREBY.

18. Notices. All notices, offers, acceptances, refusals, payments, agreements, requests or other communications given or required to be given hereunder shall be made in writing and shall be deemed duly given and effective, if (a) delivered in person or sent by electronic mail or facsimile,

on the date received, and, (b) mailed, on the second Business Day after mailing by certified mail, postage prepaid, return receipt requested, to a Stockholder at such Stockholder's last known address as it appears on the books and records of the Company, or to the Company at its then principal place of business.

19. Binding Effect. This Agreement shall be binding upon and inure to the benefit of the parties hereto, their respective heirs, successors and assigns. This Agreement cannot be assigned without the written consent of all of the parties hereto.

20. Entire Agreement; Modification. This Agreement expresses the entire and final understandings of the parties hereto and supersedes all prior agreements with reference to the subject matter hereof, including, without limitation, the Prior Agreement. Each of the parties hereto hereby irrevocably waives any and all claims and rights under all prior agreements with reference to the subject matter hereof, including, without limitation, any and all claims and rights under the Prior Agreement relating to transactions contemplated under this Agreement, including those pursuant to the Share Purchase Agreement. This Agreement may neither be altered nor modified except by a writing duly signed by the Company and a majority of the Stockholders.

21. Miscellaneous. Each party to this Agreement agrees to perform any and all further acts, and to execute and deliver any and all documents and instruments that may be reasonably necessary and appropriate to carry out the terms and conditions and to further the intent of this Agreement. As required by the context, the singular shall be construed to include the plural and vice versa, and the use of any gender shall be construed to include all genders. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original but all of which together will constitute one and the same instrument, and may be delivered by facsimile or emailed document scan.

22. Termination. This Agreement shall terminate and be of no further force and effect on the later to occur of (i) the first date when the Stockholders, taken together, hold less than two percent (2%) of all issued and outstanding shares of Common Stock and (ii) the first date when no party to this Agreement continues to hold any Registrable Securities.

[*Signature page follows*]

IN WITNESS WHEREOF, the Stockholders have executed this Agreement, and the Company has caused this Agreement to be executed by a duly authorized officer of the Company as of the date first above written.

VERTEX, INC.

By: _____
Name: David DeStefano
Title: President, Chief Executive Officer and Chairperson

STOCKHOLDERS

By: _____
Name:

EXHIBIT A

FORM OF JOINDER AGREEMENT

[Attached]

JOINDER AGREEMENT

This JOINDER AGREEMENT to the Third Amended and Restated Stockholders' Agreement (the "Joinder Agreement") is made and entered into as of , , by and among Vertex, Inc., a Delaware corporation (the "Company"), and the undersigned (the "Joining Stockholders"), and relates to that certain Third Amended and Restated Stockholders' Agreement, dated as of [·], 2020 (as amended from time to time, the "Stockholders' Agreement"), by and among the Company and each Person set forth on Schedule 2 to the Stockholders' Agreement and any other Person who becomes a party to the Stockholders' Agreement pursuant to the provisions of the Stockholders' Agreement (each such Person, individually, a "Stockholder" and, collectively, the "Stockholders"). Capitalized terms used and not defined herein shall have the meanings ascribed to such terms in the Stockholders' Agreement.

WHEREAS, the Joining Stockholders are acquiring as transferees shares of Class B Stock, par value $0.0001 per share, of the Company and, in connection therewith, have agreed to become a party to the Stockholders' Agreement on the terms set forth herein.

NOW, THEREFORE, in consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Agreement to be Bound. Each Joining Stockholder agrees that, upon the execution of this Joinder Agreement, such Joining Stockholder shall become a party to the Stockholders' Agreement and shall be fully bound by, and subject to, all of the covenants, terms and conditions of the Stockholders' Agreement and such Joining Stockholder shall be deemed a "Stockholder" thereunder for all purposes.

2. Binding Effect. This Joinder Agreement shall be binding upon and shall inure to the benefit of, and be enforceable by, the Company, the Stockholders and the Joining Stockholders and their respective heirs, personal representatives, successors and assigns.

3. Severability. If any provision of this Joinder Agreement (or any portion thereof) or the application of any such provision (or any portion thereof) to any Person or circumstance shall be held invalid, illegal or unenforceable in any respect by a Governmental Authority, such invalidity, illegality or unenforceability shall not affect any other provision hereof (or the remaining portion thereof) or the application of such provision to any other Persons or circumstances. Upon such determination that any provision of this Joinder Agreement (or any portion thereof) or the application of any such provision (or any portion thereof) to any Person or circumstance is invalid, illegal or unenforceable, the parties hereto shall negotiate in good faith to modify this Joinder Agreement so as to effect the original intent of the parties hereto as closely as possible in an acceptable manner to the end that the transactions contemplated hereby are fulfilled to the extent possible.

4. Further Agreement. The parties hereto shall use commercially reasonable efforts to do and perform or cause to be done and performed all such further acts and things and shall execute and deliver all such other agreements, certificates, instruments or documents as any other party

may reasonably request in order to carry out the intent and purposes of this Joinder Agreement and to consummate the transactions contemplated hereby.

5. Effect of Headings. The Section headings of this Joinder Agreement have been inserted for convenience of reference only and shall not be deemed a part of this Joinder Agreement.

6. Counterparts. This Joinder Agreement may be executed in one or more counterparts, each of which shall be deemed to constitute an original, but all such respective counterparts shall together constitute one and the same instrument. Delivery of an executed counterpart of a signature page of this Joinder Agreement by facsimile or other electronic image scan shall be effective as delivery of a manually executed counterpart of this Agreement.

7. Governing Law. THIS JOINDER AGREEMENT SHALL BE GOVERNED BY AND INTERPRETED AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF DELAWARE WITHOUT REFERENCE TO ITS INTERNAL CONFLICTS OF LAWS PRINCIPLES.

[*Signature page follows*]

IN WITNESS WHEREOF, the parties hereto have executed this Joinder Agreement as of the date first above written:

VERTEX, INC.

By: _____
Name:
Title:

[NAME(S) OF JOINING STOCKHOLDER(S)]

By: _____
Name:
Title:

[*Signature Page to Joinder Agreement*]

VERTEX, INC.
2020 INCENTIVE AWARD PLAN

ARTICLE I.
PURPOSE

The Plan's purpose is to enhance the Company's ability to attract, retain and motivate persons who make (or are expected to make) important contributions to the Company by providing these individuals with equity ownership opportunities. Capitalized terms used in the Plan are defined in Article XI.

ARTICLE II.
ELIGIBILITY

Service Providers are eligible to be granted Awards under the Plan, subject to the limitations described herein.

ARTICLE III.
ADMINISTRATION AND DELEGATION

3.1 Administration. The Plan is administered by the Administrator. The Administrator has authority to determine which Service Providers receive Awards, grant Awards and set Award terms and conditions, subject to the conditions and limitations in the Plan. The Administrator also has the authority to take all actions and make all determinations under the Plan, to interpret the Plan and Award Agreements and to adopt, amend and repeal Plan administrative rules, guidelines and practices as it deems advisable. The Administrator may correct defects and ambiguities, supply omissions and reconcile inconsistencies in the Plan or any Award as it deems necessary or appropriate to administer the Plan and any Awards. The Administrator's determinations under the Plan are in its sole discretion and will be final and binding on all persons having or claiming any interest in the Plan or any Award.

3.2 Appointment of Committees. To the extent Applicable Laws permit, the Board may delegate any or all of its powers under the Plan to one or more Committees or officers of the Company or any of its Subsidiaries. The Board may abolish any Committee or re-vest in itself any previously delegated authority at any time.

ARTICLE IV.
STOCK AVAILABLE FOR AWARDS

4.1 Number of Shares. Subject to adjustment under Article VIII and the terms of this Article IV, Awards may be made under the Plan covering up to the Overall Share Limit. Shares issued under the Plan may consist of authorized but unissued Shares, Shares purchased on the open market or treasury Shares.

4.2 Share Recycling. If all or any part of an Award expires, lapses or is terminated, exchanged for cash, surrendered, repurchased, canceled without having been fully exercised or forfeited, in any case, in a manner that results in the Company acquiring Shares covered by the Award at a price not greater than the price (as adjusted to reflect any Equity Restructuring) paid by the Participant for such Shares or not issuing any Shares covered by the Award, the unused Shares covered by the Award will again be available for Award grants under the Plan. Further, Shares delivered (either by actual delivery or attestation) to the Company by a Participant to satisfy the applicable exercise or purchase price of an Award and/or to satisfy

any applicable tax withholding obligation (including Shares retained by the Company from the Award being exercised or purchased and/or creating the tax obligation) will again be available for Award grants under the Plan. The payment of Dividend Equivalents in cash in conjunction with any outstanding Awards shall not count against the Overall Share Limit.

4.3 Incentive Stock Option Limitations. Notwithstanding anything to the contrary herein, no more than 3,000,000 Shares may be issued pursuant to the exercise of Incentive Stock Options.

4.4 Substitute Awards. In connection with an entity's merger or consolidation with the Company or the Company's acquisition of an entity's property or stock, the Administrator may grant Awards in substitution for any options or other stock or stock-based awards granted before such merger or consolidation by such entity or its affiliate. Substitute Awards may be granted on such terms as the Administrator deems appropriate, notwithstanding limitations on Awards in the Plan. Substitute Awards will not count against the Overall Share Limit (nor shall Shares subject to a Substitute Award be added to the Shares available for Awards under the Plan as provided above), except that Shares acquired by exercise of substitute Incentive Stock Options will count against the maximum number of Shares that may be issued pursuant to the exercise of Incentive Stock Options under the Plan. Additionally, in the event that a company acquired by the Company or any Subsidiary or with which the Company or any Subsidiary combines has shares available under a pre-existing plan approved by stockholders and not adopted in contemplation of such acquisition or combination, the shares available for grant pursuant to the terms of such pre-existing plan (as adjusted, to the extent appropriate, using the exchange ratio or other adjustment or valuation ratio or formula used in such acquisition or combination to determine the consideration payable to the holders of common stock of the entities party to such acquisition or combination) may be used for Awards under the Plan and shall not reduce the Shares authorized for grant under the Plan (and Shares subject to such Awards shall not be added to the Shares available for Awards under the Plan as provided above); provided that Awards using such available shares shall not be made after the date awards or grants could have been made under the terms of the pre-existing plan, absent the acquisition or combination, and shall only be made to individuals who were not Employees or Directors prior to such acquisition or combination.

4.5 Non-Employee Director Compensation. Notwithstanding any provision to the contrary in the Plan, the Administrator may establish compensation for non-employee Directors from time to time, subject to the limitations in the Plan. The Administrator will from time to time determine the terms, conditions and amounts of all such non-employee Director compensation in its discretion and pursuant to the exercise of its business judgment, taking into account such factors, circumstances and considerations as it shall deem relevant from time to time, provided that the sum of any cash compensation, or other compensation, and the value (determined as of the grant date in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, or any successor thereto) of Awards granted to a non-employee Director as compensation for services as a non-employee Director during any fiscal year of the Company may not exceed $750,000 (the "***NED Limit***"). The NED Limit shall not apply (i) to cash or equity-based compensation granted to a non-employee Director for services as a non-employee Director prior to the Plan's effective date, (ii) compensation granted to a non-employee Director in connection with the initial public offering of the Shares, or (iii) to compensation granted to a non-employee Director who serves in a capacity in addition to that of non-employee Director for which he or she receives additional compensation. The Administrator may make exceptions to the NED Limit for individual non-employee Directors in extraordinary circumstances, as the Administrator may determine in its discretion, provided that the non-employee Director receiving such additional compensation may not participate in the decision to award such compensation or in other contemporaneous compensation decisions involving non-employee Directors.

ARTICLE V.
STOCK OPTIONS AND STOCK APPRECIATION RIGHTS

5.1 General. The Administrator may grant Options or Stock Appreciation Rights to Service Providers subject to the limitations in the Plan, including any limitations in the Plan that apply to Incentive Stock Options. The Administrator will determine the number of Shares covered by each Option and Stock Appreciation Right, the exercise price of each Option and Stock Appreciation Right and the conditions and limitations applicable to the exercise of each Option and Stock Appreciation Right. A Stock Appreciation Right will entitle the Participant (or other person entitled to exercise the Stock Appreciation Right) to receive from the Company upon exercise of the exercisable portion of the Stock Appreciation Right an amount determined by multiplying the excess, if any, of the Fair Market Value of one Share on the date of exercise over the exercise price per Share of the Stock Appreciation Right by the number of Shares with respect to which the Stock Appreciation Right is exercised, subject to any limitations of the Plan or that the Administrator may impose and payable in cash, Shares valued at Fair Market Value or a combination of the two as the Administrator may determine or provide in the Award Agreement.

5.2 Exercise Price. The Administrator will establish each Option's and Stock Appreciation Right's exercise price and specify the exercise price in the Award Agreement. Unless otherwise determined by the Administrator, the exercise price will not be less than 100% of the Fair Market Value on the grant date of the Option or Stock Appreciation Right.

5.3 Duration. Each Option or Stock Appreciation Right will be exercisable at such times and as specified in the Award Agreement, provided that, unless otherwise determined by the Administrator, the term of an Option or Stock Appreciation Right will not exceed ten years. Notwithstanding the foregoing, if the Participant, prior to the end of the term of an Option or Stock Appreciation Right, violates the non-competition, non-solicitation, confidentiality or other similar restrictive covenant provisions of any employment contract, confidentiality and nondisclosure agreement or other agreement between the Participant and the Company or any of its Subsidiaries, the right of the Participant and the Participant's transferees to exercise any Option or Stock Appreciation Right issued to the Participant shall terminate immediately upon such violation, unless the Company otherwise determines.

5.4 Exercise. Options and Stock Appreciation Rights may be exercised by delivering to the Company a written notice of exercise, in a form the Administrator approves (which may be electronic), signed by the person authorized to exercise the Option or Stock Appreciation Right, together with, as applicable, payment in full (i) as specified in Section 5.5 for the number of Shares for which the Award is exercised and (ii) as specified in Section 9.5 for any applicable taxes. Unless the Administrator otherwise determines, an Option or Stock Appreciation Right may not be exercised for a fraction of a Share.

5.5 Payment Upon Exercise. Subject to Section 10.8, any Company insider trading policy (including blackout periods) and Applicable Laws, the exercise price of an Option must be paid by:

(a) cash, wire transfer of immediately available funds or by check payable to the order of the Company, provided that the Company may limit the use of one of the foregoing payment forms if one or more of the payment forms below is permitted;

(b) if there is a public market for Shares at the time of exercise, unless the Company otherwise determines, (A) delivery (including telephonically to the extent permitted by the Company) of an irrevocable and unconditional undertaking by a broker acceptable to the Company to deliver promptly to the Company sufficient funds to pay the exercise price, or (B) the Participant's delivery to the Company of

a copy of irrevocable and unconditional instructions to a broker acceptable to the Company to deliver promptly to the Company cash or a check sufficient to pay the exercise price; provided that such amount is paid to the Company at such time as may be required by the Administrator;

(c) to the extent permitted by the Administrator, delivery (either by actual delivery or attestation) of Shares owned by the Participant valued at their fair market value;

(d) to the extent permitted by the Administrator, surrendering Shares then issuable upon the Option's exercise valued at their fair market value on the exercise date;

(e) to the extent permitted by the Administrator, delivery of a promissory note or any other property that the Administrator determines is good and valuable consideration; or

(f) to the extent permitted by the Company, any combination of the above payment forms approved by the Administrator.

ARTICLE VI.
RESTRICTED STOCK; RESTRICTED STOCK UNITS

6.1 General. The Administrator may grant Restricted Stock, or the right to purchase Restricted Stock, to any Service Provider, subject to the Company's right to repurchase all or part of such shares at their issue price or other stated or formula price from the Participant (or to require forfeiture of such shares) if conditions the Administrator specifies in the Award Agreement are not satisfied before the end of the applicable restriction period or periods that the Administrator establishes for such Award. In addition, the Administrator may grant to Service Providers Restricted Stock Units, which may be subject to vesting and forfeiture conditions during the applicable restriction period or periods, as set forth in an Award Agreement. The Administrator will determine and set forth in the Award Agreement the terms and conditions for each Restricted Stock and Restricted Stock Unit Award, subject to the conditions and limitations contained in the Plan.

6.2 Restricted Stock.

(a) Dividends. Participants holding shares of Restricted Stock will be entitled to all ordinary cash dividends paid with respect to such Shares, unless the Administrator provides otherwise in the Award Agreement. In addition, unless the Administrator provides otherwise, if any dividends or distributions are paid in Shares, or consist of a dividend or distribution to holders of Common Stock of property other than an ordinary cash dividend, the Shares or other property will be subject to the same restrictions on transferability and forfeitability as the shares of Restricted Stock with respect to which they were paid.

(b) Stock Certificates. The Company may require that the Participant deposit in escrow with the Company (or its designee) any stock certificates issued in respect of shares of Restricted Stock, together with a stock power endorsed in blank.

6.3 Restricted Stock Units.

(a) Settlement. The Administrator may provide that settlement of Restricted Stock Units will occur upon or as soon as reasonably practicable after the Restricted Stock Units vest or will instead be deferred, on a mandatory basis or at the Participant's election, in a manner intended to comply with Section 409A.

(b) Stockholder Rights. A Participant will have no rights of a stockholder with respect to Shares subject to any Restricted Stock Unit unless and until the Shares are delivered in settlement of the Restricted Stock Unit.

(c) Dividend Equivalents. If the Administrator provides, a grant of Restricted Stock Units may provide a Participant with the right to receive Dividend Equivalents. Dividend Equivalents may be paid currently or credited to an account for the Participant, settled in cash or Shares and subject to the same restrictions on transferability and forfeitability as the Restricted Stock Units with respect to which the Dividend Equivalents are granted and subject to other terms and conditions as set forth in the Award Agreement.

ARTICLE VII.
OTHER STOCK OR CASH BASED AWARDS

Other Stock or Cash Based Awards may be granted to Participants, including Awards entitling Participants to receive Shares to be delivered in the future and including annual or other periodic or long-term cash bonus awards (whether based on specified Performance Criteria or otherwise), in each case subject to any conditions and limitations in the Plan. Such Other Stock or Cash Based Awards will also be available as a payment form in the settlement of other Awards, as standalone payments and as payment in lieu of compensation to which a Participant is otherwise entitled. Other Stock or Cash Based Awards may be paid in Shares, cash or other property, as the Administrator determines. Subject to the provisions of the Plan, the Administrator will determine the terms and conditions of each Other Stock or Cash Based Award, including any purchase price, performance goal (which may be based on the Performance Criteria), transfer restrictions, and vesting conditions, which will be set forth in the applicable Award Agreement.

ARTICLE VIII.
ADJUSTMENTS FOR CHANGES IN COMMON STOCK
AND CERTAIN OTHER EVENTS

8.1 Equity Restructuring. In connection with any Equity Restructuring, notwithstanding anything to the contrary in this Article VIII, the Administrator will equitably adjust each outstanding Award as it deems appropriate to reflect the Equity Restructuring, which may include adjusting the number and type of securities subject to each outstanding Award and/or the Award's exercise price or grant price (if applicable), granting new Awards to Participants, and making a cash payment to Participants. The adjustments provided under this Section 8.1 will be nondiscretionary and final and binding on the affected Participant and the Company; provided that the Administrator will determine whether an adjustment is equitable.

8.2 Corporate Transactions. In the event of any dividend or other distribution (whether in the form of cash, Common Stock, other securities, or other property), reorganization, merger, consolidation, combination, amalgamation, repurchase, recapitalization, liquidation, dissolution, or sale, transfer, exchange or other disposition of all or substantially all of the assets of the Company, or sale or exchange of Common Stock or other securities of the Company, Change in Control, issuance of warrants or other rights to purchase Common Stock or other securities of the Company, other similar corporate transaction or event, other unusual or nonrecurring transaction or event affecting the Company or its financial statements or any change in any Applicable Laws or accounting principles, the Administrator, on such terms and conditions as it deems appropriate, either by the terms of the Award or by action taken prior to the occurrence of such transaction or event (except that action to give effect to a change in Applicable Law or accounting principles may be made within a reasonable period of time after such change) and either automatically or upon the Participant's request, is hereby authorized to take any one or more of the following actions whenever the Administrator determines that such action is appropriate in order to (x)

prevent dilution or enlargement of the benefits or potential benefits intended by the Company to be made available under the Plan or with respect to any Award granted or issued under the Plan, (y) to facilitate such transaction or event or (z) give effect to such changes in Applicable Laws or accounting principles:

(a) To provide for the cancellation of any such Award in exchange for either an amount of cash or other property with a value equal to the amount that could have been obtained upon the exercise or settlement of the vested portion of such Award or realization of the Participant's rights under the vested portion of such Award, as applicable; provided that, if the amount that could have been obtained upon the exercise or settlement of the vested portion of such Award or realization of the Participant's rights, in any case, is equal to or less than zero, then the Award may be terminated without payment;

(b) To provide that such Award shall vest and, to the extent applicable, be exercisable as to all shares covered thereby, notwithstanding anything to the contrary in the Plan or the provisions of such Award;

(c) To provide that such Award be assumed by the successor or survivor corporation, or a parent or subsidiary thereof, or shall be substituted for by awards covering the stock of the successor or survivor corporation, or a parent or subsidiary thereof, with appropriate adjustments as to the number and kind of shares and/or applicable exercise or purchase price, in all cases, as determined by the Administrator;

(d) To make adjustments in the number and type of shares of Common Stock (or other securities or property) subject to outstanding Awards and/or with respect to which Awards may be granted under the Plan (including, but not limited to, adjustments of the limitations in Article IV hereof on the maximum number and kind of shares which may be issued) and/or in the terms and conditions of (including the grant or exercise price), and the criteria included in, outstanding Awards;

(e) To replace such Award with other rights or property selected by the Administrator; and/or

(f) To provide that the Award will terminate and cannot vest, be exercised or become payable after the applicable event.

8.3 Change in Control. Notwithstanding Section 8.2 above, if a Change in Control occurs and Awards are not continued, converted, assumed, or replaced with a comparable award (as determined by the Administrator) by (i) the Company or (ii) a successor entity or its parent or subsidiary (an "***Assumption***"), and provided that the Participant has not had a Termination of Service, then immediately prior to the Change in Control such Awards (other than any Award that is regularly scheduled to vest based on the attainment of performance-based vesting conditions) will become fully vested, exercisable and/or payable, as applicable, and all forfeiture, repurchase and other restrictions on such Awards will lapse, in which case, such Awards will be canceled upon the consummation of the Change in Control in exchange for the right to receive the Change in Control consideration payable to other holders of Common Stock, which may be on such terms and conditions as apply generally to holders of Common Stock under the Change in Control documents (including, without limitation, any escrow, earn-out or other deferred consideration provisions) or such other terms and conditions as the Administrator may provide, and determined by reference to the number of Shares subject to such Awards and net of any applicable exercise price; provided that to the extent that any Awards constitute "nonqualified deferred compensation" that may not be paid upon the Change in Control under Section 409A without the imposition of taxes thereon under Section 409A, the timing of such payments shall be governed by the applicable Award Agreement (subject to any deferred consideration provisions applicable under the Change in Control documents); and provided, further, that if

the amount to which a Participant would be entitled upon the settlement or exercise of such Award at the time of the Change in Control is equal to or less than zero, then such Award may be terminated without payment. An Award will be considered replaced with a comparable award if the Award is exchanged for an amount of cash or other property with a value equal to the amount that could have been obtained upon the settlement of such Award in such Change in Control (as determined by the Administrator), even if such cash or other property payable with respect to the unvested portion of such Award remains subject to similar vesting provisions following such Change in Control. Notwithstanding the foregoing, the Administrator will have full and final authority to determine whether an Assumption of an Award has occurred in connection with a Change in Control.

8.4 Administrative Stand Still. In the event of any pending stock dividend, stock split, combination or exchange of shares, merger, consolidation or other distribution (other than normal cash dividends) of Company assets to stockholders, or any other extraordinary transaction or change affecting the Shares or the share price of Common Stock, including any Equity Restructuring or any securities offering or other similar transaction, for administrative convenience, the Administrator may refuse to permit the exercise of any Award for up to sixty days before or after such transaction.

8.5 General. Except as expressly provided in the Plan or the Administrator's action under the Plan, no Participant will have any rights due to any subdivision or consolidation of Shares of any class, dividend payment, increase or decrease in the number of Shares of any class or dissolution, liquidation, merger, or consolidation of the Company or other corporation. Except as expressly provided with respect to an Equity Restructuring under Section 8.1 above or the Administrator's action under the Plan, no issuance by the Company of Shares of any class, or securities convertible into Shares of any class, will affect, and no adjustment will be made regarding, the number of Shares subject to an Award or the Award's grant or exercise price. The existence of the Plan, any Award Agreements and the Awards granted hereunder will not affect or restrict in any way the Company's right or power to make or authorize (i) any adjustment, recapitalization, reorganization or other change in the Company's capital structure or its business, (ii) any merger, consolidation dissolution or liquidation of the Company or sale of Company assets or (iii) any sale or issuance of securities, including securities with rights superior to those of the Shares or securities convertible into or exchangeable for Shares. The Administrator may treat Participants and Awards (or portions thereof) differently under this Article VIII.

ARTICLE IX.
GENERAL PROVISIONS APPLICABLE TO AWARDS

9.1 Transferability. Except as the Administrator may determine or provide in an Award Agreement or otherwise for Awards other than Incentive Stock Options, Awards may not be sold, assigned, transferred, pledged or otherwise encumbered, either voluntarily or by operation of law, except by will or the laws of descent and distribution, or, subject to the Administrator's consent, pursuant to a domestic relations order, and, during the life of the Participant, will be exercisable only by the Participant. References to a Participant, to the extent relevant in the context, will include references to a Participant's authorized transferee that the Administrator specifically approves.

9.2 Documentation. Each Award will be evidenced in an Award Agreement, which may be written or electronic, as the Administrator determines. Each Award may contain terms and conditions in addition to those set forth in the Plan.

9.3 Discretion. Except as the Plan otherwise provides, each Award may be made alone or in addition or in relation to any other Award. The terms of each Award to a Participant need not be identical, and the Administrator need not treat Participants or Awards (or portions thereof) uniformly.

9.4 Termination of Status. The Administrator will determine how the disability, death, retirement, authorized leave of absence or any other change or purported change in a Participant's Service Provider status affects an Award and the extent to which, and the period during which, the Participant, the Participant's legal representative, conservator, guardian or Designated Beneficiary may exercise rights under the Award, if applicable.

9.5 Withholding. Each Participant must pay the Company, or make provision satisfactory to the Administrator for payment of, any taxes required by law to be withheld in connection with such Participant's Awards by the date of the event creating the tax liability. The Company may deduct an amount sufficient to satisfy such tax obligations based on the applicable statutory withholding rates (or such other rate as may be determined by the Company after considering any accounting consequences or costs) from any payment of any kind otherwise due to a Participant. Subject to Section 10.8 and any Company insider trading policy (including blackout periods), Participants may satisfy such tax obligations (i) in cash, by wire transfer of immediately available funds, by check made payable to the order of the Company, provided that the Company may limit the use of one of the foregoing payment forms if one or more of the payment forms below is permitted, (ii) to the extent permitted by the Administrator, in whole or in part by delivery of Shares, including Shares retained from the Award creating the tax obligation, valued at their fair market value, (iii) if there is a public market for Shares at the time the tax obligations are satisfied, unless the Company otherwise determines, (A) delivery (including telephonically to the extent permitted by the Company) of an irrevocable and unconditional undertaking by a broker acceptable to the Company to deliver promptly to the Company sufficient funds to satisfy the tax obligations, or (B) delivery by the Participant to the Company of a copy of irrevocable and unconditional instructions to a broker acceptable to the Company to deliver promptly to the Company cash or a check sufficient to satisfy the tax withholding; provided that such amount is paid to the Company at such time as may be required by the Administrator, or (iv) to the extent permitted by the Company, any combination of the foregoing payment forms approved by the Administrator. If any tax withholding obligation will be satisfied under clause (ii) of the immediately preceding sentence by the Company's retention of Shares from the Award creating the tax obligation and there is a public market for Shares at the time the tax obligation is satisfied, the Company may elect to instruct any brokerage firm determined acceptable to the Company for such purpose to sell on the applicable Participant's behalf some or all of the Shares retained and to remit the proceeds of the sale to the Company or its designee, and each Participant's acceptance of an Award under the Plan will constitute the Participant's authorization to the Company and instruction and authorization to such brokerage firm to complete the transactions described in this sentence.

9.6 Amendment of Award; Repricing. The Administrator may amend, modify or terminate any outstanding Award, including by substituting another Award of the same or a different type, changing the exercise or settlement date, and converting an Incentive Stock Option to a Non-Qualified Stock Option. The Participant's consent to such action will be required unless (i) the action, taking into account any related action, does not materially and adversely affect the Participant's rights under the Award, or (ii) the change is permitted under Article VIII or pursuant to Section 10.6. Notwithstanding the foregoing or anything in the Plan to the contrary, the Administrator may not, except pursuant to Article VIII, without the approval of the stockholders of the Company, reduce the exercise price per share of outstanding Options or Stock Appreciation Rights or cancel outstanding Options or Stock Appreciation Rights in exchange for cash, other Awards or Options or Stock Appreciation Rights with an exercise price per share that is less than the exercise price per share of the original Options or Stock Appreciation Rights.

9.7 Conditions on Delivery of Stock. The Company will not be obligated to deliver any Shares under the Plan or remove restrictions from Shares previously delivered under the Plan until (i) all Award conditions have been met or removed to the Company's satisfaction, (ii) as determined by the Company, all other legal matters regarding the issuance and delivery of such Shares have been satisfied, including any

applicable securities laws and stock exchange or stock market rules and regulations, and (iii) the Participant has executed and delivered to the Company such representations or agreements as the Administrator deems necessary or appropriate to satisfy any Applicable Laws. The Company's inability to obtain authority from any regulatory body having jurisdiction, which the Administrator determines is necessary to the lawful issuance and sale of any securities, will relieve the Company of any liability for failing to issue or sell such Shares as to which such requisite authority has not been obtained.

9.8 Acceleration. The Administrator may at any time provide that any Award will become immediately vested and fully or partially exercisable, free of some or all restrictions or conditions, or otherwise fully or partially realizable.

9.9 Additional Terms of Incentive Stock Options. The Administrator may grant Incentive Stock Options only to employees of the Company, any of its present or future parent or subsidiary corporations, as defined in Sections 424(e) or (f) of the Code, respectively, and any other entities the employees of which are eligible to receive Incentive Stock Options under the Code. If an Incentive Stock Option is granted to a Greater Than 10% Stockholder, the exercise price will not be less than 110% of the Fair Market Value on the Option's grant date, and the term of the Option will not exceed five years. All Incentive Stock Options will be subject to and construed consistently with Section 422 of the Code. By accepting an Incentive Stock Option, the Participant agrees to give prompt notice to the Company of dispositions or other transfers (other than in connection with a Change in Control) of Shares acquired under the Option made within (i) two years from the grant date of the Option or (ii) one year after the transfer of such Shares to the Participant, specifying the date of the disposition or other transfer and the amount the Participant realized, in cash, other property, assumption of indebtedness or other consideration, in such disposition or other transfer. Neither the Company nor the Administrator will be liable to a Participant, or any other party, if an Incentive Stock Option fails or ceases to qualify as an "incentive stock option" under Section 422 of the Code. Any Incentive Stock Option or portion thereof that fails to qualify as an "incentive stock option" under Section 422 of the Code for any reason, including becoming exercisable with respect to Shares having a fair market value exceeding the $100,000 limitation under Treasury Regulation Section 1.422-4, will be a Non-Qualified Stock Option.

ARTICLE X.
MISCELLANEOUS

10.1 No Right to Employment or Other Status. No person will have any claim or right to be granted an Award, and the grant of an Award will not be construed as giving a Participant the right to continued employment or any other relationship with the Company. The Company expressly reserves the right at any time to dismiss or otherwise terminate its relationship with a Participant free from any liability or claim under the Plan or any Award, except as expressly provided in an Award Agreement.

10.2 No Rights as Stockholder; Certificates. Subject to the Award Agreement, no Participant or Designated Beneficiary will have any rights as a stockholder with respect to any Shares to be distributed under an Award until becoming the record holder of such Shares. Notwithstanding any other provision of the Plan, unless the Administrator otherwise determines or Applicable Laws require, the Company will not be required to deliver to any Participant certificates evidencing Shares issued in connection with any Award and instead such Shares may be recorded in the books of the Company (or, as applicable, its transfer agent or stock plan administrator). The Company may place legends on stock certificates issued under the Plan that the Administrator deems necessary or appropriate to comply with Applicable Laws.

10.3 Effective Date and Term of Plan. Unless earlier terminated by the Board, the Plan will become effective on the Pricing Date and will remain in effect until the tenth anniversary of the earlier of

(i) the date the Board adopted the Plan or (ii) the date the Company's stockholders approved the Plan, but Awards previously granted may extend beyond that date in accordance with the Plan.

10.4 Amendment of Plan. The Administrator may amend, suspend or terminate the Plan at any time; provided that no amendment, other than an increase to the Overall Share Limit, may materially and adversely affect any Award outstanding at the time of such amendment without the affected Participant's consent. No Awards may be granted under the Plan during any suspension period or after Plan termination. Awards outstanding at the time of any Plan suspension or termination will continue to be governed by the Plan and the Award Agreement, as in effect before such suspension or termination. The Board will obtain stockholder approval of any Plan amendment to the extent necessary to comply with Applicable Laws.

10.5 Provisions for Foreign Participants. The Administrator may modify Awards granted to Participants who are foreign nationals or employed outside the United States or establish subplans or procedures under the Plan to address differences in laws, rules, regulations or customs of such foreign jurisdictions with respect to tax, securities, currency, employee benefit or other matters.

10.6 Section 409A.

(a) General. The Company intends that all Awards be structured to comply with, or be exempt from, Section 409A, such that no adverse tax consequences, interest, or penalties under Section 409A apply. Notwithstanding anything in the Plan or any Award Agreement to the contrary, the Administrator may, without a Participant's consent, amend this Plan or Awards, adopt policies and procedures, or take any other actions (including amendments, policies, procedures and retroactive actions) as are necessary or appropriate to preserve the intended tax treatment of Awards, including any such actions intended to (A) exempt this Plan or any Award from Section 409A, or (B) comply with Section 409A, including regulations, guidance, compliance programs and other interpretative authority that may be issued after an Award's grant date. The Company makes no representations or warranties as to an Award's tax treatment under Section 409A or otherwise. The Company will have no obligation under this Section 10.6 or otherwise to avoid the taxes, penalties or interest under Section 409A with respect to any Award and will have no liability to any Participant or any other person if any Award, compensation or other benefits under the Plan are determined to constitute noncompliant "nonqualified deferred compensation" subject to taxes, penalties or interest under Section 409A.

(b) Separation from Service. If an Award constitutes "nonqualified deferred compensation" under Section 409A, any payment or settlement of such Award upon a termination of a Participant's Service Provider relationship will, to the extent necessary to avoid taxes under Section 409A, be made only upon the Participant's "separation from service" (within the meaning of Section 409A), whether such "separation from service" occurs upon or after the termination of the Participant's Service Provider relationship. For purposes of this Plan or any Award Agreement relating to any such payments or benefits, references to a "termination," "termination of employment" or like terms means a "separation from service."

(c) Payments to Specified Employees. Notwithstanding any contrary provision in the Plan or any Award Agreement, any payment(s) of "nonqualified deferred compensation" required to be made under an Award to a "specified employee" (as defined under Section 409A and as the Administrator determines) due to his or her "separation from service" will, to the extent necessary to avoid taxes under Section 409A(a)(2)(B)(i) of the Code, be delayed for the six-month period immediately following such "separation from service" (or, if earlier, until the specified employee's death) and will instead be paid (as set forth in the Award Agreement) on the day immediately following such six-month period or as soon as administratively practicable thereafter (without interest). Any payments of "nonqualified deferred

compensation" under such Award payable more than six months following the Participant's "separation from service" will be paid at the time or times the payments are otherwise scheduled to be made.

10.7 Limitations on Liability. Notwithstanding any other provisions of the Plan, no individual acting as a director, officer, other employee or agent of the Company or any Subsidiary will be liable to any Participant, former Participant, spouse, beneficiary, or any other person for any claim, loss, liability, or expense incurred in connection with the Plan or any Award, and such individual will not be personally liable with respect to the Plan because of any contract or other instrument executed in his or her capacity as an Administrator, director, officer, other employee or agent of the Company or any Subsidiary. The Company will indemnify and hold harmless each director, officer, other employee and agent of the Company or any Subsidiary that has been or will be granted or delegated any duty or power relating to the Plan's administration or interpretation, against any cost or expense (including attorneys' fees) or liability (including any sum paid in settlement of a claim with the Administrator's approval) arising from any act or omission concerning this Plan unless arising from such person's own fraud or bad faith.

10.8 Lock-Up Period. The Company may, at the request of any underwriter representative or otherwise, in connection with registering the offering of any Company securities under the Securities Act, prohibit Participants from, directly or indirectly, selling or otherwise transferring any Shares or other Company securities during a period of up to one hundred eighty days following the effective date of a Company registration statement filed under the Securities Act, or such longer period as determined by the underwriter.

10.9 Data Privacy. As a condition for receiving any Award, each Participant explicitly and unambiguously consents to the collection, use and transfer, in electronic or other form, of personal data as described in this section by and among the Company and its Subsidiaries and affiliates exclusively for implementing, administering and managing the Participant's participation in the Plan. The Company and its Subsidiaries and affiliates may hold certain personal information about a Participant, including the Participant's name, address and telephone number; birthdate; social security, insurance number or other identification number; salary; nationality; job title(s); any Shares held in the Company or its Subsidiaries and affiliates; and Award details, to implement, manage and administer the Plan and Awards (the "***Data***"). The Company and its Subsidiaries and affiliates may transfer the Data amongst themselves as necessary to implement, administer and manage a Participant's participation in the Plan, and the Company and its Subsidiaries and affiliates may transfer the Data to third parties assisting the Company with Plan implementation, administration and management. These recipients may be located in the Participant's country, or elsewhere, and the Participant's country may have different data privacy laws and protections than the recipients' country. By accepting an Award, each Participant authorizes such recipients to receive, possess, use, retain and transfer the Data, in electronic or other form, to implement, administer and manage the Participant's participation in the Plan, including any required Data transfer to a broker or other third party with whom the Company or the Participant may elect to deposit any Shares. The Data related to a Participant will be held only as long as necessary to implement, administer, and manage the Participant's participation in the Plan. A Participant may, at any time, view the Data that the Company holds regarding such Participant, request additional information about the storage and processing of the Data regarding such Participant, recommend any necessary corrections to the Data regarding the Participant or refuse or withdraw the consents in this Section 10.9 in writing, without cost, by contacting the local human resources representative. The Company may cancel Participant's ability to participate in the Plan and, in the Administrator's discretion, the Participant may forfeit any outstanding Awards if the Participant refuses or withdraws the consents in this Section 10.9. For more information on the consequences of refusing or withdrawing consent, Participants may contact their local human resources representative.

10.10 Severability. If any portion of the Plan or any action taken under it is held illegal or invalid for any reason, the illegality or invalidity will not affect the remaining parts of the Plan, and the Plan will be construed and enforced as if the illegal or invalid provisions had been excluded, and the illegal or invalid action will be null and void.

10.11 Governing Documents. If any contradiction occurs between the Plan and any Award Agreement or other written agreement between a Participant and the Company (or any Subsidiary) that the Administrator has approved, the Plan will govern, unless it is expressly specified in such Award Agreement or other written document that a specific provision of the Plan will not apply.

10.12 Governing Law. The Plan and all Awards will be governed by and interpreted in accordance with the laws of the State of Delaware, disregarding any state's choice-of-law principles requiring the application of a jurisdiction's laws other than the State of Delaware.

10.13 Claw-back Provisions. All Awards (including any proceeds, gains or other economic benefit the Participant actually or constructively receives upon receipt or exercise of any Award or the receipt or resale of any Shares underlying the Award) will be subject to any Company claw-back policy, including any claw-back policy adopted to comply with Applicable Laws (including the Dodd-Frank Wall Street Reform and Consumer Protection Act and any rules or regulations promulgated thereunder) as set forth in such claw-back policy or the Award Agreement.

10.14 Titles and Headings. The titles and headings in the Plan are for convenience of reference only and, if any conflict, the Plan's text, rather than such titles or headings, will control.

10.15 Conformity to Securities Laws. Participant acknowledges that the Plan is intended to conform to the extent necessary with Applicable Laws. Notwithstanding anything herein to the contrary, the Plan and all Awards will be administered only in conformance with Applicable Laws. To the extent Applicable Laws permit, the Plan and all Award Agreements will be deemed amended as necessary to conform to Applicable Laws.

10.16 Relationship to Other Benefits. No payment under the Plan will be taken into account in determining any benefits under any pension, retirement, savings, profit sharing, group insurance, welfare or other benefit plan of the Company or any Subsidiary except as expressly provided in writing in such other plan or an agreement thereunder.

10.17 Broker-Assisted Sales. In the event of a broker-assisted sale of Shares in connection with the payment of amounts owed by a Participant under or with respect to the Plan or Awards, including amounts to be paid under the final sentence of Section 9.5: (a) any Shares to be sold through the broker-assisted sale will be sold on the day the payment first becomes due, or as soon thereafter as practicable; (b) such Shares may be sold as part of a block trade with other Participants in the Plan in which all participants receive an average price; (c) the applicable Participant will be responsible for all broker's fees and other costs of sale, and by accepting an Award, each Participant agrees to indemnify and hold the Company harmless from any losses, costs, damages, or expenses relating to any such sale; (d) to the extent the Company or its designee receives proceeds of such sale that exceed the amount owed, the Company will pay such excess in cash to the applicable Participant as soon as reasonably practicable; (e) the Company and its designees are under no obligation to arrange for such sale at any particular price; and (f) in the event the proceeds of such sale are insufficient to satisfy the Participant's applicable obligation, the Participant may be required to pay immediately upon demand to the Company or its designee an amount in cash sufficient to satisfy any remaining portion of the Participant's obligation.

ARTICLE XI.
DEFINITIONS

As used in the Plan, the following words and phrases will have the following meanings:

11.1 "***Administrator***" means the Board or a Committee to the extent that the Board's powers or authority under the Plan have been delegated to such Committee.

11.2 "***Applicable Laws***" means the requirements relating to the administration of equity incentive plans under U.S. federal and state securities, tax and other applicable laws, rules and regulations, the applicable rules of any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws and rules of any foreign country or other jurisdiction where Awards are granted.

11.3 "***Award***" means, individually or collectively, a grant under the Plan of Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units or Other Stock or Cash Based Awards, including any equity award granted under a prior plan that the Company has amended so that it is covered under the Plan.

11.4 "***Award Agreement***" means a written agreement evidencing an Award, which may be electronic, that contains such terms and conditions as the Administrator determines, consistent with and subject to the terms and conditions of the Plan.

11.5 "***Board***" means the Board of Directors of the Company.

11.6 "***Cause***" means (i) if a Participant is a party to a written employment or consulting agreement with the Company or any of its Subsidiaries or an Award Agreement in which the term "cause" is defined (a "***Relevant Agreement***"), "Cause" as defined in the Relevant Agreement, and (ii) if no Relevant Agreement exists, (A) the Administrator's determination that the Participant failed to substantially perform the Participant's duties (other than a failure resulting from the Participant's Disability) or failed to carry out, or comply with any lawful and reasonable directive of the Board or the Participant's immediate supervisor; (B) the Participant's unauthorized use or disclosure of confidential information or trade secrets of the Company or any of its Subsidiaries or any material breach of a written agreement between the Participant and the Company; (C) the occurrence of any act or omission by the Participant that could reasonably be expected to result in (or has resulted in) the Participant's conviction, plea of no contest, plea of nolo contendere, or imposition of unadjudicated probation for any felony or indictable offense or crime involving moral turpitude; (D) the Participant's unlawful use (including being under the influence) or possession of illegal drugs on the premises of the Company or any of its Subsidiaries or while performing the Participant's duties and responsibilities for the Company or any of its Subsidiaries; or (E) the Participant's commission of an act of fraud, embezzlement, misappropriation, misconduct, or breach of fiduciary duty against the Company or any of its Subsidiaries.

11.7 "***Change in Control***" means and includes each of the following:

(a) A transaction or series of transactions (other than an offering of Common Stock to the general public through a registration statement filed with the Securities and Exchange Commission or a transaction or series of transactions that meets the requirements of clauses (i) and (ii) of subsection (c) below) whereby any "person" or related "group" of "persons" (as such terms are used in Sections 13(d) and 14(d)(2) of the Exchange Act) (other than the Company, any of its Subsidiaries, an employee benefit plan maintained by the Company or any of its Subsidiaries or a "person" that, prior to such transaction, directly or indirectly controls, is controlled by, or is under common control with, the Company) directly or indirectly

acquires beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act) of securities of the Company possessing more than 50% of the total combined voting power of the Company's securities outstanding immediately after such acquisition; or

(b) During any period of two consecutive years, individuals who, at the beginning of such period, constitute the Board together with any new Director(s) (other than a Director designated by a person who shall have entered into an agreement with the Company to effect a transaction described in subsections (a) or (c)) whose election by the Board or nomination for election by the Company's stockholders was approved by a vote of at least two-thirds of the Directors then still in office who either were Directors at the beginning of the two-year period or whose election or nomination for election was previously so approved, cease for any reason to constitute a majority thereof; or

(c) The consummation by the Company (whether directly involving the Company or indirectly involving the Company through one or more intermediaries) of (x) a merger, consolidation, reorganization, or business combination or (y) a sale or other disposition of all or substantially all of the Company's assets in any single transaction or series of related transactions or (z) the acquisition of assets or stock of another entity, in each case other than a transaction:

(i) which results in the Company's voting securities outstanding immediately before the transaction continuing to represent (either by remaining outstanding or by being converted into voting securities of the Company or the person that, as a result of the transaction, controls, directly or indirectly, the Company or owns, directly or indirectly, all or substantially all of the Company's assets or otherwise succeeds to the business of the Company (the Company or such person, the "***Successor Entity***")) directly or indirectly, at least a majority of the combined voting power of the Successor Entity's outstanding voting securities immediately after the transaction, and

(ii) after which no person or group beneficially owns voting securities representing 50% or more of the combined voting power of the Successor Entity; provided, however, that no person or group shall be treated for purposes of this clause (ii) as beneficially owning 50% or more of the combined voting power of the Successor Entity solely as a result of the voting power held in the Company prior to the consummation of the transaction.

Notwithstanding the foregoing, if a Change in Control constitutes a payment event with respect to any Award (or portion of any Award) that provides for the deferral of compensation that is subject to Section 409A, to the extent required to avoid the imposition of additional taxes under Section 409A, the transaction or event described in subsection (a), (b) or (c) with respect to such Award (or portion thereof) shall only constitute a Change in Control for purposes of the payment timing of such Award if such transaction also constitutes a "change in control event," as defined in Treasury Regulation Section 1.409A-3(i)(5).

The Administrator shall have full and final authority, which shall be exercised in its discretion, to determine conclusively whether a Change in Control has occurred pursuant to the above definition, the date of the occurrence of such Change in Control and any incidental matters relating thereto; provided that any exercise of authority in conjunction with a determination of whether a Change in Control is a "change in control event" as defined in Treasury Regulation Section 1.409A-3(i)(5) shall be consistent with such regulation.

11.8 "***Code***" means the Internal Revenue Code of 1986, as amended, and the regulations issued thereunder.

11.9 "***Committee***" means one or more committees or subcommittees of the Board, which may include one or more Company directors or executive officers, to the extent Applicable Laws permit. To the extent required to comply with the provisions of Rule 16b-3, it is intended that each member of the Committee will be, at the time the Committee takes any action with respect to an Award that is subject to Rule 16b-3, a "non-employee director" within the meaning of Rule 16b-3; however, a Committee member's failure to qualify as a "non-employee director" within the meaning of Rule 16b-3 will not invalidate any Award granted by the Committee that is otherwise validly granted under the Plan.

11.10 "***Common Stock***" means the Class A common stock of the Company.

11.11 "***Company***" means Vertex, Inc., a Delaware corporation, or any successor.

11.12 "***Consultant***" means any person, including any adviser, engaged by the Company or its parent or Subsidiary to render services to such entity if the consultant or adviser: (i) renders bona fide services to the Company; (ii) renders services not in connection with the offer or sale of securities in a capital-raising transaction and does not directly or indirectly promote or maintain a market for the Company's securities; and (iii) is a natural person.

11.13 "***Designated Beneficiary***" means the beneficiary or beneficiaries the Participant designates, in a manner the Administrator determines, to receive amounts due or exercise the Participant's rights if the Participant dies or becomes incapacitated. Without a Participant's effective designation, "Designated Beneficiary" will mean the Participant's estate.

11.14 "***Director***" means a Board member.

11.15 "***Disability***" means a permanent and total disability under Section 22(e)(3) of the Code, as amended.

11.16 "***Dividend Equivalents***" means a right granted to a Participant under the Plan to receive the equivalent value (in cash or Shares) of dividends paid on Shares.

11.17 "***Employee***" means any employee of the Company or its Subsidiaries.

11.18 "***Equity Restructuring***" means a nonreciprocal transaction between the Company and its stockholders, such as a stock dividend, stock split, spin-off or recapitalization through a large, nonrecurring cash dividend, that affects the number or kind of Shares (or other Company securities) or the share price of Common Stock (or other Company securities) and causes a change in the per share value of the Common Stock underlying outstanding Awards.

11.19 "***Exchange Act***" means the Securities Exchange Act of 1934, as amended.

11.20 "***Fair Market Value***" means, as of any date, the value of Common Stock determined as follows: (i) if the Common Stock is listed on any established stock exchange, its Fair Market Value will be the closing sales price for such Common Stock as quoted on such exchange for such date, or if no sale occurred on such date, the last day preceding such date during which a sale occurred, as reported in The Wall Street Journal or another source the Administrator deems reliable; (ii) if the Common Stock is not traded on a stock exchange but is quoted on a national market or other quotation system, the closing sales price on such date, or if no sales occurred on such date, then on the last date preceding such date during which a sale occurred, as reported in The Wall Street Journal or another source the Administrator deems reliable; or (iii) in any case the Administrator may determine the Fair Market Value in its discretion. Notwithstanding the foregoing, with respect to any Award granted on the Pricing Date, the Fair Market

Value shall mean the initial public offering price of a Share as set forth in the Company's final prospectus relating to its initial public offering filed with the Securities and Exchange Commission.

11.21 "***Greater Than 10% Stockholder***" means an individual then owning (within the meaning of Section 424(d) of the Code) more than 10% of the total combined voting power of all classes of stock of the Company or its parent or subsidiary corporation, as defined in Section 424(e) and (f) of the Code, respectively.

11.22 "***Incentive Stock Option***" means an Option intended to qualify as an "incentive stock option" as defined in Section 422 of the Code.

11.23 "***Non-Qualified Stock Option***" means an Option not intended or not qualifying as an Incentive Stock Option.

11.24 "***Option***" means an option to purchase Shares.

11.25 "***Other Stock or Cash Based Awards***" means cash awards, awards of Shares, and other awards valued wholly or partially by referring to, or are otherwise based on, Shares or other property.

11.26 "***Overall Share Limit***" means the sum of (i) 16,500,000 Shares and (ii) an annual increase on the first day of each calendar year beginning January 1, 2021 and ending on and including January 1, 2030, equal to the lesser of (A) 4% of the aggregate number of shares of common stock of the Company outstanding on the final day of the immediately preceding calendar year and (B) such smaller number of Shares as is determined by the Board.

11.27 "***Participant***" means a Service Provider who has been granted an Award.

11.28 "***Performance Criteria***" mean the criteria (and adjustments) that the Administrator may select for an Award to establish performance goals for a performance period, which may include the following: net earnings or losses (either before or after one or more of interest, taxes, depreciation, amortization, and non-cash equity-based compensation expense); gross or net sales or revenue or sales or revenue growth; net income (either before or after taxes) or adjusted net income; profits (including but not limited to gross profits, net profits, profit growth, net operation profit or economic profit), profit return ratios or operating margin; budget or operating earnings (either before or after taxes or before or after allocation of corporate overhead and bonus); cash flow (including operating cash flow and free cash flow or cash flow return on capital); return on assets; return on capital or invested capital; cost of capital; return on stockholders' equity; total stockholder return; return on sales; costs, reductions in costs and cost control measures; expenses; working capital; earnings or loss per share; adjusted earnings or loss per share; price per share or dividends per share (or appreciation in or maintenance of such price or dividends); regulatory achievements or compliance; implementation, completion or attainment of objectives relating to research, development, regulatory, commercial, or strategic milestones or developments; market share; economic value or economic value added models; division, group or corporate financial goals; customer satisfaction/growth; customer service; employee satisfaction; recruitment and maintenance of personnel; human resources management; supervision of litigation and other legal matters; strategic partnerships and transactions; financial ratios (including those measuring liquidity, activity, profitability or leverage); debt levels or reductions; sales-related goals; financing and other capital raising transactions; cash on hand; acquisition activity; investment sourcing activity; and marketing initiatives, any of which may be measured in absolute terms or as compared to any incremental increase or decrease. Such performance goals also may be based solely by reference to the Company's performance or the performance of a Subsidiary, division, business segment or business unit of the Company or a Subsidiary, or based upon performance relative to performance of other companies or upon comparisons of any of the indicators of performance relative to

performance of other companies. The Committee may provide for exclusion of the impact of an event or occurrence which the Committee determines should appropriately be excluded, including (a) restructurings, discontinued operations, extraordinary items, and other unusual, infrequently occurring or non-recurring charges or events, (b) asset write-downs, (c) litigation or claim judgments or settlements, (d) acquisitions or divestitures, (e) reorganization or change in the corporate structure or capital structure of the Company, (f) an event either not directly related to the operations of the Company, Subsidiary, division, business segment or business unit or not within the reasonable control of management, (g) foreign exchange gains and losses, (h) a change in the fiscal year of the Company, (i) the refinancing or repurchase of bank loans or debt securities, (j) unbudgeted capital expenditures, (k) the issuance or repurchase of equity securities and other changes in the number of outstanding shares, (l) conversion of some or all of convertible securities to Common Stock, (m) any business interruption event (n) the cumulative effects of tax or accounting changes in accordance with U.S. generally accepted accounting principles, or (o) the effect of changes in other laws or regulatory rules affecting reported results.

11.29 "***Plan***" means this 2020 Incentive Award Plan.

11.30 "***Pricing Date***" means the date upon which the Company's Registration Statement on Form S-1 filed with the Securities and Exchange Commission relating to the registered underwritten public offering of shares of Common Stock becomes effective.

11.31 "***Restricted Stock***" means Shares awarded to a Participant under Article VI subject to certain vesting conditions and other restrictions.

11.32 "***Restricted Stock Unit***" means an unfunded, unsecured right to receive, on the applicable settlement date, one Share or an amount in cash or other consideration determined by the Administrator to be of equal value as of such settlement date, subject to certain vesting conditions and other restrictions.

11.33 "***Rule 16b-3***" means Rule 16b-3 promulgated under the Exchange Act.

11.34 "***Section 409A***" means Section 409A of the Code and all regulations, guidance, compliance programs and other interpretative authority thereunder.

11.35 "***Securities Act***" means the Securities Act of 1933, as amended.

11.36 "***Service Provider***" means an Employee, Consultant or Director.

11.37 "***Shares***" means shares of Common Stock.

11.38 "***Stock Appreciation Right***" means a stock appreciation right granted under Article V.

11.39 "***Subsidiary***" means any entity (other than the Company), whether domestic or foreign, in an unbroken chain of entities beginning with the Company if each of the entities other than the last entity in the unbroken chain beneficially owns, at the time of the determination, securities or interests representing at least 50% of the total combined voting power of all classes of securities or interests in one of the other entities in such chain.

11.40 "***Substitute Awards***" shall mean Awards granted or Shares issued by the Company in assumption of, or in substitution or exchange for, awards previously granted, or the right or obligation to make future awards, in each case by a company acquired by the Company or any Subsidiary or with which the Company or any Subsidiary combines.

11.41 "***Termination of Service***" means the date the Participant ceases to be a Service Provider.

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