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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

WASHINGTON, D.C. 20549

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**FORM 10-K**

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

**For the Fiscal Year Ended December 31, 2019**

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

**For the transition period from \_\_\_\_\_ to \_\_\_\_\_.**

**Commission File Number: 001-37921**

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**FORTERRA, INC.**

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(Exact name of registrant as specified in its charter)

**Delaware**

(State or other jurisdiction of incorporation or organization)

**37-1830464**

(I.R.S. Employer Identification Number)

**511 East John Carpenter Freeway, 6th Floor, Irving, TX 75062**

(Address of principal executive offices, including zip code)

**(469) 458-7973**

(Registrant's telephone number, including area code)

Securities Registered Pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, \$0.001 par value per share	FRTA	Nasdaq Stock Market LLC

Securities Registered Pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting 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       Accelerated filer      Non-accelerated filer        Smaller reporting company       Emerging growth company

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

As of February 24, 2020, 64,853,060 shares of the registrant's common stock, \$0.001 par value per share, were issued and outstanding. The aggregate market value of the registrant's common stock, \$0.001 par value, held by non-affiliates of the registrant was approximately \$92,613,828, based upon the closing market price of \$4.97 per share of common stock on the Nasdaq Global Select Market as of June 28, 2019.

**DOCUMENTS INCORPORATED BY REFERENCE**

None.

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## CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

*Certain statements and information in this Annual Report on Form 10-K may constitute “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements relate to matters such as our industry, business strategy, goals and expectations concerning our market position, future operations, margins, profitability, capital expenditures, liquidity, capital resources and other financial and operating information. We have used the words “approximately,” “anticipate,” “assume,” “believe,” “contemplate,” “continue,” “could,” “estimate,” “expect,” “future,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “seek,” “should,” “target,” “will” and similar terms and phrases to identify forward-looking statements. All of our forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those that we are expecting, including:*

- government funding of infrastructure and related construction activities;
- the level of construction activity, particularly in the residential construction and non-residential construction markets;
- the highly competitive nature of our industry and our ability to effectively compete;
- the availability and price of the raw materials and other inputs we use in our business;
- our dependence on key customers and the absence of long-term agreements with these customers;
- the level of construction activity in Texas;
- disruption at one or more of our manufacturing facilities or in our supply chain;
- construction project delays and our inventory management;
- the seasonality of our business and its susceptibility to adverse weather;
- our ability to successfully integrate acquisitions;
- labor disruptions and other union activity;
- compliance with applicable regulations;
- a tightening of mortgage lending or mortgage financing requirements;
- the ability to implement our growth strategy;
- our current dispute with HeidelbergCement related to the payment of an earnout;
- compliance with environmental laws and regulations;
- energy costs;
- changes in tax laws could adversely affect us;
- compliance with health and safety laws and regulations;;
- our dependence on key executives and key management personnel;

- our ability and that of the customers with which we work to retain and attract additional skilled and non-skilled technical or sales personnel;
- credit and non-payment risks of our customers;
- warranty and related claims;
- legal and regulatory claims;
- our contract backlog;
- our ability to maintain sufficient liquidity and ensure adequate financing or guarantees for large projects;
- delays or outages in our information technology systems and computer networks;
- security breaches in our information technology systems and other cybersecurity incidents; and
- additional factors discussed in our filings with the Securities and Exchange Commission, or the SEC.

*The forward-looking statements contained in this Annual Report on Form 10-K are based on historical performance and management's current plans, estimates and expectations in light of information currently available to us and are subject to uncertainty and changes in circumstances. There can be no assurance that future developments affecting us will be those that we have anticipated. Actual results may differ materially from these expectations due to changes in global, regional or local political, economic, business, competitive, market, regulatory and other factors, many of which are beyond our control, as well as the other factors described in Item 1A, "Risk Factors". Additional factors or events that could cause our actual results to differ may also emerge from time to time, and it is not possible for us to predict all of them. Should one or more of these risks or uncertainties materialize, or should any of our assumptions prove to be incorrect, our actual results may vary in material respects from what we may have expressed or implied by these forward-looking statements. We caution that you should not place undue reliance on any of our forward-looking statements. Any forward-looking statement made by us speaks only as of the date on which we make it. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by applicable securities laws.*

## PART I

### Item 1. Business

On March 13, 2015, through an indirect wholly owned subsidiary, Lone Star Fund IX (U.S.), L.P. (which is referred to, along with its affiliates and associates, but excluding us and other companies that it owns as a result of its investment activity, as Lone Star) acquired the building products business of HeidelbergCement AG, or HC, in the United States and Eastern Canada, or the Acquisition. Unless otherwise specified or where the context otherwise requires, references in this Annual Report on Form 10-K to “our,” “we,” “us,” the “Company” and “our business” refer to the operations of Forterra, Inc., together with its consolidated subsidiaries. We are a holding company incorporated in Delaware in 2016. We are controlled by Lone Star and have been operating as a stand-alone company since 2015.

#### General

We are a manufacturer of pipe and precast products in the United States and Eastern Canada for a variety of water-related infrastructure applications, including water transmission, distribution and drainage.

Our manufacturing and distribution network allows us to serve most major United States and Eastern Canadian markets. We operate 77 active manufacturing facilities with capacity that allows us to serve our customers' needs. These facilities and our distribution network provide us with a local presence and the necessary proximity to our customers to minimize delivery time and distribution costs to the markets we serve.

We manufacture both water drainage pipe and precast structures (used primarily for storm water and drainage applications) and water transmission and distribution pipe (used primarily to transport potable water and as a component of wastewater systems) and believe our complementary product portfolio is well positioned to serve both the storm water and wastewater infrastructure market and the potable water transmission and distribution market. We believe that our exposure to each of the infrastructure, residential, and non-residential end-markets will allow us to benefit from both secular and cyclical growth across each of these end-markets. The infrastructure, residential, and non-residential end markets in the United States and Eastern Canada have different growth drivers and operating dynamics, and the cyclical performance of these markets has historically been staggered during different stages of the broader economic cycle.

Our organic growth strategy is focused on leveraging our operations, customer service and product innovation capabilities, as well as our product breadth and scale, to sell our products to existing customers, to increase penetration and project wins and to gain market share through new customers. Operationally, we continue to focus on efficiency and productivity improvements to reduce costs and drive unit margin improvements. We periodically evaluate our existing business and acquisition opportunities to complement our organic growth or enhance our scale, geographic footprint and product portfolio while simultaneously considering and making strategic divestitures or changes in our manufacturing footprint to optimize our portfolio. See “--Strategic Transactions” below and Note 3 to our consolidated financial statements for a more detailed discussion of our recent acquisitions and divestitures.



#### Our Segments

**Drainage Pipe & Products.** We are the largest producer of concrete drainage pipe and precast products by sales volume in the United States and Eastern Canada. We operate 59 active manufacturing facilities across multiple states and a Canadian province. We believe our product offering creates value for our customers as it eliminates the need to engage multiple suppliers of storm water and wastewater-related products for a single project, permitting them to maximize efficiency and meet more aggressive timetables. We also have the ability to custom-build products to complex specifications and regulations.

**Water Pipe & Products.** We are the largest producer of ductile iron pipe, or DIP, by sales volume in the United States, and we produce concrete pressure pipe in Eastern Canada. Our product breadth and depth and our technical service address a range of our customers' water transmission and distribution needs. Our 18

manufacturing facilities are located across the United States and Eastern Canada, with swing capacity available to support increased production levels as appropriate to satisfy increased demand.

**Key Segments**

	Drainage Pipe & Products	Water Pipe & Products
<b>Products</b>		
<b>Product Applications</b>	Storm water and wastewater infrastructure	Potable and wastewater transmission and distribution
<b>Primary Market Channels</b>	- Direct to Contractors - Distributors	- Distributors - Direct to Contractors, Municipalities and Utilities Waterworks
<b># of Active Manufacturing Facilities</b>	59	18

**Corporate and Other.** Corporate, general and administrative expenses not allocated to our revenue-generating segments such as certain shared services, executive and other administrative functions.

**Our Industry and Core End Markets**

We serve a range of infrastructure-related end markets. Based on the source of funding, we classify these construction markets into infrastructure, residential and non-residential.

*Infrastructure*

Infrastructure represents spending by federal, state, and local governments for the construction and repair of streets, highways, storm and sanitary sewers, as well as the construction and repair of water lines for the delivery of potable water, which are often supported by multi-year federal and state legislation and programs. It also includes local municipalities water infrastructure spending associated with the construction, repair and replacement of water transportation and distribution systems. Spending on these items is driven by federal, state and municipal funding for both new build and repair projects. In addition to availability of funding at the federal, state and municipal levels, these programs are impacted by other factors, including demographic and population shifts and the ability of contractors to obtain skilled labor.

*Residential Construction*

Residential construction includes single family homes and multi-family units such as apartments and condominiums. Demand for residential construction is influenced by demographic and population shifts, mortgage interest rates, and the ability of builders to obtain skilled labor. In 2019, total annual housing starts in the United States increased to 1.3 million, an increase of 3.2% above 2018 housing starts according to the U.S. Census Bureau and the U.S. Department of Housing and Urban Development.

*Non-residential Construction*

Non-residential construction includes all privately financed construction other than residential structures. Revenues in this end-market are driven largely by new United States non-residential construction, for which demand is generally driven by job growth, vacancy rates, private infrastructure needs and demographic trends. The supply of non-residential construction projects is also affected by the availability and cost of funding.

## **Our Products**

### ***Drainage Pipe & Products Segment***

We manufacture drainage pipe and precast products in the United States and Eastern Canada. Drainage pipe has residential, non-residential and infrastructure applications. It is primarily used for storm water applications, such as storm drains for roads and highways, and for residential and non-residential site developments. In addition, drainage pipe is used for sanitary sewers, low-pressure sewer force mains, tunneled systems, treatment plant piping and utility tunnels.

Drainage pipe consists of concrete reinforced by a steel cage. It is manufactured by producing a steel mesh cage, enclosing it in a form or mold and then pouring concrete around it to produce the pipe. Drainage pipe is manufactured in round, elliptical and arch shapes ranging from 12 inches to 144 inches in diameter and in box sizes ranging from three feet to 20 feet in length and width. We also manufacture a wide variety of precast concrete products, including box culverts, utility vaults, manholes, drainage inlets and pipe end sections. These precast concrete products are used for applications such as roadway drainage, airport drainage, storm water management, utility construction and water treatment and filtration systems. Our range of precast concrete products also includes products that fall under the general description of specialty precast, including products for which we hold patents that make us the exclusive manufacturer, or which are manufactured under license agreements with third parties. These specialty products include architectural panels for buildings, modular railroad crossings, retaining wall systems, highway noise barriers, storm water treatment systems and concrete vaults, which are used to house either dry utilities (such as electrical, data or communications equipment) or wet utilities (such as valves, pumps or water meters).

We also manufacture structural precast products in the United States and manufacture a range of precast concrete bridge girders for highway projects in both the United States and Eastern Canada. We manufacture a variety of structural precast products primarily for infrastructure and non-residential applications, including hollow-core planks, prestressed bridge girders, beams, columns, wall panels, stairs, garage floors and architectural cladding. These products are used as structural and architectural elements in building structures such as parking garages and arched and modular bridges.

Precast concrete products are reinforced with steel, similar to pipe, and manufactured using either a dry cast or wet cast concrete mix, depending on the size of the piece and the number of identical pieces to be manufactured. In the dry cast method, a concrete mix with low water content, known as zero-slump concrete, is poured into a mold and then densely compacted around the steel reinforcement using a variety of manufacturing methods. The concrete structure is immediately removed from the mold and allowed to cure in a high humidity environment to ensure proper hydration of the concrete. This method allows multiple pieces to be produced from the same mold each day and is most suitable for high volume, repetitive manufacturing. In the wet cast method, a concrete mix with relatively high water content is poured into a mold and allowed to cure in the mold, which can take from four to 16 hours. Precast concrete products typically range in diameter from four to 12 feet for round products or in length and width from one foot to 12 feet for square or rectangular products.

We also regularly consider ways to innovate internally and expand our drainage pipe and precast product offerings by working to bring other products to market. Some of our product offerings include precast Duct Bank, Kenner Chainwall, and a number of storm water innovative technologies for storm water management marketed through our Bio Clean subsidiary. Kenner Chainwall is a precast concrete foundation that provides a structurally sound, on-grade or elevated foundation to support prefabricated shelters or equipment buildings. One use is to elevate electrical equipment in flood zones such as those devastated by hurricanes. Duct Bank is a precast product that consolidates and protects underground electrical and communication cables and can be used in the construction of large buildings as well as installing cabling underneath roads and areas with existing structures. Each of these products is now commercially available.

In addition to our operations, we have a 50% equity interest in Concrete Pipe & Precast LLC, or CP&P, a joint venture with Americast, Inc. CP&P operates 12 plants that serve the Mid-Atlantic and Southeastern United States. CP&P manufactures drainage pipe and precast concrete products and sells those products to similar types



of customers as the ones to which we market. See Note 6 to our consolidated financial statements for additional information regarding CP&P.

### ***Water Pipe & Products Segment***

Utilizing the U.S. Pipe and Forterra Pressure Pipe Canada brands, we manufacture a number of products used for the transmission of potable water and wastewater in pipe diameters ranging from three to 144 inches.

We manufacture DIP in pipe diameters ranging from three to 64 inches in the United States. For each diameter of pipe, we offer a wide range of thicknesses with both standard and specialized linings and coatings. DIP is used for transmission and distribution of potable water and wastewater and is typically utilized for smaller diameter applications of 24 inches and smaller. DIP has residential and infrastructure repair replacement applications, including potable water distribution systems, small water system grids, major water transmission mains, wastewater collection systems, sewer force mains and water treatment plants. In addition to DIP, we also manufacture a full line of complementary joint restraints and fittings in Mexico, which are utilized for interlocking adjoining segments of pipe and are typically bundled with DIP. We also operate fabrication plants that modify our pipe to meet specific customer design requirements for above-ground applications.

DIP is manufactured using a process that consists of introducing molten iron into a rapidly-rotating steel mold and relying on centrifugal force to distribute the molten iron evenly around the inner surface of the mold to produce pipe of uniform size and dimensions. We also strive to innovate in our Water Pipe & Products segment, including by offering metallic zinc coating and TR-XTREME pipe. Metallic zinc coating is active corrosion protection for DIP. TR-XTREME pipe is DIP designed for areas of seismic activity and has joints that provide flexible extension capabilities.

In addition, for larger diameter applications, we manufacture concrete pressure pipe, prestressed concrete pipe and bar-wrapped concrete pipe in Eastern Canada. Our concrete pressure pipe is used for water transmission and distribution, power plant cooling water lines, sewage force mains for wastewater and storm water and other diverse applications involving the movement of large volumes of water. Concrete-lined pressure pipe ranges from fourteen to 144 inches in diameter. Prestressed concrete pipe consists of a concrete core, a steel cylinder and a high tensile strength wire that is wrapped, under measured tension and at uniform spacing, around the steel cylinder. This wire wrap places the steel cylinder and concrete core in compression, developing the pipe's ability to withstand specified hydrostatic pressures and external loads. An outside coating of mortar protects the wires. Bar-wrapped concrete cylinder pipe combines the physical strength of steel with the structural and protective properties of high strength cement mortar. In this type of pipe, a round steel bar is helically wound around a welded steel cylinder and all surfaces are encased in cement mortar. This composite pipe reacts as a unit when resisting internal pressure and external loads. The inside of the cylinder is lined with centrifugally cast cement mortar.

Our concrete pressure pipe is highly engineered and is built to order for technically demanding applications requiring various thresholds of working pressure, surge pressure and loads. Our engineers work closely with customers to design components and systems to meet specific regulatory and industrial demands.

### **Customers and Markets**

#### ***Drainage Pipe & Products Segment***

We typically sell our drainage pipe and precast products to contractors that perform construction work for various levels of government, residential and non-residential building owners, and developers in markets across the United States and Eastern Canada. Additionally, although they are not our direct customers, we view the owners and engineers who are customers of the contractors that purchase our products as our customers as well, because these owners and engineers often specify the types of products that our customers are required to use. We also sell our drainage pipe and precast products to utility companies. Several of our largest manufacturing facilities are located in close proximity to our markets. Our drainage pipe and precast products are typically shipped within a radius of 150 miles, but in some cases up to 350 miles, from our manufacturing facilities.

### ***Water Pipe & Products Segment***

Our water transmission pipe products are sold to some of the largest waterworks distributors and contractors. Our Water Pipe & Products segment has significant sales through distributors, including Core & Main, a key customer that accounted for 15% and 14% of our consolidated net sales in 2019 and 2018, respectively. We also sell to utility contractors that work on new or replacement pipeline projects, primarily in the East, South and Midwest of the United States. Our pressure pipe is used in projects for regional water authorities and districts, cities, counties, municipalities, port authorities, private companies and industrial clients, including power plants. DIP is typically shipped within a radius of 1,000 miles and concrete pressure pipe is typically shipped within a radius of 500 miles from our manufacturing facilities.

### **Competition**

#### ***Drainage Pipe & Products Segment***

Our largest competitors in our Drainage Pipe & Products Segment include Rinker Materials (a division of the QUIKRETE Companies) and Oldcastle Infrastructure (a unit of CRH plc). We also compete with many regional and local manufacturers. Additionally, our drainage pipe products compete with high density polyethylene, or HDPE, and polypropylene pipe products where such materials would serve as an appropriate substitute for our product.

#### ***Water Pipe & Products Segment***

Our two largest competitors in DIP manufacturing are McWane, Inc. and American Cast Iron Pipe Company. Our DIP products also compete with polyvinyl chloride, or PVC, and HDPE pipe and, when pricing achieves certain levels, we may also compete with foreign manufacturers of DIP. Our national network of fabrication products competes with regional and local providers of those products and services.

Within Canada, our concrete pressure pipe products compete with DECAST (formerly Munro Concrete Products, Ltd.) and several other American and Canadian competitors. Our concrete-lined pressure pipe also competes with pressure pipe made from other materials such as fiberglass, HDPE and PVC.

### **Sales, Marketing and Distribution**

Our products are generally made to order, but certain of our products are made to inventory. We have established target levels of inventory for certain products that we attempt to keep available at our manufacturing facilities to meet customer demand. Inventories are held at manufacturing facilities and, to a lesser extent, at distribution yards.

Our structural precast products, most precast concrete products and concrete pressure pipe are customized products that are made to order. Our order backlog for precast concrete products is typically two to six months. Our order backlog for concrete pressure pipe and other precast offerings (bridge products) is approximately eight months.

We seek to attract and retain customers through customer service and technical expertise, as well as product quality, our product and service offerings and competitive pricing. Our market strategy for products with non-residential end users is centered on building and maintaining strong customer relationships rather than traditional advertising.

We maintain in-house technical sales, engineering and field service teams which provide customers technical expertise and support to assist them in finding the right product or solution for their specific need. Each of our operating segments has its own sales force. Overall, we employ more than 290 sales and related support professionals. Our sales force and customer service functions are staffed by experienced professionals who have been trained in our product lines, processes and systems, and who maintain touch points with engineers,

contractors, builders, and distributors. Additionally, we have a staff of more than 115 engineers that we employ to work in concert with our sales force to help develop effective product solutions for our customers.

We sell our DIP products and our fittings and fabricated products primarily through distributors. Our drainage pipe, concrete pressure pipe, and precast concrete products are mostly sold direct to customers who are installing such products for or are the end users of such products. Drainage pipe, concrete pressure pipe, and certain precast products are sold through a bidding process in which we seek to place the most competitive bid. We undertake marketing efforts through our participation in trade shows and through our website. We outsource many of our product deliveries by using a combination of dedicated carriers and other third-party carriers.

## **Raw Materials and Inputs**

The primary material for our drainage pipe and precast concrete products and our concrete pressure pipe is concrete, which consists of water, cement and aggregates. Another key input for our products is steel, which is used to provide reinforcement within our drainage pipe and precast concrete products. Our DIP is largely made from iron melted from recycled scrap metals. Other key materials for our DIP include foundry coke and certain additives, such as alloys.

Most of our raw materials are widely available commodities. We have not experienced any significant shortages of raw materials. To the extent we do not produce any raw materials, when and where possible, we try to purchase raw materials from the source, and because of their low value-to-weight ratios, we generally try to source our raw materials in the vicinity of our facilities. We usually purchase the raw materials we need in the spot market, except where we anticipate a significant need of materials for a specific project. Other than certain contracts for key materials, including cement and steel, we typically do not enter into long-term supply contracts with our suppliers that require us to purchase particular quantities or to pay particular prices.

We purchase our steel from a number of different suppliers, but most suppliers are based in the United States in order to comply with "Buy America" government contract requirements placed on our customers. We endeavor to purchase these steel supplies from the entity which is as close as possible to the manufacturer.

To manufacture DIP, fabricated products and fittings, we purchase scrap metal directly from qualified scrap sources near our foundry sites in the United States and Mexico. We utilize certain categories of scrap metal, primarily shredded automobile bodies, plate & structural, and cast iron. We purchase foundry coke from two of the three merchant coke producers in the United States, both located in Birmingham, Alabama. Major alloys and additives are procured from both domestic and foreign sources based on a semiannual bid process.

## **Strategic Transactions**

Subsequent to the Acquisition over the past five years, we completed a number of strategic transactions, including the following:

- *Cretex Acquisition* - On October 1, 2015, we acquired Cretex Concrete Products, Inc., or Cretex, a manufacturer of concrete pipe, box culverts, concrete precast drainage structures, pre-stressed bridge components and ancillary precast products in the Upper Midwestern United States. Cretex now operates as part of our Drainage Pipe & Products segment.
- *Sherman-Dixie Acquisition* - On January 29, 2016, we acquired Sherman-Dixie Concrete Industries, Inc., or Sherman-Dixie, a manufacturer of precast concrete structures operating in Kentucky, Tennessee, Alabama and Indiana. Sherman-Dixie now operates as part of our Drainage Pipe & Products segment.
- *U.S. Pipe Acquisition* - On April 15, 2016, we acquired USP Holdings Inc., or U.S. Pipe, a manufacturer of water transmission pipe servicing residential, commercial and infrastructure customers. U.S. Pipe operates as part of our Water Pipe & Products segment.

- *Bio Clean Acquisition* - On August 4, 2016, we acquired Bio Clean Environmental Services, Inc. and Modular Wetland Systems, Inc., or Bio Clean, which designs and sells storm water management systems that meet the requirements of local regulatory bodies regulating storm water quality and owns technologies relating to drainage and storm water management. Bio Clean now operates as part of our Drainage Pipe & Products segment.
- *J&G Acquisition* - On October 14, 2016, we acquired J&G Concrete Operations, LLC, or J&G a manufacturer of concrete pipe, box culverts and special fittings in North Texas. J&G now operates as part of our Drainage Pipe & Products segment.
- *Precast Concepts Acquisition* - On October 14, 2016, we acquired Precast Concepts, LLC, or Precast Concepts, a manufacturer of concrete pipe, box culverts, storm detention systems and other precast concrete and related products in Colorado. Precast Concepts now operates as part of our Drainage Pipe & Products segment.
- *Royal Acquisition* - On February 3, 2017, we acquired the assets of Royal Enterprises America, Inc., or Royal, a manufacturer of concrete drainage pipe, precast concrete products, storm water treatment technologies and erosion control products serving the greater Minneapolis market. Royal now operates as part of our Drainage Pipe & Products segment.
- *Sale Leaseback* - In April 2016, we sold properties in 49 sites throughout the U.S. and Canada to Pipe Portfolio Owner (Multi) LP, or the U.S. Buyer, and FORT-BEN Holdings (ONQC) Ltd., or the Canadian Buyer, and we and U.S. Buyer and an affiliate of the Canadian Buyer entered into master land and building lease agreements under which we agreed to lease back each of the properties for an initial term of twenty years, followed by one optional renewal terms of 9 years, 11 months. On June 5, 2018, we amended and restated these arrangements and we exchanged ownership of two facilities in the U.S. for 24 facilities located in the U.S. and Canada previously included in the sale-leaseback transaction and also extended the lease terms for all facilities to an initial term of twenty-five years, followed by one optional renewal term of 9 years, 11 months.
- *U.S. Pressure Pipe Divestiture* - On July 31, 2017, we completed the sale of our U.S. concrete and steel pressure pipe business, a component of our Water Pipe and Products segment, to Thompson Pipe Group, or TPG, in exchange for approximately \$23.2 million in cash, subject to standard working capital adjustments, exclusive of fees and expenses, as well as certain assets relating to a drainage pipe and products manufacturing facility in Conroe, Texas.
- *Foley Exchange Agreement* - On January 31, 2018, we completed the sale to Foley Products Company of several of our pipe & precast plants in the southeast region, including Tennessee, Alabama and Georgia, which were part of the Drainage Pipe & Products segment, in exchange for \$9.1 million in cash, a drainage facility located in Prentiss, Mississippi and land in Texas.

See Notes 3, 15, and 24 of the consolidated financial statements for information on these transactions, as applicable.

## **Seasonality**

The construction industry, and therefore demand for our products, is typically seasonal and dependent on weather conditions, with periods of snow or heavy rain negatively affecting construction activity. For a more detailed discussion, see the sections titled Item 1A., Risk Factors, and Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, for a discussion of the seasonality of our business.

## **Employees**

As of December 31, 2019, we had 4,578 employees, 1,327 of which were salaried and 3,251 of which were hourly. Of the total number of employees, 4,060 were located in the United States, 304 were located in Canada and 214 were located in Mexico. The number of hourly workers we employ varies to match our labor needs during periods of fluctuating demand and varies seasonally in certain regions. We also employ temporary workers as needed to meet production goals.

As of December 31, 2019, approximately 32% of our workforce is covered by collective bargaining agreements, and approximately 42% of these employees are included in collective bargaining agreements that expire within one year of December 31, 2019. We have not had any recent union-organized work stoppages in the United States, Canada or Mexico. We believe that we have good relationships with our employees and with the unions representing our employees.

### **Intellectual Property**

We own various United States and foreign patents, registered trademarks, trade names and trade secrets and applications for, or licenses in respect of, the same, that relate to our various business lines including a number of innovative technologies relating to storm water management. The U.S. Pipe name has been a recognized manufacturer of DIP for more than 115 years. We also license intellectual property for use in certain of our products from unaffiliated third parties. We believe that our patents, trademarks, trade names and trade secrets are adequately protected and that any expiration or other loss of one or more of our patents or other intellectual property rights would not have a material adverse effect upon our business, financial condition or results of operations.

### **Environmental, Health and Safety Matters**

We are subject to a broad range of federal, state, provincial, local and foreign laws and regulations governing health and safety or the protection of the environment and natural resources, including, for example:

- the federal Resource Conservation and Recovery Act, or RCRA, and comparable state laws that impose requirements for the generation, handling, transportation, treatment, storage, disposal and cleanup of waste from our operations;
- the federal Comprehensive Environmental Response, Compensation, and Liability Act, or CERCLA, also known as "Superfund," and comparable state laws that govern the cleanup of hazardous substances that may have been released at properties currently or previously owned or operated by us or locations which we have sent waste for disposal;
- the federal Clean Water Act, or CWA, and analogous state laws and regulations that can impose detailed permit requirements and strict controls on discharges of waste water from our facilities; and
- the federal Clean Air Act, or CAA, and comparable state laws and regulations that impose obligations related to air emissions, including federal and state laws and regulations to address greenhouse gas, or GHG, emissions.

Environmental pre-construction and operating permits are, or may be, required for certain of the Company's operations, and such permits are subject to modification, renewal, and revocation. It is likely that we will be subject to increasingly stringent environmental standards in the future, particularly under air quality and water quality laws. It is also likely that we will be required to make additional expenditures, which could be significant, relating to environmental matters such as pollution controls, on an ongoing basis. As our operations involve, and have involved, the handling, transport and distribution of materials that are, or could be classified as, toxic or hazardous or otherwise as pollutants, there is some risk of contamination and environmental damage inherent in our operations and the materials and products we handle and transport. Consequently, we are subject to environmental laws that impose liability for historical releases of hazardous substances. We are also subject to a variety of health and safety laws and regulations dealing with occupational health and safety. Manufacturing sites can be inherently dangerous workplaces. Our sites often put our employees and others in close proximity

with large pieces of mechanized equipment, moving vehicles, and manufacturing processes, and highly regulated materials and there is inherent risk of related liabilities in our operations. See Item 1A. Risk Factors.

We regularly monitor and review our operations, procedures, and policies for compliance with existing laws and regulations, changes in interpretations of existing laws and enforcement policies, new laws that are adopted, and new laws that we anticipate will be adopted that could affect our operations. For health and safety regulations, the Occupational Safety and Health Administration, or OSHA, sets minimum standards; we have adopted programs internally that are intended to meet or exceed these requirements.

Despite our compliance efforts, risk of environmental, health and safety liability is inherent in the operation of our business, as it is with other companies engaged in similar businesses, and there can be no assurance that environmental, health and safety liabilities will not have a material adverse effect on us in the future.

Our consolidated financial statements include estimated liabilities for future costs arising from environmental issues relating to our properties and operations. As of December 31, 2019, the Company had accrued environmental liabilities of approximately \$1.6 million. See Note 2 to the consolidated financial statements.

We have been named as a potentially responsible party, or PRP, at sites identified by the EPA or state regulatory agencies for investigation and remediation under CERCLA, or comparable state statutes, generally referred to as Superfund sites, including Sylacauga, AL, North Birmingham, AL, Portland, OR and Chattanooga, TN. With respect to these Superfund sites for which we have received PRP notices, we are entitled to contractual indemnity by a third party, subject to the terms of the indemnity provisions contained in the relevant agreement. Our estimates of current liabilities factor in these indemnification rights and our assessment of the likelihood that the indemnitor will fulfill its obligations with respect to liabilities relating to such sites. To date, the indemnifying party has been fulfilling its indemnification obligation with respect to those Superfund sites, and we have no reason to believe it will not continue to do so. However, in the future, we can provide no assurance that the indemnifying party will continue to honor its obligations, or that the existing indemnities will be sufficient to cover the liabilities for such matters.

#### **Available Information**

Our web site address is [www.forterrabp.com](http://www.forterrabp.com). Information contained on our website or connected thereto does not constitute a part of this Annual Report on Form 10-K or any other filing we make with the Securities and Exchange Commission, or the SEC. We make available on this web site under the "Investor Relations" section, free of charge, our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, and amendments to those reports, as soon as reasonably practicable after we electronically file those materials with, or furnish them to, the SEC. The SEC also maintains a web site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at [www.sec.gov](http://www.sec.gov). We also make available free of charge on our website our Corporate Governance Guidelines, our Code of Ethics, and the Charters of our Audit Committee, Nominating and Corporate Governance Committee, and Compensation Committee of our Board of Directors.

#### **Item 1A. RISK FACTORS**

*Our business, operations and financial condition are subject to various risks and uncertainties. We have described below significant factors that may adversely affect our business, operations, financial performance and condition or industry. You should carefully consider these factors, together with all of the other information in this Annual Report on Form 10-K and in other documents that we file with the SEC, before making any investment decision about our securities. These risks and uncertainties are not the only ones we face. Additional risk and uncertainties presently unknown to us or currently deemed immaterial also may impair our business operations. Adverse developments or changes related to any of the factors listed below or others could materially and adversely affect our business, financial condition, results of operations, future prospects and growth.*

## Risks Relating to Our Business and Industry

***Our business is based in significant part on government-funded infrastructure projects and building activities, and any reductions or re-allocation of spending or related subsidies in these areas could have a material adverse effect on us.***

Our business depends heavily on government spending for infrastructure and other similar building activities. As a result, demand for many of our products is heavily influenced by U.S. and Canadian federal government fiscal policies and tax incentives and other subsidies, as well as state and municipal funding of projects. The infrastructure projects in which we participate are typically funded directly by governments and/or privately-funded but are otherwise tied to or impacted by government policies and spending measures. Government infrastructure spending and governmental policies with respect thereto depend primarily on the availability of public funds, which is influenced by many factors, including governmental budgets, public debt levels, interest rates, existing and anticipated and actual federal, state, provincial and municipal tax revenues, government leadership and the general political climate, as well as other general macroeconomic and political factors. In addition, U.S. federal government funds may only be available based on states' willingness to provide matching funding. Government spending is often approved only on a short-term basis and some of the projects in which our products are used require longer-term funding commitments. If government funding is not approved or funding is lowered, whether as a result of poor economic conditions, lower than expected revenues, competing spending priorities or other factors, it could limit infrastructure projects available, increase competition for projects, result in excess inventory and decrease sales, any of which could adversely affect the profitability of our business.

Additionally, certain regions or states may require or possess the means to finance only a limited number of large infrastructure projects and periods of high demand may be followed by years of little to no activity. There can be no assurances that governments will sustain or increase current infrastructure spending and tax incentive and other subsidy levels, and any reductions thereto or delays therein could have a material adverse effect on our business, financial condition and results of operations.

***Residential and non-residential construction activity is cyclical and influenced by many factors, and any reduction in the activity in one or both of these markets could have a material adverse effect on us.***

Historically, demand for our products has been closely tied to residential construction and non-residential construction in the United States and Eastern Canada. Our success and future growth prospects depend, to a significant extent, on conditions in these two geographic markets and the degree to which these markets are strong in the future.

The construction industry and related markets are cyclical and have in the past been, and may in the future be, materially and adversely affected by general economic and global financial market conditions. These factors impact not only our business, but those of our customers and suppliers as well. This influence is true with respect to macroeconomic factors within North America, particularly within our geographic footprint in the United States and Eastern Canada. For example, in 2008, residential construction and non-residential construction activity dipped to historically low levels during the financial crisis. As a result, demand for many of our products dropped significantly.

The markets in the construction industry in which we operate are also subject to other more specific factors. Residential construction activity levels are influenced by and sensitive to a number of factors, including mortgage availability, the cost of financing a home (in particular, mortgage terms and interest rates), unemployment levels, household formation rates, gross domestic product, residential vacancy and foreclosure rates, demand for second homes, existing housing prices, rental prices, housing inventory levels, building mix between single- and multi-family homes, consumer confidence, seasonal weather factors, the available labor pool and government regulation, policy and incentives. Non-residential construction activity is primarily driven by levels of business investment, availability of credit and interest rates, as well as many of the factors that impact residential construction activity levels.

We cannot control the foregoing factors, we cannot be certain that they will remain at current levels, and there can be no assurances regarding whether any growth in our markets can be sustained. If construction activity in our markets, and more generally, does remain at current levels, or if there are future downturns, whether locally, regionally or nationally, it could have a material adverse effect on our business, financial condition and results of operations.

***We engage in a highly competitive business and any failure to effectively compete could have a material adverse effect on us.***

The markets in which we sell our products are highly competitive. We face significant competition from, depending on the segment or product, domestic and imported products produced by local, regional, national and international building product manufacturers, as well as privately owned single-site enterprises. Due in part to the costs associated with transporting our products to our customers, many of our sub-markets are relatively fragmented and include a number of regional competitors. Our primary competitors include Rinker Materials (a division of QUIKRETE) and Oldcastle Infrastructure (a division of CRH plc) in our Drainage Pipe & Products segment and McWane, Inc. and American Cast Iron Pipe Company in our Water Pipe & Products segment, particularly with respect to DIP.

Competition among manufacturers in our markets is based on many factors with significant emphasis on price. Our competitors may sell their products at lower prices because, among other things, they possess the ability to manufacture or supply similar products and services more efficiently or at a lower cost or have built a superior sales or distribution network. Some of our competitors may have access to greater financial or other resources than we do, which may afford them greater purchasing power, greater production efficiency, increased financial flexibility or more capital resources for expansion and improvement. In addition, some of our competitors are vertically integrated with suppliers or distributors and can leverage this structure to their advantage to offer better pricing to customers. Furthermore, our competitors' actions, including restoring idled or expanding manufacturing capacity, or the entry of new competitors into one or more of our markets, particularly in the Drainage business where there are low to medium barriers to entry, could cause us to lower prices in an effort to maintain our customer base. For example, the pricing impact of a new competitor entering the Houston, Texas Drainage market in 2017 had a negative impact on revenues. Certain of our products, including gravity pipe, are volume manufacturing products that are widely available from other manufacturers or distributors, with prices and volumes determined frequently based on participants' perceptions of short-term supply and demand. Competitive factors, including industry overcapacity, could also lead to pricing pressures. For example, competitors may choose to pursue a volume policy to continue utilizing their manufacturing facilities or in attempt to gain market share, each to the detriment of maintaining prices. Excess product supply can result in significant declines in the market prices for these products, often within a short period of time. As a result, at times, to remain competitive, we may lower the price for any one or more of our products to or below our production costs, requiring us to sacrifice margins or incur losses. Alternatively, we may choose to forgo product sales or cease production at one or more of our manufacturing facilities. Conversely, at times when prices are maintained at higher levels, there is greater risk that foreign competitors may enter one or more of our markets, particularly with respect to DIP.

In addition to pricing, we also compete based on service, quality, range of products and product availability. Our competitors may be positioned to provide better service and thereby establish stronger relationships with customers and suppliers. Our competitors may also sell preferred products, improve the design and performance of their products, develop a more comprehensive product portfolio, be better positioned to influence end-user product specifications or introduce new products with competitive prices and performance characteristics. While the majority of our products are not subject to frequent or rapid stylistic changes, trends do evolve over time, and our competitors may do a better job of predicting market developments or adapt more quickly to new technologies or evolving customer requirements.

We also face competition from substitute and newly designed building products. For example, storm water pipe can be manufactured from concrete, steel, high-density polyethylene (HDPE), polypropylene (PP) or polyvinyl chloride (PVC) and potable water transmission infrastructure can be manufactured using HDPE or PVC. The market share of HDPE and PP pipe, which compete with gravity pipe and concrete pressure pipe for certain applications, and HDPE and PVC pipe, which compete with DIP for certain applications, have increased in recent



years. Governments in the past have, and may continue in the future, to provide incentives that support or encourage, or in certain instances pass regulations that require, the consideration or use of substitute products with which we compete. Lower costs and pricing of substitute products may challenge our ability to achieve pricing for our products at a level that is consistent with our business plans. Some of the substitute products with which we compete may also offer longer warranties than our typical product warranty, and we may face competitive pressures to offer longer warranties on our products, which could increase our exposure to claims in future years or cause us to lose business. Additionally, new construction techniques and materials will likely be developed in the future. Increases in customer or market preferences for any of these products could lead to a reduction in demand for our products, limit our ability to raise prices or otherwise adversely impact our competitive position.

Any failure by us to compete on price or service, to develop successful products and strategies or to generally maintain and improve our competitive position could have a material adverse effect on our business, financial condition and results of operations.

***Decreased availability of or increases in the cost of raw materials, including through the impacts of trade policy, could have a material adverse effect on us.***

Our ability to offer our products to our customers is dependent upon our ability to obtain adequate supplies of raw materials at reasonable costs, such as cement, aggregate, steel and scrap iron. Raw material prices for certain raw materials that are key to our products, such as steel and scrap metal, have been volatile in recent years. In particular, changes in U.S. trade policy, including the imposition of any tariffs by the U.S. or foreign governments, may negatively impact the availability and price of raw materials used in our production. In particular, in 2018 and 2019, the U.S. government imposed tariffs and quotas on certain imported steel articles, and other countries, such as Canada, have implemented retaliatory tariffs on certain U.S. imports, including steel. These actions, which are for an indefinite period of time, resulted in increased prices for both U.S. and non-U.S. steel, one of our main raw material inputs, and the continued imposition of these tariffs, increases in tariff rates, additional tariffs on other goods, or further retaliatory actions from other governments may result in higher costs for us, and there can be no assurance we will be able to pass any of the increases in raw material costs directly resulting from the tariff to our customers. Such actions may also result in more difficulty or the inability to obtain needed materials.

Suppliers are also subject to their own viability concerns from economic, market and other pressures. In particular, many suppliers may decrease capacity during financial downturns or due to other market factors such as depressed prices. This decreased capacity, along with strong global demand for certain raw materials, has at times caused and may continue to cause tighter supply and significant price increases. Factors such as adverse weather conditions and other natural disasters, as well as political and other social instability, have and will continue to disrupt raw material supplies and impact prices.

Although we have agreements with our raw material suppliers, these agreements are generally terminable by either party on limited notice or contain prices that are based upon the volume of our total purchases. To the extent agreements with any of our raw material suppliers are terminated or we need to purchase additional raw materials in the open market, there can be no assurance that we could timely find alternative sources in reasonable quantities or at reasonable prices. In addition, sudden or unanticipated changes in sources for certain raw materials, such as cement, may require us to engage in testing of our products for quality assurance, which may cause delays in our ability to meet production schedule for our customers and timely deliver our products. Changes in U.S. trade policy and reactions of other governments to those changes could also negatively impact the availability of certain raw materials, such as steel, as the demand for U.S. steel could increase as a result of these changes. The inability to obtain any raw materials or unanticipated changes with respect to our suppliers could negatively impact our ability to manufacture or deliver our products and to meet customer demands.

We are susceptible to raw material price fluctuations. In recent years, prices of the raw materials we use have at times fluctuated and may be susceptible to significant price fluctuations in the future. We have hedged our positions with respect to certain raw materials in the past and may do so in the future, but we currently have no hedging in place regarding our raw material needs and are therefore more susceptible to any short-term price

fluctuations. We generally attempt to pass increased costs, including higher raw material prices and government imposed costs, on to our customers, but the timing between acceptance of a customer order and the purchase of raw materials needed to fulfill such order, pricing pressure from our competitors, the market power of our customers or other pricing factors may limit our ability to pass on such price increases. If we cannot fully-offset increases in the cost of raw materials through other cost reductions, or recover these costs through price increases or otherwise, we could experience lower margins and profitability, which could have a material adverse effect on our business, financial condition and results of operations.

***Our dependence on key customers with whom we do not have long-term contracts and consolidation within our customers' industries could have a material adverse effect on us.***

Our business is dependent on certain key customers. In 2019 and 2018, Core & Main, our largest customer accounted for 15% and 14% of our net sales, respectively. As is customary in our industry, we do not enter into long-term contracts with many of our customers. As a result, our customers could stop purchasing our products, reduce their purchase levels or request reduced pricing structures at any time. We may therefore need to adapt our manufacturing, pricing and marketing strategies in response to a customer who may seek concessions in return for its continued or increased business. In addition, a macroeconomic downturn or any other cause of consolidation in the U.S. homebuilding industry or among our other customers, as occurred during the financial crisis when a number of smaller businesses went out of business or were acquired, can significantly increase the market share and bargaining power of a limited number of customers and give them significant additional leverage to negotiate more favorable terms and place greater demands on us. A loss of one or more customers or a meaningful reduction in their purchases from us or further consolidation within our end markets could have a material adverse effect on our business, financial condition and results of operations.

***Changes in construction activity levels in Texas could have a material adverse effect on us.***

We currently conduct a significant portion of our business in Texas, which we estimate represented approximately 20% of our 2018 and 2019 net sales. Government-funded infrastructure spending, as well as residential and non-residential construction activity in each of these areas has declined from time to time, particularly as a result of slow economic growth, whether in the energy industry or otherwise. Local economic conditions depend on a variety of factors, including national economic conditions, local and state budgets, infrastructure spending and the impact of federal cutbacks. In addition, Texas is susceptible to severe weather and flooding, which can interrupt, delay or otherwise impact the timing of projects. Any decrease in construction activity in Texas could have a material adverse effect on our business, financial condition and results of operations.

***A material disruption or capacity constraints at one or more of our manufacturing facilities or in our supply chain could have a material adverse effect on us.***

We own and operate manufacturing facilities of various ages and levels of automated control and rely on a number of third parties as part of our supply chain, including for the efficient distribution of products to our customers. Any disruption at one of our manufacturing facilities or within our supply chain could prevent us from meeting demand or require us to incur unplanned capital expenditures. Older facilities and equipment are generally less energy efficient and are at an increased risk of breakdown or equipment failure, resulting in unplanned downtime. Any unplanned downtime at our facilities may cause delays in meeting customer timelines, result in damages claims, including liquidated damages, or cause us to lose or harm customer relationships. Additionally, we require specialized equipment to manufacture certain products, and if any of our manufacturing equipment fails, the time required to repair or replace this equipment could be lengthy, which could result in extended downtime at the affected facility. Any unplanned repair or replacement work can also be very expensive. Moreover, manufacturing facilities can unexpectedly stop operating because of events unrelated to us or beyond our control, including fires and other industrial accidents, floods and other severe weather events, natural disasters, environmental incidents or other catastrophes, utility and transportation infrastructure disruptions, shortages of raw materials, and acts of war or terrorism. Work stoppages, whether union-organized or not, can also disrupt operations at manufacturing facilities. Furthermore, we are generally responsible for delivering products to the customer and, while we deliver a small percentage of our products directly to the customer using our own fleet, we outsource this function and depend on third parties to deliver the vast majority of our products,

primarily by truck with some reliance on rail where possible. Any shortages in trucking or rail capacity or any increase in the cost thereof, whether as a result of strikes, slowdowns, a shortage of drivers, other disruption to the highway or rail systems, or other unrelated transportation issues could limit our ability to deliver our products in a timely and cost-effective manner or at all. Any material disruption at one or more of our facilities or those of our customers or suppliers or otherwise within our supply chain, whether as a result of downtime, facility damage, an inability to deliver our products or otherwise, could prevent us from meeting demand, require us to incur unplanned capital expenditures or cause other material disruption to our operations, any of which could have a material adverse effect on our business, financial condition and results of operations.

***Delays in construction projects and any failure to manage our inventory could have a material adverse effect on us.***

Many of our products are used in water transmission and distribution projects and other large-scale construction projects which generally require a significant amount of planning and preparation before construction commences. However, construction projects can be delayed and rescheduled for a number of reasons, including unanticipated soil conditions, adverse weather or flooding, changes in project priorities, financing issues, difficulties in complying with environmental and other government regulations or obtaining permits and additional time required to acquire rights-of-way or property rights. These delays or reschedulings may occur with too little notice to allow us to replace those projects in our manufacturing schedules or to adjust production capacity accordingly, creating unplanned downtime, increased costs and inefficiencies in our operations and increased levels of excess or obsolete inventory. Additionally, we maintain an inventory of certain products that meet standard specifications and are ultimately purchased by a variety of end users. However, demand our forecasts are not always accurate and unexpected changes in demand for these products, whether project-driven, because of a change in preferences or otherwise, can lead to increased levels of excess or obsolete inventory. Any delays in construction projects and our customers' orders or any inability to manage our inventory, which can lead to impairment charges, could have a material adverse effect on our business, financial condition and results of operations.

***Any inability to successfully integrate acquisitions could have a material adverse effect on us.***

Historically, we have made a number of acquisitions. The integration of acquired businesses can take a significant amount of time and also exposes us to significant risks and additional costs. Integrating these and any future acquisitions may strain our resources. Further, we may have difficulty integrating the operations, systems, controls, procedures or products of acquired businesses and may not be able to do so in a timely, efficient and cost-effective manner. These difficulties could include:

- merging computer, technology and other information networks and systems;
- diversion of the attention of our management and that of the acquired business;
- merging or linking different accounting and financial reporting systems and systems of internal controls;
- assimilation of personnel, human resources and other administrative departments and potentially contrasting corporate cultures;
- disruption of our relationship with, or loss of, key customers, suppliers or personnel;
- interference with, or loss of momentum in, our ongoing business or that of the acquired companies; and
- delays or cost overruns in the integration process.

We have not fully integrated all of our acquisitions and may encounter one or more of the issues discussed above, or others of which we are not yet aware. In particular, we have not yet fully integrated the enterprise resource planning and the accounting and financial reporting systems of these businesses, and efforts to integrate are ongoing. Any of these acquisition or other integration-related issues could divert management's attention and resources from our day-to-day operations, cause significant disruption to our business and lead to substantial additional costs. Our inability to realize the anticipated benefits of an acquisition or to successfully integrate acquired companies as well as other transaction-related issues could have a material adverse effect on our business, financial condition and results of operations.

***The seasonality of our business and its susceptibility to severe and prolonged periods of adverse weather and other conditions could have a material adverse effect on us.***

Demand for our products in some markets is typically seasonal, with periods of snow or heavy rain negatively affecting construction activity. For example, sales of our products in Canada and the Northeast and Midwest regions of the United States are somewhat higher from spring through autumn when construction activity is greatest. Construction activity declines in these markets during the winter months in particular due to inclement weather, frozen ground and fewer hours of daylight. Construction activity can also be affected in any period by adverse weather conditions such as hurricanes, severe storms, torrential rains and floods, natural disasters such as fires and earthquakes and similar events, any of which could reduce demand for our products, push back existing orders to later dates or lead to cancellations. Furthermore, our ability to deliver products on time or at all to our customers can be significantly impeded by such conditions and events, such as those described above. Public holidays and vacation periods constitute an additional factor that may exacerbate certain seasonality effects, as building projects or industrial manufacturing processes may temporarily cease. These conditions, particularly when unanticipated, can leave both equipment and personnel underutilized. Additionally, the seasonal nature of our business has led to variation in our quarterly results in the past and may continue to do so in the future. This general seasonality of our business and any severe or prolonged adverse weather conditions or other similar events could have a material adverse effect on our business, financial condition and results of operations.

***Labor disruptions and other union activity could have a material adverse effect on us.***

As of December 31, 2019, approximately 32% of our workforce was covered by collective bargaining agreements, and approximately 42% of these employees were included in collective bargaining agreements that are due to expire within one year. If negotiations to renew expiring collective bargaining agreements are not successful or become unproductive, the union could take actions such as strikes, work slowdowns or work stoppages. Such actions at any one of our facilities could lead to a plant shut down or a substantial modification to employment terms, thereby causing us to lose net sales or incur increased costs. We have not had any recent union-organized work stoppages in the United States, Canada or Mexico; however, we have experienced one union organizing effort directed at our non-union employees in the past ten years. There can be no assurances there will not be additional union organizing efforts, strikes, work slowdowns or work stoppages in the future. Any such disruption, or other issue related to union activity, could have a material adverse effect on our business, financial condition and results of operations.

***The use of our products is often affected by various laws and regulations in the markets in which we operate, any of which may have a material adverse effect on us.***

The use of many of our products is subject to approvals by municipalities, state departments of transportation, engineers and developers. These approvals and specifications, including building codes, may affect the products our customers or their customers (the end users) are allowed or choose to use, and, consequently, failure to obtain or maintain such approvals or changes in building codes may affect the saleability of our products. Changes in applicable regulations governing the sale of some of our products or the failure of any of our products to comply with such requirements could increase our costs of doing business, reduce sales or otherwise have a material adverse effect on our business, financial condition and results of operations.

***Increased costs of energy could have a material adverse effect on us.***

We use significant amounts of energy, including electricity and natural gas, in the manufacturing, transportation, distribution and sale of our products, and the related expense is significant. While we have benefited from the relatively low cost of electricity and natural gas in recent years, energy prices have been and may continue to be volatile and these reduced prices may not continue. Proposed or existing government policies, including those to address climate change by reducing greenhouse gas emissions or the effects of hydraulic fracturing could result in increased energy costs. In addition, factors such as international political and military instability, adverse weather conditions and other natural disasters may disrupt fuel supplies and increase prices in the future. Additionally, because we and other manufacturers in our industry are often responsible for delivering products to the customer, we are further exposed to increased energy prices as a component of our transportation

costs. While we generally attempt to pass increased costs, including higher energy costs, on to our customers, pricing pressure from our competitors, the market power of our customers or other pricing factors may limit our ability to do so, and any increases in energy prices could have a material adverse effect on our business, financial condition and results of operations.

***A tightening of mortgage lending or mortgage financing requirements or other reductions in the availability of consumer credit or increases in its cost could have a material adverse effect on us.***

We depend on net sales generated from residential construction activity. Most home sales in the U.S. and Eastern Canada are financed through mortgage loans, and a significant percentage of renovation and other home repair activity is financed either through mortgage loans or other available credit. The financial crisis affected the financial position of many consumers and caused financial institutions to tighten their lending criteria, each of which contributed to a significant reduction in the availability of consumer credit. These developments resulted in a significant reduction in total new housing starts in the U.S. and consequently, a reduction in demand for our products in the residential sector. Similarly, the rate of interest payable on any mortgage or other form of credit will have an impact on the cost of borrowing. While base rates have remained relatively low in recent years, they may rise in the future, which would increase the cost of borrowing, making the purchase of a home less attractive, which could reduce the number of new housing starts in the U.S. and Eastern Canada. Any future tightening of mortgage lending or other reductions in the availability of consumer credit or increases in its cost could have a material adverse effect on our business, financial condition and results of operations.

***Any inability to successfully implement our acquisition strategy could have a material adverse effect on us.***

Historically we have grown in large part as a result of acquisitions and our business plan continues to provide for growth in part through acquisitions and joint ventures. Although we expect to regularly consider additional strategic transactions in the future, there can be no assurances that we will identify suitable acquisition, joint venture or other investment opportunities or, if we do, that any transaction can be consummated on acceptable terms. Antitrust or other competition laws may also limit our ability to acquire, or work collaboratively with, certain businesses or to fully realize the benefits of a prospective acquisition or joint venture. Furthermore, changes in our business or the economy, an unexpected decrease in our cash flows or any restrictions imposed by our debt may limit our ability to obtain the necessary capital or otherwise impede our ability to complete a transaction. Regularly considering strategic transactions can also divert management's attention and lead to significant due diligence and other expenses regardless of whether we pursue or consummate any transaction. Failure to identify suitable transaction partners and to consummate transactions on acceptable terms, as well as the commitment of time and resources in connection with such transactions, could have a material adverse effect on our business, financial condition and results of operations.

The consummation of an acquisition also exposes us to significant risks and additional costs. We may not accurately assess the value, strengths, weaknesses or potential profitability of an acquisition target. Furthermore, we may not be able to fully or successfully integrate an acquired business or realize the expected benefits and synergies following an acquisition. Business and operational overlaps may lead to hidden costs. These costs can include unforeseen pre-acquisition liabilities or the impairment of customer relationships or certain acquired assets such as inventory and goodwill. We may also incur costs and inefficiencies to the extent an acquisition expands the industries, markets or geographies in which we operate due to our limited exposure to and experience in a given industry, market or region. Significant acquisitions may also require that we incur additional debt to finance the transaction, which could be substantial and limit our flexibility in using our cash flow from operations for other purposes. Acquisitions can also involve post-transaction disputes with the counterparty regarding a number of matters, including a purchase price or other working capital adjustment or liabilities for which we believe we were indemnified under the relevant transaction agreements, such as environmental liabilities or pension or benefit obligations retained by the seller, including certain environmental and benefit obligations in connection with our U.S. Pipe Acquisition and certain pension obligations we assumed pursuant to the Acquisition and our acquisition of Cretex. For example, as discussed in greater detail in Item 3, "Legal Proceedings," we are currently engaged in a dispute with HeidelbergCement regarding the earnout provision in the purchase agreement entered into in connection with the Acquisition. We are also engaged in other indemnification and other post-closing disputes with certain of our transaction counterparties. Our inability to realize the anticipated benefits of an acquisition as well

as other transaction-related issues could have a material adverse effect on our business, financial condition and results of operations.

In July 2012, we entered into a joint venture agreement with Americast, Inc. to form Concrete Pipe & Precast LLC. From time to time, we may enter into additional joint ventures as part of our growth strategy. The nature of a joint venture requires us to share control with unaffiliated third parties. If our joint venture partners do not fulfill their contractual and other obligations, the affected joint venture may be unable to operate according to its business plan, and we may be required to increase our level of commitment. Differences in views among joint venture participants could also result in delays in business decisions or otherwise, failures to agree on major issues, operational inefficiencies and impasses, litigation or other issues. Third parties may also seek to hold us liable for the joint ventures' liabilities. These issues or any other difficulties that cause a joint venture to deviate from its original business plan could have a material adverse effect on our business, financial condition and results of operations.

***We are in a dispute with HeidelbergCement related to the payment of an earnout in connection with the Acquisition and any payment we are required to make could have a material adverse effect on us.***

We are engaged in a dispute with HeidelbergCement regarding the earnout provision in the purchase agreement entered into in connection with the Acquisition. As discussed in greater detail in Item 3, "Legal Proceedings," HeidelbergCement has asserted in an arbitration proceeding now pending against us that a payment should be made in the amount of \$100.0 million. If it is determined that we are required to make a significant payment to HeidelbergCement, we may not have sufficient cash to make such payment and may be required to incur additional indebtedness. We cannot be certain that we will be able to borrow any funds for this purpose under the terms of our existing indebtedness or on other terms acceptable to us, if at all. If incurred, additional indebtedness will subject us to additional interest expense, negatively impact our cash flow, increase the risk of a downgrade in our credit rating and could limit our ability to incur other indebtedness or make further acquisitions.

***We are subject to increasingly stringent environmental laws and regulations, and any failure to comply with any current or future laws or regulations could have a material adverse effect on us.***

We are subject to federal, state, provincial, local and foreign laws and regulations governing the protection of the environment and natural resources, including those governing air emissions, wastewater discharges and the use, storage, discharge, handling, disposal, transport and cleanup of solid and hazardous materials and wastes. We are required to obtain permits from governmental authorities for certain operations, and if we expand or modify our facilities or if environmental laws change, we could be required to obtain new or modified permits.

Environmental laws and regulations, including those related to energy use and climate change, tend to become more stringent over time, and any future laws and regulations could have a material impact on our operations or require us to incur material additional expenses to comply with any such future laws and regulations. Future environmental laws and regulations may cause us to modify how we manufacture and price our products or require that we make significant capital investments to comply. For example, our manufacturing processes use a significant amount of energy, and increased regulation of energy use to address the possible emission of greenhouse gases could materially increase our manufacturing costs or require us to install emissions control or other equipment at some or all of our manufacturing facilities.

If we fail to comply with any existing or future environmental laws, regulations or permits, we could incur fines, penalties or other sanctions and suffer reputational harm. In addition, we could be held responsible for costs and damages arising from claims or liabilities under environmental laws and regulations, including with respect to any exposure to or release of hazardous materials or contamination at our facilities, whether presently or previously leased, operated, or owned, or at third-party waste disposal sites. We could also be subject to third-party claims from individuals for property damage, personal injury or nuisance if any releases from our property were to cause contamination of the air, soil or groundwater of areas near our facilities. These laws and regulations may also require us to investigate and, in certain instances, remediate contamination. Some of our sites have a history of industrial use, and while we apply strict environmental operating standards and undertake extensive

environmental due diligence in relation to our facilities and acquisitions, some soil and groundwater contamination has occurred in the past at a limited number of sites.

As of December 31, 2019, we had accrued approximately \$1.6 million for environmental liabilities. Additionally, we cannot completely eliminate the risk of future contamination. Any costs or other damage related to existing or future environmental laws, regulations or permits or any violations thereof could expose us to significant financial losses as well as civil and criminal liabilities, any of which could have a material adverse effect on our business, financial condition and results of operations.

***We are subject to health and safety laws and regulations, and the costs to comply with, or any failure to comply with, any current or future laws or regulations could have a material adverse effect on us.***

Manufacturing sites are inherently dangerous workplaces. Our sites often put our employees and others in close proximity with large pieces of mechanized equipment, moving vehicles, chemical and manufacturing processes, heavy products and items and highly regulated materials. As a result, we are subject to a variety of health and safety laws and regulations dealing with occupational health and safety. Unsafe work sites have the potential to increase employee turnover and raise our operating costs. Our safety record can also impact our reputation. We maintain functional groups whose primary purpose is to ensure we implement effective work procedures throughout our organization and take other steps to ensure the health and safety of our work force, but there can be no assurances these measures or other measures we may take in the future will be successful in preventing injuries, including severe injuries and fatalities, or violations of health and safety laws and regulations. Any failure to maintain safe work sites or violations of applicable law could expose us to significant financial losses and reputational harm, as well as civil and criminal liabilities, any of which could have a material adverse effect on our business, financial condition and results of operations.

***We depend on the services of key executives and any inability to attract and retain key management personnel could have a material adverse effect on us.***

Our key management personnel, including our Chief Executive Officer and Chief Financial Officer, are important to our success because they are instrumental in setting our strategic direction, operating our business and identifying expansion opportunities. Additionally, as our business grows, we may need to attract and hire additional management personnel. We have employment agreements with some members of senior management; however, we cannot prevent our executives from terminating their employment with us, and any replacements we hire may not be as effective. Further, we have undergone some changes at the senior management level, including our Chief Executive Officer and Chief Financial Officer, and any transition involves inherent risk and any failure to ensure a smooth transition to new personnel could hinder our strategic planning, execution and future performance. While we strive to mitigate the negative impact associated with changes our senior management team, there may be uncertainty among investors, employees, customers and others concerning our future direction and performance. Our ability to retain our key management personnel or to attract additional management personnel or suitable replacements when needed is dependent on a number of factors, including the competitive nature of the employment market. Any failure to retain key management personnel or to attract additional or suitable replacement personnel could have a material adverse effect on our business, financial condition and results of operations.

***Any failure by us or the contractors with which we work to retain and attract necessary personnel or contract labor could have a material adverse effect on us.***

Competition for hiring new and retaining existing qualified personnel is intense and our success depends in part on our ability to retain, attract and train necessary personnel, including engineering and other skilled technical personnel. Our experienced sales team has also developed a number of meaningful customer relationships that would be difficult to replace. We compete with other companies for many employees in hourly positions, which have historically had high turnover rates. Without a sufficient number of qualified employees in each of these areas, the productivity and profitability of our operations and manufacturing quality could suffer. Additionally, our business relies on the ability of the contractors who install our products to obtain qualified

employees, including experienced supervisors and foreman, and a shortage in the supply of these skilled personnel could cause delays in customer's ability to take shipments of our products.

Labor shortages may impact our ability to hire skilled or unskilled workers with the necessary experience. For example, the reduction in demand for products in our industry during the financial crisis led to a number of both skilled and unskilled workers leaving our industry permanently, reducing an already limited pool of available and qualified personnel. Furthermore, unemployment has declined in recent years, reaching historically low levels in the United States, which has further tightened the labor market. If new or more restrictive immigration legislation is enacted at the federal level or in states in which we do business, or if existing regulations are interpreted or enforced differently, these changes could further tighten certain labor markets.

If we are unsuccessful in hiring and retaining the necessary workforce, we may incur additional costs to run our business. Many of these positions have historically had high turnover rates, which can lead to increased training and retention costs. Our ability to control labor costs is also subject to numerous external factors, including prevailing wage rates, the impact of legislation or regulations governing wages, regulations governing payment of workers.

There can be no assurances the labor pool from which we or the contractors with whom we work hire will increase or remain stable, nor that we will be able to control labor costs. Any failure by us or the contractors with which we work to retain our existing personnel or attract and train additional qualified personnel at reasonable costs could have a material adverse effect on our business, financial condition and results of operations.

***Credit and non-payment risks of our customers could have a material adverse effect on us.***

As is customary in our industry, the majority of our sales are to customers on an open credit basis, with standard payment terms of 30 days. While we generally monitor the ability of our customers to pay these open credit arrangements and limit the credit we extend to what we believe is reasonable based on an evaluation of each customer's financial condition and payment history, we may still experience losses because of a customer's inability to pay. As a result, while we maintain what we believe to be a reasonable allowance for doubtful receivables for potential credit losses based upon our historical trends and other available information, there is a risk that our estimates may not be accurate, particularly in times of economic uncertainty and tight credit markets. Any inability to collect customer receivables or inadequate provisions for doubtful receivables could have a material adverse effect on our business, financial condition and results of operations.

***Warranty and related claims could have a material adverse effect on us.***

We generally provide warranties on our products against defects in materials and workmanship, the costs of which could be significant. Many of our products such as gravity pipe are buried underground and incorporated into a larger infrastructure system, such as a city's or municipality's water transmission system, or built into the fabric of a building or dwelling. In most cases, it is difficult to access, repair, recall or replace these products. Additionally, some of our products, such as our pressure pipe, which is used in nuclear and coal-fired power generation factories, are used in applications where a product failure or construction defect could result in significant project delay, property damage, personal injury or death or could require significant remediation expenses. Because our products, including discontinued products, are long lasting, claims can also arise many years after their manufacture and sale. In certain cases, we may also offer warranties for longer periods now for certain products to compete with certain substitutes, which could increase the number, size, and frequency of warranty claims in the future. Product failures may also arise due to the quality of the raw materials we purchase from third-party suppliers or the quality of the work performed by our customers, including installation work, matters for which we have little to no control, but which may still subject us to a warranty claim. We may also assume product warranty or other similar obligations in acquisition transactions regarding the products sold by the acquired businesses prior to the transaction date for which we are not indemnified pursuant to the terms of the relevant transaction documentation. Our quality control systems and procedures and those of our suppliers and customers cannot test for all possible conditions of use or identify all defects in the design, engineering or specifications of one of our products or the raw materials we use before they are put to their intended purpose. Therefore, there can be no assurances that we will not supply defective or inferior products that cause product or



system failure, which could give rise to potentially extensive warranty and other claims for damages, as well as negatively impact our reputation and the perception of our product quality and reliability. While we have established reserves for warranty and related claims that we believe to be reasonable, these claims may exceed our reserves and any such excess and any negative publicity and other issues related to such claims could have a material adverse effect on our business, financial condition and results of operations.

***Legal and regulatory claims and proceedings could have a material adverse effect on us.***

We are subject to claims, litigation and regulatory proceedings in the normal course of business and could become subject to additional claims in the future, some of which could be material. For example, we have been, and may in the future be, subject to claims for product liability, construction defects, project delay, personal injury, property and other damages as well as allegations regarding compliance with mandated product specifications. Claims and proceedings, whether or not they have merit and regardless of the outcome, are typically expensive and can divert the attention of management and other personnel for significant periods of time. Additionally, claims and proceedings can impact customer confidence and the general public's perception of our company and products, even if the underlying assertions are proven to be false.

We are also currently a defendant, together with several of our current and former officers and directors, in three putative class action lawsuits, each filed by a plaintiff seeking damages against the Company for allegations of violations of United States laws regulating securities, as discussed in greater detail in Item 3, "Legal Proceedings," and Note 16 to our consolidated financial statements. Lawsuits involving us, or our current or former officers and directors, could result in significant expense and divert attention and resources of our management and other key employees. In addition to any damages we may be required to pay, we are generally obligated to indemnify our current and former directors and officers in connection with lawsuits and related settlement amounts. Such amounts could exceed the coverage provided under our insurance policies.

While we have established reserves we believe to be reasonable under the facts known, the outcomes of litigation and similar disputes are often difficult to reliably predict and may result in decisions or settlements that are contrary to, or in excess of, our expectations, and losses may exceed our reserves. In addition, various factors and developments could lead us to make changes in our current estimates of liabilities and related insurance receivables or make new or modified estimates as a result of a judicial ruling or judgment, settlement, regulatory development or change in applicable law. Any claims or proceedings, particularly those in which we are unsuccessful or for which we did not establish adequate reserves, could harm our reputation and could have a material adverse effect on our business, financial condition and results of operations.

***Certain of the contracts in our backlog may be adjusted, canceled or suspended by our customers and, therefore, our backlog is not necessarily indicative of our future revenues or earnings or a good indicator of our future margins, even if performed.***

As of December 31, 2019, our backlog totaled approximately \$473 million. In accordance with industry practice, many of our contracts are subject to cancellation, reduction, termination or suspension at the discretion of the customer in respect of work that has not yet been performed. In the event of a project cancellation, we would generally have no contractual right to the total revenue reflected in our backlog, but instead would collect revenues in respect of all work performed at the time of cancellation as well as all other costs and expenses incurred by us through such date. Projects can remain in backlog for extended periods of time because of the nature of the project, delays in execution of the project and the timing of the particular services required by the project. Additionally, the risk of contracts in backlog being canceled, terminated or suspended generally increases at times, including as a result of periods of widespread macroeconomic and industry slowdown, weather, seasonality and many of the other factors impacting our business. Many of the contracts in our backlog are subject to changes in the scope of services to be provided as well as adjustments to the costs relating to the contracts. The revenue for certain contracts included in backlog are based on estimates. Therefore, the timing of performance on our individual contracts can affect greatly our margins and hence, future profitability. There is no assurance that backlog will actually be realized as revenues in the amounts reported or, if realized, will result in any estimated profits.

***Our project-based business requires significant liquidity, and any inability to ensure adequate financing or guarantees for large projects in the future could have a material adverse effect on us.***

The projects in which we participate, particularly in our pressure pipe business, can be capital-intensive and often require substantial liquidity levels. In line with industry practice, we receive prepayments from our customers as well as milestone payments. However, a change in prepayment patterns or our inability to obtain third-party guarantees in respect of such prepayments could force us to seek alternative financing sources, such as bank debt or in the capital markets, which we may not be able to do on terms acceptable to us or at all, any of which could have a material adverse effect on our business, financial condition and results of operations.

As is customary in some of our markets, we provide our customers with performance guarantees and other guarantee instruments, such as surety bonds, that guarantee the timely completion of a project pursuant to defined contractual specifications. We also enter into contractual obligations to pay liquidated damages to our customers for project delays. We are required to make payments under these contracts, guarantees and instruments if we fail to meet any of the specifications. Some customers require the performance guarantees to be issued by a reputable and credit worthy financial institution in the form of a letter of credit, surety bond or other financial guarantee. Financial institutions consider our credit ratings and financial position in the guarantee approval process. Our credit ratings and financial position could make the process of obtaining guarantees from financial institutions more difficult and expensive. If we cannot obtain such guarantees from reputable and credit-worthy financial institutions on reasonable terms or at all, we could face higher financing costs or even be prevented from bidding on or obtaining new projects, and any of these or other related obstacles could have a material adverse effect on our business, financial condition and results of operations.

***Our business and financial performance could be adversely impacted based on disruptions, delays, outages of our information technology systems and computer networks.***

Our manufacturing facilities as well as our sales and service activities depend on the efficient and uninterrupted operation of complex and sophisticated information technology systems and computer networks, which are subject to failure and disruption. These and other problems may be caused by system updates, natural disasters, malicious attacks, human error, accidents, power disruptions, telecommunications failures, acts of terrorism or war, computer viruses, physical or electronic break-ins or other similar events. Additionally, because we have grown through various acquisitions, we have integrated and are integrating a number of disparate information technology systems across our organization, certain of which may be outdated and due for replacement, further increasing the likelihood of problems. We may in the future replace and integrate systems or implement new technology systems, but these updates may not be successful, they may create new issues we currently do not face, or significantly exceed our cost estimates.

We outsource certain portions of the operations of our information technology systems to a third party. Any failure of us or of our third party provider to effectively operate such systems could cause a disruption in our information technology systems. Any disruption in our information technology systems could interrupt or damage our operations and our ability to meet customer needs as well as our ability to maintain effective controls. These events could damage our reputation and cause us to incur unanticipated liabilities, including financial losses from remedial actions, business interruptions, loss of business and other unanticipated costs which may not be covered by insurance. Despite the defensive measures we have taken to protect our data and information technology, our systems could be vulnerable to disruption and any such disruption and the resulting fallout could have a material adverse effect on our business, financial condition and results of operations.

***Cybersecurity attacks may threaten our confidential information, disrupt operations and result in harm to our reputation and adversely impact our business and financial performance.***

Cybersecurity attacks across industries, including ours, are increasing in sophistication and frequency and may range from uncoordinated individual attempts to measures targeted specifically at us. These attacks include but are not limited to, malicious software or viruses, attempts to gain unauthorized access to, or otherwise disrupt, our information systems, attempts to gain unauthorized access to business, proprietary or other confidential information, and other electronic security breaches that could lead to disruptions in critical systems, unauthorized

release of confidential or otherwise protected information and corruption of data. Cybersecurity failures may be caused by employee error, malfeasance, system errors or vulnerabilities, including vulnerabilities of our vendors, suppliers, and their products. We have been subject to cybersecurity attacks in the past, including breaches of our IT systems that exposed certain confidential business information as well as ransomware attacks on non-critical business systems. Based on information known to date, past attacks have not had a material impact on our business, financial condition or results of operations. We may experience these and different types of attacks in the future, potentially with more frequency or sophistication.

Failures of our IT systems as a result of cybersecurity attacks or other disruptions could result in a breach of critical operational or financial controls and lead to a disruption of our operations, commercial activities or financial processes. Cybersecurity attacks or other disruptions impacting significant customers and/or suppliers could also lead to a disruption of our operations or commercial activities. Despite our attempts to safeguard our systems and mitigate potential risks, there is no assurance that such actions will be sufficient to prevent cyberattacks or security breaches that manipulate or improperly use our systems or networks, compromise confidential or otherwise protected information, destroy or corrupt data, or otherwise disrupt our operations. The occurrence of such events could have a material adverse effect on our business, financial condition and results of operations.

***Sharing our brand name and logo could have a material adverse effect on us.***

We share the “Forterra” brand with the operator of HeidelbergCement's former building products business in the United Kingdom, or Forterra UK, a public company listed on the London FTSE. Forterra UK is no longer affiliated with us and, to our knowledge, operates solely in the United Kingdom. We have no control over Forterra UK's use of the “Forterra” name and logo in Europe. Any actions or negative publicity related to Forterra UK and its products could have a material adverse effect on our business, financial condition and results of operations.

***Any inability to protect our intellectual property or claims that we infringe on the intellectual property rights of others could have a material adverse effect on us.***

We rely on a combination of patents, trademarks, trade names, confidentiality and nondisclosure clauses and agreements, and other unregistered rights to define and protect our rights to our brand and the intellectual property used in certain of our products, including the innovative technologies relating to storm water management acquired in the Bio Clean Acquisition. We also rely on product, industry, manufacturing and market “know-how” that cannot be registered and may not be subject to any confidentiality or nondisclosure clauses or agreements. However, we cannot guarantee that any of our registered or unregistered intellectual property rights or our know-how, or claims thereto, will now or in the future successfully protect our intellectual property, or that our rights will not be circumvented or successfully opposed or otherwise challenged. We also cannot guarantee that applications filed will be approved. To the extent that our intellectual property rights are not sufficient, third parties, including competitors, may be able to commercialize our innovations or products or use our know-how. Additionally, we have faced in the past and may in the future face claims that we are infringing the intellectual property rights of others, including with respect to both existing and new technologies we use. If any of our products are found to infringe the patents or other intellectual property rights of others, our manufacture and sale of such products could be significantly restricted or prohibited and we may be required to pay substantial damages or on-going licensing fees. Any inability to protect our intellectual property rights or any misappropriation of the intellectual property of others could have a material adverse effect on our business, financial condition and results of operations.

***Our foreign operations could have a material adverse effect on us.***

We operate production facilities in Canada and Mexico and we are therefore subject to a number of risks specific to these countries. These risks include social, political and economic instability, unexpected changes in regulatory requirements, tariffs and other trade barriers, currency exchange fluctuations, acts of war or terrorism and import/export requirements. In addition, we have a limited number of sales to other foreign jurisdictions, primarily concentrated in the Dominican Republic and Bolivia. Our consolidated financial statements are reported in U.S. dollars with international transactions being translated into U.S. dollars. If the U.S. dollar strengthens in relation to the Canadian dollar, our U.S. dollar reported net sales and income will decrease. Additionally, since we incur costs in foreign currencies, fluctuation in those currencies' value can negatively impact manufacturing and selling costs. See Item 7A, "Quantitative and Qualitative Disclosures about Market Risk." There can be no assurances that any of these factors will not materially impact our production cost or otherwise have a material adverse effect on our business, financial condition and results of operations.

***Changes in tax laws could adversely affect us.***

We regularly assess our future ability to utilize tax benefits, including those in the form of net operating loss, tax credit and other tax carryforwards, that are recorded as deferred income tax assets on our balance sheets to determine whether a valuation allowance is necessary. A reduction in, or disallowance of, these tax benefits resulting from a legislative change or adverse determination by a taxing jurisdiction could have an adverse impact on our financial results and liquidity.

Changes in corporate tax rates, the realizability of the net deferred tax assets relating to our U.S. operations, the taxation of foreign earnings and the deductibility of expenses contained in the Tax Cuts and Jobs Act of 2017, or the TCJA, or other tax reform legislation could have a material impact on the value of our deferred tax assets, could result in significant one-time charges and could increase our future U.S. tax expense. See Note 20 to our consolidated financial statements.

Significant judgment is required in determining our domestic and international provision for income taxes, deferred tax assets or liabilities and in evaluating our tax positions on a worldwide basis. While we believe our tax positions are consistent with the tax laws in the jurisdictions in which we conduct our business, it is possible these positions may be contested or overturned by jurisdictional tax authorities, which may have a significant impact on our tax provision for income taxes. Tax laws are dynamic and subject to change as new laws are passed and new interpretations of the laws are issued or applied.

***Insufficient insurance coverage could have a material adverse effect on us.***

We maintain property, business interruption, counterparty and liability insurance coverage that we believe is consistent with industry practice. However, our insurance program does not cover, or may not adequately cover, every potential risk associated with our business and the consequences thereof. In addition, market conditions or any significant claim or a number of claims made by or against us could cause our premiums and deductibles to increase substantially and, in some instances, our coverage may be reduced or become entirely unavailable. In the future, we may not be able to obtain meaningful coverage at reasonable rates for a variety of risks, including certain types of environmental hazards and ongoing regulatory compliance. In addition, we self-insure a portion of our exposure to certain matters, including employee health care claims of up to \$500,000 per covered individual per year and wage-payment obligations for short-term disability. If our insurance coverage is insufficient, if we are not able to obtain sufficient coverage in the future, or if we are exposed to significant losses as a result of the risks for which we self-insure, any resulting costs or liabilities could have a material adverse effect on our business, financial condition and results of operations.

## Risks Relating to our Indebtedness

### ***The terms of our debt could have a material adverse effect on us.***

We have substantial debt and may incur additional debt. As of December 31, 2019, we had approximately \$1,123.4 million of total debt. Our credit facility contains a number of significant restrictions and covenants that generally restrict our business and limit our ability to, among other things:

- dispose of certain assets;
- incur or guarantee additional indebtedness;
- enter into new lines of business;
- make investments, intercompany loans or certain payments in respect of indebtedness;
- incur or maintain certain liens;
- enter into transactions with affiliates;
- engage in certain sale and leaseback transactions;
- declare or pay dividends and make other restricted payments, including the repurchase or redemption of our stock; and
- engage in mergers, consolidations, liquidations and certain asset sales.

The credit facility also requires us to maintain certain financial ratios. See Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" for more information regarding the terms of our credit facility. We are also party to a U.S. and a Canadian master lease under which we pay an aggregate of \$17.1 million and \$1.2 million (CAD) per annum, respectively, to lease certain properties through June 30, 2043. Each of these master lease agreements contain certain restrictions and covenants that limit, among other things, our use of and ability to sublease or discontinue use of the leased properties, our ability to consider strategic divestitures of properties that are leased and our ability to consolidate operations as may be appropriate in order to minimize operating costs. See Note 15 in our consolidated financial statements.

These and other similar provisions in these and other documents could have adverse consequences on our business and to our investors because they limit our ability to take these actions even if we believe that it would contribute to our future growth or improve our operating results. For example, these restrictions could limit our flexibility in planning for or reacting to changes in our business and our industry, thereby inhibiting our ability to react to markets and potentially making us more vulnerable to downturns. These restrictions could also require that, based on our level of indebtedness, a significant portion of our cash flow from operations be used to make interest payments, thereby reducing the cash flow available for working capital, to fund capital expenditures or other corporate purposes and to generally grow our business. Furthermore, these restrictions could prevent us from pursuing a strategic transaction that we believe would benefit our company.

Our ability to comply with these provisions may be affected by events beyond our control. A breach of any of these provisions or any inability to comply with mandated financial ratios could result in a default, in which case the counterparties may have the right to declare all borrowings or other amounts due thereunder to be immediately due and payable. If we are unable to pay any amounts when due, whether periodic payments, at maturity or if declared due and payable following a default, the counterparties would have the right to proceed against the pledged collateral securing the indebtedness. Therefore, the restrictions under these agreements and any breach of the covenants or failure to otherwise comply with the terms thereof could have a material adverse effect on our business, financial condition and results of operations.

***Our current indebtedness and any future indebtedness we may incur could have a material adverse effect on us.***

We expect that we will depend primarily on cash generated by our operations to pay our expenses and any amounts due under our credit facility and any other indebtedness we may incur. However, our business may not generate sufficient cash flows from operations in the future and any anticipated growth in revenues and cash flows may not be realized, either or both of which could result in us being unable to repay indebtedness or our inability to fund other liquidity or strategic needs. Our ability to make these payments depends on our future performance, which will be affected by financial, business, economic and other factors, many of which are beyond our control. If we do not have sufficient liquidity, we may be required to refinance all or part of our then existing debt, sell assets or borrow more money.

If we incur additional indebtedness, the risks related to our indebtedness that we currently face could intensify. In addition to the risk of higher interest rates and fees, the non-economic terms of any additional indebtedness may contain covenants and other terms restricting our financial, operating and strategic flexibility to an equal or greater extent as those imposed by our credit facility and the master leases. Additional indebtedness may also include cross-default provisions such that, if we breach a restrictive covenant with respect to any of our indebtedness, or an event of default occurs, lenders may be entitled to accelerate all amounts owing under other outstanding indebtedness.

If we are required to refinance our indebtedness or otherwise incur additional indebtedness to fund strategic transactions or otherwise, any additional financing may not be available on terms favorable to us or at all. If, at such time, market conditions are materially different or our credit profile has deteriorated, the cost of refinancing our debt may be significantly higher than our indebtedness existing at that time, or we may not be able to refinance our debt at all. Any failure to meet any future debt service obligations or any inability to obtain any additional financing on terms acceptable to us or to comply therewith could have a material adverse effect on our business, financial condition and results of operations.

***The phase-out of LIBOR could increase our interest expense and have a material adverse effect on us.***

LIBOR is the basic rate of interest used in lending between banks on the London interbank market. Borrowings under our senior term loan and revolver use the London Interbank Offering Rate, or LIBOR, as a benchmark for establishing the applicable interest rate. The Financial Conduct Authority of the United Kingdom has announced that it plans to phase out LIBOR by the end of 2021. It is unclear if LIBOR will cease to exist at that time or if new methods of calculating LIBOR will be established such that it continues to exist after 2021. The U.S. Federal Reserve, in conjunction with the Alternative Reference Rates Committee, a steering committee comprised of large U.S. financial institutions, is considering replacing U.S. dollar LIBOR with a new index, the Secured Overnight Financing Rate, or SOFR, calculated using short-term repurchase agreements backed by Treasury securities. Whether or not SOFR, or another alternative reference rate, attains market traction as a LIBOR replacement tool remains in question. Although our borrowing arrangements provide for alternative base rates, those alternative base rates historically would often have led to increased interest rates, in some cases significantly higher, than those we paid based on LIBOR, and may similarly be higher in the future. Therefore, if LIBOR ceases to exist, we will likely need to agree upon a replacement index with our lenders, which would require an amendment to our borrowing arrangements, and the interest rate thereunder will likely change.

The consequences of the phase out of LIBOR cannot be entirely predicted at this time. For example, we may not be successful in amending our borrowing arrangements to provide for a replacement rate. If any new or alternative base rate for calculating interest with respect to our outstanding indebtedness may not be as favorable or perform in the same manner as LIBOR and could lead to an increase in our interest expense or could impact our ability to refinance some or all of our existing indebtedness. In addition, the transition process may involve, among other things, increased volatility or illiquidity in financial markets, which could also have an adverse effect on us whether or not any replacement rate applicable to our borrowings is affected. Any such effects of the transition away from LIBOR, as well as other unforeseen impacts, may result in increased interest expense and

other expenses, difficulties, complications or delays in connection with future financing efforts or otherwise have a material adverse impact on our business, financial condition, and results of operations.

### **Risks Related to Ownership of Our Common Stock**

***The trading price of our common stock has been and may in the future be volatile and could decline substantially.***

The market price of our common stock may be highly volatile and subject to wide fluctuations. Some of the factors that could negatively affect the market price of our common stock or result in significant fluctuations in price, regardless of our actual operating performance, include:

- actual or anticipated variations in our quarterly operating results;
- changes in market valuations of similar companies;
- changes in the markets in which we operate;
- additions or departures of key personnel;
- actions by stockholders, including the sale by Lone Star of any of its shares of our common stock;
- speculation in the press or investment community;
- general market, economic and political conditions, including an economic slowdown;
- uncertainty regarding economic events, including in Europe in connection with the United Kingdom's departure from the European Union;
- changes in interest rates;
- our operating performance and the performance of other similar companies;
- our ability to accurately project future results and our ability to achieve those and other industry and analyst forecasts; and
- new legislation or other regulatory developments that adversely affect us, our markets or our industry.

Furthermore, at times, the stock market has experienced significant price and volume fluctuations. This volatility has had a significant impact on the market price of securities issued by many companies, including companies in our industry, and often occurs without regard to the operating performance of the affected companies. Therefore, factors that have little or nothing to do with us could cause the price of our common stock to fluctuate, and these fluctuations or any fluctuations related to our company could cause the market price of our common stock to decline materially.

***The coverage of our business or our common stock by securities or industry analysts or the absence thereof could adversely affect our stock price and trading volume.***

The trading market for our common stock is influenced in part by the research and other reports that industry or securities analysts may publish about us or our business. We currently have, but may not be able to continue, research coverage by industry or financial analysts. If analysts do not continue coverage of us, the trading price and volume of our stock would likely be negatively impacted. Even if analyst coverage continues, if we fail to meet analyst expectations or one or more of the analysts who cover us downgrade our stock, or if analysts issue other unfavorable commentary or inaccurate research, our stock price would likely decline. If one or more of these analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

***Lone Star may have conflicts of interest with other stockholders and may limit your ability to influence corporate matters.***

Lone Star beneficially owns approximately 69.7% of our outstanding common stock. As a result of this concentration of stock ownership, Lone Star acting on its own has sufficient voting power to effectively control all matters submitted to our stockholders for approval, including director elections and proposed amendments to our

bylaws or certificate of incorporation. Five of the nine members of our board of directors are employees or affiliates of Lone Star.

In addition, this concentration of ownership may delay or prevent a merger, consolidation or other business combination or change in control of our company and make some transactions that might otherwise give investors the opportunity to realize a premium over the then-prevailing market price of our common stock more difficult or impossible without the support of Lone Star. Because we have opted out of Section 203 of the Delaware General Corporation Law, or the DGCL, regulating certain business combinations with interested stockholders, Lone Star may transfer control of us to a third party by transferring its common stock without the approval of our board of directors or other stockholders, which may limit the price that investors are willing to pay in the future for shares of our common stock. The interests of Lone Star may not always coincide with our interests as a company or the interests of other stockholders. Accordingly, Lone Star could cause us to enter into transactions or agreements of which investors would not approve or make decisions with which investors would disagree. This concentration of ownership may also adversely affect our share price.

Lone Star is in the business of making investments in companies and may from time to time acquire and hold interests in businesses that compete directly or indirectly with us, although it does not currently hold any such interests. Lone Star may also pursue acquisition opportunities that may be complementary to our business, and as a result, those acquisition opportunities may not be available to us. In recognition that principals, members, directors, managers, partners, stockholders, officers, employees and other representatives of Lone Star and its affiliates and investment funds may serve as our directors or officers, our amended and restated certificate of incorporation provides, among other things, that none of Lone Star or any principal, member, director, manager, partner, stockholder, officer, employee or other representative of Lone Star has any duty to refrain from engaging directly or indirectly in the same or similar business activities or lines of business that we do. In the event that any of these persons or entities acquires knowledge of a potential transaction or matter which may be a corporate opportunity for itself and us, we will not have any expectancy in such corporate opportunity, and these persons and entities will not have any duty to communicate or offer such corporate opportunity to us and may pursue or acquire such corporate opportunity for themselves or direct such opportunity to another person. These potential conflicts of interest could have a material adverse effect on our business, financial condition and results of operations if, among other things, attractive corporate opportunities are allocated by Lone Star to themselves or their other affiliates.

Lone Star may also have conflicts of interest with the Company and other stockholders as a result of its status as a party to the tax receivable agreement. For example, the tax receivable agreement entered into with Lone Star at the time of our initial public offering gives us the right to terminate the tax receivable agreement with approval of a majority of our independent directors and with Lone Star's consent by making a payment equal to the present value of future payments under the tax receivable agreement (based on certain assumptions and deemed events in the agreement, including those relating to our and our subsidiaries' future taxable income). Lone Star may determine to withhold its consent to terminate the tax receivable agreement at a time when such a termination would be favorable to us and the other stockholders. Furthermore, the tax receivable agreement prohibits us from settling any tax audit without Lone Star's consent (not to be unreasonably withheld, conditioned or delayed) if the outcome of the audit is reasonably expected to affect Lone Star's rights under the tax receivable agreement. Therefore, Lone Star may determine to withhold consent to a settlement that reduces the payments Lone Star will receive under the tax receivable agreement, even though the settlement might be favorable to us and our stockholders.

***We will be required to pay Lone Star for certain tax benefits, and these amounts are expected to be material.***

We entered into a tax receivable agreement with Lone Star that provides for the payment by us to Lone Star of 85% of the amount of cash savings, if any, in U.S. federal, state, local and non-U.S. income tax that we and our subsidiaries realize (or in some circumstances are deemed to realize) as a result of the utilization of certain tax benefits, together with interest accrued at a rate of LIBOR plus 100 basis points from the date the applicable tax return is due (without extension) until paid. These tax benefits, which we collectively refer to as the Covered Tax Benefits, include: (i) all depreciation and amortization deductions, and any offset to taxable income and gain or



increase to taxable loss, resulting from the tax basis that we have in our assets as of the time of the consummation of our initial public offering, (ii) the utilization of our and our subsidiaries' net operating losses and tax credits, if any, attributable to periods prior to our initial public offering, (iii) deductions in respect of payments made, funded or reimbursed by an initial party to the tax receivable agreement (other than us or one of our subsidiaries) or an affiliate thereof to participants under the LSF9 Concrete Holdings Ltd Long Term Incentive Plan, or the LTIP, (iv) deductions in respect of transaction expenses attributable to the acquisition of U.S. Pipe and (v) certain other tax benefits attributable to payments made under the tax receivable agreement. The tax receivable agreement will remain in effect until all Covered Tax Benefits have been used or expired, unless the agreement is terminated early, as described below.

We expect that the payments we make under the tax receivable agreement could be substantial. For the years ended December 31, 2019 and December 31, 2018, we paid \$11.4 million and \$30.4 million, respectively, on our tax receivable agreement to Lone Star. Assuming no material changes in the relevant tax law, and that we and our subsidiaries earn sufficient income to realize the full tax benefits subject to the tax receivable agreement, we currently estimate that future payments under the agreement will aggregate to approximately \$77.4 million. This amount excludes any payments that may be made to Lone Star under the tax receivable agreement as a result of tax benefits recognized in connection with payments under the LTIP and, thus, the actual payments we ultimately are required to make under the tax receivable agreement could be greater, potentially materially greater, than these amounts. These payment obligations are our obligations and are not obligations of any of our subsidiaries. Furthermore, these payment obligations are not conditioned upon Lone Star maintaining a continued direct or indirect ownership interest in us. The actual utilization of Covered Tax Benefits as well as the timing of any payments under the tax receivable agreement will vary depending upon a number of factors, including the amount, character and timing of our and our subsidiaries' taxable income in the future.

***We will not be reimbursed for any payments made to Lone Star under the tax receivable agreement in the event that the tax benefits are disallowed.***

Lone Star will not reimburse us for any payments previously made under the tax receivable agreement if such benefits are subsequently disallowed upon a successful challenge by the Internal Revenue Service, although future payments under the agreement would be adjusted to the extent possible to reflect the result of such disallowance. As a result, in certain circumstances, payments could be made under the tax receivable agreement in excess of our cash tax savings if any, from the Covered Tax Benefits, and we may not be able to recoup those payments, which could adversely affect our liquidity.

***In certain cases, payments made by us under the tax receivable agreement may be accelerated and/or significantly exceed the actual benefits we realize in respect of the Covered Tax Benefits.***

The term of the tax receivable agreement will continue until all Covered Tax Benefits have been utilized or expired, unless we exercise our right to terminate the agreement with Lone Star's consent, we breach any of our material obligations under the agreement or certain credit events occur with respect to us, in any of which cases we will be required to make an accelerated payment to Lone Star equal to the present value of future payments under the tax receivable agreement. Such payment would be based on certain assumptions, including, among others, that we and our subsidiaries would generate sufficient taxable income and tax liability to fully utilize all Covered Tax Benefits. The tax receivable agreement also provides that upon certain mergers, asset sales, other forms of business combinations or other changes of control, our (or our successor's) payments under the tax receivable agreement for each taxable year after any such event would be based on certain valuation assumptions, including the assumption that we and our subsidiaries have sufficient taxable income to fully utilize the Covered Tax Benefits. Accordingly, payments under the tax receivable agreement may be made years in advance of the actual realization, if any, of the anticipated future tax benefits and may be significantly greater than the benefits we realize in respect of the Covered Tax Benefits.

Even if the payments under the tax receivable agreement are not accelerated as described above, such payments may be significantly greater than the benefits we realize in respect of the Covered Tax Benefits, due to the manner in which payments are calculated under the tax receivable agreement. For example, for purposes of calculating the payments to be made to Lone Star:

- it is assumed that we will pay effective state and local taxes at a rate of 5%, even though our actual effective state and local tax rate may be materially lower;
- tax benefits existing at the time of our initial public offering are deemed to be utilized before any post-closing/after-acquired tax benefits and, as a result, we could be required to make payments to Lone Star for a particular tax year even if our tax liability for such year would have been materially reduced or eliminated by reason of our utilization of the post-initial public offering/after-acquired tax benefits;
- a non-taxable transfer of assets by us to a non-consolidated entity is treated under the tax receivable agreement as a taxable sale at fair market value and, as a result, we could be required to make payments to Lone Star even though such non-taxable transfer would not generate any actual tax benefits to us or our non-consolidated entity; and
- a taxable sale or other taxable transfer of subsidiary stock by us (in cases where the subsidiary's tax basis in its assets exceeds our tax basis in the subsidiary's stock) is treated under the tax receivable agreement as a taxable sale of the subsidiary's assets and, as a result, we could be required to make payments to Lone Star that materially exceed the actual tax benefit we realize from such stock sale.

Because of the foregoing, our obligations under the tax receivable agreement could have a substantial negative impact on our liquidity and could have the effect of delaying, deferring or preventing certain mergers, asset sales, other forms of business combinations or other changes of control.

***Certain provisions of the tax receivable agreement limit our ability to incur additional indebtedness, which could adversely affect our business and growth strategy.***

For so long as the tax receivable agreement remains outstanding, without the prior written consent of Lone Star (not to be unreasonably withheld, conditioned or delayed), we will be prohibited from (a) entering into any agreement that would be materially more restrictive with respect to our ability to make payments under the tax receivable agreement than the terms of our credit agreement and (b) incurring any indebtedness for borrowed money if, immediately after giving effect to such incurrence and the application of proceeds therefrom, our consolidated net leverage ratio - the ratio of consolidated funded indebtedness for borrowed money less unrestricted cash to consolidated EBITDA - would exceed a certain specified ratio, in each case as calculated pursuant to the tax receivable agreement, unless the incurrence of such indebtedness is permitted by the terms of our credit agreement or any replacement credit agreements to the extent the terms thereof are no less restrictive in this regard than the applicable credit agreement it replaced. These restrictions on the incurrence of debt could adversely affect our business, including by preventing us from pursuing an acquisition or other strategic transaction that we believe is in the best interests of our company and our stockholders, thereby impeding our growth strategy. Lone Star has no fiduciary duties to us when deciding whether to enforce these covenants under the tax receivable agreement. Furthermore, the provision in the tax receivable agreement that requires that we make an accelerated payment to Lone Star equal to the present value of all future payments due under the tax receivable agreement if we breach any of our material obligations under the agreement or certain credit events occur with respect to us might make it harder for us to obtain financing from third party lenders on favorable terms.

***We would be required to make tax gross-up payments to Lone Star if we consummate a corporate inversion or similar transaction that causes payments under the tax receivable agreement to be subject to withholding taxes.***

If we were to consummate a change of control transaction that causes us (or our successor) to become a non-U.S. person (e.g., a corporate inversion transaction), and such transaction causes payments under the tax receivable agreement to become subject to withholding taxes, we would be required under the tax receivable agreement to make tax gross-up payments to Lone Star in respect of such withholding taxes in amounts that may exceed the tax savings realized by the Company from the Covered Tax Benefits. Any such tax gross-up payments could have a negative impact on our liquidity and our ability to finance our growth.

***We are a “controlled company” within the meaning of Nasdaq rules and, as a result, qualify for, and are relying on, exemptions from certain corporate governance requirements.***

Lone Star controls a majority of the voting power of our outstanding common stock. As a result, we are a “controlled company” within the meaning of the Nasdaq corporate governance standards. Under the relevant Nasdaq rules, a company of which more than 50% of the voting power is held by a person or group is a “controlled company” and need not comply with certain requirements, including the requirement that a majority of the board of directors consist of independent directors and the requirements that the compensation and nominating and corporate governance committees be composed entirely of independent directors. We are utilizing these exemptions and, for so long as Lone Star controls a majority of the voting power of our outstanding common stock, we intend to continue to utilize these exemptions. As a result, among other things, we do not have a majority of independent directors and our compensation and nominating and corporate governance committees do not consist entirely of independent directors. Accordingly, investors will not have the same protections afforded to stockholders of companies that are subject to all of the applicable Nasdaq corporate governance requirements.

***Future sales of our common stock in the public market could cause our stock price to fall.***

Lone Star beneficially owns approximately 69.7% of our outstanding shares of common stock. The shares held by Lone Star and all shares held by our affiliates are eligible for resale in the public market, subject to applicable securities laws, including the Securities Act of 1933, as amended, or the Securities Act. In December 2019 we registered the shares of common stock beneficially owned by Lone Star pursuant to the terms of a registration rights agreement and these shares are now generally freely tradeable in the public market, subject to applicable securities laws. Unless the shares owned by any of our other affiliates are registered under the Securities Act, these shares may only be resold into the public markets in accordance with the requirements of an exemption from registration or safe harbor, including Rule 144 and the volume limitations, manner of sale requirements and notice requirements thereof. Any sale by Lone Star or other affiliates or any perception in the public markets that such a transaction may occur could cause the market price of our common stock to decline materially.

***We have issued, and in the future we expect to issue, options, restricted stock and other forms of stock-based compensation, which have the potential to dilute stockholder value and cause the price of our common stock to decline.***

We have issued, and in the future expect to issue, stock-based awards, including stock options, restricted stock and other forms of stock-based compensation to our independent directors, officers and employees. If any options that we have issued or may issue are exercised, or any restricted stock or other awards that we have issued or may issue vests, and the shares of common stock are sold into the public market, the market price of our common stock may decline. In addition, the availability of shares of common stock for award under our equity incentive plan, or the grant of stock options, restricted stock or other forms of stock-based compensation, may adversely affect the market price of our common stock.

***We have no present intention to pay dividends on our common stock.***

We have no present intention to pay dividends on our common stock. Any determination to pay dividends to holders of our common stock will be at the discretion of our board of directors and will depend upon many factors, including our financial condition, results of operations, projections, liquidity, earnings, legal requirements, restrictions in our credit facility and agreements governing any other indebtedness we may enter into and other factors that our board of directors deems relevant. Accordingly, holders of our common stock may need to sell their shares to realize a return on their investment and may not be able to sell their shares at or above the price they paid.

***Our ability to raise capital in the future may be limited.***

Our business and operations may consume resources faster than we anticipate. In the future, we may need to raise additional funds through the issuance of new equity securities, debt or a combination of both. However, any sale or perception of a possible sale by Lone Star, and any related decline in the market price of our common stock, could impair our ability to raise capital. Separately, additional financing may not be available on favorable terms, or at all. If adequate funds are not available on acceptable terms, we may be unable to fund our capital requirements. If we issue new debt securities, the debt holders would have rights senior to common stockholders to make claims on our assets, and the terms of any debt could restrict our operations, including our ability to pay dividends on our common stock. If we issue additional equity securities, existing stockholders will experience dilution, and the new equity securities could have rights senior to those of our common stock. Because our decision to issue securities in any future offering will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or nature of our future offerings. Thus, our stockholders bear the risk of our future securities offerings reducing the market price of our common stock and diluting their interest.

***We are a holding company and depend on the cash flow of our subsidiaries.***

We are a holding company with no material assets other than the equity interests of our subsidiaries. Our subsidiaries conduct substantially all of our operations and own substantially all of our assets and intellectual property. Consequently, our cash flow and our ability to meet our obligations and pay any future dividends to our stockholders depends upon the cash flow of our subsidiaries and their ability to make payments, directly or indirectly, to us in the form of dividends, distributions and other payments. Any inability on the part of our subsidiaries to make payments to us could have a material adverse effect on our business, financial condition and results of operations.

***Provisions of our amended and restated governing documents, Delaware law and other documents could discourage, delay or prevent a merger or acquisition at a premium price.***

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws may have the effect of delaying or preventing a change of control or changes in our management. For example, our amended and restated certificate of incorporation and amended and restated bylaws include provisions that:

- permit us to issue, without stockholder approval, preferred stock in one or more series and, with respect to each series, fix the number of shares constituting the series and the designation of the series, the voting powers, if any, of the shares of the series and the preferences and other special rights, if any, and any qualifications, limitations or restrictions, of the shares of the series;
- prevent stockholders from calling special meetings;
- restrict the ability of stockholders to act by written consent after such time as Lone Star owns less than a majority of our common stock;
- limit the ability of stockholders to amend our certificate of incorporation and bylaws;
- require advance notice for nominations for election to the board of directors and for stockholder proposals;
- do not permit cumulative voting in the election of our directors, which means that the holders of a majority of our common stock may elect all of the directors standing for election; and

- establish a classified board of directors with staggered three-year terms (which will be phased out over the next 3 annual meetings of stockholders).

These provisions may discourage, delay or prevent a merger or acquisition of our company, including a transaction in which the acquirer may offer a premium price for our common stock.

***Our amended and restated certificate of incorporation includes an exclusive forum clause, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us.***

Our amended and restated certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the sole and exclusive forum for any stockholder (including any beneficial owner) to bring (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, or employees to us or to our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the DGCL, or our certificate of incorporation or bylaws, or (iv) any action asserting a claim governed by the internal affairs doctrine, will be a state court located within the State of Delaware (or, if no state court located within the State of Delaware has jurisdiction, the federal district court for the District of Delaware); in all cases subject to such court having personal jurisdiction over the indispensable parties named as defendants. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock is deemed to have notice of and consented to the foregoing provisions. The exclusive forum clause may limit our stockholders' ability to obtain a favorable judicial forum for disputes with us. It is also possible that, notwithstanding such exclusive forum clause, a court could rule that such a provision is inapplicable or unenforceable.

***Our internal control over financial reporting may not be effective, and our independent registered public accounting firm may not be able to certify as to their effectiveness, which could have a material adverse effect on our business and reputation.***

As a public company, we are required to comply with the SEC's rules implementing Sections 302 and 404 of the Sarbanes-Oxley Act, which require management to certify financial and other information in our quarterly and annual reports and provide an annual management report on the effectiveness of our control over financial reporting. Our independent registered public accounting firm is also required to formally attest to the effectiveness of our internal control over financial reporting pursuant to Section 404.

Although we currently do not have any material weaknesses in our internal control over financial reporting, we have historically experienced such material weaknesses. To remediate our prior material weaknesses, we have needed to undertake various actions, such as implementing additional internal controls and procedures and hiring additional accounting or internal audit staff, and we may need to do so in the future to maintain the effectiveness of our internal control over financial reporting and other controls. Testing and maintaining internal control can divert our management's attention from other matters that are important to the operation of our business. If we identify material weaknesses in our internal control over financial reporting or are unable to comply with the requirements of Section 404 of the Sarbanes-Oxley Act or assert that our internal control over financial reporting is effective, or if our independent registered public accounting firm is unable to express an opinion as to the effectiveness of our internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports and the market price of our common stock could be negatively affected, and we could become subject to investigations by the SEC or other regulatory authorities, which could require additional financial and management resources.

#### **Item 1B. Unresolved Staff Comments**

None.

#### **Item 2. Properties**

We operate a broad network of 77 active manufacturing facilities in the United States, including 10 fabrication plants. We also have five manufacturing facilities in Canada and one in Mexico. Our headquarters is located in Irving, Texas.

The following tables set forth certain information regarding our active manufacturing facilities:

Facility Name	City	State/Province	Ownership
<b><i>Drainage Pipe &amp; Products (59 plants)</i></b>			
Caldwell	Caldwell	Idaho	Owned
Salt Lake City	Salt Lake City	Utah	Owned
Pelham	Pelham	Alabama	Owned
El Mirage	El Mirage	Arizona	Leased
West Memphis	West Memphis	Arkansas	Leased
Florin Road (2 plants)	Sacramento	California	Leased
Deland Precast	Deland	Florida	Leased
Gretna	Gretna	Florida	Leased
Marianna	Marianna	Florida	Leased
Winter Haven Pipe	Winter Haven	Florida	Leased
St. Martinville	St. Martinville	Louisiana	Leased
Como	Como	Mississippi	Owned
Prentiss (2 plants)	Prentiss	Mississippi	Owned
Columbus	Columbus	Ohio	Leased
Macedonia	Macedonia	Ohio	Owned
Austin Pipe	Austin	Texas	Leased
Cedar Hill Pipe	Cedar Hill	Texas	Leased
Grand Prairie (2 plants)	Grand Prairie	Texas	Leased
Jersey Village (3 plants)	Houston	Texas	Leased
Waco	Hewitt	Texas	Leased
New Caney	New Caney	Texas	Owned
Ottawa	Gloucester	Ontario	Leased
Cambridge	Cambridge	Ontario	Leased
Lexington	Lexington	Kentucky	Leased
Elizabethtown	Elizabethtown	Kentucky	Leased
Louisville	Louisville	Kentucky	Leased
Billings	Billings	Montana	Leased
Bonner Springs	Bonner Springs	Kansas	Leased
Cedar Rapids	Cedar Rapids	Iowa	Owned
Des Moines	Des Moines	Iowa	Leased
Elk River (3 plants)	Elk River	Minnesota	Leased
Hawley	Hawley	Minnesota	Leased
Helena	Helena	Montana	Leased
Humboldt	Humboldt	Iowa	Owned
Iowa Falls	Iowa Falls	Iowa	Leased
Lawrence	Lawrence	Kansas	Owned
Marshalltown	Marshalltown	Iowa	Leased

<b>Facility Name</b>	<b>City</b>	<b>State/Province</b>	<b>Ownership</b>
West Des Moines	West Des Moines	Iowa	Leased
Menoken	Menoken	North Dakota	Leased
Mitchell	Mitchell	South Dakota	Owned
Plattsmouth	Plattsmouth	Nebraska	Leased
Rapid City	Rapid City	South Dakota	Leased
Henderson (2 plants)	Henderson	Colorado	Leased
Grand Junction	Grand Junction	Colorado	Leased
Lubbock	Lubbock	Texas	Owned
Mineral Wells	Mineral Wells	Texas	Owned
San Antonio	San Antonio	Texas	Owned
Stacy	Stacy	Minnesota	Owned
Green Cove Springs	Green Cove Springs	Florida	Owned
Riverside	Menifee	California	Leased
Oceanside	Oceanside	California	Leased

***Water Pipe & Products (18 plants)***

St. Eustache Pressure Pipe	St. Eustache	Quebec	Owned
Stouffville	Stouffville	Ontario	Owned
Uxbridge	Uxbridge	Ontario	Owned
Bessemer (2 plants)	Bessemer	Alabama	Leased
Mini Mill	Bessemer	Alabama	Leased
Union City	Union City	California	Owned
Lynchburg	Lynchburg	Virginia	Owned
Monterrey, Mexico	Monterrey	Mexico	Owned
Rogers	Rogers	Minnesota	Leased
Ottawa	Ottawa	Kansas	Leased
Marysville	Marysville	California	Leased
Warren	Warren	Oregon	Leased
Ephrata	Ephrata	Pennsylvania	Leased
Phoenix	Phoenix	Arizona	Leased
Orlando	Orlando	Florida	Leased
Gainesville	Gainesville	Georgia	Leased
San Antonio	San Antonio	Texas	Leased

**Item 3. Legal Proceedings**

We have been from time to time, and may in the future become, party to litigation or other legal proceedings that we consider to be part of the ordinary course of our business. We are not currently involved in any legal proceedings that we believe could reasonably be expected to have a material adverse effect on our business, financial condition or results of operations. We may become involved in material legal proceedings in the future. See Note 16 to the consolidated financial statements, and the discussion therein under the headings “Earnout Dispute” and “Securities Action and Derivative Actions” is incorporated herein by reference.

## ***Earnout Dispute***

The Acquisition purchase agreement included an earnout, which provided for the payment of contingent consideration of up to \$100.0 million if and to the extent the 2015 financial results of the businesses acquired by Lone Star in the Acquisition, including the Company and HC's former building products business in the United Kingdom, exceeded a specified Adjusted EBITDA target for fiscal year 2015, as calculated pursuant to the terms of the purchase agreement. If such Adjusted EBITDA calculation exceeded the specified target, we would be required to pay the U.S. affiliate of HC an amount equal to a multiple of such excess Adjusted EBITDA, with any payment capped at \$100.0 million. In April 2016, the Company provided an earnout statement to affiliates of HC demonstrating that no payment was required. On June 13, 2016, HC provided notification that it disputed, among other things, the Company's calculation of Adjusted EBITDA under the purchase agreement and asserting that a payment should be made in the amount of \$100.0 million. The Company does not believe HC's position has merit and is vigorously opposing HC's assertions. On October 5, 2016, affiliates of HC filed a lawsuit in the Delaware Court of Chancery seeking specific performance and claiming access to the Company's books, records, and personnel; seeking a declaratory judgment concerning the scope of the neutral accounting expert's authority; and in the alternative, claiming a breach of contract and seeking the \$100.0 million and other damages (the "Delaware Action"). On December 8, 2017, the court granted the defendants' Motion to Dismiss the First Amended Complaint in the Delaware Action, finding that the earnout dispute should be heard before a neutral accounting arbitrator as set forth in the purchase agreement and that any claims that required to be brought as indemnification claims under the purchase agreement were time-barred by the contractual limitations period. Following the dismissal of the Delaware Action, the Company and HC jointly engaged a neutral accounting expert to act as an arbitrator in the dispute as required by the purchase agreement. After briefing certain preliminary matters for the arbitrator and the production of additional documents, the parties began briefing the issues on the merits for the neutral accounting arbitrator, which briefing is scheduled to be completed in the first quarter of 2020. A final hearing on the dispute is scheduled to be held on June 23 and 24, 2020, with a written decision from the neutral accounting arbitrator expected within 60 days thereafter.

As a result of an internal reorganization effected before our initial public offering in 2016, we are the liable party with respect to the earnout. We did not accrue any contingency reserve as of December 31, 2019 in respect of the earnout proceeding. See Note 16 to our consolidated financial statements. While we are vigorously opposing HC's assertions in the earnout proceeding, the outcome of this matter is uncertain, and no assurances can be given regarding the ultimate outcome.

## ***Securities Action and Derivative Actions***

Beginning on August 14, 2017, four plaintiffs filed putative class action complaints in the United States District Court for the Eastern District of New York against various defendants. On July 27, 2018, an order was entered consolidating the lawsuits into a single action, or the Securities Action, and transferring the venue of the case from the Eastern District of New York to the Northern District of Texas. Pursuant to an agreed scheduling order, plaintiffs in the Securities Action filed their Consolidated Amended Complaint on November 30, 2018.

The Securities Action is brought by two plaintiffs individually and on behalf of all persons that purchased or otherwise acquired our common stock issued pursuant to and/or traceable to the IPO and is brought against us, certain of its current and former officers and directors, Lone Star and certain of its affiliates, and certain banks that acted as underwriters of the IPO, or, collectively, the Securities Defendants. The Securities Action generally alleges that our registration statement on Form S-1 filed in connection with the IPO, or the Registration Statement, contained false or misleading statements and/or omissions of material facts. Specifically, plaintiffs allege the Registration Statement (1) made false and/or misleading statements about our ability to generate organic growth through cross-selling initiatives amongst our various businesses while failing to disclose that we had not adequately integrated acquisitions, had not begun rolling out our cross-selling initiative, and that our businesses were submitting competing bids against one another, and (2) made false or misleading statements regarding the existence of certain accounting practices and alleged material weaknesses in our internal controls over financial reporting, including the existence of and accounting for bill and hold transactions, the lack of sufficient accounting personnel, the lack of effective internal controls to ensure costs were properly and accurately accrued, resulting in misstated costs and profits in our 2016 financial statements, and the making of inventory accounting entries



without adequate substantiation or documentation. The Securities Action asserts claims under Section 11 and Section 15 of the Securities Act and seeks (1) class certification under the Federal Rules of Civil Procedure, (2) damages suffered by plaintiffs and other class members, (3) prejudgment and post-judgment interest, (4) reasonable counsel fees and expert fees, and other costs and expenses reasonably incurred, and (5) other relief the court deems appropriate.

On February 15, 2019, the Securities Defendants filed a Motion to Dismiss all claims in the case based on plaintiffs' failure to state a claim. Briefing on the motion to dismiss was completed on May 1, 2019, and the court has not yet ruled on the motion. A mediation of the Securities Action occurred in August 2019. On November 4, 2019, the parties to the Securities Action entered into a settlement agreement that is intended to fully and finally resolve all claims in the Securities Action. On January 4, 2020, the court issued an order granting preliminary approval for the settlement and providing for notice. Approval of the settlement in the Securities Action is set for final hearing on April 29, 2020, but approval cannot be guaranteed. The terms of the settlement are expected to be covered by existing insurance.

On July 31, 2018, a putative shareholder derivative complaint captioned *Maloney v. Bradley, et al.*, was filed in the United States District Court for the Northern District of Texas, alleging that certain of our current and former directors and officers had breached their fiduciary duties, committed constructive fraud, wasted corporate assets, and that certain of them had been unjustly enriched. On July 30, 2019, the court granted the defendants' motion to dismiss on the grounds that the case should have been brought in Delaware according to our Amended and Restated Certificate of Incorporation. On September 23, 2019, the same plaintiff filed a putative shareholder derivative complaint captioned *Maloney v. Bradley, et al.* in the United States District Court for the District of Delaware, naming as defendants certain of our current and former directors and officers. The complaint alleges the defendants violated Sections 14A and 20(A) of the Securities and Exchange Act of 1934, as amended, or the Exchange Act, breached their fiduciary duties, and wasted corporate assets, and also asserts unjust enrichment claims against certain defendants. The complaint seeks, on behalf of us, unspecified damages, an order directing the return of certain payments to the defendants and imposing a constructive trust thereon, certain injunctive relief, reasonable costs and attorneys' fees, and punitive damages.

On January 15, 2019, a putative shareholder derivative complaint captioned *Lee v. Bradley, et al.*, was filed in the United States District Court for the District of Delaware, naming as defendants certain of our current and former directors and officers. The complaint alleges the defendants violated Section 14A of the Exchange Act and related rules by failing to make certain disclosures in our proxy solicitation in advance of the 2017 Annual Meeting of Stockholders and breached their fiduciary duties, wasted corporate assets, and committed constructive fraud. The complaint also asserts unjust enrichment claims against certain defendants. The complaint seeks, on behalf of us, unspecified damages, an order directing the return of certain payments to the defendants, certain injunctive relief, and reasonable costs and attorneys' fees. On April 18, 2019, the court entered an agreed stipulation staying the case until the court in the Securities Action rules on the motion to dismiss in that case. On December 11, 2019, the court in the case entered a Stipulation and Order consolidating this case and the Maloney case into a single case, providing that the parties would have 60 days to attempt to resolve the action, and providing a schedule for filing of an amended complaint and motions to dismiss in the event attempts at resolution were not successful.

We and the other defendants are vigorously defending these actions. Given the stage of the proceedings, we cannot reasonably estimate at this time the possible loss or range of loss, if any, that may arise from the case. We did not accrue any contingency reserve as of December 31, 2019 in respect of the case. See Note 16 to our consolidated financial statements.

#### **North Birmingham EPA Matter**

U.S. Pipe received a General Notice Letter and Invitation to Conduct Removal Action dated September 20, 2013 from the EPA with respect to the 35th Avenue superfund site in Birmingham, Alabama. The letter requests that U.S. Pipe participate in an environmental response action in an area proximate to a closed U.S. Pipe facility in North Birmingham, Alabama. The U.S. Pipe North Birmingham facility was closed and, as part of the acquisition of

U.S. Pipe by a private equity fund from Mueller Water Products, Inc. and Mueller Group, LLC, or the Sellers, in 2012, the facility was retained by and is currently owned by either the Sellers or one of their affiliates. The notice requested response activities including testing and removing surface soils at area residences alleged to be contaminated by locally-sourced air pollutants. In connection with the disposition, the Sellers agreed to jointly and severally defend and indemnify U.S. Pipe against any losses or environmental liabilities related to sites retained by the Sellers, including the North Birmingham facility. Accordingly, U.S. Pipe tendered the defense of this matter to the Sellers for defense and indemnification. The Sellers accepted the tender and, on behalf of U.S. Pipe, have responded to the EPA's request to participate in a time-critical removal action by declining, based on the EPA's failure to establish any nexus between the contamination and any operations at the U.S. Pipe North Birmingham facility. The EPA sent a renewed request addressed to the Sellers, U.S. Pipe and a number of other potentially responsible parties on August 8, 2014 seeking participation in a broader cleanup of soil at approximately 80 homes in North Birmingham. The Sellers again responded on U.S. Pipe's behalf declining to participate on the same grounds. In September 2014, the EPA proposed that the site be listed on the National Priorities List. The Sellers continue to defend on this matter on behalf of U.S. Pipe. While we cannot provide assurance that such defense will be successful, because of the indemnification described above, we do not believe the ultimate resolution of these matters will have a material adverse effect on our business, financial condition or results of operations.

#### **Item 4. Mine Safety Disclosures**

Not applicable.

## **PART II**

#### **Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities**

##### **Common Stock**

Our common stock is traded on the Nasdaq under the ticker symbol "FRTA." As of February 26, 2020, there were 4 stockholders of record of our common stock. A substantially greater number of holders of Forterra's common stock are "street name" or beneficial holders, whose shares of record are held by banks, brokers, and other financial institutions.

##### **Dividend Policy**

We have not declared or paid any dividends since our formation and currently do not intend to pay dividends for the foreseeable future. Additional information concerning restrictions on our payment of cash dividends may be found in "Liquidity and Capital Resources" in Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations.

##### **Securities Authorized for Issuance Under Equity Compensation Plans**

See Item 12, Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters for information regarding common stock authorized for issuance under equity compensation plans.

#### **Item 6. Selected Financial Data**

References in this Item 6 refer to (i) for the Predecessor periods prior to the completion of the Acquisition, refer to the building products business of HeidelbergCement AG in the United States and Eastern Canada, (ii) for the Successor periods after completion of the Acquisition, but prior to the internal reorganization transaction discussed in Note 1 to the consolidated financial statements in which LSF9 Concrete Holdings Ltd transferred its building products business in the United States and Eastern Canada to Forterra, Inc., or the Reorganization, the building products business of LSF9 Concrete Holdings Ltd in the United States and Eastern Canada and (iii) for

the Successor periods after completion of the Reorganization, the operations of Forterra, Inc. in each case together with its consolidated subsidiaries.

The following tables set forth, for the periods and dates indicated, our selected historical financial data. The accompanying historical financial statements are presented for the "Predecessor," which are the financial statements of HeidelbergCement's building products business in the United States and Eastern Canada for the period preceding the Acquisition, and the "Successor," which are the financial statements of the Company and subsidiaries for the period following the Acquisition. The Successor's consolidated statements of operations and consolidated statements of cash flows data for the years ended December 31, 2017, 2018 and 2019 and balance sheet data as of December 31, 2018 and 2019 have been derived from our audited consolidated financial statements, which are included elsewhere in this Form 10-K. The Predecessor's combined statement of operations and combined statements of cash flow data for the period from January 1, 2015 through March 13, 2015 has been derived from the combined financial statements of HeidelbergCement's building products business in the United States and Eastern Canada, which are not included elsewhere in this Form 10-K. The Successor's consolidated statements of operations and consolidated statement of cash flow data for the period from March 14, 2015 through December 31, 2015 and for the year ended December 31, 2016, and balance sheet data as of December 31, 2015, 2016 and 2017 have been derived from our audited consolidated financial statements which are not included elsewhere in this Form 10-K.

The Predecessor's combined financial statements may not necessarily be indicative of our cost structure, financial position, results of operations or cash flows that would have existed if HeidelbergCement's building products business in the United States and Eastern Canada operated as a stand-alone, independent business. Accordingly, the historical results for those periods should not be relied upon as an indicator of our future performance. The Acquisition was accounted for as a business combination, which resulted in a new basis of accounting. The Predecessor's and the Successor's financial statements are not comparable as a result of applying a new basis of accounting. The selected financial data presented below represent portions of our financial statements and are not complete and should be read in conjunction with Item 7, "Management's Discussion and Analysis of Financial Condition" and "Results of Operations" and our consolidated financial statements.

(in thousands)	Successor					Predecessor
	Year ended December 31,	Year ended December 31,	Year ended December 31,	Year ended December 31,	For the period March 14 to December 31,	For the period from January 1 to March 13,
	2019	2018	2017	2016	2015	2015
<b>Statement of Operations Data:</b>						
<b>Net sales</b>	\$ 1,529,752	\$ 1,479,712	\$ 1,580,413	\$ 1,363,962	\$ 604,275	\$ 112,698
<b>Cost of goods sold</b>	1,233,370	1,234,143	1,327,305	1,083,508	513,723	98,339
<b>Gross profit</b>	296,382	245,569	253,108	280,454	90,552	14,359
Selling, general & administrative expenses	(221,770)	(209,877)	(255,034)	(216,099)	(121,554)	(17,106)
Impairment and exit charges	(3,520)	(4,336)	(13,220)	(2,218)	(1,026)	(542)
Other operating income, net	1,094	9,523	5,197	(10,971)	1,092	818
	(224,196)	(204,690)	(263,057)	(229,288)	(121,488)	(16,830)
<b>Income (loss) from operations</b>	72,186	40,879	(9,949)	51,166	(30,936)	(2,471)
<b>Other income (expenses)</b>						
Interest expense	(94,970)	(78,337)	(59,408)	(125,048)	(45,953)	(82)
Gain on extinguishment of debt	1,708	—	—	—	—	—
Earnings from equity method investee	10,466	10,162	12,360	11,947	8,429	67
Change in tax receivable agreement liability	—	—	46,180	—	—	—
Other income (expense), net	—	6,016	(31,915)	(847)	(326)	(28)
<b>Loss before income taxes</b>	(10,610)	(21,280)	(42,732)	(62,782)	(68,786)	(2,514)
Income tax (expense) benefit	3,279	(3,085)	40,672	51,692	(5,392)	742
<b>Loss from continuing operations</b>	(7,331)	(24,365)	(2,060)	(11,090)	(74,178)	(1,772)
<b>Discontinued operations, net of tax</b>	\$ —	\$ —	\$ —	\$ 3,484	\$ (8,608)	\$ (3,984)
<b>Net loss</b>	\$ (7,331)	\$ (24,365)	\$ (2,060)	\$ (7,606)	\$ (82,786)	\$ (5,756)
<b>Basic and Diluted Earnings (loss) Per Share:</b>						
Continuing operations	\$ (0.11)	\$ (0.38)	\$ (0.03)	\$ (0.23)	\$ (1.63)	
Discontinued operations	\$ —	\$ —	\$ —	\$ 0.07	\$ (0.19)	
Net loss	\$ (0.11)	\$ (0.38)	\$ (0.03)	\$ (0.16)	\$ (1.82)	
<b>Statement of Cash Flows Data:</b>						
Net cash provided by (used in) operating activities	\$ 146,786	\$ 27,196	\$ 42,334	\$ 76,925	\$ 121,417	\$ (48,224)
Net cash provided by (used in) investing activities	(42,295)	(51,052)	(66,023)	(1,062,447)	(898,039)	(2,762)
Net cash provided by (used in) financing activities	(106,181)	(43,451)	86,250	981,728	822,580	60,907
<b>Balance Sheet Data:</b>						
Cash and cash equivalents	\$ 34,800	\$ 35,793	\$ 104,534	\$ 40,024	\$ 26,027	
Property, plant & equipment, net	475,575	492,167	412,572	452,914	315,859	
Total assets	1,740,058	1,793,252	1,811,238	1,824,786	938,875	
Total debt <sup>1</sup>	1,098,303	1,188,605	1,193,787	1,096,047	705,829	
Shareholders' equity	120,967	108,222	132,491	132,917	52,315	

<sup>1</sup> Total debt, net of debt issuance costs and original issuance discount

## Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

*The following discussion and analysis should be read in conjunction with our consolidated financial statements and the related notes included in Item 8. "Financial Statements and Supplementary Data".*

*This discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statement as a result of many factors, including those set forth under the heading Item 1A. "Risk Factors" and elsewhere in this Annual Report on Form 10-K. See the section entitled "Cautionary Statement Concerning Forward-Looking Statements."*

### Overview

#### **Our Company**

We are a manufacturer of pipe and precast products in the United States and Eastern Canada for a variety of water-related infrastructure applications, including water transmission, distribution and drainage. Our manufacturing and distribution network allows us to serve most major U.S. and Eastern Canadian markets. We operate 77 active manufacturing facilities and currently have additional manufacturing capacity available in both of our segments, providing room to increase production to meet short-cycle demand with minimal incremental investment. These facilities and our distribution network provide us with a local presence and the necessary proximity to our customers to minimize delivery time and distribution costs to the markets we serve.

#### **Our Segments**

Our operations are organized into the following reportable segments:

- Drainage Pipe & Products - We are a producer of concrete drainage pipe and precast products.
- Water Pipe & Products - We are a producer of ductile iron pipe, or DIP, and concrete pressure pipe products.
- Corporate and Other - Corporate, general and administrative expenses not allocated to our revenue-generating segments such as certain shared services, executive and other administrative functions.

#### **Principal Factors Affecting Our Results of Operations**

Our financial performance and results of operations are influenced by a variety of factors, including conditions in the infrastructure, residential, and non-residential construction markets, general economic conditions, changes in cost of goods sold, competitive behavior in the markets we serve, and seasonality and weather conditions. Some of the more important factors are discussed below, as well as in the section Item 1A. "Risk Factors."

#### *Infrastructure Spending and Residential and Non-Residential Construction Activities*

A large proportion of our net sales in our Drainage Pipe & Products segment is generated through public infrastructure projects, which are driven by federal, state and provincial funding programs. In the U.S., federal funds are allocated to the states, which are required to match a portion of the federal funds they receive. Federal highway spending uses funds predominantly from the Federal Highway Trust Fund, which derives its revenue from taxes on diesel fuel, gasoline and other user fees. The dependability of federal funding allows the state departments of transportation to plan for their long term highway construction and maintenance needs. Funding for the existing U.S. federal transportation funding program extends through 2020. With the nation's infrastructure aging, there is increased demand by states and municipalities for long-term federal funding to support the

construction of new roads, highways and bridges in addition to the maintenance of the existing infrastructure. In addition to federal funding, state, county and local agencies provide highway construction and maintenance funding through various sources such as gas taxes.

A large proportion of our net sales in our Water Pipe & Products segment is generated through municipal infrastructure projects. The U.S. potable water infrastructure, especially the underground pipes that deliver drinking water to homes and businesses, is aging and in need of significant reinvestment. Like many of the roads, bridges, and other public assets on which the U.S. relies, most of the buried drinking water infrastructure was built 50 or more years ago, in the post-World War II era of rapid demographic change and economic growth. In some older urban areas, many water mains have been in the ground for a century or longer. Given its age, a large proportion of the U.S. water infrastructure is approaching, or has already reached, the end of its useful life. In some locations, improvements to water infrastructure are needed to comply with standards for drinking water quality. The underlying demand for municipalities to repair or replace their water systems depends on the status of the water systems and the availability of funding.

A relatively smaller proportion of our products has been closely tied to residential construction and non-residential construction activity in the United States and Eastern Canada. Activity levels in these markets can be materially affected by general economic and global financial market conditions. In addition, residential construction activity levels are influenced by and sensitive to mortgage availability, the cost of financing a home (in particular, mortgage and interest rates), unemployment levels, household formation rates, residential vacancy and foreclosure rates, existing housing prices, rental prices, housing inventory levels, consumer confidence and government policy and incentives. Non-residential construction activity is primarily driven by levels of business investment, availability of credit and interest rates, as well as many of the factors that impact residential construction activity levels. See Item 1 “Business.”

#### *Mix of Products*

We derive our revenues from both the sale of products manufactured to inventory, such as concrete drainage pipe and DIP, and highly engineered products which are made to order, such as precast concrete products and concrete pressure pipe. These two product categories differ in their dynamics. The mix of products our customers order is project driven and varies from period to period. We generally recognize revenue at the time of shipment of our products; however, for some of our highly engineered structural precast products, we recognize revenue on a percentage of completion method, which amounted to \$31.8 million in 2019.

Most of our products are sold on a one-off basis, with volumes and prices determined frequently based on market participants' perceptions of short-term supply and demand factors. A shortage of capacity or excess capacity in the industry, or in the regions where we have operations, or the behavior of our competitors, can each result in significant increases or decreases in market prices for these products, often within a short period of time. By contrast, our project-driven business involves highly engineered and customized products with a wide range of contract values. The products for these projects are engineered, manufactured and delivered on the basis of contracts that tend to extend over periods of several months or, in some cases, several years. The timing of the commencement of a project and the progress and completion of work under a contract, therefore, can have a significant effect on our results of operations for a particular period.

### *Average Selling Prices*

The average selling prices we are able to obtain for our products affect our results of operations and our margins. Our average selling price can vary by market location, particularly in our Drainage Pipe and Products segment, product mix, factors relating to supply and demand, and the actions of our customers and competitors.

### *Cost of Goods Sold*

Costs of raw material and other inputs, supplies, labor (including contract labor), freight and energy constitute a large portion of our cost of goods sold, and fluctuations in the prices of these materials and inputs affect our results of operations and, in particular, our margins. Our primary raw materials in our Drainage Pipe and Products segment are cement, aggregates, and steel. We typically negotiate contracts with suppliers of these materials for one to three years, with prices subject to annual revisions. The primary input in our Water business is scrap steel, which we purchase on the spot market, and its costs can vary significantly from period to period. We do not generally hedge our raw material purchases but rather utilize our product pricing strategy to manage our exposure to fluctuations in our raw material costs.

### *Seasonality and Weather Conditions*

The construction industry, and therefore demand for our products, is typically seasonal and highly dependent on weather conditions, with periods of snow or heavy rain negatively affecting construction activity. Because the majority of our products are buried underground, we experience lower demand for our products in periods of cold weather, particularly during winter, and periods of excessive rain or flooding. These types of conditions or other unfavorable weather conditions generally lead to seasonal fluctuations in our quarterly financial results. Historically, our net sales in the second and third quarters have been higher than in the other quarters of the year, particularly the first quarter.

In addition, unfavorable weather conditions, such as hurricanes or severe storms, or public holidays during peak construction periods can result in temporary cessation of projects and a material reduction in demand for our products and consequently have an adverse effect on our net sales. Results of a fiscal quarter may therefore not be a reliable basis for the expectations of a full fiscal year and may not be comparable with the results in the other fiscal quarters in the same year or prior years.

### *Our Business Strategy*

Our strategy is focused on continued execution of our commercial and operational excellence programs in both our businesses aimed at expanding unit margins for our products as well as a commitment to strengthening our capital structure through a combination of working capital improvement, debt repayment and prudent investment in the business. Prudent investment in the business includes growth capital expenditures in projects and smaller acquisitions. We are focused on generating cash flow in 2020, a portion of which is expected to be utilized to make voluntary repayments on our term loan.

### ***Principal Components of Results of Operations***

#### *Net Sales*

Net sales consist of the consideration received or receivable for the sale of products in the ordinary course of business and include the billable costs of delivery of our products to customers, net of discounts given to the customer. Net sales include any outbound freight charged to the customer. Revenue on certain long-term engineering and construction contracts for our structural precast and products that are designed and engineered specifically for the customer is recognized under the percentage-of completion method. See Note 2 to our consolidated financial statements.

*Cost of Goods Sold*

Cost of goods sold includes raw materials and other inputs (cement, aggregates, scrap, steel and clay) and supplies, labor (including contract labor), freight (including outbound freight for delivery of products to end users and other charges such as inbound freight), energy, depreciation and amortization, repairs and maintenance and other cost of goods sold.

*Selling, General and Administrative Expenses*

Selling, general and administrative expenses include expenses for sales, marketing, legal, accounting and finance services, human resources, customer support, treasury and other general corporate services. Selling, general and administrative expenses also include transaction costs directly related to business combinations.

*Earnings from Equity Method Investee*

Earnings from equity method investee represents our share of the income of the CP&P joint venture we entered into with Americast, Inc. CP&P is engaged primarily in the manufacture, marketing, sale and distribution of concrete pipe and precast products in Virginia, West Virginia, Maryland, North Carolina, Pennsylvania and South Carolina with sales to contiguous states.

*Gain on Sale of Property, Plant and Equipment, Net*

Gain on sale of property, plant and equipment, net includes the net gain or loss on the sale of assets including property, plant and equipment.

*Other Operating Income*

The remaining categories of operating income and expenses consist of scrap income (associated with scrap from the manufacturing process or remaining scrap after plants are closed), insurance gains, and rental income.

*Interest Expense*

Interest expense represents interest on the indebtedness.

*Income Tax (Expense) Benefit*

Income tax expense consists of federal, state, provincial, local and foreign taxes based on income in the jurisdictions in which we operate.



## Results of Operations

### Year Ended December 31, 2019 as Compared to the Year Ended December 31, 2018

#### Total Company

The following table summarizes certain financial information relating to our operating results for the years ended December 31, 2019 and December 31, 2018 (in thousands).

Statements of Income Data:	Year ended December 31, 2019	Year ended December 31, 2018	% Change
<b>Net sales</b>	\$ 1,529,752	\$ 1,479,712	3.4%
<b>Cost of goods sold</b>	1,233,370	1,234,143	(0.1)%
<b>Gross profit</b>	296,382	245,569	20.7%
Selling, general and administrative expenses	(221,770)	(209,877)	5.7%
Impairment and exit charges	(3,520)	(4,336)	(18.8)%
Other operating income, net	1,094	9,523	(88.5)%
	(224,196)	(204,690)	9.5%
<b>Income from operations</b>	72,186	40,879	76.6%
<b>Other income (expenses)</b>			
Interest expense	(94,970)	(78,337)	21.2%
Gain on extinguishment of debt	1,708	—	*
Earnings from equity method investee	10,466	10,162	3.0%
Other income, net	—	6,016	*
<b>Loss before income taxes</b>	(10,610)	(21,280)	(50.1)%
Income tax (expense) benefit	3,279	(3,085)	*
<b>Net loss</b>	\$ (7,331)	\$ (24,365)	(69.9)%

\* Represents positive or negative change in excess of 100%

#### Net Sales

Net sales for the year ended December 31, 2019 were \$1,529.8 million, an increase of \$50.1 million or 3.4% from \$1,479.7 million for the year ended December 31, 2018. The increase was primarily due to higher shipment volumes in our Drainage Pipe & Products segment and higher average selling prices in both segments, partially offset by lower shipment volumes in our Water Pipe & Products segment.

#### Cost of Goods Sold

Cost of goods sold for the year ended December 31, 2019 were \$1,233.4 million, a decrease of \$0.7 million or 0.1% from \$1,234.1 million for the year ended December 31, 2018. Lower shipment volumes and lower cost of scrap metal in our Water Pipe & Products segment, were mostly offset by higher shipment volumes in our Drainage Pipe & Products segment.

#### Gross Profit

Gross profit in the year ended December 31, 2019 was \$296.4 million, an increase of \$50.8 million, or 20.7%, from \$245.6 million in the year ended December 31, 2018. Gross profit increased primarily due to higher shipment volumes in our Drainage Pipe & Products segment, higher average selling prices in both segments, and lower raw material costs in our Water Pipe & Products segment.

### *Selling, General and Administrative Expenses*

Selling, general and administrative expenses in the year ended December 31, 2019 were \$221.8 million, an increase of \$11.9 million or 5.7% from \$209.9 million in the year ended December 31, 2018. The increase was primarily due to higher IT costs as we invest in our systems and processes, increased expenses related to various disputes and claims in the ordinary course of our business, increased reserves for credit losses, as well as a \$3.7 million executive severance charge primarily related to the change in CEO in 2019.

### *Impairment and Exit Charges*

Impairment and exit charges in the year ended December 31, 2019 were \$3.5 million, compared to \$4.3 million in the year ended December 31, 2018. The exit charges in both years primarily related to plant closings undertaken for purposes of achieving operating efficiencies.

### *Other Operating Income*

Other operating income for the year ended December 31, 2019 was \$1.1 million, compared to \$9.5 million in the prior year period. The income in the 2018 period primarily related to gains from the disposition of certain property, plant and equipment.

### *Interest Expense*

Interest expense in the year ended December 31, 2019 was \$95.0 million, an increase of \$16.7 million, or 21.2%, from \$78.3 million in the year ended December 31, 2018. The interest expense in 2019 included \$7.8 million resulting from the change in the classification of certain leases from operating lease to finance lease as the result of the amendment and restatement of our sale-leaseback transaction completed in June 2018. In addition, \$7.8 million of the change related to the increase in interest expense due to the mark-to-market on the interest rate swaps year over year. The remainder of the interest expense increase was primarily due to the impact of higher average interest rates.

### *Other Income, net*

Other income, net of \$6.0 million for the year ended December 31, 2018 related to the gain from a divestiture transaction that was completed in February 2018.

### *Income Tax (Expense) Benefit*

Income tax benefit in the year ended December 31, 2019 was \$3.3 million, a change of \$6.4 million from an income tax expense of \$3.1 million in the year ended December 31, 2018. The change is primarily due to the benefit of the favorable valuation allowance movement between the two years that was partially offset with the tax expense recorded on the greater pre-tax earnings in the year ended December 31, 2019 compared to the prior year.

## Segment Results of Operations

(in thousands)

	For the year ended December 31,		% Change
	2019	2018	
<b>Net sales:</b>			
Drainage Pipe & Products	\$ 894,722	\$ 811,477	10.3 %
Water Pipe & Products	635,030	668,235	(5.0)%
Corporate and Other	—	—	
Total	<u>\$ 1,529,752</u>	<u>\$ 1,479,712</u>	3.4 %
<b>Gross profit (loss):</b>			
Drainage Pipe & Products	200,321	174,786	14.6 %
Water Pipe & Products	96,275	71,471	34.7 %
Corporate and Other	(214)	(688)	(68.9)%
Total	<u>\$ 296,382</u>	<u>\$ 245,569</u>	20.7 %
<b>Segment EBITDA<sup>(1)</sup>:</b>			
Drainage Pipe & Products	171,413	156,735	9.4 %
Water Pipe & Products <sup>(2)</sup>	84,424	64,547	30.8 %
Corporate and Other	(74,219)	(58,802)	26.2 %

(1) For purposes of evaluating segment performance, the Company's chief operating decision maker reviews earnings before interest, taxes, depreciation and amortization, or EBITDA, as a basis for making the decisions to allocate resources and assess performance. Our discussion below includes the primary drivers of EBITDA. See Note 21 to our consolidated financial statements, for segment EBITDA reconciliation to income (loss) before income taxes.

### Drainage Pipe & Products

#### Net Sales

Net sales increased in the year ended December 31, 2019 was \$894.7 million, an increase of \$83.2 million, or 10.3%, from \$811.5 million in the year ended December 31, 2018. The increase was primarily due to higher shipment volumes as well as higher average selling prices.

#### Gross Profit

Gross profit in the year ended December 31, 2019 was \$200.3 million, an increase of \$25.5 million or 14.6% from \$174.8 million in the year ended December 31, 2018. The increase was primarily due to higher shipment volumes and higher average selling prices, slightly offset by a higher cost of raw materials.

### Water Pipe & Products

#### Net Sales

Net sales in the year ended December 31, 2019 were \$635.0 million, a decrease of \$33.2 million or 5.0% from \$668.2 million in the year ended December 31, 2018. The decrease was due primarily to a decline in sales volumes, partially offset by higher average selling prices.

### Gross Profit

Gross profit in the year ended December 31, 2019 was \$96.3 million, an increase of \$24.8 million or 34.7% from \$71.5 million in the year ended December 31, 2018. The increase was primarily driven by higher average selling prices as well as lower raw material costs.

### Year Ended December 31, 2018 as Compared to the Year Ended December 31, 2017

#### Total Company

The following table summarizes certain financial information relating to our operating results for the years ended December 31, 2018 and December 31, 2017 (in thousands).

Statements of Income Data:	Year ended December 31, 2018	Year ended December 31, 2017	% Change
<b>Net sales</b>	\$ 1,479,712	\$ 1,580,413	(6.4)%
<b>Cost of goods sold</b>	1,234,143	1,327,305	(7.0)%
<b>Gross profit</b>	245,569	253,108	(3.0)%
Selling, general and administrative expenses	(209,877)	(255,034)	(17.7)%
Impairment and exit charges	(4,336)	(13,220)	(67.2)%
Other operating income, net	9,523	5,197	83.2 %
	(204,690)	(263,057)	(22.2)%
<b>Income (loss) from operations</b>	40,879	(9,949)	*
<b>Other income (expenses)</b>			
Interest expense	(78,337)	(59,408)	31.9 %
Change in tax receivable agreement liability	—	46,180	*
Earnings from equity method investee	10,162	12,360	(17.8)%
Other income (expense), net	6,016	(31,915)	*
<b>Loss before income taxes</b>	(21,280)	(42,732)	(50.2)%
Income tax (expense) benefit	(3,085)	40,672	*
<b>Net loss</b>	\$ (24,365)	\$ (2,060)	*

\* Represents positive or negative change in excess of 100%

#### Net Sales

Net sales for the year ended December 31, 2018 were \$1,479.7 million, a decrease of \$100.7 million or 6.4% from \$1,580.4 million for the year ended December 31, 2017. The decrease is primarily due to the divestiture of our U.S. concrete and steel pressure pipe business in July 2017, which contributed \$72.7 million in net sales in 2017, and the Foley Transaction, which resulted in a \$42.3 million decline in net sales. Excluding the impact of these two transactions, our net sales grew approximately \$14.3 million, or 0.9% due primarily to higher average selling prices.

#### Cost of Goods Sold

Cost of goods sold were \$1,234.1 million for the year ended December 31, 2018, a decrease of \$93.2 million or 7.0% from \$1,327.3 million in the year ended December 31, 2017. The decrease is due to the divestiture of our U.S. concrete and steel pressure pipe business, which resulted in a \$80.2 million decline in cost of goods sold, as well as the Foley Transaction, which resulted in a \$33.2 million decline in cost of goods sold. Costs of

goods sold in our existing businesses increased by \$20.2 million, or 1.5%, due to the higher cost of labor, freight, and raw materials.

#### *Gross Profit*

Gross profit decreased by \$7.5 million, or 3.0%, to \$245.6 million in the year ended December 31, 2018 from \$253.1 million in the year ended December 31, 2017. Gross profit decrease was attributed to lower profitability in the Water Pipe and Products segment due primarily to the impact of higher scrap steel, labor and freight costs that were not fully offset by higher average selling prices.

#### *Selling, General and Administrative Expenses*

Selling, general and administrative expenses were \$209.9 million in the year ended December 31, 2018, a decrease of \$45.1 million or 17.7% from \$255.0 million in the year ended December 31, 2017. The decrease was due primarily to lower professional fees associated with various cost saving initiatives implemented in 2018 and savings from our divestitures of \$5.1 million.

#### *Impairment and Exit Charges*

Impairment and exit charges decreased by \$8.9 million to \$4.3 million in the year ended December 31, 2018 from \$13.2 million in the year ended December 31, 2017. The decrease was primarily due to a 2017 goodwill impairment of \$3.0 million related to our Canadian concrete pressure pipe reporting unit and \$7.5 million of long-lived asset impairment related to the sale of our U.S. concrete and steel pressure pipe business in 2017. See Notes 3 and 8 to the consolidated financial statements.

#### *Other Operating Income*

Other operating income for the year ended December 31, 2018 was \$9.5 million, compared to \$5.2 million in the prior year period. The income in the 2018 period primarily related to gains from the disposition of certain property, plant and equipment deemed not core to our operations.

#### *Interest Expense*

Interest expense increased by \$18.9 million, or 31.9%, to \$78.3 million in the year ended December 31, 2018 from \$59.4 million in the year ended December 31, 2017. The increase included \$10.2 million in higher interest expense related to the change in the classification of certain leases from operating lease to capital lease as the result of the amendment and restatement of our sale-leaseback transaction completed in June 2018. Additionally, the mark-to-market gain on the interest rate swaps in the year ended December 31, 2018 was \$1.4 million as compared to \$5.3 million in the prior year. The remainder of the interest expense increase was primarily due to the impact of higher average interest rates.

#### *Change in Tax Receivable Agreement Liability*

The passage of the TCJA in 2017 significantly reduced the Company's anticipated liability under the tax receivable agreement. The reduction in the tax receivable agreement resulted in \$46.2 million recognized in the Company's statement of operations for the year ended December 31, 2017 due primarily to the decrease in the federal corporate tax rate from 35% to 21%. The Company did not have a comparable charge for the year ended December 31, 2018. See Note 16 to the consolidated financial statements.

#### *Other Income (Expense), net*

Other income was \$6.0 million for the year ended December 31, 2018 due primarily to the gain resulting from the Foley Transaction. Other expense of \$31.9 million for the year ended December 31, 2017 was primarily due to the \$32.3 million loss generated by the U.S. Pressure Pipe Divestiture during July 2017. See Note 3 to the consolidated financial statements.

### Income Tax (Expense) Benefit

Income tax (expense) benefit changed by \$43.8 million to an income tax expense of \$3.1 million in the year ended December 31, 2018 from an income tax benefit of \$40.7 million in the year ended December 31, 2017. The change is due largely to the impact of the lower corporate tax rates enacted in December 2017 as a result of the TCJA, the smaller loss before income taxes recorded for the year ended December 31, 2018 compared to 2017, inclusion of the global intangible low-tax income, the foreign tax rate differential and the change in valuation allowance. See Note 20 to the consolidated financial statements.

On December 22, 2017, the U.S. government enacted comprehensive tax reform legislation commonly known as the Tax Cuts and Jobs Act, or TCJA. Changes included, but were not limited to, a marginal corporate tax rate decrease from 35% to 21% effective for tax years beginning after December 31, 2017, the transition of U.S international taxation from a worldwide tax system to a territorial system, and a one-time transition tax on the mandatory deemed repatriation of cumulative foreign earnings as of December 31, 2017. During 2017, we provisionally calculated our best estimate of the impact of the TCJA in the year end income tax provision in accordance with our understanding of the TCJA and guidance available at that time and as a result recorded \$26.9 million as additional income tax benefit in the fourth quarter of 2017.

### Segment Results of Operations

(in thousands)

	For the year ended December 31,		% Change
	2018	2017	
<b>Net sales:</b>			
Drainage Pipe & Products	\$ 811,477	\$ 834,810	(2.8)%
Water Pipe & Products	668,235	745,555	(10.4)%
Corporate and Other	—	48	(100.0)%
Total	\$ 1,479,712	\$ 1,580,413	(6.4)%
<b>Gross profit (loss):</b>			
Drainage Pipe & Products	174,786	147,741	18.3 %
Water Pipe & Products	71,471	108,320	(34.0)%
Corporate and Other	(688)	(2,953)	(76.7)%
Total	\$ 245,569	\$ 253,108	(3.0)%
<b>Segment EBITDA<sup>(1)</sup>:</b>			
Drainage Pipe & Products	156,735	129,618	20.9 %
Water Pipe & Products <sup>(2)</sup>	64,547	47,587	35.6 %
Corporate and Other	(58,802)	(44,870)	31.0 %

(1) For purposes of evaluating segment performance, the Company's chief operating decision maker reviews earnings before interest, taxes, depreciation and amortization, or EBITDA, as a basis for making the decisions to allocate resources and assess performance. Our discussion below includes the primary drivers of EBITDA. See Note 21, *Segment Reporting*, for segment EBITDA reconciliation to income (loss) before income taxes.

(2) For the 2017 period, segment EBITDA included a \$32.3 million loss as a result of the U.S. Pressure Pipe Divestiture in July 2017.

## **Drainage Pipe & Products**

### *Net Sales*

Net sales decreased by \$23.3 million, or 2.8%, to \$811.5 million in the year ended December 31, 2018 from \$834.8 million in the year ended December 31, 2017. Excluding net sales of \$42.3 million associated with the Foley Transaction, net sales increased by \$19.0 million or 2.3%. The increase was due primarily to higher average selling prices that offset the impact of a decline in shipments.

### *Gross Profit*

Gross profit was \$174.8 million in the year ended December 31, 2018, an increase of \$27.1 million, or 18.3%, from \$147.7 million in the year ended December 31, 2017. The increase was primarily due to higher average selling prices that more than offset higher cost of goods sold including labor, freight, and raw materials.

## **Water Pipe & Products**

### *Net Sales*

For the year ended December 31, 2018, net sales were \$668.2 million, a decrease of \$77.4 million or 10.4% from \$745.6 million for the year ended December 31, 2017. The decrease was primarily attributable to the sale of the U.S. concrete and steel pressure pipe business in July 2017 that contributed net sales of \$72.7 million. Excluding the impact of the divestiture, net sales declined by 1% due to lower sales of fabrication, fittings and large diameter concrete pressure pipe in Canada that were not fully offset by the growth in sales of ductile iron pipe. The sales growth for ductile iron pipe was due to higher average selling prices.

### *Gross Profit*

Gross profit was \$71.5 million in the year ended December 31, 2018, a decrease of \$36.8 million or 34.0% from \$108.3 million in the year ended December 31, 2017. The decrease was due primarily to the impact of higher scrap steel, labor and freight costs that were not fully offset by higher average selling prices.

### *Other*

For the year ended December 31, 2017, EBITDA included a \$32.3 million loss generated by the U.S. Pressure Pipe Divestiture in July 2017. In addition, for the year ended December 31, 2017, EBITDA included \$3.0 million for a goodwill impairment and \$7.5 million for long-lived asset impairment charges. See Note 8 to the consolidated financial statements.

## **Liquidity and Capital Resources**

Our primary sources of liquidity are cash on hand, cash from operations and borrowings under our credit agreements. We believe these sources will be sufficient to fund our planned operations and capital expenditures in the next 24 months.

We are currently engaged in a dispute with HeidelbergCement regarding the earnout provision in the purchase agreement entered into in connection with the Acquisition. HeidelbergCement has asserted that a payment should be made in the amount of \$100.0 million. Resolution will be determined by a neutral accounting arbitrator pursuant to the terms of the purchase agreement. If it is determined that we are required to make a significant payment to HeidelbergCement, we may not have sufficient cash to make such payment and may be required to incur additional indebtedness. See Item 1A. "Risk Factors" and Note 16 to our consolidated financial statements.

As of December 31, 2019 and 2018, we had approximately \$34.8 million and \$35.8 million of cash and cash equivalents, respectively, of which \$12.6 million and \$18.1 million, respectively, were held by foreign subsidiaries. All of the cash and cash equivalents as of December 31, 2019 and 2018 were readily convertible as of such dates into currencies used in the Company's operations, including the U.S. dollar. As a result of the TCJA, we can repatriate the cumulative undistributed foreign earnings back to the U.S. when needed with minimal additional taxes other than state income and foreign withholding tax.

In connection with the IPO, we entered into a tax receivable agreement with Lone Star that provides for the payment by us to Lone Star of specified amounts in respect of any cash savings as a result of the utilization of certain tax benefits. The actual utilization of the relevant tax benefits as well as the timing of any payments under the tax receivable agreement will vary depending upon a number of factors, including the amount, character and timing of our and our subsidiaries' taxable income in the future. However, we expect that the payments we make under the tax receivable agreement could be substantial. The tax receivable agreement also includes provisions that restrict the incurrence of debt and require that we make an accelerated payment to Lone Star equal to the present value of all future payments due under the tax receivable agreement, in each case under certain circumstances. Because of the foregoing, our obligations under the tax receivable agreement could have a substantial negative impact on our liquidity and could have the effect of delaying, deferring or preventing certain mergers, asset sales, other forms of business combinations or other changes of control. The passage of the TCJA significantly reduced the Company's anticipated liability under the tax receivable agreement. Our liability recorded for the tax receivable agreement at December 31, 2019 and December 31, 2018 was \$77.4 million and \$88.8 million, respectively, with \$13.1 million and \$15.5 million, respectively, being classified as short-term. For the years ended December 31, 2019 and December 31, 2018, we paid \$11.4 million and \$30.4 million, respectively, to Lone Star under the tax receivable agreement.

Our forecast for payments under the tax receivable agreement in 2020 is expected to be in the range of \$13 to \$15 million. We expect that future annual payments under the tax receivable agreement will decline each year in accordance with our tax basis depreciation and amortization schedule unless future transactions result in an acceleration of our tax benefits under the agreement. See Item 1A, Risk Factors and Note 16 to the consolidated financial statements.

## **Credit Agreements**

During the year ended December 31, 2019, we voluntarily prepaid \$87.0 million of our Term Loan and as of December 31, 2019, we had \$1.1 billion outstanding balance under our Term Loan. At December 31, 2019, we had no borrowings under our Revolver and our available borrowing capacity under the Revolver was \$257.7 million.

The Revolver provides for an aggregate principal amount of up to \$300.0 million, with up to \$280.0 million to be made available to the U.S. borrowers and up to \$20.0 million to be made available to the Canadian borrowers. Subject to the conditions set forth in the revolving credit agreement, the Revolver may be increased by up to the greater of (i) \$100.0 million and (ii) such amount as would not cause the aggregate borrowing base to be exceeded by more than \$50.0 million. Borrowings under the Revolver may not exceed a borrowing base equal to the sum of (i) 100% of eligible cash, (ii) 85% of eligible accounts receivable and (iii) the lesser of (a) 75% of eligible inventory and (b) 85% of the orderly liquidation value of eligible inventory, with the U.S. and Canadian borrowings being subject to separate borrowing base limitations. The Revolver matures on October 25, 2021.

The Term Loan, as amended, provides for a \$1.25 billion senior secured term loan. Subject to the conditions set forth in the term loan agreement, the Term Loan may be increased by (i) up to the greater of \$285.0 million and 1.0x consolidated EBITDA of Forterra, Inc. and its restricted subsidiaries for the four quarters most recently ended prior to such incurrence plus (ii) the aggregate amount of any voluntary prepayments, plus (iii) an additional amount, provided certain financial tests are met. The Term Loan matures on October 25, 2023 and is subject to quarterly amortization equal to 0.25% of the initial principal amount. Interest will accrue on outstanding borrowings thereunder at a rate equal to LIBOR (with a floor of 1.0%) or an alternate base rate, in each case plus a margin of 3.00% or 2.00%, respectively. Our credit agreement does not provide a mechanism to facilitate the adoption of an alternative benchmark rate for use in place of LIBOR. We plan to monitor the expected phase-out



of LIBOR and may seek to renegotiate the benchmark rate with our lenders in the future. See Item 1A. "Risk Factors."

The Revolver and the Term Loan contain customary representations and warranties, and affirmative and negative covenants, that, among other things, restrict our ability to incur additional debt, incur or permit liens on assets, make investments and acquisitions, consolidate or merge with any other company, engage in asset sales and pay dividends and make distributions. The Revolver contains a financial covenant restricting Forterra from allowing its fixed charge coverage ratio to drop below 1.00:1.00 during a compliance period, which is triggered when the availability under the Revolver falls below a threshold. The fixed charge coverage ratio is the ratio of consolidated earnings before interest, depreciation, and amortization, less cash payments for capital expenditures and income taxes to consolidated fixed charges (interest expense plus scheduled payments of principal on indebtedness). The Term Loan does not contain any financial covenants. Obligations under the Revolver and the Term Loan may be accelerated upon certain customary events of default (subject to grace periods, as appropriate). As of December 31, 2019, we were in compliance with all applicable covenants under the Revolver and the Term Loan.

## Cash Flows

The following table sets forth a summary of the net cash provided by (used in) operating, investing and financing activities for the periods presented (*in thousands*).

	Year ended December 31, 2019	Year ended December 31, 2018	Year ended December 31, 2017
<b>Statement of Cash Flows data:</b>			
Net cash provided by operating activities	\$ 146,786	\$ 27,196	\$ 42,334
Net cash used in investing activities	(42,295)	(51,052)	(66,023)
Net cash (used in) provided by financing activities	(106,181)	(43,451)	86,250

### Net Cash Provided by Operating Activities

Changes in operating cash flows between the periods are primarily due to the change in income from operations, timing of collections and payments, as well as the change in our inventory as compared to the prior year periods.

Operating cash flow increased to \$146.8 million in 2019 as compared to \$27.2 million in 2018 primarily due to higher income from operations and a decrease in ending inventory. Operating cash flow declined to \$27.2 million in 2018 as compared to \$42.3 million in the prior year period. Higher income from operations and lower cash taxes in 2018 as compared to 2017 was offset by higher cash interest payments and higher cash utilization associated with changes in assets and liabilities. Excluding the impact of changes in tax-related receivables and payables that resulted in a cash inflow of \$12.8 million in 2018 and cash outflow of \$43.3 million in 2017, the changes in assets and liabilities in 2018 was a cash use of \$52.2 million, compared to a cash use of \$14.3 million in the prior year, due primarily to an increase in ending inventory.

### Net Cash Used in Investing Activities

Net cash used in investing activities was \$42.3 million for the year ended December 31, 2019 primarily due to capital expenditures of \$42.9 million and the acquisition of Buckner assets of \$10.8 million, partially offset by proceeds from the sale of fixed assets of \$11.4 million. Net cash used in investing activities was \$51.1 million for the year ended December 31, 2018 due to capital expenditures of \$48.7 million, final net working capital settlement related to U.S. Pressure Pipe Divestiture of \$8.5 million, settlement on derivative contracts of \$5.0 million, business acquisitions of \$4.5 million and other asset acquisitions of \$1.9 million, partially offset by cash received from the Foley Transaction of \$9.1 million and proceeds from sale of fixed assets of \$8.4 million. Net cash

used in investing activities was \$66.0 million for the year ended December 31, 2017 primarily due to capital expenditures of \$52.5 million and Royal acquisition of \$35.5 million, partially offset by \$23.2 million cash proceeds from the U.S. Pressure Pipe Divestiture.

#### *Net Cash (Used in) Provided by Financing Activities*

Net cash used in financing activities was \$106.2 million for the year ended December 31, 2019 due primarily to \$95.7 million of repayments of principal on the Term Loan and a \$11.4 million payment pursuant to the tax receivable agreement. Net cash used in financing activities was \$43.5 million for the year ended December 31, 2018 due primarily to the payment of \$30.4 million under our tax receivable agreement. The \$30.4 million payment under the tax receivable agreement in 2018, pertaining to the 2017 tax year, included the impact of accelerated payments as a result of certain transactions completed in 2017, including the sale of the U.S. concrete and steel pressure pipe business, that caused an acceleration of tax benefits subject to the tax receivable agreement. The \$11.4 million payment under the tax receivable agreement in 2019 was pertaining to the 2018 tax year. Net cash provided by financing activities was \$86.3 million for the year ended December 31, 2017 due primarily to proceeds from additional borrowing under the Term Loan.

#### **Capital Expenditures**

Our capital expenditures were \$42.9 million for the year ended December 31, 2019, \$48.7 million for the year ended December 31, 2018, and \$52.5 million for the year ended December 31, 2017. Capital expenditures primarily related to equipment, such as plant and mobile equipment, expansion of existing facilities and environmental and permit compliance projects.

#### **Off-Balance Sheet Arrangements**

In the ordinary course of our business, we are required to provide surety bonds and standby letters of credit to secure performance commitments. As of December 31, 2019, outstanding stand-by letters of credit amounted to \$16.0 million.

#### **Contractual Obligations and Other Long-Term Liabilities**

The following table summarizes our significant contractual obligations as of December 31, 2019. Non-cancelable operating leases are presented net of non-cancelable subleases. Some of the amounts included in the table are based on management's estimate and assumptions about these obligations, including their duration, the possibility of renewal, anticipated actions by third parties and other factors. Because these estimates and assumptions are necessarily subjective, our actual payments may vary from those reflected in the table.

	Payment Due by Period						
	Total	2020	2021	2022	2023	2024	Thereafter
	(In thousands)						
Senior term loan	\$ 1,123,358	\$ 12,510	\$ 12,510	\$ 12,510	\$ 1,085,828	\$ —	\$ —
Interest on indebtedness <sup>(1)</sup>	204,282	54,532	53,774	53,165	42,811	—	—
Operating leases	160,218	11,858	9,682	9,380	10,127	9,561	109,610
Finance leases	738,967	16,894	17,049	17,300	17,516	17,841	652,367
<b>Total Commitments</b>	<b>\$ 2,226,825</b>	<b>\$ 95,794</b>	<b>\$ 93,015</b>	<b>\$ 92,355</b>	<b>\$ 1,156,282</b>	<b>\$ 27,402</b>	<b>\$ 761,977</b>

(1) The interest rate on the Term loan is 5.52%.

Additionally, we have accrued approximately \$64.2 million associated with the tax receivable agreement in long-term liabilities and \$21.9 million of other long-term liabilities as of December 31, 2019. The risks and uncertainties associated with the tax receivable agreement are discussed above and in Note 16 to the consolidated financial statements.

## **Application of Critical Accounting Policies and Estimates**

### ***Business Combinations***

Assets acquired and liabilities assumed in business combination transactions, as defined by ASC 805, *Business Combination*, are recorded at fair value using the acquisition method of accounting. We allocate the purchase price of acquisitions based upon the fair value of each component which may be derived from various observable and unobservable inputs and assumptions. Initial purchase price allocations are preliminary and subject to revision within the measurement period, not to exceed one year from the date of the transaction. The fair value of property, plant and equipment and intangible assets may be based upon the discounted cash flow method that involves inputs that are not observable in the market (Level 3). Goodwill assigned represents the amount of consideration transferred in excess of the fair value assigned to identifiable assets acquired and liabilities assumed.

### ***Use of estimates***

The preparation of our financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities as of the reporting date, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates. These estimates are based on management's best knowledge of current events and actions that the Company may undertake in the future. The more significant estimates made relate to fair value estimates for assets and liabilities acquired in business combinations; accrued liabilities for environmental cleanup, bodily injury and insurance claims; estimates for commitments and contingencies; and estimates for the realizability of deferred tax assets, the tax receivable agreement obligation, inventory reserves, allowance for doubtful accounts and impairment of goodwill and long-lived assets.

### ***Inventories***

Inventories are valued at the lower of cost or net realizable value. Our inventories are valued using the average cost and first-in-first-out methods. Inventories include materials, labor and applicable factory overhead costs. The value of inventory is adjusted for damaged, obsolete, excess and slow-moving inventory. Market value of inventory is estimated considering the impact of market trends, an evaluation of economic conditions, and the value of current orders relating to the future sales of each respective component of inventory.

### ***Goodwill and other intangible assets, net***

Goodwill represents the excess of costs over the fair value of identifiable assets acquired and liabilities assumed. We evaluate goodwill and intangible assets in accordance with ASC 350, *Goodwill and Other Intangible Assets* which requires goodwill to be either qualitatively or quantitatively assessed for impairment annually (or more frequently if impairment indicators arise) for each reporting unit. We perform our annual impairment testing of goodwill as of October 1 of each year and in interim periods if events occur that would indicate that it is more likely than not the fair value of a reporting unit is less than carrying value. We first assess qualitative factors to evaluate whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount as the basis for determining whether it is necessary to perform a quantitative goodwill impairment test. We may bypass the qualitative assessment for any reporting unit in any period and proceed directly with the quantitative analysis. The quantitative analysis compares the fair value of the reporting unit with its carrying amount. If the carrying amount of a reporting unit exceeds the fair value, impairment is recognized in an amount equal to that excess, limited to the total amount of goodwill allocated to that reporting unit.

We determine the fair value of our reporting units using a weighted combination of the discounted cash flow method (income approach) and the guideline company method (market approach). Determining the fair value of a reporting unit requires judgment and the use of significant estimates and assumptions. Such estimates and assumptions include future revenue growth rates, gross profit margins, EBITDA margins, future capital expenditures, weighted average costs of capital and future market conditions, among others. We believe the

estimates and assumptions used in our impairment assessments are reasonable; however, variations in any of the assumptions could result in materially different calculations of fair value and determinations of whether or not an impairment is indicated. Under the discounted cash flow method, we determine fair value based on estimated future cash flows of each reporting unit including estimates for capital expenditures, discounted to present value using the risk-adjusted industry rate, which reflect the overall level of inherent risk of the reporting unit. Cash flow projections are derived from one year budgeted amounts and five year operating forecasts plus an estimate of later period cash flows, all of which are evaluated by management. Subsequent period cash flows are developed for each reporting unit using growth rates that management believes are reasonably likely to occur. Under the guideline company method, we determine the estimated fair value of each of our reporting units by applying valuation multiples of comparable publicly-traded companies to each reporting unit's projected EBITDA and then averaging that estimate with similar historical calculations using a three-year average. In addition, we estimate a reasonable control premium representing the incremental value that accrues to the majority owner from the opportunity to dictate the strategic and operational actions of the business.

Key assumptions for the measurement of an impairment include management's estimate of future cash flows and EBITDA. The estimates of future cash flows and EBITDA are subjective in nature and are subject to impacts from the business risks described in "Item 1A. Risk Factors." Therefore, the actual results could differ significantly from the amounts used for goodwill impairment testing, and significant changes in fair value estimates could occur, resulting in potential impairments in future periods.

For the years ended December 31, 2019, December 31, 2018 and December 31, 2017, no impairment charge was recorded for goodwill and intangible assets.

### ***Leases Accounting Policy***

We determine if an arrangement is a lease at inception. Leases with an initial term of less than 12 months are not recorded on the balance sheet. Operating leases are included in operating lease right-of-use, or ROU, assets, accrued liabilities, and long-term operating lease liabilities in the consolidated balance sheets. Finance leases are included in property, plant and equipment, accrued liabilities, and long-term finance lease liabilities in the consolidated balance sheets.

ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As most of our leases do not provide an implicit rate, we use our incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. We use the implicit rate when readily determinable. The lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

We have lease agreements with lease and non-lease components, which are generally accounted for separately. For machinery and equipment leases, such as forklifts, we account for the lease and non-lease components as a single lease component.

### ***Income Taxes***

Deferred tax assets generally represent items that can be used as a tax deduction or credit in our tax returns in future years for which a tax benefit has already been recorded in our income statement. The measurement of a deferred tax asset is reduced, if necessary, by a valuation allowance if, based on the available evidence, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Deferred tax liabilities generally represent tax expense recognized in the financial statements for which payment has been deferred, or expense for which we have already taken a deduction in its tax return but have not yet recognized as expense in the financial statements.

We finalized our policy and elected to use the period cost method for GILTI provisions, and therefore, have not recorded deferred taxes for basis differences expected to reverse in future periods.

We recognize a tax benefit for uncertain tax positions only if we believe it is more likely than not that the position will be upheld on audit based solely on the technical merits of the tax position. We evaluate uncertain tax positions after the consideration of all available information. Penalties and interest related to income tax uncertainties, should they occur, would be included in income tax expense in the period in which they are incurred.

### ***Revenue recognition***

Revenues are recognized when the risks and rewards associated with the transaction have been transferred to the purchaser, which is demonstrated when all the following conditions are met: evidence of a binding arrangement exists, products have been delivered or services have been rendered, there is no future performance required, fees are fixed or determinable and amounts are collectible under normal payment terms. Sales represent the net amounts charged or chargeable in respect of services rendered and goods supplied, excluding intercompany sales. Sales are recognized net of any discounts given to the customer.

A portion of our sales revenue is derived from sales to distributors. Distributor revenue is recognized when all of the criteria for revenue recognition are met, which is generally the time of shipment to the distributor. All returns and credits are estimable and recognized as contra-revenue.

We incur shipping costs to third parties for the transportation of building products and bill such costs to customers. For the years ended December 31, 2019, 2018 and 2017, we recorded freight costs of approximately \$131.8 million, \$127.0 million, and \$132.3 million, respectively, on a gross basis within net sales and cost of goods sold in the accompanying consolidated statements of operations.

For certain engineering and construction contracts and building contracting arrangements, we recognize revenue using the percentage of completion method, based on total contract costs incurred to date compared to total estimated cost at completion for each contract. Changes to total estimated contract cost or losses, if any, are recognized in the period in which they are determined. Pre-contract costs are expensed as incurred. If estimated total costs on a contract indicate a loss, the entire loss is provided for in the financial statements immediately. To the extent we have invoiced and collected from customers more revenue than has been recognized as revenue using the percentage of completion method, we record the excess amount invoiced as deferred revenue. Revenue recognized in excess of amounts billed, and balances billed but not yet paid by customers under retainage provisions are classified as a current asset within receivables, net on the balance sheet. For the years ended December 31, 2019, December 31, 2018, and December 31, 2017, revenue recognized in continuing operations using the percentage of completion method amounted to 2%, 1%, and 3% of total net sales, respectively.

We generally provide limited warranties related to our products which cover manufacturing in accordance with the specifications identified on the face of our quotation or order acknowledgment and to be free of defects in workmanship or materials. The warranty periods typically extend for a limited duration of one year. We estimate and accrue for potential warranty exposure related to products which have been delivered.

### ***Recent Accounting Guidance Adopted***

The information set forth under Note 2 to the consolidated financial statements under the caption "Recent Accounting Guidance Adopted" is incorporated herein by reference.

## Item 7A. Quantitative and Qualitative Disclosures about Market Risk

In the normal course of business, we are exposed to financial risks such as changes in interest rates, foreign currency exchange rates and commodity price risk associated with our input costs. We utilize derivative instruments to manage selected foreign exchange and interest rate exposures. See Note 13 to the financial statements.

### *Interest Rate Risk*

Our exposure to market risk for changes in interest rates relates primarily to our long-term debt. The interest expense associated with our long-term debt will vary with market rates. In February 2017, we entered into two interest rate swap transactions with a combined notional value of \$525 million to limit our exposure to interest rate increases related to a portion of our floating rate indebtedness. Under the terms of both swap transactions, we agreed to pay a fixed rate of interest of 1.52% and receive floating rate interest indexed to one-month LIBOR with monthly settlement terms with the swap counterparties. The swaps have a three-year term and expire on March 31, 2020. At December 31, 2019, we estimate that 1% increase in the rates relating to the portion of our floating rate debt that is not hedged would increase annual interest requirements by approximately \$6.0 million.

Borrowings under our Term Loan and our Revolver may use LIBOR as a benchmark for establishing the applicable interest rate. LIBOR is the subject of recent regulatory guidance and proposals for reform, which are expected to ultimately lead to the discontinuation of LIBOR or to cause LIBOR to cause LIBOR become unavailable as a benchmark rate. The consequences of these developments with respect to LIBOR cannot be entirely predicted but could result in a significant increase in the cost of our variable rate indebtedness causing a negative impact on our financial position, liquidity and results of operations. We plan to carefully monitor the situation and may seek to renegotiate the benchmark for establishing the applicable interest rate with our lenders in the future. See Item 1A. "Risk Factors."

### *Foreign Currency Risk*

Approximately 5.3% of our net sales for the year ended December 31, 2019 were made in countries outside of the U.S. As a result, we are exposed to movements in foreign exchange rates between the U.S. dollar and other currencies. Based upon our net sales for the year ended December 31, 2019, we estimate that a 1% change in the exchange rate between the U.S. dollar and foreign currencies would affect net sales by approximately \$0.8 million. This may differ from actual results depending on the levels of net sales outside of the U.S.

### *Commodity Price Risk*

We are subject to commodity price risks with respect to price changes mainly in the electricity and natural gas markets and other raw material costs, such as cement, aggregates, steel and clay. Price fluctuations on our key inputs have a significant effect on our financial performance. The markets for most of these commodities are cyclical and are affected by factors such as global economic conditions, changes in or disruptions to industry production capacity, changes in inventory levels and other factors beyond our control.

### *Credit Risk*

Financial instruments that potentially subject us to a concentration of credit risk consist principally of accounts receivable. We provide our products to customers based on an evaluation of the financial condition of our customers, generally without requiring collateral. Exposure to losses on receivables is principally dependent on each customer's financial condition. We monitor the exposure for credit losses and maintain allowances for anticipated losses. Concentrations of credit risk with respect to our accounts receivable are limited due to the large number of customers comprising our customer base and their dispersion among many different geographies.

At December 31, 2019 and 2018, we had an individual customer within our Water Pipe & Products segment that accounted for more than 10% of total net sales for the years ended December 31, 2019 and 2018.

The customer represented approximately 15% and 14% of our total net sales for the years ended December 31, 2019 and 2018, respectively, and had total receivables at December 31, 2019 and 2018 totaling 11% and 16% of our total receivables, net, respectively.

**Item 8. Financial Statements and Supplementary Data**

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## Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Forterra, Inc.

### Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Forterra, Inc. (the Company) as of December 31, 2019 and 2018, and the related consolidated statements of operations, comprehensive income (loss), shareholders' equity and cash flows for the each of the three years in the period ended December 31, 2019, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company at December 31, 2019 and 2018, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated February 27, 2020 expressed an unqualified opinion thereon.

### Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2013.

Dallas, Texas

February 27, 2020

**FORTERRA, INC.**  
**Consolidated Statements of Operations**  
*(in thousands, except per share data)*

	Year ended December 31,		
	2019	2018	2017
<b>Net sales</b>	\$ 1,529,752	\$ 1,479,712	\$ 1,580,413
<b>Cost of goods sold</b>	1,233,370	1,234,143	1,327,305
<b>Gross profit</b>	296,382	245,569	253,108
Selling, general & administrative expenses	(221,770)	(209,877)	(255,034)
Impairment and exit charges	(3,520)	(4,336)	(13,220)
Other operating income, net	1,094	9,523	5,197
	<u>(224,196)</u>	<u>(204,690)</u>	<u>(263,057)</u>
<b>Income (loss) from operations</b>	72,186	40,879	(9,949)
<b>Other income (expenses)</b>			
Interest expense	(94,970)	(78,337)	(59,408)
Gain on extinguishment of debt	1,708	—	—
Earnings from equity method investee	10,466	10,162	12,360
Change in tax receivable agreement liability	—	—	46,180
Other income (expense), net	—	6,016	(31,915)
	<u>(10,610)</u>	<u>(21,280)</u>	<u>(42,732)</u>
<b>Loss before income taxes</b>	(10,610)	(21,280)	(42,732)
Income tax (expense) benefit	3,279	(3,085)	40,672
	<u>3,279</u>	<u>(3,085)</u>	<u>40,672</u>
<b>Net loss</b>	<u>\$ (7,331)</u>	<u>\$ (24,365)</u>	<u>\$ (2,060)</u>
<b>Basic and Diluted earnings (loss) per share:</b>			
Net loss	\$ (0.11)	\$ (0.38)	\$ (0.03)
<b>Weighted average shares of common stock outstanding:</b>			
Basic and Diluted	64,232	63,904	63,801

See accompanying notes to financial statements

**FORTERRA, INC.**  
**Consolidated Statements of Comprehensive Income (Loss)**  
*(in thousands)*

	Year ended December 31,		
	2019	2018	2017
Net loss	\$ (7,331)	\$ (24,365)	\$ (2,060)
Unrealized gain (loss) on derivative activities, net of tax	—	970	(3,548)
Change in other postretirement benefit plans, net of tax	373	—	—
Foreign currency translation adjustment	3,304	(5,782)	3,475
Comprehensive loss	<u>\$ (3,654)</u>	<u>\$ (29,177)</u>	<u>\$ (2,133)</u>

*See accompanying notes to financial statements*

**FORTERRA, INC.**  
**Consolidated Balance Sheets**  
*(in thousands, except per share data)*

	December 31,	
	2019	2018
<b>ASSETS</b>		
<b>Current assets</b>		
Cash and cash equivalents	\$ 34,800	\$ 35,793
Receivables, net	205,801	198,468
Inventories	238,483	285,030
Prepaid expenses	11,021	7,289
Other current assets	8,890	17,509
Total current assets	498,995	544,089
<b>Non-current assets</b>		
Property, plant and equipment, net	475,575	492,167
Operating lease right-of-use assets	60,253	—
Goodwill	508,826	508,193
Intangible assets, net	142,674	183,789
Investment in equity method investee	50,034	50,607
Other long-term assets	3,701	14,407
Total assets	\$ 1,740,058	\$ 1,793,252
<b>LIABILITIES AND EQUITY</b>		
<b>Current liabilities</b>		
Trade payables	\$ 102,426	\$ 114,708
Accrued liabilities	88,839	70,236
Deferred revenue	9,527	9,138
Current portion of long-term debt	12,510	12,510
Current portion of tax receivable agreement	13,145	15,457
Total current liabilities	226,447	222,049
<b>Non-current liabilities</b>		
Long-term debt	1,085,793	1,176,095
Long-term finance lease liabilities	137,365	134,948
Long-term operating lease liabilities	54,411	—
Deferred tax liabilities	28,929	46,615
Deferred gain on sale-leaseback	—	9,338
Other long-term liabilities	21,906	22,667
Long-term tax receivable agreement	64,240	73,318
Total liabilities	1,619,091	1,685,030
Commitments and Contingencies (Note 16)		
<b>Equity</b>		
Common stock, \$0.001 par value. 190,000 shares authorized; 64,741 and 64,206 shares issued and outstanding at December 31, 2019 and December 31, 2018, respectively	19	18
Additional paid-in-capital	244,372	234,931
Accumulated other comprehensive loss	(7,063)	(10,740)
Retained deficit	(116,361)	(115,987)
Total shareholders' equity	120,967	108,222
Total liabilities and shareholders' equity	\$ 1,740,058	\$ 1,793,252

See accompanying notes to financial statements

**FORTERRA, INC.**  
**Consolidated Statements of Shareholders' Equity**  
*(in thousands, except share data)*

	Common Stock		Additional Paid-in-Capital	Accumulated Other Comprehensive Income (Loss)	Retained Deficit	Total Shareholders' Equity
	Shares	Amount				
Balance at December 31, 2016	63,924,124	\$ 18	\$ 228,316	\$ (5,025)	\$ (90,392)	\$ 132,917
Share-based compensation expense	—	—	3,696	—	—	3,696
Stock-based plan activity	306,764	—	(37)	—	—	(37)
Net loss	—	—	—	—	(2,060)	(2,060)
Gains on derivative transactions, net of tax	—	—	—	(3,548)	—	(3,548)
Foreign currency translation adjustment	—	—	—	3,475	—	3,475
Other	—	—	(1,952)	—	—	(1,952)
Balance at December 31, 2017	64,230,888	\$ 18	\$ 230,023	\$ (5,098)	\$ (92,452)	\$ 132,491
Share-based compensation expense	—	—	6,240	—	—	6,240
Stock-based plan activity	(25,284)	—	(126)	—	—	(126)
Net loss	—	—	—	—	(24,365)	(24,365)
Gain on derivative transactions, net of tax	—	—	—	970	—	970
Reclassification due to the adoption of ASU 2018-02	—	—	—	(830)	830	—
Foreign currency translation adjustment	—	—	—	(5,782)	—	(5,782)
Other	—	—	(1,206)	—	—	(1,206)
Balance at December 31, 2018	64,205,604	\$ 18	\$ 234,931	\$ (10,740)	\$ (115,987)	\$ 108,222
Cumulative effect of accounting changes, net of tax	—	—	—	—	6,957	6,957
Share-based compensation expense	—	—	7,919	—	—	7,919
Stock-based plan activity	535,063	1	1,522	—	—	1,523
Net loss	—	—	—	—	(7,331)	(7,331)
Foreign currency translation adjustment	—	—	—	3,304	—	3,304
Other	—	—	—	373	—	373
Balance at December 31, 2019	64,740,667	\$ 19	\$ 244,372	\$ (7,063)	\$ (116,361)	\$ 120,967

See accompanying notes to financial statements

**FORTERRA, INC.**  
**Consolidated Statements of Cash Flows**  
*(in thousands)*

	Year ended December 31,		
	2019	2018	2017
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>			
Net loss	\$ (7,331)	\$ (24,365)	\$ (2,060)
<i>Adjustments to reconcile net loss to net cash provided by operating activities:</i>			
Depreciation & amortization expense	97,258	105,423	115,659
(Gain) / loss on business divestiture	—	(6,016)	32,278
(Gain) / loss on disposal of property, plant and equipment	2,045	(4,266)	2,107
Gain on extinguishment of debt	(1,708)	—	—
Amortization of debt discount and issuance costs	7,962	8,143	8,123
Stock-based compensation expense	7,919	6,240	3,696
Impairment on property, plant, and equipment and goodwill	128	956	10,551
Earnings from equity method investee	(10,466)	(10,162)	(12,360)
Distributions from equity method investee	11,039	13,141	13,717
Unrealized (gain) loss on derivative instruments, net	6,401	(1,408)	(5,251)
Unrealized foreign currency gains, net	45	(527)	(615)
Provision (recoveries) for doubtful accounts	387	(1,224)	2,947
Deferred income taxes	(20,067)	(20,768)	(25,496)
Tax receivable agreement non-cash items	—	—	(46,180)
Deferred rent	—	1,373	2,616
Other non-cash items	1,320	83	196
<i>Change in assets and liabilities:</i>			
Receivables, net	(7,394)	(2,466)	(16,831)
Inventories	47,491	(45,313)	1,838
Other current assets	514	8,657	(24,003)
Accounts payable and accrued liabilities	2,675	(4,548)	(19,424)
Other assets & liabilities	8,568	4,243	826
<b>NET CASH PROVIDED BY OPERATING ACTIVITIES</b>	<b>146,786</b>	<b>27,196</b>	<b>42,334</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>			
Purchase of property, plant and equipment, and intangible assets	(53,709)	(50,609)	(52,514)
Proceeds from business divestiture	—	618	23,200
Proceeds from sale of fixed assets	11,414	8,429	—
Settlement of net investment hedges	—	(4,990)	—
Assets and liabilities acquired, business combinations, net	—	(4,500)	(36,709)
<b>NET CASH USED IN INVESTING ACTIVITIES</b>	<b>(42,295)</b>	<b>(51,052)</b>	<b>(66,023)</b>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>			
Payments of debt issuance costs	—	—	(2,498)
Proceeds from issuance of common stock, net	1,703	—	—
Payments on term loans	(95,741)	(12,510)	(12,008)
Proceeds from term loans, net	—	—	200,000
Proceeds from revolver	54,000	—	194,000
Payments on revolver	(54,000)	—	(293,000)
Payment pursuant to tax receivable agreement	(11,390)	(30,407)	—
Other financing activities	(753)	(534)	(244)
<b>NET CASH PROVIDED BY (USED IN) FINANCING ACTIVITIES</b>	<b>(106,181)</b>	<b>(43,451)</b>	<b>86,250</b>
Effect of exchange rate changes on cash	697	(1,434)	1,949
Net change in cash and cash equivalents	(993)	(68,741)	64,510
Cash and cash equivalents, beginning of period	35,793	104,534	40,024
Cash and cash equivalents, end of period	<u>\$ 34,800</u>	<u>\$ 35,793</u>	<u>\$ 104,534</u>

## **1. Organization and description of the business**

### ***General***

Forterra, Inc. ("Forterra" or the "Company") is involved in the manufacturing, sale and distribution of building products in the United States ("U.S.") and Eastern Canada. Forterra's primary products are concrete drainage pipe, precast concrete structures, and water transmission pipe used in drinking and wastewater systems. These products are used in the residential, infrastructure and non-residential sectors of the construction industry.

Forterra, a Delaware corporation, was formed on June 21, 2016 to hold the business of Forterra Building Products following an internal reorganization transaction in connection with its initial public offering ("IPO") as described below.

The business of Forterra Building Products included indirect wholly-owned subsidiaries of LSF9 Concrete Holdings Ltd., ("LSF9"). Lone Star Fund IX (U.S.), L.P. , which is referred to along with its affiliates and associates, but excluding the Company and other companies that it owns as a result of its investment activity, as Lone Star, through its wholly-owned subsidiary LSF9, acquired the business of Forterra Building Products on March 13, 2015, ("Acquisition"). LSF9, which was formed on February 6, 2015 for the purpose of acquiring the business of Forterra Building Products had no operations prior to the date of the Acquisition.

#### *Initial Public Offering*

On October 6, 2016, Forterra filed an Amended and Restated Certificate of Incorporation which increased the number of authorized shares of common stock from 1,000 with a par value of \$0.01 per share to 190,000,000 with a par value of \$0.001 per share, and, immediately after which, effected a 41,619,472 for one stock split of its issued and outstanding common stock previously approved by the Company's Board of Directors. Following the stock split there were 41,619,472 shares of common stock outstanding. The Company's Amended and Restated Certificate of Incorporation has also authorized 10,000,000 shares of preferred stock that may be issued at the approval of the Company's Board of Directors. No shares of preferred stock have been issued or were outstanding as of December 31, 2019.

On October 25, 2016, Forterra sold 18,420,000 shares of common stock in its initial public offering ("IPO") at a public offering price of \$18.00 per share. The Company received net proceeds of \$313.3 million in the IPO before offering costs.

#### *Reorganization*

Prior to the consummation of the IPO, LSF9 distributed its brick operations in the United States and Eastern Canada to an affiliate of Lone Star, or the Bricks Disposition, recognized as a return of capital in the statement of shareholders' equity. Following the Bricks Disposition and prior to the consummation of the IPO, the remaining building products operations of LSF9 in the United States and Eastern Canada, were transferred to Forterra, Inc. in an internal reorganization under common control transaction (the "Reorganization"). Following the Reorganization, Forterra, Inc. became a wholly owned subsidiary of Forterra US Holdings, LLC, which is indirectly wholly owned by an affiliate of Lone Star.

#### *Refinancing*

Concurrent with the completion of the IPO, Forterra entered into a new asset based revolving credit facility for working capital and general corporate purposes, (the "Revolver"), and a new \$1.05 billion senior term loan facility ("Term Loan"). On May 1, 2017, the Company amended the Term Loan to increase the principal outstanding by an additional \$200.0 million and to reduce the interest margin applicable to the full balance thereof. The terms of the Term Loan and Revolver are described in greater detail in Note 11, Debt and deferred financing costs.

## 2. Summary of significant accounting policies

### ***Principles of Consolidation***

The consolidated financial statements include the accounts and results of operations of Forterra, Inc. and its consolidated subsidiaries. Intercompany transactions and balances have been eliminated in consolidation.

### ***Basis of Presentation***

The consolidated financial statements of the Company have been prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP"). Certain prior year numbers have been reclassified to conform to current year presentations.

### ***Business Combinations***

Assets acquired and liabilities assumed in business combination transactions, as defined by the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 805, *Business Combination*, are recorded at fair value using the acquisition method of accounting. The Company allocates the purchase price of acquisitions based upon the fair value of each component which may be derived from various observable and unobservable inputs and assumptions. Initial purchase price allocations are preliminary and subject to revision within the measurement period, not to exceed one year from the date of the transaction. The fair value of property, plant and equipment and intangible assets may be based upon the discounted cash flow method that involves inputs that are not observable in the market (Level 3). Goodwill assigned represents the amount of consideration transferred in excess of the fair value assigned to identifiable assets acquired and liabilities assumed.

### ***Use of estimates***

The preparation of the consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities as of the reporting date, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates. These estimates are based on management's best knowledge of current events and actions that the Company may undertake in the future. The more significant estimates made by management relate to fair value estimates for assets and liabilities acquired in business combinations; estimates for accrued liabilities for environmental cleanup, bodily injury and insurance claims; estimates for commitments and contingencies; and estimates for the realizability of deferred tax assets, the tax receivable agreement obligation, inventory reserves, allowance for doubtful accounts and impairment of goodwill and long-lived assets.

### ***Cash and cash equivalents***

Cash and cash equivalents include cash on hand and other highly liquid investments having an original maturity of less than three months.

### ***Receivables, net***

Receivables are recorded at net realizable value, which includes allowances for doubtful accounts. The Company reviews the collectability of trade receivables on an ongoing basis. The Company reserves for trade receivables determined to be uncollectible. This determination is based on the delinquency of the account, the financial condition of the customer and the Company's collection experience.



***Concentration of credit risk***

Financial instruments that potentially subject the Company to concentrations of credit risk are primarily receivables. The Company performs ongoing credit evaluations of its customers' financial condition and generally requires no collateral from its customers. The allowances for uncollectible receivables are based upon analysis of economic trends in the construction industry, detailed analysis of the expected collectibility of accounts receivable that are past due and the expected collectibility of overall receivables.

The Company had an individual customer within its Water Pipe & Products segment that accounted for approximately 15% and 14% of the Company's total net sales for the years ended December 31, 2019 and 2018, respectively, and total receivables at December 31, 2019 and 2018 representing 11% and 16% of the Company total receivables, net, respectively.

***Concentration of Labor***

Approximately 32% of the Company's employees are represented by collective bargaining agreements, and 42% of these employees are included in collective bargaining agreements that expire within 12 months.

***Inventories***

Inventories are valued at the lower of cost or net realizable value. The Company's inventories are valued using the average cost and first-in-first-out methods. Inventories include materials, labor and applicable factory overhead costs. The value of inventory is adjusted for damaged, obsolete, excess and slow-moving inventory. Market value of inventory is estimated considering the impact of market trends, an evaluation of economic conditions, and the value of current orders relating to the future sales of each respective component of inventory.

***Property, plant and equipment, net***

Property, plant and equipment, which includes amounts recorded under capital lease arrangements, is stated at cost less accumulated depreciation. Depreciation of property, plant and equipment is computed using the straight-line method over the estimated useful lives of the assets. These lives range from 20 to 40 years for buildings, 4 to 20 years for machinery and equipment, and 5 to 10 years for other equipment and lower of lease term or useful life on leasehold improvements. Repair and maintenance costs are expensed as incurred. The Company's depreciation expense is recorded in cost of goods sold and selling, general and administrative expenses in the statements of operations. The Company capitalizes interest during the active construction of major projects. Capitalized interest is added to the cost of the underlying assets and is depreciated over the useful lives of those assets. There was no interest capitalized for any of the periods presented in the financial statements.

***Impairment or disposal of long-lived assets***

The Company evaluates the recoverability of its long-lived assets in accordance with the provisions of ASC 360, *Property, Plant and Equipment* ("ASC 360"). ASC 360 requires that long-lived assets and certain identifiable intangibles be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets is measured by comparing the carrying amount of an asset to future undiscounted net cash flows expected to be generated by the asset. Such evaluations for impairment are significantly impacted by estimates of future prices for the Company's products, capital needs, economic trends in the construction sector and other factors. If such assets are considered to be impaired, the impairment to be recognized is measured at the amount by which the carrying amount of the assets exceeds their fair value.

***Leases***

The Company has both capital and finance leases. The Company determines if an arrangement is a lease at inception. Leases with an initial term of less than 12 months are not recorded on the balance sheet.

Operating leases are included in operating lease right-of-use ("ROU") assets, accrued liabilities, and long-term operating lease liabilities in the consolidated balance sheets. Finance leases are included in property, plant and equipment, accrued liabilities, and long-term finance lease liabilities in the consolidated balance sheets.

ROU assets represent the Company's right to use an underlying asset for the lease term, and lease liabilities represent the Company's obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As most of the Company's leases do not provide an implicit rate, the Company uses its incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. The Company uses the implicit rate when readily determinable. The lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

The Company has lease agreements with lease and non-lease components, which are generally accounted for separately. For machinery and equipment leases, such as forklifts, the Company accounts for the lease and non-lease components as a single lease component.

Minimum rent payments under operating leases are recognized as an expense on a straight-line basis over the lease term, including any rent free periods. Operating lease expenses for the years ended December 31, 2019, 2018 and 2017 were approximately \$16.5 million, \$24.3 million and \$30.8 million, respectively.

#### ***Goodwill and other intangible assets, net***

Goodwill represents the excess of costs over the fair value of identifiable assets acquired and liabilities assumed. The Company evaluates goodwill and intangible assets in accordance with ASC 350, *Goodwill and Other Intangible Assets* ("ASC 350"). ASC 350 requires goodwill to be either qualitatively or quantitatively assessed for impairment annually (or more frequently if impairment indicators arise) for each reporting unit. The Company performs its annual impairment testing of goodwill as of October 1 of each year and in interim periods if events occur that would indicate that it is more likely than not the fair value of a reporting unit is less than carrying value. The Company first assesses qualitative factors to evaluate whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount as the basis for determining whether it is necessary to perform a quantitative goodwill impairment test. The Company may bypass the qualitative assessment for any reporting unit in any period and proceed directly with the quantitative analysis. The quantitative analysis compares the fair value of the reporting unit with its carrying amount. If the carrying amount of a reporting unit exceeds the fair value, impairment is recognized in an amount equal to that excess, limited to the total amount of goodwill allocated to that reporting unit.

The Company evaluates its intangible assets with finite lives for indications of impairment whenever events or changes in circumstances indicate that the net book value may not be recoverable. Intangible assets with finite lives consist of customer relationships, customer backlogs, and brand names, and are amortized under the consumption method over the estimated useful lives. Factors that could trigger an impairment review include significant under-performance relative to expected historical or projected future operating results, significant changes in the manner of the Company's use of the acquired assets or the strategy for the Company's overall business or significant negative industry or economic trends.

If this evaluation indicates that the value of the intangible asset may be impaired, the Company makes an assessment of the recoverability of the net book value of the asset over its remaining useful life. If this assessment indicates that the intangible asset is not recoverable, based on the estimated undiscounted future cash flows of the asset over the remaining amortization period, the Company reduces the net book value of the related intangible asset to fair value and may adjust the remaining amortization period.

#### ***Investment in equity method investee***

The Company has an investment in a joint venture accounted for using the equity method. Under the equity method, carrying value is adjusted for the Company's share of the investee's earnings and losses, as well

as capital contributions to and distributions from the investee. Distributions in excess of equity method earnings are recognized as a return of investment and recorded as investing cash inflows in the accompanying consolidated statements of cash flows. The Company classifies its share of income and loss related to its investments in its investee as a component of operating income or loss, as the Company's investments in the investee is an extension of the Company's core business operations.

The Company evaluates its investment in the equity method investee for impairment whenever events or changes in circumstances indicate that the carrying value of its investment may have experienced an "other-than-temporary" decline in value. If such conditions exist, the Company compares the estimated fair value of the investment to its carrying value to determine if an impairment is indicated and determines whether the impairment is "other-than-temporary" based on its assessment of all relevant factors, including consideration of the Company's intent and ability to retain its investment.

### ***Derivatives and Hedge Accounting***

The Company has entered into derivative instruments to mitigate interest rate and foreign exchange rate risk. Certain derivative instruments are designated for hedge accounting under ASC 815-20, *Derivatives - Hedging*. Instruments that meet hedge criteria are formally designated as hedges at the inception of the instrument.

The Company's derivative assets and liabilities are measured at fair value. Fair value related to the cash flows occurring within one year are classified as current and the fair value related to the cash flows occurring beyond one year are classified as non-current in the consolidated balance sheets. For those instruments designated as hedges, the Company recognizes the changes in fair value in other comprehensive income ("OCI"), and recognizes any ineffectiveness immediately in earnings.

Valuation of derivative assets and liabilities reflect the value of the instrument including counterparty credit risk. These values also take into account the Company's own credit standing.

### ***Deferred financing costs***

In conjunction with its debt, the Company had a net balance of \$25.1 million in debt discounts and debt issuance costs as of December 31, 2019. These costs are amortized over the life of the applicable debt instrument to interest expense utilizing the effective interest method.

### ***Fair value measurement***

The Company utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible. The Company determines fair value based on assumptions that market participants would use in pricing an asset or liability in the principal or most advantageous market. When considering market participant assumptions in fair value measurements, the following fair value hierarchy distinguishes between observable and unobservable inputs, which are categorized in one of the following levels:

Level 1 Inputs – Unadjusted quoted prices in active markets for identical assets or liabilities accessible to the reporting entity at the measurement date.

Level 2 Inputs – Other than quoted prices included in Level 1 inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the asset or liability.

Level 3 Inputs – Unobservable inputs for the asset or liability used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at measurement date.

The Company's other financial instruments consist primarily of cash and cash equivalents, trade and other receivables, accounts payable, accrued expenses, derivative financial instruments and long-term debt. The

carrying value of the Company's trade and other receivables, trade payables and accrued expenses approximates fair value due to their highly liquid nature, short-term maturity, or competitive rates assigned to these financial instruments.

The Company adjusts the carrying amount of certain non-financial assets to fair value on a non-recurring basis when they are impaired.

#### ***Foreign currency translation***

The Company uses the U.S. dollar as its functional currency for operations in the U.S. and Mexico, and the Canadian dollar for operations in Canada. The assets, liabilities, revenues and expenses of the Company's Canadian operations are translated in accordance with ASC 830, *Foreign Currency Matters*.

#### ***Environmental remediation liabilities***

The Company accrues for costs on an undiscounted basis associated with environmental remediation obligations when such costs are probable and reasonably estimable; if an estimated amount is likely to fall within a range and no amount within that range can be determined to be the better estimate, the minimum amount of the range is recorded. Claims for recoveries from insurance carriers and other third parties are not recorded until it is probable that the recoveries will be realized. Such accruals are adjusted as further information develops or circumstances change. Environmental expenditures that relate to current operations or to conditions caused by past operations are expensed. Expenditures that create future benefits are capitalized. At December 31, 2019 and 2018, the Company had environmental obligations of \$1.6 million and \$1.6 million, respectively, which are recorded within accrued liabilities and other long-term liabilities in the consolidated balance sheets.

#### ***Stock-based plans***

The Company applies the provisions of ASC 718, *Compensation - Stock Compensation*, in its accounting and reporting for stock-based compensation. ASC 718 requires all stock-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. All unvested options outstanding under the Company's option plans have grant prices equal to the market price of the Company's stock on the dates of grant. Compensation cost for restricted stock and restricted stock units is determined based on the fair market value of the Company's stock at the date of grant. Stock-based compensation expense is generally recognized over the required service period, or over a shorter period when employee retirement eligibility is a factor. The Company recognizes forfeitures as they occur. Awards that may be settled in cash or company stock are classified as liabilities and remeasured at fair value at the end of each reporting period until the awards are settled.

#### ***Income Taxes***

Deferred tax assets generally represent items that can be used as a tax deduction or credit in the Company's tax returns in future years for which a tax benefit has already been recorded in the Company's consolidated statement of operations. The measurement of a deferred tax asset is reduced, if necessary, by a valuation allowance if, based on the available evidence, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Deferred tax liabilities generally represent tax expense recognized in the financial statements for which payment has been deferred, or expense for which the Company has already taken a deduction in its tax return but have not yet recognized as expense in the financial statements.

At December 31, 2018, the Company finalized its policy and elected to use the period cost method for Global Intangible Low-taxed Income ("GILTI") provisions, and therefore, have not recorded deferred taxes for basis differences expected to reverse in future periods.

The Company recognizes a tax benefit for uncertain tax positions only if the Company believes it is more likely than not that the position will be upheld on audit based solely on the technical merits of the tax position. The Company evaluates uncertain tax positions after the consideration of all available information. Penalties and

interest related to income tax uncertainties, should they occur, would be included in income tax expense in the period in which they are incurred.

### ***Revenue recognition***

The Company's revenue contracts are primarily single performance obligations for the sale of product both to trade customers and distributors. A majority of revenue recognized by the Company is recognized at the time control is transferred to customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for the products. The Company considers several indicators for the transfer of control to its customers, including the significant risks and rewards of ownership of products, the Company's right to payment and the legal title of the products. Based upon the assessment of control indicators, sales to trade customers and distributors are generally recognized when products are delivered to customers.

All variable consideration that may affect the total transaction price, including contractual discounts, rebates, returns and credits, is included in net sales. Estimates for variable consideration are based on historical experience, anticipated performance and management's judgment. Generally, the Company's contracts do not contain significant financing.

For certain engineering and construction contracts and building contracting arrangements, the Company enters into long-term contracts with customers. Revenue is recognized as the identified performance obligations are satisfied over time using an acceptable input method to measure the progress toward completion of the performance obligation if: the customer receives the benefits as work is performed, the customer controls the asset as it is being produced, or if the product being produced for the customer has no alternative use and the Company has a contractual right to payment. The Company uses its cost incurred to date relative to total estimated costs at completion to measure progress. The Company's contract liabilities consist of billings to customers in excess of revenue recognized which the Company records as deferred revenue. Revenue recognized during the years ended December 31, 2019 and December 31, 2018, which was included in contract liabilities at the beginning of each period was not material. Contract assets include revenue recognized in excess of amounts billed, and balances billed but not yet paid by customers under retainage provisions which are classified as a current asset within receivables, net on the Company's consolidated balance sheet. The Company had no material contract assets on the consolidated balance sheets as of December 31, 2019 or December 31, 2018. For the years ended December 31, 2019, 2018 and 2017, revenue recognized in continuing operations using the percentage of completion method amounted to 2%, 1%, and 3% and of total net sales, respectively.

The Company records net sales including taxes collected on behalf of its customers. Shipping and handling costs are accounted for as contract fulfillment costs and classified as cost of goods sold. See Note 20, Segment reporting, for the Company's disaggregated revenue disclosures.

The Company incurs shipping costs to third parties for the transportation of building products and bills such costs to customers. For the years ended December 31, 2019, 2018 and 2017, the Company recorded freight costs of approximately \$131.8 million, \$127.0 million and \$132.3 million, respectively, on a gross basis within net sales and cost of goods sold in the accompanying consolidated statements of operations.

The Company generally provides limited warranties related to its products which cover manufacturing in accordance with the specifications identified on the face of its quotation or order acknowledgment and to be free of defects in workmanship or materials. The warranty periods typically extend for a limited duration of one year. The Company estimates and accrues for potential warranty exposure related to products which have been delivered.

### ***Cost of goods sold and selling, general and administrative expenses***

Cost of goods sold includes costs of production, inbound freight charges for raw materials, outbound freight to customers, purchasing and receiving costs, inspection costs and warehousing at plant distribution facilities. Selling, general and administrative costs include expenses for sales, marketing, legal, accounting and finance services, human resources, customer support, treasury and other general corporate services.

**Recent Accounting Guidance Adopted**

In February 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2016-02, *Leases (Topic 842)*, which establishes the principles that lessees and lessors shall apply to report information about the amount, timing, and uncertainty of cash flows arising from a lease. Under the new guidance, lessees are required to recognize a right-of-use asset and a lease liability, measured on a discounted basis, at the commencement date for all leases with terms greater than twelve months. Additionally, this guidance required disclosures to help investors and other financial statement users better understand the amount, timing and uncertainty of cash flows arising from leases, including qualitative and quantitative requirements. The Company adopted Topic 842 during the first quarter of 2019, using the transition approach that permits application of the new standard at the adoption date instead of the earliest comparative period presented in the financial statements.

To adopt Topic 842, the Company elected the package of practical expedients permitted under the transition guidance within the new standard, which among other things, allowed the Company to carry forward its historical assessments of (1) whether the existing contracts contained a lease, (2) the lease classification for existing leases, and (3) initial direct cost for existing leases. In addition to the package of practical expedients, the Company has elected the adoption expedients of (1) the exclusion of leases with terms less than 12 months, and (2) the election not to separate non-lease components from lease components for certain classes of underlying leased assets.

To adopt Topic 842, the Company recognized a cumulative catch-up adjustment to the opening balance sheet presented January 1, 2019. The adoption of the standard had a material impact on the Company's consolidated balance sheet but did not have an impact on its consolidated statements of operations, comprehensive income (loss) or cash flows. As a result of the adoption, the Company has recorded additional lease assets and lease liabilities of approximately \$63.9 million and \$65.2 million, respectively, as of January 1, 2019. In addition, the Company recognized the carrying value of deferred gains related to certain sale and operating leaseback of land of \$9.3 million, net of tax impact of \$2.3 million, to beginning retained deficit as of January 1, 2019, in accordance with ASC 842-10-65-1.

In February 2018, the FASB issued ASU 2018-02, *Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income* to allow a reclassification from accumulated other comprehensive income ("AOCI") to retained earnings for stranded tax effects resulting from the U.S. tax reform legislation commonly known as the Tax Cuts and Jobs Act of 2017 ("TCJA"). This guidance is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years, with early adoption permitted. The Company early adopted the guidance provided in the ASU during the first quarter of 2018 and reclassified \$0.8 million of stranded deferred tax benefits related to its derivative instruments from accumulated other comprehensive loss to retained deficit.

**Recent Accounting Guidance Not Yet Adopted**

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments - Credit Losses (Topic 326)*. The standard replaces the incurred loss impairment methodology under current U.S. GAAP with a methodology that reflects expected credit losses and requires the use of a forward-looking expected credit loss model for accounts receivables, loans, and other financial instruments. The standard requires a modified retrospective approach through a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. The new standard is effective for fiscal years beginning after December 15, 2019. The Company plans to adopt the new credit loss standard effective January 1, 2020. The Company does not expect the new credit loss standard to have a material effect on its consolidated financial statements.

### 3. Acquisitions and divestitures

The acquisitions described below have been accounted for as business combinations (except as discussed below) as defined by ASC 805. The Company allocated the purchase price to the individually identifiable assets acquired and liabilities assumed based on their estimated fair value on the date of acquisition. The excess purchase price over those fair values was recorded as goodwill. The determination of fair values of the acquired assets and assumed liabilities required significant judgment, including estimates impacting the determination of estimated lives of tangible and intangible assets, calculation of the fair value of property, plant and equipment, inventory, and various intangibles. The fair values of assets and liabilities were determined using level 3 inputs as defined by ASC 820.

#### **2019 transactions**

On March 1, 2019, the Company acquired certain assets of Texas limited liability companies Houston Buckner Precast, LLC, Buckner Precast, LLC, Montgomery 18905 E. Industrial, LLC, and 1763 Old Denton Road, LLC (altogether "Buckner") for consideration of \$11.8 million in cash, inclusive of a working capital adjustment. The acquired Buckner assets did not meet the definition of a business and, as such, the transaction was accounted for as an asset acquisition pursuant to the guidance in subsection 805-50 of ASC 805, *Business Combinations*. The assets of the Buckner acquisition operate as part of the Company's Drainage Pipe & Products segment.

#### **2018 transactions**

##### *Acquisitions*

On April 2, 2018, the Company acquired substantially all the assets of Watkins Industries, Inc. for aggregate consideration of \$4.5 million in cash and accounted for the transaction as a business combination. During the third quarter of 2018, the Company acquired certain assets of Anchor Concrete Products, Ltd. in Kingston, Ontario, for aggregate consideration of \$2.5 million in cash and accounted for the transaction as an asset acquisition. Both of these acquisitions operate in the Company's Drainage Pipe & Products segment.

##### *Divestitures*

On January 31, 2018, the Company divested assets relating to the operation of certain Drainage Pipe & Products facilities in Tennessee, Alabama, and Georgia to Foley Products Company ("Foley") in exchange for \$9.1 million in cash, land in Texas and a Drainage Pipe & Products facility located in Prentiss, Mississippi.

The acquisition side of the exchange transaction was accounted for as a business combination as defined by FASB ASC 805, *Business Combinations*. In accordance with ASC 805, the purchase price is measured as the acquisition date fair value of the assets transferred by the Company to Foley in the exchange. In the exchange, the Company divested of the net working capital and certain of the real property of its Drainage Pipe & Products plants in Tennessee and Alabama, as well as the net working capital of certain Drainage Pipe & Products plants in Georgia. The purchase price of \$37.2 million was the fair value of the divested assets which resulted in the recognition of a gain of \$6.0 million, recognized in Other income (expense), net. The Company allocated the purchase price to the individually identifiable assets acquired and liabilities assumed based on their estimated fair value on the date of acquisition. The excess purchase price over those fair values was recorded as goodwill.

The determination of fair values of the divested and acquired assets and assumed liabilities requires significant judgment, including estimates impacting the determination of estimated lives of tangible and intangible assets, calculation of the fair value of property, plant and equipment, inventory, and various intangibles. The fair values of assets and liabilities were determined using level 3 inputs as defined by ASC 820, *Fair Value Measurements and Disclosures*.

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The final fair values of the assets acquired and liabilities assumed in the transaction, including \$9.1 million in cash, the Prentiss plant, and a parcel of land in Texas, at the acquisition date are as follows (*in thousands*):

Net working capital	\$	10,984
Property, plant and equipment		9,221
Customer relationship intangible		2,100
Non-compete agreement intangible		5,600
Other intangibles		290
Net identifiable assets acquired		28,195
Goodwill		8,996
Consideration transferred	\$	37,191

**2017 transactions**

*Acquisitions*

On February 3, 2017, Forterra acquired the assets of Royal Enterprises America, Inc. ("Royal") for aggregate consideration of \$35.5 million in cash, including customary working capital adjustments. Royal manufactured concrete drainage pipe, precast concrete products, storm water treatment technologies and erosion control products serving the greater Minneapolis market. The acquisition was financed with borrowings on the Revolver.

The respective fair values of the assets acquired and liabilities assumed at the acquisition date for the Royal acquisition are as follows:

	2017
	Royal
Net working capital	\$ 2,994
Property, plant and equipment, net	12,335
Customer relationship intangible	1,676
Non-compete agreement intangible	866
Trade names	308
Customer backlog intangible	63
Patents	72
Other assets and liabilities	(726)
Net identifiable assets acquired	17,588
Goodwill	17,903
Cash consideration transferred	\$ 35,491

Goodwill recognized is attributable primarily to expected operating efficiencies and expansion opportunities in the business acquired. Goodwill is deductible for tax purposes.

*Divestitures*

Effective July 31, 2017, Forterra completed the U.S. Pressure Pipe Divestiture, selling its U.S. concrete and steel pressure pipe business, which was part of the Company's Water Pipe & Products segment to Thompson Pipe Group ("TPG"), in exchange for approximately \$23.2 million in cash, exclusive of fees and expenses, as well as certain assets relating to a U.S. drainage pipe and products manufacturing facility. The assets acquired, recognized at fair value, include \$3.8 million of working capital, \$1.8 million of machinery and equipment, and a



customer intangible totaling \$0.8 million. The U.S. Pressure Pipe Divestiture generated a pre-tax loss of \$32.3 million recorded in other income (expense), net.

The total pre-tax loss of the U.S. concrete and steel pressure pipe business was \$50.9 million for the year ended December 31, 2017 inclusive of the loss on U.S. Pressure Pipe Divestiture of \$32.3 million, and long-lived asset impairment of \$7.5 million.

***Transaction costs***

For the years ended December 31, 2019, 2018 and 2017, the Company recognized aggregate transaction costs, including legal, accounting, valuation, and advisory fees, specific to the transactions identified above of \$0.2 million, \$0.8 million, and \$0.4 million, respectively. These costs are recorded in the consolidated statements of operations within selling, general & administrative expenses.

#### 4. Receivables, net

Receivables consist of the following at December 31, 2019 and 2018 (*in thousands*):

	December 31,	
	2019	2018
Trade receivables	\$ 178,698	\$ 188,999
Amounts billed, but not yet paid under retainage provisions	3,093	2,065
Other receivables	26,078	9,545
<b>Total receivables</b>	<b>\$ 207,869</b>	<b>\$ 200,609</b>
Less: Allowance for doubtful accounts	(2,068)	(2,141)
<b>Receivables, net</b>	<b>\$ 205,801</b>	<b>\$ 198,468</b>

The Company records provisions for doubtful accounts in selling, general and administrative expenses in the consolidated statements of operations. The table below summarizes the Company's allowance for doubtful accounts for the periods presented (*in thousands*):

	Allowance for doubtful accounts
Balance at December 31, 2017	\$ (4,033)
Recovery on doubtful accounts	1,224
Write-offs and adjustments	668
Balance at December 31, 2018	\$ (2,141)
Provision for doubtful accounts	(387)
Write-offs and adjustments	460
Balance at December 31, 2019	\$ (2,068)

#### 5. Inventories

Inventories consist of the following at December 31, 2019 and December 31, 2018 (*in thousands*):

	December 31,	
	2019	2018
Finished goods	\$ 161,440	\$ 193,603
Raw materials	76,237	90,376
Work in process	806	1,051
<b>Total inventories</b>	<b>\$ 238,483</b>	<b>\$ 285,030</b>

#### 6. Investment in equity method investee

The Company owns 50% of the Common Unit voting shares of Concrete Pipe & Precast LLC ("CP&P") and consequently, has recorded its investment in the Common Unit voting shares in accordance with ASC 323, *Investments – Equity Method and Joint Ventures*, under the equity method of accounting.

The Company's investment in the joint venture as of December 31, 2019 and 2018 was \$50.0 million and \$50.6 million, respectively, which is included within the Drainage Pipe & Products segment. At December 31, 2019, the difference between the amount at which the Company's investment is carried and the amount of the Company's share of the underlying equity in net assets of CP&P was approximately \$13.0 million. The basis difference is primarily attributable to the value of land and equity method goodwill associated with the investment.

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The following reflects the Company's distribution and earnings in the equity investment (in thousands):

	Year ended December 31,		
	2019	2018	2017
Distribution received from CP&P	\$ (11,039)	\$ (13,141)	(13,717)
Share of earnings in CP&P	10,538	10,234	12,432
Amortization of excess fair value of investment	(72)	(72)	(72)

Selected financial data for CP&P on a 100% basis is as follows (in thousands):

	Year ended December 31,		
	2019	2018	2017
Net sales	\$ 136,430	\$ 125,744	\$ 137,458
Gross profit	40,379	37,491	43,453
Income from operations	20,899	19,729	25,346
Net income	20,844	19,804	25,437

## 7. Property, plant and equipment, net

Property, plant and equipment, net consist of the following at December 31, 2019 and 2018 (in thousands):

	December 31,	
	2019	2018
Machinery and equipment	\$ 398,127	\$ 373,881
Land, buildings and improvements	240,403	235,819
Other equipment	8,660	6,962
Construction-in-progress	29,157	32,448
Total property, plant and equipment	676,347	649,110
Less: accumulated depreciation	(200,772)	(156,943)
Property, plant and equipment, net	\$ 475,575	\$ 492,167

Depreciation expense totaled \$49.8 million, \$52.9 million and \$60.2 million for the years ended December 31, 2019, 2018 and 2017, respectively, which is included in cost of goods sold and selling, general and administrative expenses in the consolidated statements of operations.

As of December 31, 2019 and 2018, gross assets recorded under finance leases, consisting primarily of land and buildings, were \$53.8 million and \$52.1 million, respectively, and accumulated depreciation was \$3.8 million and \$1.0 million, respectively.

### Impairments

For the year ended December 31, 2019, the Company recorded asset impairment charges of \$0.1 million for its property, plant and equipment. For the year ended December 31, 2018, the Company recorded impairment charges primarily in conjunction with plant closings undertaken for purposes of achieving operating efficiencies and recognized asset impairment charges for its property, plant and equipment of \$1.0 million. For the year ended December 31, 2017, the Company recorded \$7.5 million of impairment charges primarily related to assets held for sale in conjunction with the sale of its U.S. concrete and steel pressure pipe business. See Note 3, Acquisitions and divestitures for additional details. Asset impairments are included in impairment and exit charges on the consolidated statements of operations.

**8. Goodwill and other intangible assets, net**

The Company has goodwill which has been recorded in connection with its acquisition of businesses. The following table summarizes the changes in goodwill by operating segment for the years ended December 31, 2019 and December 31, 2018 (*in thousands*):

	<b>Drainage Pipe &amp; Products</b>	<b>Water Pipe &amp; Products</b>	<b>Total</b>
Balance at December 31, 2017	\$ 179,723	\$ 316,418	\$ 496,141
Acquisitions	9,951	—	9,951
Foreign currency and other adjustments	159	1,942	2,101
Balance at December 31, 2018	189,833	318,360	508,193
Foreign currency and other adjustments	633	—	633
Balance at December 31, 2019	<u>\$ 190,466</u>	<u>\$ 318,360</u>	<u>\$ 508,826</u>

Goodwill is required to be tested for impairment at the reporting unit level. The Company has three reporting units which have goodwill. The Company uses a combination of an income approach and a market approach to determine the fair value of the reporting unit. The income approach uses a reporting unit's estimated future cash flows, discounted at the weighted average cost of capital of a hypothetical third-party buyer. The market approach estimates fair value by applying cash flow multiples to the reporting unit's operating performance. The multiples are derived from comparable publicly traded companies with similar operating and investment characteristics to the reporting unit. The calculation of business enterprise value is based on significant unobservable inputs, such as price trends, customer demand, material costs and discount rates, and are classified as Level 3 in the fair value hierarchy. The Company's impairment determinations involve significant assumptions and judgments, as discussed above. Different assumptions regarding any of these inputs could have a significant effect on the various valuations.

The Company performed its annual goodwill impairment test as of October 1st of each year by conducting a quantitative analysis for all of the Company's reporting units. In 2018 and 2019, the calculated fair value of the reporting units exceeded book value in all circumstances; therefore, no annual impairment charge was recorded in either of these periods. During the year ended December 31, 2017, as a result of the interim goodwill impairment testing of its Canadian concrete pressure pipe reporting unit, the Company determined the carrying value of the reporting unit's goodwill was fully impaired and a goodwill impairment charge of \$3.0 million was recorded.

Intangible assets other than goodwill at December 31, 2019 included the following (*in thousands*):

	<b>Weighted average amortization period (in years)</b>	<b>Gross carrying amount as of December 31, 2019</b>	<b>Accumulated amortization</b>	<b>Net carrying value as of December 31, 2019</b>
Customer relationships	10	\$ 235,907	\$ (135,038)	\$ 100,869
Trade names	10	39,390	(19,764)	19,626
Patents	11	23,629	(15,956)	7,673
Customer backlog	0.8	13,209	(13,209)	—
Non-compete agreements	5	17,090	(9,020)	8,070
Developed technology	17	6,354	(374)	5,980
Other	10	867	(411)	456
Total intangible assets		<u>\$ 336,446</u>	<u>\$ (193,772)</u>	<u>\$ 142,674</u>

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Intangible assets other than goodwill at December 31, 2018 included the following *(in thousands)*:

	Weighted average amortization period (in years)	Gross carrying amount as of December 31, 2018	Accumulated amortization	Net carrying value as of December 31, 2018
Customer relationships	10	\$ 231,056	\$ (99,583)	\$ 131,473
Trade names	10	39,390	(14,867)	24,523
Patents	11	23,629	(12,325)	11,304
Customer backlog	0.8	13,206	(13,206)	—
Non-compete agreements	5	15,618	(6,044)	9,574
In-Process R&D (1)	Indefinite-lived	6,354	—	6,354
Other	10	867	(306)	561
Total intangible assets		<u>\$ 330,120</u>	<u>\$ (146,331)</u>	<u>\$ 183,789</u>

(1) Reclassified to developed technology in the first quarter of 2019.

Amortization expense totaled \$47.4 million, \$52.5 million and \$55.4 million for the years ended December 31, 2019, December 31, 2018 and December 31, 2017, respectively, which is included in selling, general and administrative expenses in the consolidated statements of operations.

The estimated amortization expense relating to amortizable intangible assets for the next five years is as follows *(in thousands)*:

Year ended	Intangible assets subject to amortization
2020	\$ 41,286
2021	33,221
2022	23,984
2023	17,651
2024	12,742
Total	<u>\$ 128,884</u>

## 9. Fair value measurement

The Company's financial instruments consist primarily of cash and cash equivalents, trade and other receivables, derivative instruments, accounts payable, long-term debt, operating and finance lease liabilities, accrued liabilities and the tax receivable agreement obligation. The carrying value of the Company's trade receivables, other receivables, trade payables, the asset-based revolver and accrued liabilities approximates fair value due to their short-term maturity or other terms related to these financial instruments. The Company may adjust the carrying amount of certain non-financial assets to fair value on a non-recurring basis when they are impaired.

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The estimated carrying amount and fair value of the Company's financial instruments measured and recorded at fair value on a recurring basis are as follows for the dates indicated (*in thousands*):

	Fair value measurements at December 31, 2019 using			Total Fair Value December 31, 2018
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
Recurring:				
<b>Non-current assets</b>				
Derivative asset	\$ —	\$ 258	\$ —	\$ 258

	Fair value measurements at December 31, 2018 using			Total Fair Value December 31, 2017
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
Recurring:				
<b>Non-current assets</b>				
Derivative asset	\$ —	\$ 6,659	\$ —	\$ 6,659

Liabilities and assets classified as level 2 which are recorded at fair value are valued using observable market inputs. The fair values of derivative assets and liabilities are determined using quantitative models that utilize multiple market inputs including interest rates and exchange rates to generate continuous yield or pricing curves and volatility factors to value the position. The majority of market inputs are actively quoted and can be validated through external sources, including brokers, market transactions and third-party pricing services. The fair values of derivative assets and liabilities include adjustments for market liquidity, counter-party credit quality and other instrument-specific factors, where appropriate. In addition, the Company incorporates within its fair value measurements a valuation adjustment to reflect the credit risk associated with the net position. Positions are netted by counter-parties, and fair value for net long exposures is adjusted for counter-party credit risk while the fair value for net short exposures is adjusted for the Company's own credit risk.

The estimated carrying amount and fair value of the Company's financial instruments and liabilities for which fair value is only disclosed is as follows (*in thousands*):

	Carrying Amount December 31, 2019	Fair value measurements at December 31, 2019 using			Total Fair Value December 31, 2019
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
<b>Non-current liabilities</b>					
Term Loan	\$1,098,303	—	\$1,102,295	—	\$1,102,295
Tax receivable agreement payable	77,385	—	—	47,625	47,625

	Carrying Amount December 31, 2018	Fair value measurements at December 31, 2018 using			Total Fair Value December 31, 2018
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
<b>Non-current liabilities</b>					
Term Loan	\$1,188,605	—	\$1,103,628	—	\$1,103,628
Tax receivable agreement payable	88,775	—	—	51,832	51,832

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The fair value of debt is valued using a market approach based on the indicative quoted prices for the Company's debt instruments traded in over-the-counter markets and, therefore, is classified as Level 2 within the fair value hierarchy. See Note 11, Debt and deferred financing costs, for a further discussion of Company debt.

The fair value of the tax receivable agreement payable was determined using a discounted cash flow methodology using level 3 inputs as defined by ASC 820, *Fair Value Measurements and Disclosures*. The determination of fair value required significant judgment, including estimates of the timing and amounts of various tax attributes. These estimates are based on management's best knowledge of current events and actions that the Company may undertake in the future. Actual results could differ from these estimates. See Note 16, Commitments and contingencies, for a further discussion of the Company's tax receivable agreement.

**10. Accrued liabilities**

Accrued liabilities consist of the following at December 31, 2019 and December 31, 2018 (*in thousands*):

	December 31,	
	2019	2018
Accrued payroll and employee benefits	\$ 32,815	\$ 31,095
Short-term capital leases	16,542	16,430
Short-term operating leases	8,784	—
Accrued taxes	5,354	11,489
Accrued rebates	9,895	3,542
Warranty	5,536	3,251
Environmental obligation	718	570
Other miscellaneous accrued liabilities	9,195	3,859
Total accrued liabilities	\$ 88,839	\$ 70,236

**11. Debt and deferred financing costs**

The Company's debt consisted of the following (*in thousands*):

	December 31, 2019	December 31, 2018
Term Loan, net of debt issuance costs and original issuance discount of \$25,055 and \$34,252, respectively	\$ 1,098,303	\$ 1,188,605
<b>Total debt</b>	<b>\$ 1,098,303</b>	<b>\$ 1,188,605</b>
Less: current portion debt	(12,510)	(12,510)
<b>Total long-term debt</b>	<b>\$ 1,085,793</b>	<b>\$ 1,176,095</b>

Concurrent with the completion of the IPO, Forterra entered into a \$300 million asset based revolving credit facility for working capital and general corporate purposes ("Revolver") and a \$1.05 billion senior term loan facility ("Term Loan").

The Term Loan initially provided for a \$1.05 billion senior secured term loan. Subject to the conditions set forth in the term loan agreement, the Term Loan may be increased by (i) up to the greater of \$285.0 million and 1.0x consolidated EBITDA (defined below) of Forterra and its restricted subsidiaries for the four quarters most recently ended prior to such incurrence plus (ii) the aggregate amount of any voluntary prepayments, plus (iii) an additional amount, provided certain financial tests are met.

Effective May 1, 2017 the Company amended the Term Loan to increase the principal outstanding by an additional \$200.0 million and to reduce the interest margins applicable to the full balance of the Term Loan by 50 basis points such that applicable margin based on LIBOR was reduced from 3.50% to 3.00%. The net proceeds from the incremental term loan of \$196.8 million were used to pay down a portion of the outstanding balance on the Revolver. This amendment had no effect on the Company's ability to increase the size of the Term Loan under the original provisions. The Term Loan matures on October 25, 2023 and is subject to quarterly amortization equal to 0.25% of the initial principal amount. Interest accrues on outstanding borrowings thereunder at a rate equal to LIBOR (with a floor of 1.0%) or an alternate base rate, in each case plus a margin of 3.00% or 2.00%, respectively. The weighted average interest rates for the Term Loan were 5.2% and 5.0% for the years ended December 31, 2019 and 2018, respectively.

During 2019, the Company repaid \$87.0 million of the Term Loan before its maturity at a market value of \$83.2 million. Consequently, the Company wrote off a proportionate share of debt issuance costs of \$2.1 million and recognized a net gain of \$1.7 million on the early extinguishment of debt which was included in the consolidated statements of operations.

The Revolver provides for an aggregate principal amount of up to \$300.0 million, with up to \$280.0 million to be made available to the U.S. borrowers and up to \$20.0 million to be made available to the Canadian borrowers (the allocation may be modified periodically at the Company's request). Subject to the conditions set forth in the revolving credit agreement related to the Revolver (the "Revolving Credit Agreement"), the Revolver may be increased by up to the greater of (i) \$100.0 million and (ii) such amount as would not cause the aggregate borrowing base to be exceeded by more than \$50.0 million. Borrowings under the Revolver may not exceed a borrowing base equal to the sum of (i) 100% of eligible cash, (ii) 85% of eligible accounts receivable and (iii) the lesser of (a) 75% of eligible inventory and (b) 85% of the orderly liquidation value of eligible inventory, with the U.S. and Canadian borrowings being subject to separate borrowing base limitations. The advance rates for accounts receivable and inventory are subject to increase by 2.5% during certain periods. As of December 31, 2019, the Revolver had no outstanding borrowings, and the weighted average interest rate was 3.72% for borrowings during the period.

The Revolver matures on October 25, 2021. The facility also provides for the issuance of letters of credit of up to an agreed sublimit. Interest accrues on outstanding borrowings at a rate equal to LIBOR or CDOR plus a margin ranging from 1.25% to 1.75% per annum, or at an alternate base rate, Canadian prime rate or Canadian base rate plus a margin ranging from 0.25% to 0.75% per annum, in each case, based upon the average excess



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availability under the Revolver for the most recently completed calendar quarter. The obligations of the borrowers under the Revolver are guaranteed by Forterra and its direct and indirect wholly-owned restricted subsidiaries other than certain excluded subsidiaries; provided that the obligations of the U.S. borrowers are not guaranteed by the Canadian subsidiaries. The Revolver is secured by substantially all of the assets of the borrowers; provided that the obligations of the U.S. borrowers are not secured by any liens on more than 65% of the voting stock of the Canadian subsidiaries or assets of the Canadian subsidiaries.

Interest on the 2016 Revolver is floating, based on a reference rate plus an applicable margin. In addition, Forterra pays a facility fee of between 20.0 and 32.5 basis points per annum based upon the utilization of the total Revolver. Availability under the Revolver at December 31, 2019 based on draws, outstanding letters of credit of \$16.0 million and allowable borrowing base was \$257.7 million.

The obligations of the borrower under the Term Loan are guaranteed by Forterra and each of its direct and indirect material wholly-owned domestic subsidiaries other than any of Forterra's Canadian subsidiaries and certain other excluded subsidiaries, or the Guarantors. The Term Loan is secured by substantially all of the assets of Forterra, the borrower and the Guarantors; provided that the obligations under the Term Loan are not secured by any liens on more than 65% of the voting stock of the Canadian subsidiaries or assets of the Canadian subsidiaries. The Term Loan contains customary representations and warranties, and affirmative and negative covenants, that, among other things, restrict the ability of Forterra and its restricted subsidiaries to incur additional debt, incur or permit liens on assets, make investments and acquisitions, consolidate or merge with any other company, engage in asset sales and pay dividends and make distributions. The Term Loan does not contain any financial covenants. Obligations under the Term Loan may be accelerated upon certain customary events of default (subject to grace periods, as appropriate). The Company was in compliance with all applicable covenants under the Term Loan as of December 31, 2019.

The Revolver contains customary representations and warranties, and affirmative and negative covenants, including representations, warranties, and covenants that, among other things, restrict the ability of Forterra and its restricted subsidiaries to incur additional debt, incur or permit liens on assets, make investments and acquisitions, consolidate or merge with any other company, engage in asset sales and pay dividends and make distributions. The Revolving Credit Agreement contains a financial covenant restricting Forterra from allowing its fixed charge coverage ratio to drop below 1.00:1.00 during a compliance period, which is triggered when the availability under the Revolver falls below a threshold set forth in the Revolving Credit Agreement. Obligations under the Revolving Credit Agreement may be accelerated upon certain customary events of default (subject to grace periods, as appropriate). The fixed charge coverage ratio is the ratio of consolidated earnings before interest, depreciation, and amortization, or EBITDA, less cash payments for capital expenditures and income taxes to consolidated fixed charges (interest expense plus scheduled payments of principal on indebtedness). The Company was in compliance with all applicable covenants under the Revolver as of December 31, 2019.

As of December 31, 2019, scheduled maturities of long-term debt were as follows (*in thousands*):

	<b>Term Loan</b>
2020	\$ 12,510
2021	12,510
2022	12,510
2023	1,085,828
	<u>\$ 1,123,358</u>

## 12. Other long-term liabilities

Other long-term liabilities consist of the following for the years ended December 31, 2019 and 2018 (*in thousands*):

	December 31,	
	2019	2018
Workers' compensation	\$ 9,023	\$ 9,837
Deferred rent	—	4,259
Employee benefits	2,945	3,307
Insurance	1,345	1,550
Environmental remediation liability	872	1,001
Other miscellaneous long-term liabilities	7,721	2,713
	<u>\$ 21,906</u>	<u>\$ 22,667</u>

## 13. Derivatives and hedging

The Company uses derivatives to manage selected foreign exchange and interest rate exposures. The Company does not use derivative instruments for speculative trading purposes, and, except as discussed below, cash flows from derivative instruments are included in net cash provided by (used in) operating activities in the consolidated statements of cash flows.

At December 31, 2017, the Company had foreign exchange forward contracts, designated as net investment hedges in accordance with ASC 815-20 *Derivatives - Hedging*, which allows for the effective portion of the changes in the fair value of the instruments to be captured in accumulated other comprehensive income, and ineffective portion recorded in earnings. These instruments were novated to Forterra by an affiliate concurrent with the Reorganization, directly prior to the IPO and refinancing described in Note 1 and were settled in March 2018 resulting in a cash outlay of \$5.0 million. This cash outlay was recorded within the investing activities section of the consolidated statements of cash flows. The net investment hedges were intended to mitigate foreign exchange exposure related to non-U.S. dollar net investments in certain foreign subsidiaries against changes in foreign exchange rates. A quantitative analysis was utilized to assess hedge effectiveness for the hedges. The Company assessed the hedge effectiveness and measured the amount of ineffectiveness for the hedge relationships based on changes in forward exchange rates. Cumulative changes in fair value of the effective portion of the hedging instruments were recorded in Accumulated other comprehensive income, and will be reclassified into earnings upon the sale or complete or substantially complete liquidation of the foreign entity. Any hedge ineffectiveness is recorded immediately in current period earnings. The Company did not have any ineffectiveness related to net investment hedges during the years ended December 31, 2019 and 2018.

On February 9, 2017, Forterra entered into interest rate swap transactions with a combined notional value of \$525 million. Under the terms of the swap transactions, Forterra agreed to pay a fixed rate of interest of 1.52% and receive floating rate interest indexed to one-month LIBOR with monthly settlement terms with the swap counterparties. The swaps have a three-year term and expire on March 31, 2020. The interest rate swaps are not designated as cash flow hedges, therefore all changes in the fair value of these instruments are captured as a component of interest expense in the consolidated statements of operations. Accordingly, cash flows from the monthly interest rate swap settlements are included in net cash provided by (used in) operating activities in the consolidated statements of cash flows.

The Company elects to present all derivative assets and derivative liabilities on a net basis on its balance sheets when a legally enforceable International Swaps and Derivatives Association, Inc. ("ISDA") Master Agreement exists. An ISDA Master Agreement is an agreement between two counterparties, which may have multiple derivative transactions with each other governed by such agreement, and such ISDA Master Agreement generally provides for the net settlement of all or a specified group of these derivative transactions, through a single payment, in a single currency, in the event of a default on, or affecting any, one derivative transaction or a

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termination event affecting all, or a specified group of, derivative transactions. At December 31, 2019 and 2018, the Company's derivative instruments fall under an ISDA master netting agreement.

The following table presents the fair values of derivative assets and liabilities in the balance sheets (*in thousands*):

	December 31, 2019			
	Derivative Assets		Derivative Liabilities	
	Notional Amount	Fair Value	Notional Amount	Fair Value
Interest rate swaps	\$ 525,000	\$ 258	\$ —	\$ —
Total derivatives, gross		258		—
Less: Legally enforceable master netting agreements		—		—
Total derivatives, net		<u>\$ 258</u>		<u>\$ —</u>

	December 31, 2018			
	Derivative Assets		Derivative Liabilities	
	Notional Amount	Fair Value	Notional Amount	Fair Value
Interest rate swaps	\$ 525,000	\$ 6,659	\$ —	\$ —
Total derivatives, gross		6,659		—
Less: Legally enforceable master netting agreements		—		—
Total derivatives, net		<u>\$ 6,659</u>		<u>\$ —</u>

The following table presents the effect of derivative instruments on the consolidated statements of operations (*in thousands*):

	Year ended December 31, 2019	Year ended December 31, 2018
<b>Net investment hedges</b>		
<i>Foreign exchange forward contracts</i>		
Gain on derivatives recognized in Accumulated other comprehensive loss	\$ —	\$ 970
<b>Derivatives not designated as hedges</b>		
<i>Interest rate swaps</i>		
Gain (loss) on derivatives not designated as hedges included in interest expense	(6,401)	1,408

#### 14. Leases

The Company leases land and buildings, office spaces, vehicles, machinery and equipment under various lease agreements. A large portion of the Company's leases were the result of the sale and leaseback of land and buildings related to certain production facilities. These leases have an initial term of 25 years, followed by one optional renewal term of approximately ten years that may be exercised at the Company's discretion. See note 15, Sale-Leaseback transaction. These leases, with the exception of certain land leases, were classified as finance leases. The Company's operating leases are mainly comprised of land and buildings, office spaces, vehicles, machinery and equipment leases, and have remaining terms of one to 25 years, some of which include options to extend the leases for up to ten years.

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The components of lease expense were as follows (in thousands):

Lease cost	Classification	Year ended December 31, 2019
Operating lease cost	Lease expense	\$ 16,464
Finance lease cost		
Amortization of leased assets	Depreciation, amortization, and accretion	2,276
Interest on lease liabilities	Interest expense	18,528

Lease term and discount rate	December 31, 2019
Weighted-average remaining lease term (years)	
Operating leases	15.5 years
Finance leases	33.1 years
Weighted-average discount rate (%)	
Operating leases	12.6%
Finance leases	12.3%

Supplemental cash flow information related to leases was as follows (in thousands):

	Year ended December 31, 2019
Cash paid for amounts included in lease liabilities	
Operating cash flows related to operating leases	\$ 14,945
Operating cash flows related to finance leases	16,090
Financing cash flows related to finance leases	583
Leased assets obtained in exchange for new finance lease liabilities	180
Leased assets obtained in exchange for new operating lease liabilities	4,925

Supplemental balance sheet information related to leases was as follows (in thousands):

	Classification	December 31, 2019
Operating leases		
Right of use assets	Operating lease right-of-use assets	\$ 60,253
Operating lease liabilities - current portion	Accrued liabilities	(8,784)
Operating lease liabilities - long term portion	Long-term operating lease liabilities	(54,411)
Finance leases		
Finance lease assets	Property, plant and equipment, net	49,999
Finance lease liabilities - current portion	Accrued liabilities	(16,542)
Finance lease liabilities - long term portion	Long-term finance lease liabilities	(137,365)

As of December 31, 2019, maturities of lease liabilities were as follows (in thousands):

	Operating leases	Finance leases	Total
2020	\$ 13,766	\$ 16,894	\$ 30,660
2021	11,371	17,049	28,420
2022	10,500	17,300	27,800
2023	10,247	17,516	27,763
2024	9,561	17,841	27,402
Thereafter	109,610	652,367	761,977
Total lease payments	165,055	738,967	904,022
Less: imputed interest	(101,860)	(585,060)	(686,920)
Present value of lease liabilities	\$ 63,195	\$ 153,907	\$ 217,102

## 15. Sale-Leaseback transaction

During April 2016, the Company sold 49 US and Canadian properties to Pipe Portfolio Owner (Multi) LP, (the "U.S. Buyer") and FORT-BEN Holdings (ONQC) Ltd., (the "Canadian Buyer") and entered into master land and building lease agreements under which the Company agreed to lease back each of the properties for an initial term of twenty years, followed by one optional renewal term of 9 years, 11 months. A deferred gain of \$81.5 million related to the sale-leaseback transaction was being amortized over the life of the master leases. In addition, the Company concluded that the leases for land and buildings were operating leases, and the leases for the machinery equipment were capital leases. In October 2016, the Company entered into agreements to replace the original guarantor with Forterra, as the new guarantor, effective immediately following completion of the internal reorganization effected prior to the IPO. Due to the change in guarantor, the sale leaseback qualified for sales recognition and was classified as an operating lease beginning October 2016.

On June 5, 2018, the Company entered into exchange agreements and Amended and Restated Master Leases with each of the U.S. Buyer and the Canadian Buyer (collectively, the "Exchange Transaction"). Under the exchange agreement between the Company and the U.S. Buyer, the Company exchanged ownership of a ductile iron pipe facility located in Bessemer, Alabama used in its Water Pipe & Products segment (the "Bessemer Facility") for 21 facilities used in its Drainage Pipe & Products segment and the U.S. concrete and steel pressure pipe facilities previously part of the Water Pipe & Products segment, including a portion of one property used in both segments, all of which were previously included in the sale-leaseback transaction. Under the exchange agreement between the Company and the Canadian Buyer, the Company exchanged ownership of a smaller diameter ductile iron pipe facility located in Bessemer, Alabama used in its Water Pipe & Products segment (the "Mini Mill Facility") for ownership of three Canadian concrete pressure pipe facilities that were previously included in the sale-leaseback transaction. No cash changed hands in the Exchange Transaction.

Under the Amended and Restated Master Leases, the Company leases 26 properties from the U.S. Buyer and 2 properties from an affiliate of the Canadian Buyer, each for an initial term of 25 years, through June 30, 2043, followed by one optional renewal term of nine years, eleven months that may be exercised at the Company's option. The initial base rent under the U.S. Amended and Restated Master Lease is \$17.1 million per annum, payable monthly, and is subject to a 2% annual increase during the initial term. If the Company elects to extend the term of the U.S. Amended and Restated Master Lease, the base rent for the first year of the extension will be the greater of 95% of the fair market rental value of the properties and an amount equal to 102% of the prior year's base rent, subject to an annual increase based on changes in the Consumer Price Index, but capped at 4%. The U.S. Amended and Restated Master Lease restricts the Company's use of the U.S. properties to heavy manufacturing, industrial, and other related uses. The Company cannot sublease or assign the properties covered by the U.S. Amended and Restated Master Lease without the prior written consent of the U.S. Landlord and subject to certain other restrictions. The terms of the Canadian Amended and Restated Master Lease are similar

to those of the U.S. Amended and Restated Master Lease described above, except that the initial base rent is \$1.2 million (CAD) per annum. The Company's aggregate liability in connection with its representations, warranties, covenants and indemnification and other obligations is \$5.0 million under the U.S. Exchange Agreement and \$6.4 million (CAD) under the Canadian Exchange Agreement, subject to limited exceptions.

The Company accounted for the Exchange Transaction in accordance with the sale-leaseback accounting guidance under ASC 840, *Leases*. The fair value of the 24 facilities exchanged back was \$86.1 million, and was accounted for as the proceeds from the sale of the Bessemer and Mini Mill Facilities after adjusting for the transaction cost of \$2.7 million. Consequently, a deferred gain of \$67.3 million was recorded at June 5, 2018. The carrying value of the deferred gains of \$35.0 million, the deferred rent of \$3.1 million, and the deferred transaction costs of \$2.4 million from the original sale-leaseback transaction were reclassified to reduce the carrying value of the 24 facilities exchanged back.

The Amended and Restated Master Leases extended the lease terms for all facilities, which caused the majority of the leases to be classified as capital leases instead of operating leases. Consequently, the Company recognized capital lease obligations as well as the gross value of the capital lease assets of \$149.0 million, calculated by discounting minimum future lease payments using its incremental borrowing rate of 12.33%. The carrying value of the deferred gains of \$100.0 million, the deferred rent of \$3.8 million, and the deferred transaction cost of \$5.7 million were reclassified to reduce the carrying value of capital lease assets.

During the year ended December 31, 2018, the Company recognized \$10.0 million of rent expense in cost of goods sold for operating leases, related to payments made under the sales leaseback transaction. During the year ended December 31, 2017, the Company recognized \$20.9 million of rent expense in cost of goods sold for operating leases, related to payments made under the sales leaseback transaction. See Note 14 for rent expense relating to the year ended December 31, 2019.

## **16. Commitments and contingencies**

The Company is involved in legal proceedings and litigation in the ordinary course of business. In the opinion of management, the outcome of such matters will not have a material adverse effect on the Company's consolidated financial position, results of operations, or liquidity. Other than routine litigation incidental to the Company's business and those matters described below, there are no material legal proceedings to which the Company is a party or to which any of the Company's properties are subject.

### *Earnout Dispute*

The Acquisition purchase agreement included an earnout, which provided for the payment of contingent consideration of up to \$100.0 million if and to the extent the 2015 financial results of the businesses acquired by Lone Star in the Acquisition, including the Company and HeidelbergCement A.G.'s ("HC") former building products business in the United Kingdom, exceeded a specified Adjusted EBITDA target for fiscal year 2015, as calculated pursuant to the terms of the purchase agreement. If such Adjusted EBITDA calculation exceeded the specified target, LSF9 and, as a result of the internal reorganization transaction effected prior to the Company's IPO, the Company would be required to pay the U.S. affiliate of HC an amount equal to a multiple of such excess Adjusted EBITDA, with any payment capped at \$100.0 million. In April 2016, the Company provided an earnout statement to affiliates of HC demonstrating that no payment was required. On June 13, 2016, HC provided notification that it disputed, among other things, the Company's calculation of Adjusted EBITDA under the purchase agreement and asserting that a payment should be made in the amount of \$100.0 million. The Company does not believe HC's position has merit and is vigorously opposing HC's assertions. On October 5, 2016, affiliates of HC filed a lawsuit in the Delaware Court of Chancery seeking specific performance and claiming access to the Company's books, records, and personnel; seeking a declaratory judgment concerning the scope of the neutral accounting expert's authority; and in the alternative, claiming a breach of contract and seeking the \$100.0 million and other damages or (the "Delaware Action"). On December 8, 2017, the court granted the defendants' Motion to Dismiss the First Amended Complaint in the Delaware Action, finding that the earnout dispute should be heard before a neutral accounting arbitrator as set forth in the purchase agreement and that any claims that required to be brought as indemnification claims under the purchase agreement were time-barred by the contractual limitations period.

Following the dismissal of the Delaware Action, the Company and HC jointly engaged a neutral accounting expert to act as an arbitrator in the dispute as required by the purchase agreement. After briefing certain preliminary matters for the arbitrator, the production of additional documents, the parties began briefing the issues on the merits for the neutral accounting arbitrator, which briefing is scheduled to be completed in the first quarter of 2020. A final hearing on the dispute is scheduled to be held on June 23 and 24, 2020, with a written decision from the neutral accounting arbitrator expected within 60 days thereafter. As of December 31, 2019, no liability for this contingency has been accrued as payment of any earnout is not considered probable. However, the outcome of this matter is uncertain, and no assurance can be given to the ultimate outcome of the resulting proceedings. If the Company is unsuccessful in resolving the dispute, it could recognize a material charge to its earnings.

#### *Securities Action and Derivative Actions*

Beginning on August 14, 2017, four plaintiffs filed putative class action complaints in the United States District Court for the Eastern District of New York against various defendants. On July 27, 2018, an order was entered consolidating the lawsuits into a single action (the "Securities Action"), and transferring the venue of the case from the Eastern District of New York to the Northern District of Texas. Pursuant to an agreed scheduling order, plaintiffs in the Securities Action filed their Consolidated Amended Complaint on November 30, 2018.

The Securities Action is brought by two plaintiffs individually and on behalf of all persons that purchased or otherwise acquired the Company's common stock issued pursuant to and/or traceable to the IPO and is brought against the Company, certain of its current and former officers and directors, Lone Star and certain of its affiliates, and certain banks that acted as underwriters of the IPO (collectively, the "Securities Defendants"). The Securities Action generally alleges that the Company's registration statement on Form S-1 filed in connection with the IPO (the "Registration Statement") contained false or misleading statements and/or omissions of material facts. Specifically, plaintiffs allege the Registration Statement (1) made false and/or misleading statements about the Company's ability to generate organic growth through cross-selling initiatives amongst the Company's various businesses while failing to disclose that the Company had not adequately integrated acquisitions, had not begun rolling out its cross-selling initiative, and that its businesses were submitting competing bids against one another, and (2) made false or misleading statements regarding the existence of certain accounting practices and alleged material weaknesses in the Company's internal controls over financial reporting, including the existence of and accounting for bill and hold transactions, the lack of sufficient accounting personnel, the lack of effective internal controls to ensure costs were properly and accurately accrued, resulting in misstated costs and profits in the Company's 2016 financial statements, and the making of inventory accounting entries without adequate substantiation or documentation. The Securities Action asserts claims under Section 11 and Section 15 of the Securities Act of 1933, as amended, (the "Securities Act") and seeks (1) class certification under the Federal Rules of Civil Procedure, (2) damages suffered by plaintiffs and other class members, (3) prejudgment and post-judgment interest, (4) reasonable counsel fees and expert fees, and other costs and expenses reasonably incurred, and (5) other relief the court deems appropriate.

On February 15, 2019, the Securities Defendants filed a Motion to Dismiss all claims in the case based on plaintiffs' failure to state a claim. Briefing on the motion to dismiss was completed on May 1, 2019, and the court has not yet ruled on the motion. A mediation of the Securities Action occurred in August 2019. On November 4, 2019, the parties to the Securities Action entered into a settlement agreement that is intended to fully and finally resolve all claims in the Securities Action. On January 4, 2020, the court issued an order granting preliminary approval for the settlement and providing for notice. Approval of the settlement in the Securities Action is set for final hearing on April 29, 2020, but approval cannot be guaranteed. The terms of the settlement are expected to be paid by the Company's insurance.

On July 31, 2018, a putative shareholder derivative complaint captioned *Maloney v. Bradley, et al.*, was filed in the United States District Court for the Northern District of Texas, alleging that certain of the Company's current and former directors and officers had breached their fiduciary duties, committed constructive fraud, wasted corporate assets, and that certain of them had been unjustly enriched (the "Maloney Texas Action"). On July 30, 2019, the court in the Maloney Texas Action granted the defendants' motion to dismiss on the grounds that the case should have been brought in Delaware according to the Company's Amended and Restated Certificate of Incorporation. On September 23, 2019, the same plaintiff filed a putative shareholder derivative complaint

captioned *Maloney v. Bradley, et al.* in the United States District Court for the District of Delaware, naming as defendants certain of the Company's current and former directors and officers (the "Maloney Delaware Action"). The complaint alleges the defendants violated Sections 14A and 20(A) of the Securities and Exchange Act of 1934, as amended, breached their fiduciary duties, and wasted corporate assets, and also asserts unjust enrichment claims against certain defendants. The complaint seeks, on behalf of the Company, unspecified damages, an order directing the return of certain payments to the defendants and imposing a constructive trust thereon, certain injunctive relief, reasonable costs and attorneys' fees, and punitive damages.

On January 15, 2019, a putative shareholder derivative complaint captioned *Lee v. Bradley, et al.*, was filed in the United States District Court for the District of Delaware, naming as defendants certain of the Company's current and former directors and officers (the "Lee Action"). The complaint alleges the defendants violated Section 14A of the Securities and Exchange Act of 1934, as amended, and related rules by failing to make certain disclosures in the Company's proxy solicitation in advance of the 2017 Annual Meeting of Stockholders, and that defendants breached their fiduciary duties, wasted corporate assets, and committed constructive fraud. The complaint also asserts unjust enrichment claims against certain defendants. The complaint seeks, on behalf of the Company, unspecified damages, an order directing the return of certain payments to the defendants, certain injunctive relief, and reasonable costs and attorneys' fees. On April 18, 2019, the court entered an agreed stipulation staying the Lee Action until the court in the Securities Action rules on the motion to dismiss in that case. On December 11, 2019, the court in the Lee Action entered a Stipulation and Order consolidating the Lee Action and the Maloney Delaware Action into a single case, providing that the parties would have 60 days to attempt to resolve the action, and providing a schedule for filing of an amended complaint and motions to dismiss in the event attempts at resolution were not successful.

The Company and other defendants are vigorously defending the Lee Action. Given the stage of the proceedings, the Company cannot reasonably estimate at this time the possible loss or range of loss, if any, that may arise from the Lee Action.

#### *Long-term incentive plan*

Following the Acquisition, Lone Star implemented a cash-based long term incentive plan (the "LTIP"), which entitles the participants in the LTIP a potential cash payout upon a monetization event as defined by the LTIP. Potential monetization events include the sale, transfer or otherwise disposition of all or a portion of the Company or successor entities of LSF9, an initial public offering where Lone Star sells/reduces its ownership in the Company or successor entities of LSF9, or through certain cash distribution as defined in the LTIP. Before the payout of any cash the LTIP requires Lone Star realize in cash the full return of their investment plus a specified internal rate of return, which is calculated by comparing the return to Lone Star over the timeline of its investment in the Company and certain successor entities of LSF9. As of December 31, 2019, no such monetization events that meet the required return for an LTIP payment have occurred, and therefore no amounts were accrued in the accompanying consolidated balance sheet. While no payments have occurred thus far, payments under the LTIP could be significant depending upon future monetization events. The timing and amount of such payments are unknown and is dependent upon future monetization events and market conditions that are outside of the control of the Company or the participants of the plan. Subsequent to the IPO, Forterra became directly liable for any payment obligations triggered under the LTIP, but LSF9 or one of its affiliates will remain obligated to make payments to the Company in amounts equal to any payment obligations triggered under the LTIP as and when such payment obligations are triggered.

#### *Leases*

The Company leases certain property and equipment for various periods under non-cancelable operating and finance leases. See Note 14 for future minimum lease payments under such agreements.



*Tax receivable agreement*

The Company has a tax receivable agreement (the "TRA") with Lone Star that provides for, among other things, the payment by the Company to Lone Star of 85% of the amount of certain covered tax benefits, which may reduce the actual liability for certain taxes that the Company might otherwise be required to pay. The tax benefits subject to the TRA include: (i) all depreciation and amortization deductions, and any offset to taxable income and gain or increase to taxable loss, resulting from the tax basis that the Company had in its assets as of the time of the consummation of the IPO, (ii) the utilization of the Company's and its subsidiaries' net operating losses and tax credits, if any, attributable to periods prior to the IPO, (iii) deductions in respect of payments made, funded or reimbursed by an initial party to the tax receivable agreement (other than the Company or one of its subsidiaries) or an affiliate thereof to participants under the LTIP, (iv) deductions in respect of transaction expenses attributable to the USP Acquisition and (v) certain other tax benefits attributable to payments made under the tax receivable agreement.

For purposes of the TRA, the aggregate reduction in income tax payable by the Company will be computed by comparing the Company's actual income tax liability with its hypothetical liability had it not been able to utilize the related tax benefits. The agreement will remain in effect for the period of time in which all such related tax benefits remain. The Company accounts for potential payments under the tax receivable agreement as a contingent liability, with amounts accrued when considered probable and reasonably estimable. The passage of the TCJA described in Note 20 significantly reduced the Company's anticipated liability under the TRA. The reduction in the TRA liability resulted in \$46.2 million of non-operating income recognized in the Company's consolidated statement of operations for the year ended December 31, 2017 due primarily to the decrease in the federal corporate tax rate. The liabilities recorded by the Company for the tax receivable agreement at December 31, 2019 and December 31, 2018 were \$77.4 million and \$88.8 million, respectively. The timing and amount of future tax benefits associated with the TRA are subject to change, and additional payments may be required which could be materially different from the current accrued liability. The Company anticipates that it will have sufficient taxable income in future periods to realize the full value of the obligation recorded. Future tax receivable agreement payments related to the tax basis of assets at the time of the IPO will be recorded as a reduction to the liability and will be recorded as a financing activity in the statement of cash flows. For the years ended December 31, 2019 and December 31, 2018, the Company paid \$11.4 million and \$30.4 million, respectively on the TRA to Lone Star.

**17. Earnings per share**

Basic earnings per share ("EPS") is calculated by dividing net earnings by the weighted average number of common shares outstanding during the period. Potentially dilutive securities include employee stock options and shares of restricted stock. Diluted EPS reflects the assumed exercise or conversion of all dilutive securities. The restricted shares are considered participating securities for the purposes of the Company's EPS calculation.

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The calculations of the basic and diluted EPS for the years ended December 31, 2019, 2018 and 2017 are presented below (in thousands, except per share data):

	Year ended December 31,		
	2019	2018	2017
Net loss	\$ (7,331)	\$ (24,365)	\$ (2,060)
<b>Common stock:</b>			
Weighted average basic shares outstanding	64,232	63,904	63,801
Effect of dilutive securities - stock options	—	—	—
Weighted average diluted shares outstanding	64,232	63,904	63,801
<b>Basic and Diluted earnings (loss) per share:</b>			
Net income (loss)	\$ (0.11)	\$ (0.38)	\$ (0.03)

Potential dilutive common shares were anti-dilutive as a result of the Company's net loss for the years ended December 31, 2019, 2018 and 2017. As a result, basic weighted average shares were used in the calculations of basic earnings per share and diluted earnings per share for those periods.

The number of stock options and restricted shares that were excluded from the computation of diluted earnings per share because their inclusion would result in an anti-dilutive effect on per share amounts for the years ended December 31, 2019, 2018 and 2017 was 2,192,048, 2,749,348 and 209,607, respectively.

## 18. Employee benefit plans

### *Defined Contribution Plans*

The Company's employees are able to participate in a 401K defined contribution plan. The Company contributes funds into this plan subject to certain limits. For the years ended December 31, 2019, December 31, 2018, and December 31, 2017, the Company recorded an expense of \$7.0 million, \$6.6 million and \$11.3 million, respectively.

## 19. Stock-based plans

### *Stock Incentive Plans*

The Company's previous equity compensation plan under which it granted stock awards was the Forterra, Inc. 2016 Stock Incentive Plan, (the "2016 Incentive Plan"). The aggregate number of shares of common stock that was initially available for issuance under the 2016 Incentive Plan was 5,000,000 shares. The Company's board of directors has granted employees and independent directors options to purchase shares of common stock, shares of restricted common stock and restricted stock units. The options, restricted stock and restricted stock units awarded to employees are subject to either three-year or four-year vesting periods and the options, restricted stock and restricted stock units awarded to independent directors are subject to a one-year vesting period. The awards of stock options granted under the 2016 Incentive Plan have a term of ten years. In May 2018, the Company's shareholders approved the Forterra, Inc. 2018 Stock Incentive Plan, (the "2018 Incentive Plan"). The 2018 Incentive Plan serves as the umbrella plan for the Company's stock-based and cash-based incentive compensation programs for its directors, officers and other eligible employees. The aggregate number of shares of common stock issuable under the 2018 Incentive Plan is 5,000,000 shares plus any shares subject to outstanding awards under the 2016 Incentive Plan as of the date of the approval of the 2018 Incentive Plan that on or after such date cease for any reason to be subject to such awards (other than by reason of exercise or settlement of the awards to the extent they are exercised for or settled in nonforfeitable shares).

In accordance with ASC 718, *Compensation-Stock Compensation*, the Company recognizes stock-based compensation expense over the requisite service period for the entire award, which is generally the maximum vesting period of the award or over a shorter period when employee retirement eligibility is a factor, in an amount equal to the fair value of share-based payments, which include stock options granted and restricted stock awards to employees and non-employees members of Forterra's Board of Directors. The Company records stock-based compensation expense in cost of goods sold and selling, general, and administrative expenses. Stock-based compensation expense was approximately \$7.9 million, \$6.2 million and \$3.7 million for the years ended December 31, 2019, 2018 and 2017, respectively.

**Stock Option Grants**

The value of the options is determined by using a Black-Scholes pricing model that includes the following variables: 1) exercise price of the instrument, 2) fair market value of the underlying stock on date of grant, 3) expected life, 4) estimated volatility and 5) the risk-free interest rate. The Company utilized the following weighted-average assumptions in estimating the fair value of the option grants in the years ended December 31, 2019, December 31, 2018 and December 31, 2017:

	2019		2018		2017
Expected dividends	—%		—%		—%
Expected volatility	32.08%		32.90%		39.60%
Risk-free interest rate	2.43%		1.71%		0.86%
Expected lives in years	6		6		6
<b>Weighted-average fair value of options:</b>					
Granted at fair value	\$ 1.54	\$	2.76	\$	4.16
<b>Weighted-average exercise price of options:</b>					
Granted at fair value	\$ 4.29	\$	7.92	\$	10.76

The Black-Scholes model requires the use of subjective assumptions including expectations of future dividends and stock price volatility. Expected volatility was calculated using a weighted average of Forterra and a set of Forterra's peer companies based on an analysis of historical and implied volatility measures. The average expected life is based on the contractual term of the option and expected employee exercise and post-vesting employment termination behavior. Such assumptions are only used for making the required fair value estimate and should not be considered as indicators of future dividend policy or stock price appreciation. Because changes in the subjective assumptions can materially affect the fair value estimate, and because employee stock options have characteristics significantly different from those of traded options, the use of the Black-Scholes option pricing model may not provide a reliable estimate of the fair value of employee stock options.

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A summary of the status of the Company's stock options is presented below:

	Shares	Weighted Average Exercise Price
	(in thousands)	
Outstanding, December 31, 2017	1,254,429	\$12.31
Granted	2,189,216	\$7.92
Exercised	—	n/a
Forfeited	(342,226)	\$12.53
Outstanding, December 31, 2018	3,101,419	\$9.19
Granted	2,771,930	\$4.29
Exercised	(224,266)	\$7.60
Forfeited	(1,975,987)	\$7.50
Outstanding, December 31, 2019	3,673,096	\$6.50
Options vested or expected to vest at year end	3,673,096	\$6.50
Options exercisable at year end	927,863	\$8.81

As of December 31, 2019, the Company has approximately \$3.5 million of unrecognized stock option compensation cost related to unvested stock options, which is expected to be recognized over a weighted average period of approximately 1.7 years.

**Restricted Stock and Restricted Stock Unit Awards**

Restricted stock are share awards that entitle the holder to receive shares of the Company's common stock which become freely transferable upon vesting. Restricted stock has the same dividend and voting rights as common stock and is considered to be issued and outstanding upon grant. Restricted stock units are share awards denominated in units of the Company's common stock and are subject to a service condition. The restricted stock units do not have the voting rights of common stock, and the shares underlying restricted stock units are not considered issued and outstanding upon grant. The restricted stock and restricted stock unit awards generally vest one to four years from the date of grant and are generally subject to forfeiture if employment terminates prior to the vesting date. The estimated compensation cost of the restricted stock and restricted stock unit awards, which is equal to the fair value of the awards on the date of grant, is recognized on a straight-line basis over the vesting period.

During 2019, the Company granted 2.6 million restricted stock units consisting of 1.2 million time-vested restricted stock units and 1.4 million performance-based restricted stock units. The performance-based restricted stock units vest in tranches based on the 20-day volume weighted average price of FRTA common stock based on a grant date market condition. If the performance condition is achieved, one-fourth of the tranche will vest immediately and the remainder of the tranche will be time-vested over one year from the date the performance condition was met. The Company accounts for the time-vested and performance-based restricted stock units as equity awards.

The following table summarizes the activity for restricted stock and restricted stock units:

	Shares	Weighted Average Grant Date Fair Value
	(in thousands)	
Unvested balance at December 31, 2017	441,350	\$13.60
Grants	542,979	\$7.98
Vested shares	(155,260)	\$13.11
Forfeitures	(84,706)	\$12.98
Unvested balance at December 31, 2018	744,363	\$9.68
Grants	2,562,250	\$4.58
Vested shares	(508,799)	\$7.74
Forfeitures	(640,172)	\$6.21
Unvested balance at December 31, 2019	<u>2,157,642</u>	<u>\$5.11</u>

At December 31, 2019, there was \$7.4 million of total unrecognized compensation cost related to unvested restricted stock and restricted stock units and that cost is expected to be recognized over a weighted average period of 1.8 years.

## 20. Income taxes

### *U.S. Tax Reform*

On December 22, 2017, the U.S. government enacted comprehensive tax reform legislation commonly known as the Tax Cuts and Jobs Act of 2017 ("TCJA"). Effective January 2018, the TCJA, among other things, reduced the marginal U.S. corporate income tax rate from 35% to 21%, limited the deductibility of interest expense, limited the deduction for net operating losses and eliminated net operating loss carrybacks, and modified or eliminated many business deductions and credits. There were also provisions that partially offset the benefit of the rate reduction, such as the repeal of the deduction for domestic production activities. The TCJA also included international provisions, which generally established a territorial-style system for taxing foreign source income of domestic multinational corporations known as global intangible low-taxed income ("GILTI") for the years beginning after December 31, 2017 and imposed a mandatory one-time transition tax on undistributed international earnings for the year ended December 31, 2017.

Financial statement impacts include adjustments for, among other things, the remeasurement of deferred tax assets and liabilities. U.S. GAAP accounting for income taxes required that Forterra record the impact of any tax law change on its deferred income taxes in the quarter that the tax law change was enacted, which was the fourth quarter ended December 31, 2017. Due to the complexities involved in accounting for the enactment of TCJA, SEC Staff Accounting Bulletin 118 allowed the Company to provide a provisional estimate of the impacts of the TCJA in its earnings during a one-year measurement period. During the year ended December 31, 2017, the Company recorded a provisional income tax benefit for the reduction in net deferred income tax liabilities of approximately \$28.7 million, due to the remeasurement of net U.S. deferred tax liabilities at the lower 21% U.S. federal corporate income tax rate, offset by the recognition of a one-time transition tax on foreign earnings of \$1.7 million. In addition, the Company recorded the pretax income effect of the change related to the Company's estimated tax receivable agreement obligation primarily due to the lower U.S. federal corporate income tax rate in the year ended December 31, 2017. See Note 16 for further discussion on the tax receivable agreement. During the year ended December 31, 2018, the Company did not record any significant adjustments to the originally recorded amount. Forterra considered the accounting for the TCJA complete as of December 31, 2018.

Deferred tax assets and liabilities are recognized principally for the expected tax consequences of temporary differences between the tax basis of assets and liabilities and their reported amounts, using currently enacted tax rates.

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The Company's income (loss) from continuing operations before income taxes was as follows *(in thousands)*:

	Year ended December 31, 2019	Year ended December 31, 2018	Year ended December 31, 2017
U.S. companies	\$ (21,557)	\$ (36,317)	\$ (54,690)
Foreign companies	10,947	15,037	11,958
Loss from continuing operations before income taxes	<u>\$ (10,610)</u>	<u>\$ (21,280)</u>	<u>\$ (42,732)</u>

The income tax benefit (expense) was as follows *(in thousands)*:

	Year ended December 31, 2019	Year ended December 31, 2018	Year ended December 31, 2017
<b>Current income tax</b>			
U.S. companies	\$ (9,510)	\$ (13,225)	\$ 21,539
State	(4,260)	(5,779)	(1,479)
Foreign companies	(3,018)	(4,849)	(4,884)
Total current tax (expense) benefit	<u>(16,788)</u>	<u>(23,853)</u>	<u>15,176</u>
<b>Deferred income tax</b>			
U.S. companies	16,180	17,273	26,866
State	4,232	3,306	(1,658)
Foreign companies	(345)	189	288
Total deferred tax benefit	<u>20,067</u>	<u>20,768</u>	<u>25,496</u>
Income tax (expense) benefit	<u>\$ 3,279</u>	<u>\$ (3,085)</u>	<u>\$ 40,672</u>

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The rate reconciliation for continuing operations presented below is based on the U.S. federal statutory tax rate of 21% for the years ended December 31, 2019 and December 31, 2018 and 35% for the years ended December 31, 2017 because the predominant business activity is in the U.S. (*in thousands*):

	Year ended December 31, 2019	Year ended December 31, 2018	Year ended December 31, 2017
Loss from continuing operations	\$ (10,610)	\$ (21,280)	\$ (42,732)
Income tax benefit at statutory rate of 21% and 35%	\$ 2,228	\$ 4,469	\$ 14,956
State income taxes, net of federal benefit	113	1,494	1,470
Foreign rate differential	(361)	(568)	1,586
Non-deductible executive compensation	(1,011)	(129)	—
Tax effect of equity compensation	(496)	(310)	(13)
M&E and other non-deductible expenses	(763)	(452)	(1,220)
Change in valuation allowance	1,927	(6,601)	(4,141)
Divestiture of assets	—	(1,559)	—
Goodwill impairment	—	—	(1,147)
Effect of TCJA	—	—	26,932
Net US tax cost on foreign income	(221)	(390)	—
Tax credits	552	390	497
Other prior year adjustments	1,311	571	1,752
Total income tax benefit (expense)	<u>\$ 3,279</u>	<u>\$ (3,085)</u>	<u>\$ 40,672</u>

The income tax benefit for the year ended December 31, 2019 is primarily attributable to the unfavorable impact of the non-deductible expenses, partially offset with the favorable effect of the partial reversal of the federal and state valuation allowances and the effect of the return to provision adjustments.

The income tax expense for the year ended December 31, 2018 is primarily attributable to the unfavorable impact of the federal and state valuation allowance increase, inclusion of GILTI, and impact of the disposition of nondeductible goodwill in connection with the Foley exchange described in Note 3, partially offset with the favorable impact of the tax credits and state tax benefit.

The income tax benefit for the year ended December 31, 2017 is primarily attributable to provisional amounts recognized related to the enactment of the TCJA and losses from operations.

The Company evaluates the recoverability of its deferred tax assets quarterly to determine if valuation allowances are required or should be adjusted. The Company assesses whether valuation allowances should be established against deferred tax assets based on consideration of all available evidence, both positive and negative, using a “more likely than not” criteria. The analysis used in determining the valuation allowance involves considerable judgment and assumptions.

The Company's history of pretax losses limits its ability to rely on projections of future pretax income, and the TCJA limits the ability to carryback losses to recover taxes paid in prior periods; therefore, realization of deferred tax assets is based primarily on reversal of taxable temporary differences. The amendment and restatement of the sale-leaseback transaction that closed during the second quarter ended June 30, 2018 affected the timing and recognition of temporary differences, and the Company concluded that a portion of its deferred tax assets no longer meets the “more likely than not” criteria for realization based on reversal of taxable temporary differences.

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For the year ended December 31, 2019, after consideration of all evidence, including the analysis of the reversal pattern of the taxable and deductible temporary differences in the future, the Company decreased the valuation allowance by \$2.0 million during the year.

Deferred income taxes are provided for the effects of temporary differences between the tax basis of an asset or liability and its reported amount in the accompanying consolidated balance sheets. These temporary differences result in taxable or deductible amounts in future years. The net deferred tax asset (liability) balances were comprised of the following components as of December 31, 2019 and 2018 (*in thousands*):

	December 31, 2019	December 31, 2018
Deferred tax assets:		
Inventory	\$ 6,891	\$ 6,424
Reserves	4,112	2,263
Accrued liabilities	4,656	4,347
Net operating losses	2,964	3,243
Capitalized transaction costs	3,599	3,407
Finance leases	55,063	39,512
Deferred gain on sale-leaseback	—	2,521
Interest expense limitation	6,566	2,780
Tax receivable agreement	1,655	1,645
Other assets	4,687	1,110
Total deferred tax assets	90,193	67,252
Valuation allowance	(13,555)	(15,427)
Total deferred tax assets, net	\$ 76,638	\$ 51,825
Deferred tax liabilities:		
Fixed assets	\$ (53,156)	\$ (50,686)
Lease assets	(25,378)	(11,543)
Deferred financing costs	(6,812)	(8,631)
Intangible assets	(20,221)	(27,580)
Total deferred tax liabilities	\$ (105,567)	\$ (98,440)
Net deferred tax asset (liability)	\$ (28,929)	\$ (46,615)

As of December 31, 2019, the Company had tax loss carryforwards as follows (*in thousands*):

	Amount	Expiration Date
Federal net operating losses	\$ —	—
State net operating losses	\$ 29,048	2021-2039
Foreign net operating losses	\$ 5,848	2036-2039

*Uncertain tax positions*

The Company is subject to audit examinations at federal, state, local, and foreign levels by tax authorities in those jurisdictions who may challenge the treatment or reporting of any tax return item. The tax matters challenged by the tax authorities are typically complex; therefore, the ultimate outcomes of these challenges are subject to uncertainty. The Company is under audit with respect to the U.S. federal income tax for the years ended December 31, 2016 and 2017. The Company is not aware of any adjustments with respect to any year under audit.



State income tax returns are generally subject to examination for a period of three to five years after filing of the respective return.

Each period the Company assesses uncertain tax positions for recognition, measurement and effective settlement. Based on the Company's assessment, it determined that no liabilities for uncertain tax positions should be recorded as of December 31, 2019 and 2018.

## **21. Segment reporting**

Segment information is presented in accordance with ASC 280, *Segment Reporting*, which establishes standards for reporting information about operating segments. It also establishes standards for related disclosures about products and geographic areas. Operating segments are defined as components of an enterprise that engage in business activities that earn revenues, incur expenses and prepare separate financial information that is evaluated regularly by the Company's chief operating decision maker ("CODM") in order to allocate resources and assess performance. The Company's Chief Executive Officer is its CODM. The Corporate and Other segment includes expenses related to certain executive salaries, interest costs related to the Company's credit agreements, acquisition related costs, and other corporate costs that are not directly attributable to the Company's operating segments. The Company's segments follow the same accounting policies as the Company.

Net sales from the major products sold to external customers include drainage pipe and precast products, and concrete and steel water transmission pipe.

The Company's three geographic areas consist of the United States, Canada and Mexico for which it reports net sales, fixed assets and total assets. For purposes of evaluating segment profit, the CODM reviews earnings before interest, taxes, depreciation and amortization ("EBITDA") as a basis for making the decisions to allocate resources and assess performance.

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The following tables set forth the disaggregation of revenue earned from contracts with customers based on the Company's reportable segments as well as other financial information attributable to the Company's reportable segments for the periods presented (*in thousands*):

	Year ended December 31, 2019	Year ended December 31, 2018	Year ended December 31, 2017
<b>Net sales:</b>			
Drainage Pipe & Products	\$ 894,722	\$ 811,477	\$ 834,810
Water Pipe & Products	635,030	668,235	745,555
Corporate and Other	—	—	48
Total	<u>\$ 1,529,752</u>	<u>\$ 1,479,712</u>	<u>\$ 1,580,413</u>
<b>Depreciation and amortization:</b>			
Drainage Pipe & Products	\$ 37,331	\$ 41,495	\$ 45,750
Water Pipe & Products	58,476	62,917	69,089
Corporate and Other	1,451	1,011	820
Total	<u>\$ 97,258</u>	<u>\$ 105,423</u>	<u>\$ 115,659</u>
<b>Segment EBITDA and reconciliation to income (loss) before income taxes:</b>			
Drainage Pipe & Products	\$ 171,413	\$ 156,735	\$ 129,618
Water Pipe & Products	84,424	64,547	47,587
Corporate and Other	(74,219)	(58,802)	(44,870)
Less: Interest expense	(94,970)	(78,337)	(59,408)
Depreciation and amortization	(97,258)	(105,423)	(115,659)
Loss before income taxes	<u>\$ (10,610)</u>	<u>\$ (21,280)</u>	<u>\$ (42,732)</u>
<b>Capital expenditures:</b>			
Drainage Pipe & Products	\$ 23,096	\$ 27,761	
Water Pipe & Products	14,246	18,529	
Corporate and Other	2,531	2,391	
Total	<u>\$ 39,873</u>	<u>\$ 48,681</u>	
<b>Total assets:</b>			
Drainage Pipe & Products	\$ 819,373	\$ 800,454	
Water Pipe & Products	862,542	922,162	
Corporate and Other	58,143	70,636	
Total	<u>\$ 1,740,058</u>	<u>\$ 1,793,252</u>	

In addition, the Company also has an investment in an equity method investee included in the Drainage Pipe & Products segment for which earnings from equity method investee were \$10.5 million, \$10.2 million and \$12.4 million for the years ended December 31, 2019, 2018 and 2017, respectively, and with the following balances (*in thousands*):

	December 31,	
	2019	2018
Investment in equity method investee	<u>\$ 50,034</u>	<u>\$ 50,607</u>

Disaggregated revenue by geographic location is provided in the tables below. The Company has operations in the United States, Canada and Mexico. The economic characteristics of the Company's customers does not significantly vary across geographic locations or product lines. The Company has both revenues and

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long-lived assets in each country and those assets and revenues are recorded within geographic location as follows (*in thousands*):

Property, plant, and equipment, net:	December 31,	
	2019	2018
United States	\$ 422,486	\$ 441,773
Canada	43,754	40,331
Mexico	9,335	10,063
	\$ 475,575	\$ 492,167

Net Sales:	Year ended December 31,	Year ended December 31,	Year ended December 31,
	2019	2018	2017
United States	\$ 1,448,492	\$ 1,389,115	\$ 1,485,092
Canada	73,270	80,868	82,529
Mexico	7,990	9,729	12,792
	\$ 1,529,752	\$ 1,479,712	\$ 1,580,413

## 22. Related party transactions

### *CP&P*

The Company sold certain goods and services to its joint venture, CP&P, including spare parts for repairs, and property rentals. For the year ended December 31, 2019, Forterra sold \$0.4 million of product to CP&P and purchased goods and services from CP&P for an amount of \$0.5 million. For the year ended December 31, 2018, the Company sold \$0.1 million of product to CP&P and received \$0.2 million in exchange for purchased goods and services from CP&P. For the year ended December 31, 2017, Forterra sold \$0.1 million of product to CP&P and purchased \$0.1 million of goods and services from CP&P.

### *Tax receivable agreement*

In connection with the IPO, the Company entered into a tax receivable agreement with Lone Star that provides for, among other things, the payment by the Company to Lone Star of 85% of the amount of certain covered tax benefits, which may reduce the actual liability for certain taxes that the Company might otherwise be required to pay. See further discussion in Note 16, Commitments and contingencies.

### *Bricks Joint Venture*

Prior to the IPO, LSF9 distributed its brick operations in the United States and Eastern Canada to a joint venture formed by an affiliated of Lone Star (the "Bricks Disposition"). In connection with the Bricks Disposition, Forterra entered into a transition services agreement with the joint venture, whereby Forterra would continue to provide certain administrative services, including but not limited to information technology, accounting and treasury for a limited period of time. Such transition services ended in February 2018. The Company recognized a total of \$10 thousand and \$1.6 million in Other operating income, net pursuant to the transition services agreement for the years ended December 31, 2018 and December 31, 2017, respectively. Additionally, during the transition period, the Company collected cash from as well as settled invoices and payroll on behalf of the joint venture. As a result, Forterra had a net receivable from affiliates of \$4.4 million as of December 31, 2018, included in other current assets. Such amount was subsequently collected during the second quarter of 2019.

### 23. Quarterly Financial Data (Unaudited)

The following is a summary of the quarterly results of operations:

#### Year ended December 31, 2019:

(in thousands, except per share amounts)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Net sales	\$ 291,858	\$ 410,219	\$ 464,526	\$ 363,149
Cost of goods sold	250,053	324,405	362,362	296,550
Gross profit	41,805	85,814	102,164	66,599
Income (loss) from continuing operations before taxes	(32,336)	3,835	28,327	(10,436)
Net income (loss)	(25,039)	2,954	22,430	(7,676)

#### Basic earnings (loss) per share:

Net income (loss)	\$ (0.39)	\$ 0.05	\$ 0.35	\$ (0.12)
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#### Diluted earnings (loss) per share:

Net income (loss)	\$ (0.39)	\$ 0.05	\$ 0.34	\$ (0.12)
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#### Year ended December 31, 2018:

(in thousands, except per share amounts)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Net sales	\$ 289,960	\$ 416,087	\$ 434,510	\$ 339,155
Cost of goods sold	255,595	340,774	357,374	280,400
Gross profit	34,365	75,313	77,136	58,755
Income (loss) from continuing operations before taxes	(23,595)	14,237	8,296	(20,218)
Net income (loss)	(19,910)	6,994	5,503	(16,952)

#### Basic earnings (loss) per share:

Net income (loss)	\$ (0.31)	\$ 0.11	\$ 0.09	\$ (0.27)
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#### Diluted earnings (loss) per share:

Net income (loss)	\$ (0.31)	\$ 0.11	\$ 0.09	\$ (0.27)
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### 24. Supplemental Cash Flow Disclosures

	Year ended December 31, 2019	Year ended December 31, 2018	Year ended December 31, 2017
SUPPLEMENTAL DISCLOSURES (in thousands):			
Cash interest paid	\$ 77,086	\$ 69,381	\$ 54,676
Income taxes paid, net of refunds received	12,343	11,068	28,086
SUPPLEMENTAL NON-CASH INVESTING AND FINANCING DISCLOSURES:			
Assets and liabilities acquired in non-cash exchange	—	18,140	—
Capital lease obligation resulting from the sale-leaseback exchange transaction	—	(148,962)	—
Fair value changes of derivatives recorded in OCI, net of tax	—	970	(3,548)

**Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure**

None.

**Item 9A. Controls and Procedures**

**Evaluation of Disclosure Controls and Procedures**

As required by Rule 13a-15(b) under the Exchange Act, our management, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934, as amended, or the Exchange Act) as of December 31, 2019.

Based on the evaluation referenced above, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of December 31, 2019.

**Management's Report on Internal Control over Financial Reporting**

Our management, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, is responsible for establishing and maintaining adequate internal control over financial reporting as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act.

Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP. Internal control over financial reporting includes policies and procedures that: (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

Management assessed the Company's internal control over financial reporting as of December 31, 2019 using the criteria for effective internal control over financial reporting established in "Internal Control - Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on this assessment, management concluded that as of December 31, 2019, our internal control over financial reporting was effective.

Ernst & Young LLP, our independent registered public accounting firm that audited the consolidated financial statements included in this Annual Report on Form 10-K, also audited the effectiveness of the Company's internal control over financial reporting as of December 31, 2019, as stated in their report included below.

**Changes in Internal Control over Financial Reporting**

There were no changes in our internal control over financial reporting during the quarter ended December 31, 2019 that have a materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## **Inherent Limitations on Effectiveness of Controls**

Our management, including our principal executive officer and principal financial officer, does not expect that our disclosure controls and procedures or our system of internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well designed or operated, can provide only reasonable, but not absolute, assurance that the objectives of the system of internal control are met. The design of our control system reflects the fact that there are resource constraints, and that the benefits of such control system must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control failures and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the intentional acts of individuals, by collusion of two or more people, or by management override of the controls. The design of any system of controls is also based in part on certain assumptions about the likelihood of future events, and there can be no assurance that the design of any particular control will always succeed in achieving its objective under all potential future conditions.

## Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Forterra, Inc.

### Opinion on Internal Control over Financial Reporting

We have audited Forterra, Inc.'s internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission 2013 framework (the COSO criteria). In our opinion, Forterra, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2019 and 2018, and the related consolidated statements of operations, comprehensive income (loss), shareholders' equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes, and our report dated February 27, 2020 expressed an unqualified opinion thereon.

### Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

### Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

Dallas, Texas  
February 27, 2020

**Item 9B. Other Information**

None.



**PART III****Item 10. Directors, Executive Officers and Corporate Governance**

The following table sets forth the name, age and positions of each of our current directors and executive officers:

<b>Name</b>	<b>Age</b>	<b>Position</b>
Karl Watson, Jr.	55	Chief Executive Officer, Director
Charles R. Brown, II	56	Executive Vice President and Chief Financial Officer
Richard Hunter	58	President, Drainage Pipe & Products
Vikrant Bhatia	42	President, Water Pipe & Products
Lori M. Browne	45	Executive Vice President, General Counsel and Corporate Secretary
Chris Meyer	49	Chairman of the Board, Director
Richard Cammerer, Jr.	46	Director
Rafael Colorado	42	Director
Maureen Harrell	40	Director
Chad Lewis	37	Director
Clint McDonnough	64	Director
John McPherson	51	Director
Jacques Sarrazin	70	Director

**Directors**

**Chris Meyer** - Mr. Meyer, is a Class II director and has been Chairman of our Board since July 2017 and a member of our Board since October 2016. Mr. Meyer has been Senior Managing Director of Lone Star North America Acquisitions, L.P., an affiliate of ours and Lone Star, since April 2018, where he leads all acquisition efforts for Lone Star in North America. Prior to his role at Lone Star, Mr. Meyer served as Managing Director of Hudson Americas L.P., a related party of Lone Star and ours, from February 2015 through April 2018, where he had oversight responsibility for all of Lone Star's private equity investments, including our company, and also assisted with the due diligence and underwriting of potential operating company investments. Prior to joining Hudson Americas, Mr. Meyer held a number of positions with McKinsey & Company, Inc., a global management consulting firm, most recently serving as a Director (Senior Partner). While at McKinsey, Mr. Meyer managed the Dallas office, co-led the Consumer Practice group and co-founded McKinsey's Consumer Marketing Analytics Center. Mr. Meyer has served as a member of the board of directors of Foundation Building Materials, Inc. since February 2017 and currently serves as a member of the board of directors of a number of privately held companies, including several for which he serves as chairman. Mr. Meyer earned a Bachelor of Science degree in Industrial Engineering from North Carolina State University and a Masters of Business Administration degree from Harvard Business School.

Mr. Meyer's background, including as a management consultant in a wide range of industries, allows him to assist the Board in understanding and addressing a wide variety of the issues it faces. Mr. Meyer also brings significant financial and operational expertise developed through his past and current leadership and oversight roles. His responsibilities for Lone Star's companies, including our company, also provide Mr. Meyer with a deep working knowledge of our business and operations.

**John McPherson** - Mr. McPherson is our Lead Director and non-executive Vice Chairman of the Board and is a Class III director who has been a member of our Board of Directors since October 2016. Mr. McPherson served as Executive Vice President, Chief Financial and Strategy Officer of Vulcan Materials Company, a publicly-traded producer of construction aggregates, asphalt mix and ready-mixed concrete, from July 2014 through August 2018, and remained as Executive Vice President, Chief Strategy Officer through December 2018. Prior to assuming those roles, Mr. McPherson served in a number of other roles for Vulcan, including Executive Vice President and Chief Financial Officer from January 2014 to June 2014, Senior Vice President - East Region from November 2012

to December 2013 and Senior Vice President, Strategy and Business Development from October 2011 to November 2012. Before joining Vulcan in October 2011, Mr. McPherson worked at McKinsey & Company, Inc., a global management consulting firm, beginning in 1995, most recently serving as a Senior Partner from 2006 to 2011. Mr. McPherson is a graduate of Stanford University where he earned both a B.A. in Economics and an M.B.A.

Mr. McPherson brings a significant level of financial and accounting expertise to the Board developed during his professional career, including through his service as a Chief Financial Officer. Mr. McPherson's valuable public company experience also provides the Board with valuable insight regarding public company reporting matters, as well a first-hand view of management's day-to-day duties and responsibilities. In addition, his service as our Lead Director promotes more direct and open channels of communication between the Board and management.

**Richard "Chip" Cammerer, Jr.** - Mr. Richard Cammerer, Jr., also known as Chip, is a Class II director and has been a member of our Board since April 2018. Mr. Cammerer currently serves as a Managing Director Lone Star North America Acquisitions, L.P., an affiliate of ours and Lone Star, a position he has held since January 2020. Prior to his service to Lone Star, Mr. Cammerer was a Managing Director of Hudson Advisors L.P., a related party of Lone Star and ours, since January 2016. Mr. Cammerer has over 20 years of experience within the commercial and investment banking industry, advising corporate clients and boards on a range of strategic and financial transactions. He served as Managing Director of Consumer & Retail Investment Banking Group at RBC Capital Markets LLC from June 2014 to January 2016. From 2006 to June 2014, he held various roles within Citigroup Global Markets Inc.'s investment banking arm in New York, most recently being promoted to Managing Director of the industry team in 2010. Previously, he held roles in Deutsche Bank Securities Inc., Banc of America Securities LLC and Bank of America, N.A. Mr. Cammerer served as Non-Executive Director of Forterra plc., a former affiliate of ours, from March 2016 to April 2017 and currently serves as a member of the board of other private companies. Mr. Cammerer holds a Bachelor degree in Business Administration in Finance from Southern Methodist University and a Master of Business Administration degree from Vanderbilt University with a dual concentration in Finance and Accounting.

Mr. Cammerer's background, including as a commercial and investment banker serving a wide variety of industries, allows him to bring broad financial management and financial markets expertise to the Board that allows him to make valuable contributions to our capital structure and financing and investing activities. In addition, Mr. Cammerer's past and current leadership and oversight roles for a number of other companies allow him to assist the Board in strategic, financial and operational decisions.

**Rafael Colorado** - Mr. Colorado, is a Class II director and has been a member of our Board since September 2018. Mr. Colorado serves as a Managing Director with Hudson Advisors L.P., a related party of Lone Star and ours, a position he has held since April 2019, and where he served as Director from January 2016 through April 2019. In his role, Mr. Colorado advises on legal issues impacting operating companies that are affiliates of Lone Star within North America, as well as other corporate investments for which Hudson or its subsidiaries provide underwriting and asset management services in North America. In particular, Mr. Colorado has been actively involved in the negotiation and closing of numerous acquisitions, asset sales and lending transactions, for the Company and other Lone Star portfolio companies. This is Mr. Colorado's second stint with Hudson having previously served as a Vice President from 2008 to 2012. Before rejoining Hudson, Mr. Colorado was a Partner at the law firm of Perkins Coie LLP, from 2012 to 2016, where he supported clients in various types of mortgage banking transactions, private and public securities offerings, debt financing transactions and mergers and acquisitions. Prior to his time at Hudson, Mr. Colorado was an attorney with Bank of America and a Certified Public Accountant with Ernst & Young LLP. Mr. Colorado currently serves as a member of the board of directors of a number of privately held companies. Mr. Colorado graduated from the University of Texas at Austin where he obtained a Bachelor of Business Administration degree and a Master of Professional Accounting degree. Mr. Colorado also received a Juris Doctor degree with honors from the University of Texas School of Law. Mr. Colorado is a Certified Public Accountant in the state of Texas.

Mr. Colorado brings to the Board his extensive experience in private equity and the financial markets. His legal and financial education and qualifications, as well as his significant experience with capital and debt markets transactions and with the management of investments in many different types of businesses enable him to

contribute solid insight and assistance both in respect of the Company's transactions and its capital structure, including financing and investing activities. His financial and legal background will assist management and the Board in addressing a wide variety of issues we may face.

**Maureen Harrell** - Ms. Harrell, age 40, is a Class I director and has been a member of our Board since February 2020. Ms. Harrell has been a Managing Director of Hudson Americas, L.P., an related party of ours and of Lone Star, since June 2019. Ms. Harrell has oversight responsibility over a number of Lone Star's private equity investments, including its investment in us and also assists with the due diligence and underwriting of potential operating company investments. Ms. Harrell currently serves on the board of directors of Financial Building Materials (NYSE: FBM). Prior to joining Hudson Americas, Ms. Harrell previously served as a Director at Alinda Capital Partners, LLC, and independent infrastructure investment firm, from October 2010 to May 2019, where she had oversight over several infrastructure investments and served on the boards of directors of a number of privately held companies. Prior to Alinda, Ms. Harrell held roles at GE Capital from 2008 to 2010 and at Pricewaterhouse Coopers, LLP from 2001 to 2006. Ms. Harrell earned a Bachelor of Arts degree in Economics from Bowdoin College and a Masters of Business Administration degree from the University of Virginia Darden School of Business.

Ms. Harrell brings extensive financial and operational management experience to the Board given her extensive experience in the private investment community as well as experience gained during her consulting career.

**Chad Lewis** - Mr. Lewis, is a Class I director and has been a member of our Board since April 2018. Mr. Lewis is a Director of Hudson Americas L.P., a related party of Lone Star and ours, where he is responsible for executing and managing private equity investments, a position he has held since January 2019. Previously, Mr. Lewis held other roles at Hudson America, L.P., serving as a Vice President from June 2015 to December 2018 and as an Associate from January 2015 to June 2015. Prior to Hudson Americas, Mr. Lewis was a Consultant at Bain & Company from January 2014 to January 2015 and an Associate at Prospect Partners, LLC from August 2009 to July 2011. Mr. Lewis began his career as an investment banking analyst, and later an Associate, at Lincoln International. Mr. Lewis holds an MBA from the University of Texas at Austin, which was earned between his time at Prospect Partners and Bain & Company, and a Bachelor of Science with Special Attainments in Commerce from Washington and Lee University, where he graduated cum laude. Mr. Lewis has also served as a member of the board of directors of Foundation Building Materials, Inc. since April 2018 as well as on the board of directors of another privately held company.

Mr. Lewis brings broad expertise in financial and operational management to the Board. His extensive experience in private equity and the financial markets also allows him to make valuable contributions with respect to our growth initiatives, acquisitions and investing activities. His responsibilities for Lone Star's companies, including in connection with our company, also provide Mr. Lewis with a valuable working knowledge of our business and operations.

**Clint McDonnough** - Mr. McDonnough, is a Class III director and has been a member of our Board since October 2016. Mr. McDonnough has been the Managing Partner of McDonnough Consulting LLC, a consulting firm, since May 2016. Before retiring in June 2015, Mr. McDonnough served 38 years at Ernst & Young LLP, most recently serving as the Managing Partner of the firm's Dallas office. In his role as Managing Partner, Mr. McDonnough was responsible for leading all day-to-day practice operations in one of the firm's largest markets. Prior to serving as Managing Partner, Mr. McDonnough was the firm's Managing Partner of Assurance & Advisory Business Services for the southwest area practice. Mr. McDonnough has been a member of the board of directors of UDR, Inc. and ORIX USA Corporation since February 2016 and April 2016, respectively. Mr. McDonnough is also active in, and serves on the boards of, several charitable and educational organizations.

Mr. McDonnough brings a significant level of financial and accounting expertise to the Board developed during his more than 35 year career with Ernst & Young LLP. This experience, in particular his experience gained working with numerous listed companies, provides valuable insight regarding public company reporting matters, as well as insight into the process of an audit committee's interactions with the board and management.

**Jacques Sarrazin** - Mr. Sarrazin, is a Class III director and has been a member of our Board since October 2016.

Mr. Sarrazin has also been a Partner at and President of Edalfaust, a strategy and development consulting firm, since 2015. Mr. Sarrazin also served as an Affiliate Partner at Lindsay Goldberg, a private equity fund, from 2015 through December 2019. Prior to 2015, Mr. Sarrazin held a number of executive positions with Lafarge SA, a French industrial company, over a period of almost 25 years, most recently serving as Group Vice President of Strategy from 2007 to 2014. Prior to Lafarge, Mr. Sarrazin was employed by Pechiney, an aluminum company, and served as a research fellow at Ecole Polytechnique in Paris. Mr. Sarrazin holds a degree in Mining Engineering from Ecole des Mines, Nancy and a Ph.D. from the University of Texas at Austin.

Mr. Sarrazin brings a significant level of industry experience to the Board developed during his approximately 25 year career in the industrial and construction industries, including as an executive at Lafarge. His service as an executive also provides the Board with valuable insight regarding management's day-to-day duties and responsibilities.

**Karl Watson, Jr.** - Mr. Watson is a Class I director and has served as our Chief Executive Officer and a member of our Board since July 2019. Mr. Watson has over 30 years of global experience in the construction materials industry. Prior to joining us, Mr. Watson served as Executive Vice President and Chief Operating Officer of Summit Materials, Inc., a construction materials company, which he joined in January 2018. From January 2017 to December 2017, Mr. Watson served as the President of the Cement & Southwest Ready Mix division at Martin Marietta, Inc., a supplier of aggregates and heavy building materials. Mr. Watson served as the President of CEMEX USA at CEMEX, S.A.B. de C.V., a Mexican multinational building materials company, from April 2011 through December 2015 and served as its advisor from January 2016 to June 2016. Earlier in his career Mr. Watson held various leadership positions at CEMEX and Rinker Group Ltd, which was acquired by CEMEX in 2007, in both the United States and Australia. Mr. Watson is a past Chairman of the National Ready Mix Concrete Association, Florida Concrete and Products Association, and past Vice Chairman of the Portland Cement Association. He has also served on the Executive Committees of the National Stone, Sand, and Gravel Association and Cement, Concrete & Aggregates Australia. Mr. Watson holds a Bachelor of Science in Business Administration from Palm Beach Atlantic University, a Master's in Business Administration from Rice University (Jones School) and completed the Advanced Management Program at Harvard Business School.

As our Chief Executive Officer, Mr. Watson brings a deep understanding of our business, operations and strategic planning to the Board. Mr. Watson brings extensive experience and knowledge of the construction and building materials industry to the Board. In addition, Mr. Watson's service on the Board provides a direct and open channel of communication between the Board and management.

#### **Executive Officers**

Biographical information for Mr. Watson is set forth above in the section entitled "Directors."

**Charles R. Brown, II** - Mr. Brown has served as Executive Vice President and Chief Financial Officer since September 2017. Prior to joining Forterra, Mr. Brown spent 14 years with Oldcastle Materials, a supplier of aggregates, asphalt, cement, ready-mix concrete and construction and paving services in North America, where he most recently served as Chief Financial Officer beginning in 2008. Mr. Brown joined Oldcastle Materials as a Vice President of Finance in 2003 and was promoted to Senior Vice President of Finance in 2007. Prior to Oldcastle Materials, Mr. Brown held various finance and senior management roles of increasing responsibility at Vulcan Materials Company, a producer of construction aggregates and aggregates-based construction materials, from 1996 to 2003, and at PPG Industries, a global manufacturer of paints, coatings, and specialty materials, from 1990 to 1996. Mr. Brown holds a Bachelor of Arts in International Economics from The George Washington University in Washington, D.C. and a Master's of Management from Northwestern University (Kellogg) in Evanston, Illinois.

**Richard Hunter** - Mr. Hunter has served as President, Drainage Pipe & Products since March 2019, and before assuming his current position, Mr. Hunter served as our Chief Operating Officer from June 2018 to March 2019, during which time he held responsibilities for improvement of our overall operations, including direct responsibility for all operations in our Water Pipe & Products segment from August 2018 to March 2019. Prior to joining us, Mr.

Hunter served as Executive Vice President, Lean Manufacturing - Electrical Products for Trinity Industries, Inc., a diversified industrial company providing products and services to the energy, chemical, agriculture, transportation, and construction sectors, from September 2016 through May 2018, where he previously served as President, Parts & Components, LLC from January 2016 to August 2016 and as Vice President and Chief Manufacturing Officer from June 2013 to December 2016. Prior to joining Trinity Industries, Mr. Hunter served as Vice President, Crane Business System at Crane Corporation, a diversified industrial manufacturing firm, as Vice President, Global Operations of Terex Corporation, a global manufacturer of lifting and material handling solutions, and Vice President of Operations, Tool Group Division for Danaher Corporation, a global manufacturer and service provider to professional, medical and industrial customers. Early in his career, Mr. Hunter rose through various roles of increasing responsibility first at General Motors Corporation and later at Delphi Corporation, a global automotive components manufacturer. Mr. Hunter holds a Masters of Business Administration, Operations and Strategic Planning from Purdue University, a Master's in Manufacturing Management from Kettering University and a Bachelor of Science in Mechanical Engineering from Michigan State University.

**Vikrant Bhatia** - Mr. Bhatia has served as President, Water Pipe & Products since March 2019. Prior to assuming his current position, Mr. Bhatia served as our Executive Vice President from August 2017 to March 2019, during which time he held responsibilities, including responsibility on a corporate level for procurement, information technology, corporate marketing and, from August 2018 to March 2019, responsibility for the commercial aspects of our Water Pipe & Products segment. Prior to joining us, Mr. Bhatia served as Executive Vice President, Strategic Initiatives at Copart, Inc., a publicly-traded global provider of online auctions and vehicle remarketing services, from January 2016 through January 2017 and as Senior Vice President, Strategic Initiatives from December 2014 through January 2016. Before joining Copart, Mr. Bhatia spent 16 years at Boston Consulting Group, a global management consulting firm, in various roles and with numerous responsibilities, most recently serving as Partner and Managing Director from 2009 to December 2014. Mr. Bhatia holds a Master's in Business Administration from Stanford University and a Bachelor of Science in Commerce, Finance and MIS from the University of Virginia.

**Lori M. Browne** - Ms. Browne has served as Executive Vice President, General Counsel and Corporate Secretary since December 2017 and previously served as Senior Vice President, General Counsel and Corporate Secretary from June 2016 through December 2017 and as Vice President and General Counsel from March 2015 to June 2016. From April 2007 through March 2015, Ms. Browne served first as General Counsel for Fairpay Solutions, Inc. through March 2014, and subsequently as Assistant General Counsel for Mitchell International, Inc. after Mitchell's acquisition of Fairpay Solutions, Inc. Both Fairpay Solutions, Inc. and Mitchell International, Inc. provide health care technology services to property and casualty insurers. Prior to that, Ms. Browne represented a variety of business clients in private practice at Weil, Gotshal & Manges, LLP and Fulbright & Jaworski, LLP. Ms. Browne holds a Juris Doctor degree from The University of Texas School of Law and a Bachelor of Arts degree from Texas A&M University. She is admitted to practice law in the State of Texas.

## Meetings of the Board of Directors

The Board holds regularly scheduled meetings throughout the year and holds additional meetings from time to time as it deems necessary or desirable to carry out its responsibilities. In addition, our non-management directors meet as a group at each regularly scheduled Board meeting in an executive session in which the Chief Executive Officer and other members of management are not present. The Board held eight meetings in fiscal 2019. All directors attended at least 75% of all meetings of the Board and of the Committees thereof on which they served during the year (or portion thereof during which such director served). Our Principles of Corporate Governance provides that directors are expected to attend annual meetings of stockholders; two directors attended the 2019 annual meeting of stockholders.

## Director Compensation

For service during 2019, and except as otherwise set forth below with regard to Mr. McPherson, each of our independent directors received an annual retainer of \$75,000, with an additional \$20,000 annual fee for service as the chair of the Audit Committee, \$15,000 annual fee for service as the chair of the Compensation Committee, \$10,000 annual fee for service as the chair of the Nominating and Corporate Governance Committee and \$7,500 annual fee for service on a committee of the Board. All such cash fees are paid quarterly in arrears. In

addition, each of our independent directors receives an award of equity with a grant date fair value of \$100,000 per year in the form of restricted stock units which are awarded annually at our annual meeting of stockholders and vest in full at the following year's annual meeting of stockholders. Our Board approved these compensatory arrangements after reviewing director compensation practices at our peer companies. We do not pay any additional compensation to directors who are members of our management or are employed by or consultants for Lone Star or one of its affiliates or related parties, but we reimburse all directors for out-of-pocket expenses they incur in connection with attending Board and committee meetings or otherwise in their capacity as directors.

In addition, in connection with Mr. McPherson's appointment on June 24, 2019 as our Lead Director and non-executive Vice Chairman of the Board, we agreed with Mr. McPherson that he would forego \$45,000 of the cash compensation he was otherwise eligible to receive for his continued service on the Board for the remainder of 2019 and would instead receive a one-time grant of non-qualified stock options to purchase our common stock with a fair market value of \$354,500, vesting in equal amounts on each of the first, second and third anniversaries of the date of grant. This grant of stock options was approved by the Board on June 21, 2019.

The table below sets forth the compensation paid (or credited) to each of the Company's independent directors during fiscal year 2019:

	Fees Earned or Paid in Cash	Stock Awards (1)	All Other Compensation	Total
Clint McDonnough	\$ 102,500	\$ 100,002	— \$	202,502
John McPherson	\$ 45,000	\$ 454,368	— \$	499,368
Jacques Sarrazin	\$ 82,500	\$ 100,002	— \$	182,502

(1) Represents the aggregate grant date fair value of restricted stock unit awards granted under our 2018 Stock Incentive Plan, in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, Stock Compensation, or ASC 718. The fair value reported equals the number of restricted stock units granted to each independent director multiplied by the closing price of \$5.34 per share on the date of grant. A grant of 18,727 restricted stock units was made to each of Messrs. McDonnough, McPherson, and Sarrazin on May 22, 2019, all of which will vest on the date of the 2020 shareholders meeting and were outstanding as of December 31, 2019. A grant of 224,282 non-qualified stock options was made to Mr. McPherson on June 21, 2019 with a Black-Scholes value of \$1.58 per option, which will vest in equal installments on the first and second anniversaries of the grant date and which was unvested as of December 31, 2019. For more information on the assumptions used in the valuation of these options, see Note 19 to our consolidated financial statements. Messrs. McDonnough and Sarrazin did not hold any unvested option awards as of December 31, 2019.

### Controlled Company Exemption

Because Lone Star controls more than 50% of our common stock, we are a "controlled company" within the meaning of the corporate governance standards of Nasdaq. Accordingly, we currently avail ourselves of the "controlled company" exception available under the Nasdaq rules which exempts us from certain corporate governance requirements, such as the requirements that a company have a majority of independent directors on its board of directors, that compensation of the executive officers be determined, or recommended to the board of directors for determination, by a majority of the independent directors or a compensation committee comprised solely of independent directors, and that director nominees be selected, or recommended for the board of directors' selection, by a majority of the independent directors or a nominations committee comprised solely of independent directors.

### Committees of the Board of Directors

The Board has established three standing committees: the Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee.

#### Audit Committee

The primary responsibilities of our Audit Committee are to oversee the accounting and financial

reporting processes of our company and subsidiary companies, and to oversee the internal and external audit processes. The Audit Committee also assists the Board in fulfilling its oversight responsibilities by reviewing the financial information provided to stockholders and others and the system of internal controls established by management and the Board. The Audit Committee oversees the independent auditors, including their independence and objectivity. The Audit Committee is empowered to retain independent legal counsel and other advisors as it deems necessary or appropriate to assist it in fulfilling its responsibilities, and to approve the fees and other retention terms of the advisors.

The Audit Committee is comprised of Messrs. McDonnough, McPherson and Sarrazin, with Mr. McDonnough serving as Chair. The Board has determined that each of Messrs. McDonnough, McPherson, and Sarrazin is independent, as defined under and required by the federal securities laws and Nasdaq rules. The Board has determined that Mr. McDonnough qualifies as an audit committee financial expert under the federal securities laws and that each member of the Audit Committee is “financially literate” as required by Nasdaq rules, as such qualification is interpreted by the Board in its business judgment. The Audit Committee held seven meetings during fiscal 2019.

### ***Compensation Committee***

The primary responsibility of our Compensation Committee is to periodically review and approve the compensation and other benefits for our employees, officers and independent directors. This includes reviewing and approving corporate goals and objectives relevant to the compensation of our executive officers in light of those goals and objectives and setting compensation for these officers based on those evaluations. Our Compensation Committee also administers and has discretionary authority over the issuance of stock awards under our equity incentive plan. The Compensation Committee may delegate authority to review and approve the compensation of our employees to certain of our executive officers, including with respect to awards made under our equity incentive plan. Even where the Compensation Committee does not delegate authority, our executive officers will typically make recommendations to the Compensation Committee regarding compensation to be paid to our employees and the size of grants of stock options, restricted stock and other forms of stock- based compensation.

Since January 10, 2019, the Compensation Committee has been comprised of Messrs. Meyer, McPherson and Lewis, with Mr. Meyer serving as Chair. From January 1, 2019 to January 10, 2019, the Compensation Committee was comprised of Messrs. Meyer and McPherson, with Mr. Meyer serving as Chair. The Board has determined that Mr. McPherson is independent under Nasdaq rules. As discussed under “Controlled Company Exemption” above, we are a controlled company, as such are not required to have a compensation committee comprised entirely of independent directors under Nasdaq rules. The Compensation Committee held six meetings during fiscal 2019.

*Compensation Committee Interlocks and Insider Participation* - During fiscal year 2019, Messrs. Meyer, McPherson, and Lewis served as members of our Compensation Committee. None of these individuals was or has been an officer or employee of our Company. None of our executive officers currently serves or has served during the last completed fiscal year, as a member of the board of directors, or as a member of the compensation or similar committee, of any entity that has one or more executive officers who served on our Board. For a description of the transactions between us and members of the Compensation Committee, and entities affiliated with such members, see the transactions described under “Certain Relationships and Related Party Transactions” below.

### ***Nominating and Corporate Governance Committee***

The Nominating and Corporate Governance Committee oversees all aspects of our corporate governance functions. The committee makes recommendations to our Board regarding director candidates and assists our Board in determining the composition of our Board and its committees. The qualifications that the Nominating and Corporate Governance Committee and Board consider in identifying qualified candidates to serve as directors include age, skills, such as financial background and abilities, education, professional and academic affiliations, industries served, length of service, positions held, and geographies served. The

Nominating and Corporate Governance Committee also considers diversity of viewpoints, backgrounds, experience and other demographics in evaluating director candidates and how they contribute to the overall composition of the Board. The Nominating and Corporate Governance Committee assesses the effectiveness of its efforts at pursuing diversity across these measures as part of evaluating the composition of the Board. The Nominating and Corporate Governance Committee also considers director candidates recommended by stockholders and may also consult with outside advisors or retain search firms to assist in the search for qualified candidates. Once potential candidates are identified, including those candidates recommended by stockholders, the Nominating and Corporate Governance Committee reviews the backgrounds of those candidates. Final candidates are then chosen and then interviewed by other Board or management representatives. Based on the interviews, the Nominating and Corporate Governance Committee then makes its recommendation to the Board. If the Board approves the recommendation, the candidate is nominated for election. With regard to procedures for stockholder recommendations of director candidates, please see the requirements described below for stockholder nominations of directors under "Stockholder Proposals."

The Nominating and Corporate Governance Committee is comprised of Messrs. Colorado, Lewis and McDonnough, with Mr. Colorado serving as Chair. The Board has determined that Mr. McDonnough is independent under Nasdaq rules. As discussed under "Controlled Company Exemption" above, we are a controlled company, and as such are not required to have a nominating and governance committee comprised entirely of independent directors under Nasdaq rules. The Nominating and Corporate Governance Committee held three meetings during fiscal 2019.

### **Committee Charters**

The Board has adopted formal charters for each of its three standing Committees. These charters establish the missions of the respective Committees as well as Committee membership guidelines. They also define the purpose, duties, and responsibilities of each Committee in relation to the Committee's role in supporting the Board and assisting the Board in discharging its duties in supervising and governing the Company. The charters are available on the Company's website at [forterrabp.com](http://forterrabp.com) by following the links to "Investors" and "Corporate Governance" and "Documents and Charters" or upon written request to the Company, as set forth under "Corporate Governance-Availability of Documents" below.

### **Code of Ethics**

In addition to the Principles of Corporate Governance, the Board has adopted a Code of Ethics and Business Conduct. The Code of Ethics, along with the Principles of Corporate Governance, serves as the foundation for the Company's system of corporate governance. It provides guidance for maintaining ethical behavior, requires that directors and employees comply with applicable laws and regulations, prohibits conflicts of interest and provides mechanisms for reporting violations of the Company's policies and procedures.

In the event the Company makes any amendment to, or grants any waiver from, a provision of the Code of Ethics that applies to the principal executive officer, principal financial officer or principal accounting officer that requires disclosure under applicable SEC or Nasdaq rules, the Company will disclose such amendment or waiver and the reasons therefor within four business days following the date of such amendment or waiver on its website at [forterrabp.com](http://forterrabp.com).

### **Delinquent Section 16(a) Reports**

Section 16(a) of the Exchange Act requires the Company's directors and executive officers and persons who own beneficially more than ten percent of a registered class of the Company's equity securities to file with the SEC initial reports of ownership and reports of changes in ownership of common stock and other equity securities of the Company. Officers, directors and greater than ten percent stockholders are required by SEC regulations to furnish the Company with copies of all Section 16(a) forms filed by them. To the Company's knowledge, based solely on a review of the copies of such filings on file with the Company and written representations from its directors and executive officers, except as set forth below, all Section 16(a) filing requirements applicable to the Company's directors, officers and greater-than-ten-percent beneficial owners were complied with on a timely basis



during the fiscal year ended December 31, 2019, except for a late Form 4 filed by Karl H. Watson, Jr., which was filed on November 1, 2019 with respect to a vesting of performance-based restricted stock units on September 18, 2019 and a late Form 4 filed by Vikrant Bhatia with respect to a vesting of restricted stock units on December 12, 2019. Additionally, on March 18, 2019, a late Form 4 report was filed for each of Jeff Bradley, Charlie Brown and Lori Browne with respect to the vesting of restricted stock units on March 1, 2019.

## Item 11. Executive Compensation

### *Compensation Discussion and Analysis*

In this section, the Compensation Discussion and Analysis, or CD&A, we provide an overview of our compensation philosophy and each element of our executive compensation program with regard to the compensation awarded to, earned by, or paid to our named executive officers, or NEOs, during our fiscal year ended December 31, 2019.

For the fiscal year ended December 31, 2019, the following individuals constituted our NEOs.

<b>Named Executive Officer</b>	<b>Title</b>
Karl Watson, Jr.	Chief Executive Officer (1)
Charlie Brown	Executive Vice President, Chief Financial Officer
Richard Hunter	President, Drainage Pipe & Products(2)
Vikrant Bhatia	President, Water Pipe & Products(3)
Lori Browne	Executive Vice President, General Counsel & Corporate Secretary
Jeff Bradley	Former Chief Executive Officer(4)

(1) Mr. Watson assumed this position effective July 1, 2019.

(2) Mr. Hunter served as our Chief Operating Officer until he assumed the position of President, Drainage Pipe & Products effective March 25, 2019.

(3) Mr. Bhatia served as our Executive Vice President until he assumed the position of President, Water Pipe & Products effective March 25, 2019.

(4) Mr. Bradley resigned his position as Chief Executive Officer effective June 30, 2019.

### *Leadership Transition*

On June 21, 2019, the Board appointed Karl Watson, Jr. as the Company's Chief Executive Officer and a Class I member of the Board effective as of July 1, 2019. In connection with Mr. Watson's appointment, we entered into an employment agreement with him, which is described in further detail under "Employment Agreements" below.

Mr. Bradley resigned from his positions as Chief Executive Officer, effective as of June 30, 2019, and as a member of the Board, effective June 21, 2019. At this time, we entered into a Separation Agreement with Mr. Bradley which is described in further detail under "Severance Agreements" below.

### *Management Restructuring*

Prior to this transition, in March of 2019, we also announced a management restructuring under which certain of our executives assumed new roles and responsibilities. Under this organizational restructuring, Mr. Hunter assumed the role of President of the Company's Drainage Pipe & Products segment. Mr. Hunter previously held the position of the Company's Chief Operating Officer and, in addition to his larger operational responsibilities, had direct responsibility for all operations within the Company's Water Pipe & Products segment. In addition, Mr. Bhatia assumed the role of President of the Water Pipe & Products segment, where he has previously held responsibility for the commercial aspects of the segment in his role as Executive Vice President.

**Summary of Corporate Governance Practices**

Our compensation program incorporates the following best corporate governance practices that are designed to drive performance and serve our stockholders' interests:

<b>What We Do</b>	<b>What We Don't Do</b>
ü Align pay to performance by ensuring a significant portion of executive compensation is tied to performance and not guaranteed	û No cash severance multiple in excess of one times base salary and target bonus
ü Enforce a robust insider trading policy, including prohibiting derivative or other hedging transactions with our shares	û No excise tax gross-ups
ü Provide minimal executive perquisites and executive benefits generally aligned to those available to all of our full-time employees	û No repricing or cash buyout of underwater stock options without stockholder approval
ü Separate the roles of Chairman and Chief Executive Officer	û No defined benefit pension plans or enhanced executive retirement formulas
ü Engage an independent compensation consultant	û No single-trigger change-in-control benefits

Stockholders approved our advisory vote on the compensation of our named executive officers at our 2019 Annual Meeting with 82.1% support. Our Compensation Committee considers the results of our say-on-pay vote when establishing NEO compensation, and, after considering the results of this most recent vote and other factors, Mr. Watson was issued performance-based restricted stock units as part of his compensation package in July 2019. In an effort to further align the interests of our executives and stockholders, the Compensation Committee is also considering including performance-based restricted stock units as part of the long term incentives for our NEOs in 2020.

**Compensation Philosophy**

Our compensation programs are designed to attract, motivate, retain and reward our employees in order to promote our long-term success, growth and profitability. In setting compensation levels and designing program elements, we seek to establish overall compensation levels that are internally equitable and competitive within the industries in which we compete for talent. We regularly review our executive officer compensation program with the goal of motivating our executive team to achieve our strategic goals and aligning them with the interests of our stockholders. In particular, we seek to:

- Align the base salary and incentive compensation of our executive officers to those of comparable companies of similar size in our industry to enable us to hire and retain skilled, experienced and talented individuals;
- Focus a meaningful portion of our executive officers' compensation on achieving financial metrics that are tied to the Company's performance over both short-term and long-term horizons, thereby aligning their interests to those of our stockholders;
- Recognize and reward individual excellence; and
- Provide balanced incentives that motivate our executives to achieve our short-term and long-term goals without incentivizing executives to take excessive risks.

**Elements of 2019 Compensation**

The principal elements of our 2019 compensation program are described in the table below:

Element	Description	Objective
<b>Base salary</b>	Fixed level of annual cash compensation, reviewed annually.	Provides a competitive level of base pay designed to attract and retain qualified executives
<b>Annual incentive compensation</b>	Annual cash performance bonus payable based upon attainment of short-term objectives. The total target level of annual incentive compensation is set as a percentage of each individual's base salary. Annual incentive awards are then earned based on (i) the achievement of financial metrics of the Company and/or one of its segments, and (ii) the achievement by that individual of certain individual goals established by the Compensation Committee, for our CEO, and established by our CEO for his direct-reports, including all other NEOs. Payment of annual incentive compensation can range from 0% to 200% of the targeted amount.	Motivates executives to drive performance and rewards executives for achievement in key areas of operational and financial performance.
<b>Long-term equity incentives</b>	The Compensation Committee may grant executives various types of equity awards. During 2019, our NEOs (other than Mr. Watson) were awarded non-qualified stock options and restricted stock units, each vesting ratably over a three-year period. At the time of his appointment, our CEO was granted performance-based restricted stock units that vest based on a combination of the achievement of specified targets for the price of our common stock as well as continued service.	Directly aligns our executives' interests with those of our stockholders and incentivizes them to increase overall stockholder return and value as well as helps develop an ownership culture in the Company; Provides retentive value.
<b>Long-term return-driven incentive compensation</b>	Cash-based long term incentive plan established prior to our IPO and funded entirely by Forterra US Holdings, LLC, our majority stockholder, in which certain of our NEOs participate, entitling them to potential cash payouts upon designated liquidity events in which Lone Star realizes a specified internal rate of return on its investment in the Company.	Motivates and rewards executives for increasing Company value and serves to align executive compensation with our equity holders' realized returns; Provides retentive value.
<b>Benefits and perquisites</b>	Participation in broad-based employee plans offered to our salaried, full-time employees generally, including a 401(k) plan Company match of up to 4% of covered compensation. Use of cars leased by the Company as part of its fleet lease program, together with a fuel card.	Provides competitive benefits and limited perquisites to attract and retain executives. Most of the benefits offered to our executives are similarly offered to all salaried U.S. employees.

## **2019 Compensation-Setting Process**

### **Compensation Committee**

Compensation levels in 2019 for key executive employees, including our NEOs, were set by our Compensation Committee, or the Committee, except for the compensation of our Chief Executive Officer, or CEO, whose compensation is recommended by the Committee for approval by the independent directors of our Board. Our Chief Executive Officer provides information regarding appropriate performance goals for other senior executive officers, his evaluation of their performance, and compensation recommendations for those individuals for the Committee's consideration. Our Compensation Committee meets in executive session without management as appropriate, at least annually, to evaluate the performance of our Chief Executive Officer and determine compensation recommendations for our CEO, including his annual bonus and any performance goals related thereto. Certain approvals regarding compensation and benefits are made by our independent directors or full Board of Directors, as further described in the Committee's Charter.

### **Independent Compensation Consultant**

For 2019, the Committee retained Willis Towers Watson as an independent consultant to the Compensation Committee. The independent consultant provides market data regarding compensation among our industry peers as well as larger market trends and also provides information regarding trends in pay mix, types of

awards, and key governance and certain regulatory matters. The independent consultant assisted with the selection of compensation peers and performed a compensation study to assist with benchmarking the compensation of our executive officers, including the initial compensation provided to Mr. Watson, and designing our compensation programs for 2019. The compensation consultant attends Compensation Committee meetings and advises the Committee regarding various components of executive and director compensation. The consultant assists the Committee with evaluating the alignment of pay and performance to ensure that our incentive programs are functioning as intended.

Willis Towers Watson provided these services to the Committee for fees in 2019 of approximately \$167,000 and also provides other services to the Company that are unrelated to executive compensation, including other non-executive compensation-related services, for annual fees in 2019 of approximately \$193,000. The decision to engage Willis Towers Watson for these other services was made by management and approved by the Compensation Committee. Our Compensation Committee also evaluated the nature of these unrelated services, among several other relevant factors, and determined that no conflict of interest exists for Willis Towers Watson in rendering independent advice to the Committee.

### **Compensation Peers**

Our Compensation Committee, in consultation with its independent consultant, selected a peer group against which the Compensation Committee generally benchmarks and analyzes the compensation of our executives, including with respect to base salary, annual incentive programs, and long-term incentive programs. The peer group was selected primarily based on industry and company size (one-half to two and one-half times our annual revenue), with other considerations for geographic markets where we might compete for talent. Our peer group, which remained unchanged for 2019 purposes from that used in setting 2018 compensation, consists of 17 companies from four industries, including Building Products, Construction and Engineering, Construction Materials, and Industry Machinery, and is comprised of the following companies:

Armstrong World Industries, Inc.   NCI Building Systems, Inc.  
Builders FirstSource, Inc.   Primoris Services Corporation  
Eagle Materials Inc.   Summit Materials, Inc.  
Flowserve Corporation   U.S. Concrete, Inc.  
Granite Construction Incorporated   USG Corporation  
Martin Marietta Materials, Inc.   Vulcan Materials Company  
Masonite International Corporation   Watts Water Technologies Inc.  
MasTec, Inc.   Xylem Inc.  
Mueller Water Products, Inc.

This peer group provides the Committee with market data regarding similar companies that aids the Committee in making decisions around our executives' compensation. In October 2019, the Committee approved certain changes to the peer group for use in determination of our 2020 compensation, including removing Builders FirstSource, Inc., Eagle Materials, Inc., MasTec, Inc., NCI Building Systems, Inc., USG Corporation and Xylem Inc. and adding Advanced Drainage Systems, Inc., Arcosa, Inc., Cornerstone Building Products, Inc., Evoqua Water Technologies Corp., Gibraltar Industries, Inc., and Simpson Manufacturing Co., Inc. These changes were made to better reflect our business and the size of the revenues of the companies included in the peer group.

### **Employment Agreements**

#### **Karl Watson, Jr.**

Forterra, Inc. entered into an employment agreement with Mr. Watson dated June 21, 2019, pursuant to which he assumed the role of serves as Chief Executive Officer effective July 1, 2019. The Employment Agreement establishes Mr. Watson's initial base salary at a rate of \$875,000 per year and his target annual bonus at 100% of his base salary, with a maximum annual bonus opportunity equal to 200% of his base salary, and established that the annual bonus would be prorated for 2019 based on the number of days between the effective date of the

agreement and the end of the year. The employment agreement also provided for a long-term incentive grant of 1,350,000 performance-based restricted stock units that vest based on the Company's achievement of certain stock price thresholds as well as Mr. Watson's continued service for one year after achievement of each price threshold. The employment agreement also provides certain benefits related to Mr. Watson's relocation to the Dallas-Fort Worth, Texas area within eighteen (18) months of the effective date of the agreement, including costs of a moving company, temporary living expenses in the Dallas-Fort Worth area, and travel to and from Houston, Texas to the Dallas-Fort Worth area for up to eighteen (18) months after his employment began. Mr. Watson's employment agreement also includes certain severance provisions that apply in the event that he is terminated without cause (as defined in his employment agreement) or resigns for good reason (as defined in his employment agreement). These payments are described in further detail in the section entitled "Potential Payments Upon Termination or Change in Control" below and are subject to Mr. Watson's execution and nonrevocation of a general release of claims and continued compliance with the restrictive covenants contained in his employment agreement, including a 24-month post-termination non-competition covenant, a 24-month post-termination employee and business contact non-solicitation provision, and a mutual non-disparagement covenant.

***Charlie Brown***

We entered into an employment agreement with Mr. Brown dated September 6, 2017, pursuant to which he assumed the role of Executive Vice President and Chief Financial Officer on September 25, 2017. The employment agreement established Mr. Brown's initial base salary at a rate of \$500,000 per year and his target annual bonus at 100% of his base salary (with a maximum annual bonus opportunity equal to 200% of his base salary). Mr. Brown's employment agreement also sets forth certain severance provisions that apply in the event that he is terminated without cause (as defined in his employment agreement) or resigns for good reason (as defined in his employment agreement). These payments are described in further detail in the section entitled "Potential Payments Upon Termination or Change in Control" below and are subject to Mr. Brown's execution and nonrevocation of a general release of claims and continued compliance with the restrictive covenants contained in his employment agreement, including a 12-month post-termination non-competition covenant, a 12-month post-termination employee and business contact non-solicitation provision, and a mutual non-disparagement covenant.

***Richard Hunter***

In an effort to align the compensation and benefits of the Company's executive officers and standardize executive officer employment agreements across the Company, we entered into an employment agreement with Richard Hunter dated May 22, 2019, pursuant to which Mr. Hunter serves as President, Drainage Pipe & Products, and which supersedes and replaces his prior employment letter agreement dated May 16, 2018, under which Mr. Hunter served as our Chief Operating Officer. The employment agreement establishes Mr. Hunter's 2019 base salary at a rate of \$450,000 per year and set his target annual bonus at a level equal to 100% of his base salary (with a maximum annual bonus opportunity equal to 200% of his base salary). Mr. Hunter's employment agreement also set forth certain severance provisions that would apply in the event that his employment were terminated without cause (as defined in his employment agreement), he were to resign for good reason (as defined in his employment agreement), or his employment were to terminate as a result of death or disability. These payments are described in further detail in the section entitled "Potential Payments Upon Termination or Change in Control" below and are subject to Mr. Hunter's execution and nonrevocation of a general release of claims and continued compliance with the restrictive covenants contained in his employment agreement, including a 12-month post-termination non-competition covenant, a 12-month post-termination employee and business contact non-solicitation provision, and a mutual non-disparagement covenant.

***Vikrant Bhatia***

As part of this same effort to align the compensation and benefits of the Company's executive officers and standardize executive officer employment agreements, we entered into an employment agreement with Vikrant Bhatia dated May 22, 2019, pursuant to which Mr. Bhatia serves as President, Water Pipe & Products, and which supersedes and replaces his prior employment letter agreement dated August 2, 2017, under which Mr. Bhatia served as our Executive Vice President. The employment agreement established Mr. Bhatia's 2019

base salary at a rate of \$425,000 per year and set his target annual bonus at a level equal to 75% of his base salary (with a maximum annual bonus opportunity equal to 150% of his base salary). Mr. Bhatia's employment agreement also set forth certain severance provisions that would apply in the event that his employment were terminated without cause (as defined in his employment agreement), he were to resign for good reason (as defined in his employment agreement), or his employment were to terminate as a result of death or disability. These payments are described in further detail in the section entitled "Potential Payments Upon Termination or Change in Control" below and are subject to Mr. Bhatia's execution and nonrevocation of a general release of claims and continued compliance with the restrictive covenants contained in his employment agreement, including a 12-month post-termination non-competition covenant, a 12-month post-termination employee and business contact non-solicitation provision, and a mutual non-disparagement covenant.

#### ***Lori Browne***

We entered into an Employment Agreement with Lori Browne dated as of December 18, 2017. Under the employment agreement, Ms. Browne serves as our Executive Vice President, General Counsel and Corporate Secretary. The employment agreement establishes Ms. Browne's 2017 base salary at a rate of \$350,000 per year as well as sets her target annual bonus at a level equal to 75% of her base salary (with a maximum annual bonus opportunity equal to 150% of her base salary). Ms. Browne's employment agreement also sets forth certain severance provisions that apply in the event that she is terminated without cause (as defined in her employment agreement), resigns for good reason (as defined in her employment agreement), or terminates employment as a result of death or disability. These payments are described in further detail in the section entitled "Potential Payments Upon Termination or Change in Control" below and are subject to Ms. Browne's execution and nonrevocation of a general release of claims and continued compliance with the restrictive covenants contained in her employment agreement. The employment agreement contains a number of restrictive covenants, including a 12-month post-termination non-competition covenant, a 12-month post-termination employee and business contact non-solicitation provision, and a mutual non-disparagement covenant.

#### ***Severance Agreements***

##### ***Jeff Bradley***

We entered into a separation and release agreement with Jeff Bradley as of June 30, 2019 under which Mr. Bradley's employment was terminated without cause entitling him to severance benefits under his employment agreement with Forterra Pipe & Precast, LLC dated July 8, 2015. The separation agreement provides for the following: (i) a lump-sum payment of \$875,000, (ii) a lump-sum payment of \$1,750,000 (which represents one year of Mr. Bradley's annual base salary and one year of his annual bonus at target), (iii) a lump-sum payment of \$433,904 (which represents a prorated portion of Mr. Bradley's 2019 annual incentive performance bonus with achievement at target levels), and (iv) reimbursement of the cost of COBRA premiums for Mr. Bradley's and his dependents' coverage under the Company's group insurance plans for up to one year following his separation, provided Mr. Bradley timely elects and receives such coverage under such plans. Consistent with his award agreement under the LSF9 Concrete Holdings Ltd. Long Term Incentive Plan, Mr. Bradley also retained the 105,000 vested pool units that he currently holds under this plan through July 8, 2021. The separation agreement also includes a customary release by Mr. Bradley of claims against us and our affiliates. Mr. Bradley is also obligated to comply with various restrictive covenants, including confidentiality, non-compete and non-solicitation provisions.

**DETAILED DISCUSSION OF 2019 COMPENSATION PROGRAM****Base Salary**

Our NEOs' base salaries are established based on external market competitiveness, Company performance, individual performance, and internal equity. The base salaries are generally subject to annual review by the Committee. Effective March 25, 2019, the base salaries for Messrs. Hunter and Bhatia were increased to \$450,000 and \$425,000, respectively, to recognize their acceptance of new roles as President, Drainage Pipe & Products, and President, Water Pipe & Products, respectively. Effective April 1, 2019, the base salaries for Messrs. Brown and Bradley and Ms. Browne were increased to reflect a three percent (3%) merit increase for each individual.

NEO	2018 Annual Base Salary (as of year-end)	2019 Annual Base Salary <sup>(1)</sup>
Karl H. Watson, Jr. <sup>(2)</sup>	not applicable	\$875,000
Charlie Brown	\$500,000	\$515,000
Richard Hunter	\$365,000	\$450,000
Vikrant Bhatia	\$375,000	\$425,000
Lori Browne	\$375,000	\$386,250
Jeff Bradley <sup>(3)</sup>	\$825,000	\$849,750

(1) Reflects annual base salary at year end 2019 or the NEO's last date of employment with us.

(2) Mr. Watson's position was effective July 1, 2019.

(3) Mr. Bradley resigned his position effective June 30, 2019.

**Annual Incentives**

We maintain an Annual Incentive Plan in which full-time salaried employees, including each of our NEOs participates. For 2019, each NEO's target and potential annual bonus payouts under this plan were as reflected below and remained unchanged for each individual as a percentage of base salary for each NEO from 2018 levels, except for Mr. Hunter, whose target participation rate was raised from 72.5% to 100% from 2018 to 2019 in recognition of his new role as President, Drainage Pipe & Products.

NEO	Target Bonus (as a percentage of annual base salary)	Potential Bonus (as a percentage of annual base salary)
Karl H. Watson, Jr. <sup>(1)</sup>	100%	200%
Charlie Brown	100%	200%
Richard Hunter	100%	200%
Vikrant Bhatia	75%	150%
Lori Browne	75%	150%
Jeff Bradley <sup>(2)</sup>	100%	200%

(1) Mr. Watson's employment with the Company began effective July 1, 2019. His annual incentive bonus was applied to his pro-rated base salary for the portion of 2019 during which he was employed with the Company.

(2) Mr. Bradley's employment with the Company terminated effective June 30, 2019. The payment of Mr. Bradley's annual incentive payment for 2019 was included in his Separation Agreement, as more fully described above in the section entitled "Severance Agreements."

For 2019, annual bonuses were earned based on the achievement of certain company-wide or segment-level financial performance metrics as well as the achievement of individual management by objectives, or MBOs. The relative weighting of each performance metric for the NEOs was as follows:

NEO	Financial Metric (Company-wide Adjusted EBITDA <sup>(1)</sup> )	Financial Metric (Segment-Specific Adjusted EBITDA)	Personal MBOs
Karl H. Watson, Jr. <sup>(2)</sup>	70%		30%
Charlie Brown	70%		30%
Richard Hunter <sup>(3)</sup>	20%	50%	30%
Vikrant Bhatia <sup>(3)</sup>	20%	50%	30%
Lori Browne	40%		60%
Jeff Bradley <sup>(4)</sup>	70%		30%

(1) This non-GAAP measure reflects our overall Company or applicable segment Adjusted EBITDA, adjusted for AIP purposes to exclude the impact of a non-cash inventory valuation adjustment during 2019 related to our production planning process.

(2) Mr. Watson's employment with the Company began effective July 1, 2019. His annual incentive bonus was applied to his pro-rated base salary for the portion of 2019 during which he was employed with the Company.

(3) The financial metrics governing the AIP for Messrs. Hunter and Bhatia are partially driven by our overall performance and partially driven by the performance of the segment each individual manages.

(4) Mr. Bradley's employment with the Company terminated effective June 30, 2019. The payment of Mr. Bradley's annual incentive payment for 2019 was included in his Separation Agreement, as more fully described above in the section entitled "Severance Agreements."

The Company-wide adjusted EBITDA target for 2019 was \$197.1 million, which was intended to be attainable but require significant effort on the part of our management team. The EBITDA portion of the goal also contained a threshold level of Company-wide adjusted EBITDA of at least \$174 million which, if not met, would result in no payment for that component of the award. The payout for this component of the award could range from 0% to 200% of the target based on attainment of various points of adjusted EBITDA. After adjustments for the impact of a non-cash inventory valuation adjustment during 2019 related to our production planning process as described above as well as consideration for the thresholds necessary for any payment, we achieved 104% of the target amount, which resulted in a payout of 155% of the Company-wide adjusted EBITDA metric. In addition to the Company-wide adjusted EBITDA and their MBOs, Messrs. Hunter and Bhatia's bonuses were based on segment-specific adjusted EBITDA targets for the specific business segments they lead, which were set with the expectation that they would be achievable but would require considerable effort on the part of these individuals. It was determined that Mr. Hunter achieved 169% of his segment-specific adjusted EBITDA target and that Mr. Bhatia achieved 99% of his segment-specific adjusted EBITDA target, and each received a corresponding payout on this component of his bonus.

Individual MBOs varied for each NEO and included performance metrics such as achievement of various targets on our commercial, operational and procurement savings strategies, support of our mergers and acquisitions strategy, working capital targets, and execution on key business projects relevant to the specific NEO's primary area of responsibility. In addition, each NEO had a shared goal that we end 2019 with no material weaknesses in our internal controls. The Committee did not establish 2019 MBO goals for Mr. Watson, as his employment agreement provided for his annual incentive bonus to be paid at target for the prorated time of his service to us in 2019.

The Compensation Committee determined that our NEOs had achieved critical goals for the Company in 2019 including the following:



NEO	Individual Goals for 2019
Charlie Brown	<ul style="list-style-type: none"> <li>Achieved discretionary debt reduction exceeding target of between \$30 and \$85 million</li> <li>Enhanced productivity through standardization of processes, including control design efficiency, IT governance and priorities, and standardization of SKUs in Drainage</li> <li>Achieved continuation of no material weaknesses in 2019</li> <li>Reorganized Finance and IT structure to address succession planning needs and reduce costs through efficiencies</li> </ul>
Richard Hunter	<ul style="list-style-type: none"> <li>Successfully deployed salesforce across Drainage</li> <li>Established baseline and implementation of metrics to measure customer service</li> <li>Continue Drainage operational excellence roll out to a specified number of sites, impacting specified number of tons produced</li> <li>Increased 2019 Inventory turns from 2018 levels</li> <li>Achieved continuation of no material weaknesses in 2019</li> <li>Provide a safe and healthy work environment by achieving safety rates that exceed prior year performance</li> <li>Implemented talent development program for Drainage senior leadership</li> </ul>
Vikrant Bhatia	<ul style="list-style-type: none"> <li>Established baseline and implementation of metrics to measure customer service</li> <li>Won back specified percentage of 2018 customer losses</li> <li>Produced DIP with a scrap percentage lower than a specified rate</li> <li>Executed outbound transportation optimization with a specified rate of on time deliveries</li> <li>Achieved continuation of no material weaknesses in 2019</li> <li>Provide a safe and healthy work environment by achieving safety rates that exceed prior year performance</li> <li>Implemented succession and development plans from 2018 talent review</li> </ul>
Lori Browne	<ul style="list-style-type: none"> <li>Managed review, updating and alignment of Company terms and conditions for all lines of business, including alignment of credit terms corporate M&amp;A strategy, including sale-leaseback swap deal</li> <li>Managed all aspects of litigation efforts</li> <li>Supported Company's M&amp;A efforts as well as sales of non-core assets</li> <li>Achieved continuation of no material weaknesses in 2019</li> <li>Developed and hosted training for executives and Board on key compliance and fiduciary duties</li> <li>Developed and hosted training of sales force regarding antitrust and sales terms and conditions</li> </ul>
Jeff Bradley	<ul style="list-style-type: none"> <li>Discretionary debt reduction of between \$30 and \$85 million</li> <li>Continue Drainage operational excellence roll out to a specified number of sites, reduce scrap rates in Water business</li> <li>No material weaknesses in 2019</li> <li>Provide a safe and healthy work environment by achieving safety rates that exceed prior year performance</li> </ul>

Based on achievement of both the adjusted EBITDA and individual MBOs, final payouts under the 2019 Annual Incentive Plan were as follows for each NEO:

NEO	Actual Bonus Payout	Percentage of Target
Karl H. Watson, Jr. <sup>(1)</sup>	\$437,500	100%
Charlie Brown	\$775,075	151%
Richard Hunter	\$696,330	155%
Vikrant Bhatia	\$383,584	120%
Lori Browne	\$396,002	137%

(1) Mr. Watson received a pro-rated annual incentive payment based on his service to us for only a portion of 2019 pursuant to the terms of his employment agreement, as described above in the section entitled "Employment Agreements."

Mr. Bradley received a payment of \$433,904 under his separation agreement, which reflects a pro-rated portion of his 2019 annual bonus assuming achievement of applicable performance goals at the target level, as described further under “Severance Agreements” above.

## **Equity Incentive Compensation**

### 2019 Annual Equity Awards

We grant long-term equity incentive compensation to our NEOs in order to align their interests with our stockholders' long-term interests and create an ownership culture within the Company. On March 14, 2019, we granted our NEOs the following awards of non-qualified stock options, or NQSOs, which have value only to the extent that our stock price appreciates following the grant date and restricted stock units, or RSUs, which grow in value with our share price. Such awards also provide retentive value over the applicable three-year vesting periods.

- Mr. Brown received 197,351 NQSOs and 88,690 RSUs,
- Mr. Hunter received 162,914 NQSOs and 73,214 RSUs,
- Mr. Bhatia received 121,854 NQSOs and 54,762 RSUs,
- Ms. Browne received 133,775 NQSOs and 60,119 RSUs, and
- Mr. Bradley received 723,179 NQSOs and 325,000 RSUs, which were forfeited on his subsequent termination.

To arrive at these numbers, the Committee established overall target award levels for each NEO based on peer group data for comparable positions, individual and Company performance and then awarded that total value in approximately 44% stock options and 56% RSUs.

### 2019 CEO Performance-Based RSU Award

On July 1, 2019, we granted 1,350,000 performance-based RSUs to Mr. Watson in connection with his assumption of the CEO role. One-fifth of the performance-based RSUs become earned and eligible to vest on the date the dollar volume-weighted average price of our common stock has equaled or exceeded \$6.75, \$8.50, \$10.75, \$13.50 and \$18.00 for twenty consecutive trading days. 75% of the earned performance-based RSUs vest on the one-year anniversary of the date on which the applicable stock price hurdle is attained, with the remaining 25% vesting immediately upon attainment of the applicable stock price hurdle.

The first stock price hurdle was achieved on September 18, 2019. Thus, 67,500 of these performance-based RSUs vested on such date and 202,500 of the performance-based RSUs will vest on September 18, 2020 subject to Mr. Watson's continued employment through such date. The second stock price hurdle was achieved on November 5, 2019, resulting in an additional 67,500 of these performance-based RSUs vesting on such date and 202,500 of the units scheduled to vest on November 5, 2020 subject to Mr. Watson's continued employment through such date. The third stock price hurdle was achieved on November 25, 2019, resulting in an additional 67,500 of these performance-based RSUs vesting on such date and 202,500 of the units scheduled to vest on November 25, 2020 subject to Mr. Watson's continued employment through such date. The fourth stock price hurdle was achieved on February 6, 2020, resulting in an additional 67,500 of these performance-based RSUs vesting on such date and 202,500 of the units scheduled to vest on February 6, 2021 subject to Mr. Watson's continued employment through such date.

See the “2019 Grants of Plan-Based Awards” table below for additional information on these awards.

## **Long Term Incentive Plan**

Prior to our IPO, LSF9 Concrete Holdings Ltd, or Concrete Holdings, established a cash-based long term incentive plan, the LSF9 Concrete Holdings Ltd. Long Term Incentive Plan, or the LTIP. In connection with the corporate restructuring immediately prior to the IPO, on October 14, 2016, Concrete Holdings transferred sponsorship of the LTIP to Forterra, but retained economic responsibility for any payments under the LTIP. On

October 19, 2016, Concrete Holdings transferred all of its remaining obligations and liabilities under the LTIP from Concrete Holdings to Forterra US Holdings, LLC, our majority stockholder.

Under the LTIP, participants are granted pool units entitling them, subject to the terms of the LTIP, to a potential cash payout upon a designated liquidity event. Generally, for purposes of the LTIP, a liquidity event occurs when:

- Lone Star Fund IX (U.S.), L.P. and/or its affiliates sell, transfer or otherwise dispose of all or a portion of their direct and indirect ownership interests in Concrete Holdings or a respective successor entity (whether through a direct sale, merger, consolidation, reorganization, or other similar transaction) to an unrelated third party for cash;
- A firm commitment underwritten public offering of the equity interests of Concrete Holdings or a respective successor entity is consummated that either (1) is registered under the Securities Act, or (2) results in such equity interests being admitted for trading on either the Main Market or the AIM market of the London Stock Exchange, in each case, where Lone Star Fund IX (U.S.), L.P. and/or its affiliates sell all or a portion of their direct and indirect ownership interests in Concrete Holdings or a respective successor entity, as applicable, in such offering; or
- Forterra US Holdings pays any cash distributions to Lone Star Fund IX (U.S.), L.P. and/or its affiliates (including in connection with a sale of the assets of, or equity interests issued by, Concrete Holdings or a respective successor entity).

We are considered a successor entity of Concrete Holdings for purposes of the occurrence of a liquidity event under the LTIP. We are liable for any payment obligations triggered under the LTIP, but Forterra US Holdings, LLC will remain obligated to make payments to us in amounts equal to any payment obligations triggered under the LTIP as and when such payment obligations are triggered under the LTIP.

As of December 31, 2019, Mr. Bradley and Ms. Browne were the only NEOs participating in the LTIP, holding 105,000 and 17,500 pool units, respectively. The total number of pool units authorized under the LTIP is 1,000,000. While it is not currently expected that the total number of pool units authorized under the LTIP would increase, there may be future limited grants out of the currently authorized but unallocated pool units under the LTIP.

As described in the section entitled “Potential Payments Upon Termination or Change in Control” below, even vested pool units held by an LTIP participant will remain subject to forfeiture in the event of a termination for cause (as defined in their respective employment agreements) or in the event that no Exit Transaction occurs by the sixth anniversary of the grant date and the participant is no longer employed by Forterra Pipe and Precast, LLC or an affiliate.

Mr. Bradley will retain his vested pool units through July 8, 2021. The units granted to Ms. Browne are not subject to vesting provisions but remain subject to forfeiture in the event of the NEO’s failure to comply with certain restrictive covenants, including a non-competition and non-solicitation provision, the termination of the NEO’s employment (although the NEO may retain all pool units for six months following a termination without cause, as determined by the LTIP administrator) or upon the occurrence of an Exit Transaction.

Under the LTIP, in the event of a liquidity event while the participant is still employed, the participant will be entitled to a payment based on the full number of his or her then outstanding pool units, whether or not vested at the time.

The value of a participant’s pool units is determined as of the closing date of each liquidity event relative to that participant’s interest in the incentive pool, calculated as the number of outstanding pool units (whether vested or unvested) held by the individual participant, divided by the aggregate number of pool units outstanding under the LTIP. The amount of profits credited to the incentive pool under the LTIP in connection with a liquidity event is based upon the cumulative internal rate of return (pursuant to the terms of the LTIP) realized upon the liquidity event by Forterra US Holdings’ direct and indirect equity holders immediately prior to our IPO. In addition, the incentive pool will not be credited with any amounts and no

payouts will be made unless such internal rate of return is at least 15%. Payments under the LTIP, if earned pursuant to the LTIP, are made in cash within sixty days after the closing of the applicable liquidity event. The IPO did not trigger any payouts under the LTIP.

The amount of profits that are credited to the LTIP incentive pool upon a liquidity event are summarized in the table and narrative below:

<b>Cumulative IRR Achieved from Aggregate LE Cash Received</b>	<b>Percentage of the Incremental LE Profit Amount to Be Credited as LE Participation Amount</b>
14.99% or less	0%
Over 15% up to 16.49%	2.50% of excess over 15%
Over 16.5% up to 17.99%	5.50% of excess over 16.5%
Over 18% up to 19.99%	7.00% of excess over 18%
Over 20% up to 22.99%	8.00% of excess over 20%
Over 23% up to 25.99%	9.00% of excess over 23%
Over 26% up to 28.99%	9.75% of excess over 26%
Over 29% up to 31.99%	10.00% of excess over 29%
Over 32% up to 34.99%	10.50% of excess over 32%
Over 35% up to 44.99%	12.25% of excess over 35%
Over 45%	5.00% of excess over 45%

Upon a liquidity event, the incentive pool will be credited with an amount equal to the "LE Participation Amount," which is to be a portion of the excess of:

- the sum of the net cash proceeds from the event causing the liquidity event actually received by Forterra US Holdings, LLC's direct and indirect equity owners net of transaction costs and expenses, or the LE Cash Received, plus all prior LE Cash Received (collectively with the current LE Cash Received, the Aggregate LE Cash Received), over
- the beginning equity value (as defined in the LTIP) (such excess, the LE Profit Amount).

To determine such portion, Forterra US Holdings, LLC will calculate a cumulative internal rate of return, or IRR (pursuant to the terms of the LTIP) with respect to the Aggregate LE Cash Received, which will be determined separately as to each component of LE Cash Received so that the time of payment is taken into account in determining the rate of return. The incentive pool will not be credited unless and until the cumulative IRR equals or exceeds 15% but once the cumulative IRR equals or exceeds 15%, then the LE Participation Amount will be a varying percentage of the tranches of the LE Profit Amount that are required to achieve varying levels of Cumulative IRR, determined pursuant to the table above.

In the table above, the percentage in the right-hand column in any particular row is applied only to the portion of the LE Profit Amount attributable to the incremental cumulative IRR reflected in the left-hand column of such row.

As of December 31, 2019, there have been no payments under the LTIP to any of our NEOs.

#### ***Additional Compensation and Benefit Details***

We provide very limited perquisites and other benefits to our executives, such as relocation benefits in connection with required relocations. We do not provide our executives, including our NEOs, with special or supplemental retirement or health benefits. Our NEOs are eligible for retirement, health and welfare benefits under the same programs and subject to the same eligibility requirements that apply to our salaried, full-time employees generally. We believe that all of the benefits made available to our NEOs are reasonable and are intended to help us attract and retain them.

In 2019, we matched any contributions that employees made to our 401(k) plan in an amount of up to 4% of the employee's covered compensation, subject to limitations on contributions set by applicable federal law. In connection with her employment, Ms. Browne has been granted the use of an automobile leased by Forterra Pipe & Precast, LLC as part of its fleet lease program, together with a fuel card that can be used for purchase of fuel for the vehicle. The aggregate incremental cost to the Company of each of these benefits is reflected in the "All Other Compensation" column of the Summary Compensation Table below.

#### **COMPENSATION COMMITTEE REPORT**

The Compensation Committee reviewed and discussed the foregoing Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with our management. Based on this review and discussion, the Compensation Committee recommended to the Board that the Compensation Discussion and Analysis be included in this Annual Report on Form 10-K.

By the Compensation Committee of the Board of Directors of Forterra, Inc.

Chris Meyer, Chair  
John McPherson  
Chad Lewis

**SUMMARY COMPENSATION TABLE**

The following table summarizes the compensation of our NEOs for our fiscal years ended December 31, 2019, 2018, and 2017. Messrs. Watson and Hunter were not NEOs for 2018 and 2017, and Mr. Bhatia was not an NEO for 2017.

Name and Principal Position <sup>(1)</sup>	Year	Salary (\$)(2)	Bonus\$(3)	Stock Awards (\$)(4)	Option Awards (\$)(5)	Non-Equity Incentive Plan Compensation(\$)(6)	All Other Compensation(\$)(7)	Total(\$)
Karl H. Watson, Jr. <i>Chief Executive Officer</i>	2019	437,500	—	6,453,000	—	437,500	45,578	7,373,578
Charlie Brown <i>Executive Vice President and Chief Financial Officer</i>	2019	511,265	—	310,427	298,000	775,075	13,580	1,908,347
Richard Hunter <i>President, Drainage Pipe &amp; Products</i>	2018	500,000	—	298,001	447,000	525,650	99,920	1,870,571
	2017	134,615	—	300,000	450,000	53,322	36,049	973,986
Vikrant Bhatia <i>President, Water Pipe &amp; Products</i>	2019	430,385	—	310,427	246,114	696,330	13,154	1,696,410
	2018	413,462	—	232,191	184,085	383,584	13,232	1,226,554
	2017	375,000	35,000	184,000	276,000	334,997	9,605	1,214,602
Lori Browne <i>Executive Vice President and General Counsel</i>	2019	383,453	—	254,905	202,094	396,002	29,679	1,266,133
	2018	368,761	—	181,798	272,701	345,965	29,680	1,198,905
	2017	327,502	—	157,501	105,002	244,125	32,305	866,435
Jeff Bradley <i>Former Chief Executive Officer</i>	2019	418,696	—	1,378,000	1,092,507	—	13,232	2,902,435
	2018	825,000	—	1,002,798	1,504,199	734,911	14,999	4,081,907
	2017	818,750	—	1,125,011	750,005	111,375	24,392	2,829,533

- (1) Current position held by the NEOs as of February 27, 2020 except for Mr. Bradley, who was our Chief Executive Officer from September 1, 2015 through June 30, 2019.
- (2) Includes elective deferrals into our 401(k) plan.
- (3) Represents one-time payment to recognize Mr. Bhatia's acceptance of responsibility for and contributions to the commercial team of our Water Pipe & Products segment during the third and fourth quarters of 2018.
- (4) Represents the aggregate grant date fair value of performance-based restricted stock unit, restricted stock unit and restricted stock awards granted to each of the NEOs in accordance with Accounting Standards Codification (ASC) 718 and Item 402 of Regulation S-K. For additional information on the assumptions used in determining fair value for share-based compensation, refer to Notes 2 and 19 in our Consolidated Financial Statements. Also see the "2019 Grants of Plan-Based Awards" table below for additional information on these awards.
- (5) Represents the aggregate grant date fair value of stock options granted to each of the NEOs in accordance with ASC 718 and Item 402 of Regulation S-K. The amounts reflect the fair market value at the date of grant for these awards based on a binomial value using the Black-Scholes valuation model. See the "2019 Grants of Plan-Based Awards" table below for information on these awards. The binomial value assigned to an option as of each grant date is as follows:

Date of Grant	NEO	Option Value
March 14, 2019	Messrs. Brown, Hunter, Bhatia, Bradley and Ms. Browne	\$1.51
March 1, 2018	Messrs. Brown, Bhatia, Bradley and Ms. Browne	\$2.53
September 25, 2017	Mr. Brown	\$1.66
March 20, 2017	Ms. Browne and Mr. Bradley	\$7.25

For additional information on the valuation assumptions used in determining fair value for share-based compensation, refer to Notes 2 and 19 in our Consolidated Financial Statements.

- (6) These amounts reflect payments under our Annual Incentive Plan.
- (7) The "All Other Compensation" column for 2019 includes, as applicable for each NEO: (a) Company contributions under our 401(k) plan with respect to such period, (b) amounts paid to lease a Company vehicle under our fleet lease program

described above, (c) amounts paid in connection with relocation, and (d) amounts paid as premiums in connection with group life insurance made available to our NEOs. The amounts of each benefit included for each of our NEOs are reported in the table below. In addition, for Mr. Bradley, this column reflects cash separation payments of \$3,058,904 and the reimbursement of \$7,284 in COBRA premiums. The amounts of each benefit included for each of our NEOs are reported in the table below.

NEO	Company Contributions to 401(k) Plan	Company Vehicle Payments	Relocation Payments / Allowance	Tax Gross Up for Relocation Payments	Group Life Insurance Premiums	Separation Payments and Benefits
Karl H. Watson, Jr.		—	\$27,064	\$17,804	\$710	—
Charlie Brown	\$11,200	—	—	—	\$2,380	—
Richard Hunter	\$11,200	—	—	—	\$1,954	—
Vikrant Bhatia	\$11,200	—	—	—	\$435	—
Lori Browne	\$11,200	\$18,297	—	—	\$383	—
Jeff Bradley	\$11,200	—	—	—	\$2,032	\$3,066,188

#### **GRANTS OF PLAN-BASED AWARDS TABLE**

The following table sets forth information with respect to: (1) the annual cash incentive bonuses awarded to each NEO for 2019 and (2) the awards granted to each NEO under our 2016 Stock Incentive Plan and 2018 Stock Incentive Plan in 2019.

Name	Type of Award	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards			All Other Stock Awards: Number of Shares of Stock or Units (#)(2)	All Other Option Awards: Number of Securities Underlying Options (#)(3)	Exercise or Base Price of Option Awards (\$/Share)(4)	Grant Date Fair Value of Stock and Option Awards \$(5)
			Threshold (\$)	Target (\$)	Maximum (\$) (1)				
Karl H. Watson, Jr. (6)	Annual Incentive Plan		437,500	875,000	1,750,000				
	Performance-Based Restricted Stock Units	7/1/2019				1,350,000		6,453,000	
Charlie Brown	Annual Incentive Plan		257,500	515,000	1,030,000				
	Restricted Stock Units	3/14/2019				88,690		376,046	
	Stock Options	3/14/2019					197,351 \$	298,138	
Richard Hunter	Annual Incentive Plan		225,000	450,000	900,000				
	Restricted Stock Units	3/14/2019				73,214		310,427	
	Stock Options	3/14/2019					162,914 \$	246,114	
Vikrant Bhatia	Annual Incentive Plan		159,375	318,750	637,500				
	Restricted Stock Units	3/14/2019				54,762		232,191	
	Stock Options	3/14/2019					121,854 \$	184,085	
Lori Browne	Annual Incentive Plan		144,844	289,688	579,375				
	Restricted Stock Units	3/14/2019				60,119		254,905	
	Stock Options	3/14/2019					133,775 \$	202,094	
Jeff Bradley(7)	Annual Incentive Plan		424,875	849,750	1,699,500				
	Restricted Stock Units	3/14/2019				325,000		1,378,000	
	Stock Options	3/14/2019					723,179 \$	1,092,507	

- (1) Our Annual Incentive Plan contemplates a maximum potential award as shown above, but also permits the Compensation Committee to grant discretionary additional bonuses in excess of this amount in order to recognize exceptional Company and individual performance.
- (2) Reflects performance-based restricted stock units, or PRSUs, granted to Mr. Watson and restricted stock units granted to Messrs. Brown, Hunter, Bhatia, Bradley and Ms. Browne in 2019. For Mr. Watson's award, unless an award is forfeited prior to vesting, the performance based restricted stock units is split into five equal tranches of 270,000 restricted stock units, and 25% of each tranche vests upon the twenty-day volume weighted average trading price for our common stock equaling or exceeding a specified threshold, while the remaining 75% of each tranche vests on the first anniversary of the initial 25% vesting of the tranche. For the remainder of the awards, unless forfeited prior to vesting, the restricted stock units vest in approximately one-third increments on each of the first, second, and third anniversary of the grant date.
- (3) Reflects the number of non-qualified stock options granted in 2019. Unless an award is forfeited prior to vesting, option awards generally have a 10-year term and become exercisable annually over three years from the grant date in equal approximately 1/3 increments.
- (4) The closing price of Forterra, Inc. common stock per share on Grant Date.
- (5) Represents the fair value (at grant date) of stock options, PRSUs and RSUs granted to NEOs in 2019 in accordance with ASC 718. See footnotes 4 and 5 to the Summary Compensation Table above.
- (6) Mr. Watson was eligible for a pro-rated annual incentive payment based on his service to us commencing July 1, 2019 per his employment agreement.
- (7) Mr. Bradley forfeited all of the restricted stock units and option awards reported in this table upon the termination of his employment on June 30, 2019 and received a pro-rated annual incentive payment based on the portion of 2019 during which he was employed by the Company.



**OUTSTANDING EQUITY AWARDS AT FISCAL YEAR END 2019**

The following table provides information on stock option, restricted stock, and restricted stock units for each NEO that were outstanding as of the end of the fiscal year ended December 31, 2019. The market value of the stock awards is based on the closing market price of our common stock on December 31, 2019 of \$11.56 per share.

	Option Awards				Stock Awards	
	Number of Securities Underlying Unexercised Option (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)
Karl H. Watson, Jr.					1,147,500 <sup>(1)</sup>	13,265,100
Charlie Brown	0	197,351 <sup>(2)</sup>	4.24	03/14/2029	88,690 <sup>(4)</sup>	1,025,256
	58,887	117,793 <sup>(3)</sup>	7.29	03/01/2028	27,254 <sup>(5)</sup>	315,056
	180,704	90,380 <sup>(6)</sup>	4.23	9/25/2027	23,646 <sup>(7)</sup>	273,348
Richard Hunter	0	162,914 <sup>(2)</sup>	4.24	03/14/2029	73,214 <sup>(4)</sup>	846,354
	23,004	46,016 <sup>(8)</sup>	9.23	06/11/2028	10,835 <sup>(9)</sup>	125,253
Vikrant Bhatia	0	121,854 <sup>(2)</sup>	4.24	03/14/2029	54,762 <sup>(4)</sup>	633,049
	36,360	72,731 <sup>(3)</sup>	7.29	03/01/2028	16,828 <sup>(5)</sup>	194,532
	21,975	10,992 <sup>(10)</sup>	9.16	12/12/2027	2,912 <sup>(11)</sup>	33,663
	22,920	11,464 <sup>(12)</sup>	8.92	08/07/2027	2,991 <sup>(13)</sup>	34,576
Lori Browne	0	133,775 <sup>(2)</sup>	4.24	03/14/2029	60,119 <sup>(4)</sup>	694,976
	35,925	71,862 <sup>(3)</sup>	7.29	03/01/2028	16,627 <sup>(5)</sup>	192,208
	9,654	4,829 <sup>(14)</sup>	18.96	03/20/2027	2,770 <sup>(15)</sup>	32,021
	16,410	5,470 <sup>(16)</sup>	18.00	10/19/2026	2,188 <sup>(17)</sup>	25,293
Jeff Bradley <sup>(18)</sup>	—	—	n/a	n/a	—	—

- (1) Represents performance-based restricted stock units, 540,000 units of which the performance condition had not been met at December 31, 2019 and the vesting dates for the remaining units, in the amount of 202,500 shares each, are expected to occur 9/18/2020, 11/5/2020 and 11/25/2020.
- (2) Options vest annually in approximately equal increments of 1/3 with remaining vesting dates of 3/14/2020, 3/14/2021 and 3/14/2022.
- (3) Options vest annually in approximately equal increments of 1/3 with remaining vesting dates of 3/1/2020 and 3/1/2021.
- (4) These restricted stock units vest in approximately equal increments of 1/3 each on the first, second and third anniversaries of the Grant Date. The remaining vesting dates for these units are 3/14/2020, 3/14/2021, and 3/14/2022.
- (5) These restricted stock units vest in approximately equal increments of 1/3 each on the first, second and third anniversaries of the Grant Date. The remaining vesting date for these units is 3/1/2020.
- (6) Options vest annually in approximately equal increments of 1/3 with a remaining vesting date of 9/25/2020.
- (7) These shares of restricted stock vest in equal increments of 1/3 each on the first, second and third anniversaries of the Grant Date. The remaining vesting date for these shares is 9/25/2020.
- (8) Options vest annually in approximately equal increments of 1/3 with remaining vesting dates of 6/11/2020 and 6/11/2021.
- (9) These shares of restricted stock vest in equal increments of 1/3 each on the first, second and third anniversaries of the Grant Date. The remaining vesting dates for these shares are 6/11/2020 and 6/11/2021.
- (10) Options vest annually in approximately equal increments of 1/3 with a remaining vesting date of 12/12/2020.
- (11) These restricted stock units vest in approximately equal increments of 1/3 each on the first, second and third anniversaries of the Grant Date. The remaining vesting date for these restricted stock units is 12/12/2020.
- (12) Options vest annually in approximately equal increments of 1/3 with a remaining vesting date of 8/7/2020.
- (13) These shares of restricted stock vest in approximately equal increments of 1/3 each on the first, second and third anniversaries of the Grant Date. The remaining vesting date for these shares is 8/7/2020.
- (14) Options vest annually in approximately equal increments of 1/3 with a remaining vesting date of 3/20/2020.
- (15) These shares of restricted stock vest in equal increments of 1/3 each on the first, second and third anniversaries of the Grant Date. The remaining vesting date for these shares is 3/20/2020.
- (16) Options vest annually in 25% increments with a remaining vesting date of 10/19/2020.

- (17) These shares of restricted stock vest in increments of 25% each on the first, second, third and fourth anniversaries of the Grant Date. The remaining vesting date for these shares is 10/19/2020.
- (18) Mr. Bradley forfeited all of his unvested options and unvested restricted stock and restricted stock units upon his voluntary resignation of his employment effective 6/30/2019. Under the terms of the 2016 Stock Incentive Plan and the 2018 Stock Incentive Plan, any remaining unexercised options were canceled on 9/30/2019.

**OPTION EXERCISES AND STOCK VESTED**

The following table provides information concerning the options exercised and the vesting of restricted stock, performance-based restricted stock units, and restricted stock units during the fiscal year ended December 31, 2019 for each of our NEOs. For more information on our equity compensation plan, see the “Equity Incentive Compensation” section of the “Compensation Discussion and Analysis.”

Name	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)(1)	Value Realized on Exercise (\$)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)
Karl H. Watson, Jr.(1)	—	—	202,500	1,997,325
Charlie Brown(2)	—	—	37,262	244,528
Richard Hunter(3)	—	—	5,416	26,863
Vikrant Bhatia(4)	—	—	14,312	92,749
Lori Browne(5)	—	—	13,268	72,813
Jeff Bradley(6)	175,822	29,444	65,625	324,278

- (1) The number of shares acquired on vesting and value realized on vesting reflects the combined total of the 67,500 performance-based restricted stock units that vested with a closing market price of \$7.70 on September 18, 2019, the 67,500 performance-based restricted stock units that vested with a closing market price of \$10.95 on November 5, 2019, and the 67,500 performance-based restricted stock units that vested with a closing market price of \$10.94 on November 25, 2019.
- (2) The number of shares acquired on vesting and value realized on vesting reflects the 13,624 restricted stock units that vested with a closing market price of \$5.30 on March 1, 2019 and the 23,638 shares of restricted stock that vested with a closing market price of \$7.29 on September 25, 2019.
- (3) The number of shares acquired on vesting and value realized on vesting reflects the 5,416 restricted stock units that vested with a closing market price of \$4.96 on June 11, 2019.
- (4) The number of shares acquired on vesting and value realized on vesting reflects the combined total of the 8,412 restricted stock units that vested with a closing market price of \$5.30 on March 1, 2019, the 2,989 shares of restricted stock that vested with a closing market price of \$5.82 on August 7, 2019, and the 2,911 restricted stock units that vested with a closing market price of \$10.57 on December 12, 2019.
- (5) The number of shares acquired on vesting and value realized on vesting reflects the combined total of the 8,311 restricted stock units that vested with a closing market price of \$5.30 on March 1, 2019, the 2,769 shares of restricted stock that vested with a closing market price of \$4.11 on March 20, 2019 and the 2,188 shares of restricted stock that vested with a closing market price of \$7.95 on October 18, 2019.
- (6) The number of options exercised and value realized on exercise reflects the combined total of 106,577 options exercised at \$7.51 on September 18, 2019, a total of 13,299 options exercised at the weighted-average exercise price of \$7.40 on September 26, 2019, a total of 28,052 options exercised at the weighted-average exercise price of \$7.40 on September 27, 2019, a total of 27,894 options exercised at the weighted-average exercise price of \$7.34 on September 30, 2019. The number of shares acquired on vesting and value realized on vesting reflects the combined total of the 45,848 restricted stock units that vested with a closing market price of \$5.30 on March 1, 2019 and the 19,777 shares of restricted stock that vested with a closing market price of \$4.11 on March 20, 2019.

**POTENTIAL PAYMENTS UPON TERMINATION OR CHANGE-IN-CONTROL**

**Equity Awards**

Under the stock option, performance-based restricted stock unit, restricted stock unit, and restricted stock awards granted to our NEOs under our 2016 Stock Incentive Plan and our 2018 Stock Incentive Plan, if the relevant NEO's employment were to terminate as a result of death, disability, retirement (unless otherwise indicated, at or after age 55 with 5 years of service or at or after age 50 with 80 points, with points meaning the sum of age and years of service) or under the terms of a transaction constituting a Change in Control (as defined in our 2016 Stock Incentive Plan and our 2018 Stock Incentive Plan) without cause within 24 months following such Change in Control: (a) all unvested restricted stock and restricted stock unit awards would vest, and (b) all unvested stock options would vest and remain exercisable for a period of 12 months from the date of termination. None of our NEOs are "retirement" eligible under this definition.

**Karl H. Watson, Jr.**

Pursuant to his June 21, 2019 employment agreement, subject to execution and nonrevocation of a general release of claims and continued compliance with the restrictive covenants contained in his employment agreement, described in the section entitled "Employment Agreements" above, Mr. Watson is entitled to the following benefits in the event of a termination of his employment without cause (as defined in his employment agreement) or a resignation by Mr. Watson for good reason (as defined in his employment agreement):

(1) continued payment of his base salary for a period of 12 months post-termination; (2) payment of a pro-rated annual bonus for the year of termination based on actual performance, payable at the time bonuses for such year are paid to other executives; and (3) availability of continuation coverage in accordance with COBRA at the rates applicable to him immediately prior to termination for a period of 12 months post-termination. In the event of Mr. Watson's death or disability, he, or his estate, as applicable, is entitled to any payments determined by the Board in its sole and absolute discretion.

Assuming Mr. Watson's employment was terminated as of December 31, 2019, and where noted, a change in control had occurred as of such date, the payments and benefits that would have been provided to him in connection with his separation would have been as follows:

	Base Salary Continuation	Pro-rated 2019 Annual Bonus	Health Care Coverage Continuation (1)	Performance-Based RSUs (2)	Total
Termination without Cause or Resignation for Good Reason not in connection with a Change in Control	\$875,000	\$437,500	\$15,723	\$7,022,700	\$8,350,923
Termination without Cause in connection with Retirement	\$875,000	\$437,500	\$15,723	\$975,375	\$2,303,598
Termination without Cause in connection with a Change in Control	\$875,000	\$437,500	\$15,723	\$13,265,100	\$14,593,323
Death or Disability	n/a	\$437,500	n/a	\$7,022,700	\$7,460,200

(1) Based on applicable COBRA rates in effect under our group health plan as of December 31, 2019.

(2) As of December 31, 2019, 202,500 performance-based restricted stock units, or PRSUs, granted on July 1, 2019 had vested according to the terms of the award agreement. However, in the event of a termination without cause or due to death, disability all of Mr. Watson's unvested PRSUs for which the applicable performance targets had been achieved prior to the date of termination would have become vested on the date of termination and all unvested PRSUs for which the applicable performance target had not been achieved would have been forfeited and canceled as of the date of termination. In the event of a termination due to Mr. Watson's retirement, a pro-rated portion of the unvested PRSUs for which the applicable performance targets had been achieved prior to the date of termination would have become vested on the date of termination, such pro-rated portion to be determined by multiplying the unvested shares by a formula involving the number of months of service to us after achievement of the applicable performance target, and all other

unvested PRSUs would have been forfeited and canceled as of the date of termination. In the event of a termination in connection with a change of control, provided we are no longer a controlled company of Lone Star, all of Mr. Watson's unvested PRSUs would have vested immediately prior to the consummation of the change in control. The value included above reflects the number of shares for which vesting would have accelerated multiplied by the closing price per share of our common stock of \$11.56 on December 31, 2019, the last trading day of our fiscal year.

**Charlie Brown**

Pursuant to his September 6, 2017 employment agreement, subject to execution and nonrevocation of a general release of claims and continued compliance with the restrictive covenants contained in his employment agreement, described in the section entitled "Employment Agreements" above, Mr. Brown is entitled to the following benefits in the event of a termination of his employment without cause (as defined in his employment agreement) or a resignation by Mr. Brown for good reason (as defined in his employment agreement):

(1) continued payment of his base salary for a period of 12 months post-termination; (2) payment of a pro-rated annual bonus for the year of termination based on actual performance, payable at the time bonuses for such year are paid to other executives; and (3) availability of continuation coverage in accordance with COBRA at the rates applicable to him immediately prior to termination for a period of 12 months post-termination. In the event of Mr. Brown's death or disability, he, or his estate, as applicable, is entitled to any payments determined by the Board in its sole and absolute discretion.

Assuming Mr. Brown's employment was terminated as of December 31, 2019, and where noted, a change in control had occurred as of such date, the payments and benefits that would have been provided to him in connection with his separation would have been as follows:

	Base Salary Continuation	Pro-rated 2019 Annual Bonus	Health Care Coverage Continuation (1)	Stock Options, RSUs and Restricted Shares (2)	Total
Termination without Cause or Resignation for Good Reason not in Connection with a Change in Control	\$515,000	\$775,075	\$15,723	All unvested awards are forfeited	\$1,305,798
Termination without Cause in Connection with a Change in Control	\$515,000	\$775,075	\$15,723	\$5,799,739	\$7,105,537
Death or Disability	n/a	\$775,075	n/a	\$5,799,739	\$6,574,814

(1) Based on applicable COBRA rates in effect under our group health plan as of December 31, 2019.

(2) As of December 31, 2019, two-thirds of the stock options and restricted shares granted on September 25, 2017 had vested and one-third of the stock options and restricted shares granted on March 1, 2018 had vested according to the terms of the award agreements, and none of the stock options and restricted stock granted on March 14, 2019 had vested. However, in the event of a termination as a result of retirement, death, disability or without cause within 24 months of a change in control all of Mr. Brown's unvested stock options and restricted shares would have accelerated. The value included above reflects the number of shares that would have accelerated multiplied by the closing price per share of our common stock of \$11.56 on December 31, 2019, the last trading day of our fiscal year, less the relevant exercise price (in the case of stock options).

**Richard Hunter**

Pursuant to his May 22, 2019 employment agreement, subject to execution and nonrevocation of a general release of claims and continued compliance with the restrictive covenants contained in his employment agreement, described in the section entitled "Employment Agreements" above, Mr. Hunter is entitled to the following benefits in the event of a termination of his employment by us without cause (as defined in his employment agreement) or a resignation by Mr. Hunter for good reason (as defined in his employment agreement): (1) continued payment of his base salary for a period of 12 months post-termination; (2) payment of a pro-rated annual bonus for the year of termination based on actual performance, payable at the time bonuses for

such year are paid to other executives; and (3) availability of continuation coverage in accordance with COBRA at the rates applicable to him immediately prior to termination for a period of 12 months post-termination. In the event of Mr. Hunter's death or disability, he, or his estate, as applicable, is entitled to any payments determined by the Board in its sole and absolute discretion.

Assuming Mr. Hunter's employment was terminated as of December 31, 2019, and where noted, a change in control had occurred as of such date, the payments and benefits that would have been provided to him in connection with his separation would have been as follows:

	Base Salary Continuation	Pro-rated 2019 Annual Bonus	Health Care Coverage Continuation (1)	Stock Options and RSUs (2)	Total
Termination without Cause or Resignation for Good Reason not in Connection with a Change in Control	\$450,000	\$696,330	\$15,723	All unvested awards are forfeited	\$1,162,053
Termination without Cause in Connection with a Change in Control	\$450,000	\$696,330	\$15,723	\$2,271,354	\$3,433,407
Death or Disability	n/a	\$696,330	n/a	\$2,271,354	\$2,967,684

(1) Based on applicable COBRA rates in effect under our group health plan as of December 31, 2019.

(2) As of December 31, 2019, one-third of the stock options and restricted shares granted on June 11, 2018 had vested according to the terms of the award agreements and none of the stock options and restricted stock granted on March 14, 2019 had vested. However, in the event of a termination as a result of retirement, death, disability or without cause within 24 months of a change in control all of Mr. Richard Hunter's unvested stock options and restricted shares would have accelerated. The value included above reflects the number of shares that would have accelerated multiplied by the closing price per share of our common stock of \$11.56 on December 31, 2019, the last trading day of our fiscal year, less the relevant exercise price (in the case of stock options).

**Vikrant Bhatia**

Pursuant to his May 22, 2019 employment agreement, subject to execution and nonrevocation of a general release of claims and continued compliance with the restrictive covenants contained in his employment agreement, described in the section entitled "Employment Agreements" above, Mr. Bhatia is entitled to the following benefits in the event of a termination of his employment by us without cause (as defined in his employment agreement) or a resignation by Mr. Bhatia for good reason (as defined in his employment agreement): (1) continued payment of his base salary for a period of 12 months post-termination; (2) payment of a pro-rated annual bonus for the year of termination based on actual performance, payable at the time bonuses for such year are paid to other executives; and (3) availability of continuation coverage in accordance with COBRA at the rates applicable to him immediately prior to termination for a period of 12 months post-termination. In the event of Mr. Bhatia's death or disability, he, or his estate, as applicable, is entitled to payment of a pro-rated annual bonus for the year of termination, payable at the time bonuses for such year are paid to other executives, in an amount determined by the Forterra, Inc. Board of Directors in its sole discretion.

Assuming Mr. Bhatia's employment was terminated as of December 31, 2019, and where noted, a change in control had occurred as of such date, the payments and benefits that would have been provided to him in connection with his separation would have been as follows:

	Base Salary Continuation	Pro-rated 2019 Annual Bonus	Health Care Coverage Continuation (1)	Stock Options, RSUs and Restricted Shares (2)	Total
Termination without Cause or Resignation for Good Reason not in Connection with a Change in Control	\$425,000	\$383,584	\$15,723	All unvested awards are forfeited	\$824,307
Termination without Cause in Connection with a Change in Control	\$425,000	\$383,584	\$15,723	\$2,423,503	\$3,247,810
Death or Disability	n/a	\$383,584	n/a	\$2,423,503	\$2,807,087

(1) Based on applicable COBRA rates in effect under our group health plan as of December 31, 2019.

(2) As of December 31, 2019, two-thirds of the stock options and restricted shares granted on August 7, 2017 and December 12, 2017 had vested, one-third of the stock options and restricted shares granted on March 1, 2018 had vested according to the terms of the award agreements and none of the stock options and restricted stock granted on March 14, 2019 had vested. However, in the event of a termination as a result of death, disability or without cause within 24 months of a change in control all of Mr. Bhatia's unvested stock options and restricted shares would have accelerated. The value included above reflects the number of shares that would have accelerated multiplied by the closing price per share of our common stock of \$11.56 on December 31, 2019, the last trading day of our fiscal year, less the relevant exercise price (in the case of stock options).

### Lori Browne

Pursuant to her December 18, 2017 employment agreement, subject to execution and nonrevocation of a general release of claims and continued compliance with the restrictive covenants contained in her employment agreement, described in the section entitled "Employment Agreements" above, Ms. Browne is entitled to the following benefits in the event of a termination of her employment by us without cause (as defined in her employment agreement) or a resignation by Ms. Browne for good reason (as defined in her employment agreement): (1) continued payment of her base salary for a period of 12 months post-termination; (2) payment of a pro-rated annual bonus for the year of termination based on actual performance, payable at the time bonuses for such year are paid to other executives; and (3) availability of continuation coverage in accordance with COBRA at the rates applicable to her immediately prior to termination for a period of 12 months post-termination. In the event of Ms. Browne's death or disability, she, or her estate, as applicable, is entitled to any payments determined by the Board in its sole and absolute discretion.

In addition, under her LTIP award agreement, in the event of a termination of employment for any reason other than cause (as defined in his employment agreement), Ms. Browne is entitled to retain any pool units she holds as of her termination of employment for a period of six months after termination of employment.

Assuming Ms. Browne's employment was terminated as of December 31, 2019, and where noted, a change in control had occurred as of such date, the payments and benefits that would have been provided to her in connection with her separation would have been as follows:

	Base Salary Continuation	Pro-rated 2019 Annual Bonus	Health Care Coverage Continuation (1)	Stock Options, RSUs and Restricted Shares (2)	LTIP Units (3)	Total
Termination without Cause or Resignation for Good Reason not in Connection with a Change in Control	\$386,250	\$396,002	n/a	All unvested awards are forfeited	Remain Outstanding through June 30, 2020	\$782,252
Termination without Cause in Connection with a Change in Control	\$386,250	\$396,002	n/a	\$2,383,982	Remain Outstanding through June 30, 2020	\$3,166,234
Death or Disability	n/a	\$396,002	n/a	\$2,383,982	n/a	\$2,779,984

- (1) Ms. Browne does not currently participate in our group health plan.
- (2) As of December 31, 2019, 75% of the stock options and restricted shares granted on October 19, 2016 had vested, two-thirds of the stock options and restricted shares granted on March 20, 2017 had vested, one-third of the stock options and restricted stock units granted March 1, 2018 had vested and none of the stock options and restricted stock units granted March 14, 2019 had vested according to the terms of the award agreements. However, in the event of a termination as a result of death, disability or without cause within 24 months of a change in control all of Ms. Browne's unvested stock options and restricted shares would have accelerated. The value included above reflects the number of shares that would have accelerated multiplied by the closing price per share of our common stock of \$11.56 on December 31, 2019, the last trading day of our fiscal year, less the relevant exercise price (in the case of stock options).
- (3) Had she been terminated on December 31, 2019, the 17,500 pool units granted to Ms. Browne would have remained outstanding through June 30, 2020 under the terms of her LTIP Award Agreement.

### Jeff Bradley

Pursuant to a separation and release agreement by and between Mr. Bradley and us effective June 30, 2019, Mr. Bradley's employment was terminated without cause pursuant to his Employment Agreement with Forterra Pipe & Precast, LLC dated as of July 8, 2015. The separation agreement provides for the following: (i) a lump-sum payment of \$875,000, (ii) a lump-sum cash payment of \$1,750,000 (which represents one year of Mr. Bradley's annual base salary and one year of his annual bonus at target), (iii) a lump-sum cash payment of \$433,904 (which represents a prorated portion of Mr. Bradley's 2019 annual incentive performance bonus with achievement at target levels), and (iv) reimbursement of the cost of COBRA premiums for Mr. Bradley's and his dependents' coverage under the Company's group insurance plans for up to one year following Mr. Bradley's separation valued at \$14,568, provided Mr. Bradley timely elects and receives such coverage under such plans. Consistent with his award agreement under the LSF9 Concrete Holdings Ltd. Long Term Incentive Plan, Mr. Bradley will also retain the 105,000 vested pool units that he currently holds through July 8, 2021. The separation agreement also includes a customary release by Mr. Bradley of claims against us and our affiliates.

	Lump Sum Payment	Pro-rated 2019 Annual Bonus	Lump Sum Payment (representing one year of base salary and performance bonus)	Health Care Coverage Continuation	Stock Options, RSUs and Restricted Shares	LTIP Units	Total
Termination without Cause or Resignation for Good Reason not in Connection with a Change in Control	\$875,000	\$433,904	\$1,750,000	\$14,568	All unvested awards are forfeited	105,000 Vested Units Remain Outstanding through July 8, 2021	\$3,073,472

**CEO PAY RATIO**

We have prepared the following information in accordance with the requirements of Item 402(u) of Regulation S-K. The SEC's rules for identifying the median compensated employee and calculating the pay ratio based on that employee's annual total compensation allow companies to adopt a variety of methodologies, to apply certain exclusions, and to make reasonable estimates and assumptions that reflect their employee populations and compensation practices. As a result, the pay ratio reported by other companies may not be comparable to the pay ratio reported below, as other companies have different employee populations and compensation practices and may utilize different methodologies, exclusions, estimates and assumptions in calculating their own pay ratios.

For purposes of determining our median-compensated employee, we prepared a list of all 4,578 individuals employed by us as of December 31, 2019, which included all full-time, part-time, temporary and seasonal (summer) employees. As permitted by SEC rules, we then excluded 214 employees of our U.S. Pipe Mexico operation, who comprise less than 5% of our total employee population. We then ordered the list based on each employee's annual cash compensation. With a global employee population of 4,578, the total number of employees used for the calculation was 4,364 based on the above exemption. We applied the December 31, 2019 exchange rate of .77 for Canadian employee salaries. From this list, our median-compensated employee's 2019 annual total compensation was \$54,637 and total annual compensation for Karl Watson, our Chief Executive Officer, was \$7,373,578.

The ratio of our CEO's 2019 annual total compensation to the 2019 annual total compensation for our median-compensated employee was 135 to 1. This pay ratio is a reasonable estimate calculated in a manner consistent with SEC rules based on the methodology described above

**Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**

**Information with Respect to Securities Authorized for Issuance Under Equity Compensation Plans**

The following table summarizes, as of December 31, 2019, information with respect to (a) the number of securities to be issued upon exercise of outstanding options, warrants and rights, (b) the weighted average exercise price of outstanding options, warrants and rights and (c) the number of securities remaining available for future issuance, in each case under our 2016 Stock Incentive Plan or 2018 Stock Incentive Plan. We do not have any equity compensation plans not approved by security holders.

<b>Plan Category</b>	<b>(a) Number of Securities to Be Issued Upon Exercise of Outstanding Options, Warrants and Rights</b>	<b>(b) Weighted Average Exercise Price of Outstanding Options, Warrants and Rights</b>	<b>(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column(a))</b>
Equity compensation plans approved by security holders	3,673,096	\$ 6.50	3,282,574

The following table presents information concerning the beneficial ownership of the shares of our common stock as of February 26, 2020, or the Determination Date, by (1) each person known to us to beneficially own more than 5% of the outstanding shares of our common stock, (2) each of our directors and NEOs and (3) all of our directors and executive officers as a group. Beneficial ownership is determined under the rules of the SEC and generally includes voting or investment power over securities. Under these rules, more than one person may be deemed beneficial owner of the same securities, and a person may be deemed to be a beneficial owner of securities as to which such person has no economic interest. Except in cases where community property laws apply or as indicated in the footnotes to this table, we believe that each stockholder identified in the table possesses sole voting and investment power over all shares of common stock shown as beneficially owned by the



stockholder. Unless indicated below, the address of each individual listed below is c/o 511 E. John Carpenter Freeway, Suite 600, Irving, Texas 75062.

Name of Beneficial Owner	Shares of Common Stock	Percentage of Total Outstanding Common Stock (%)
<b>5% Stockholder and Selling Stockholder</b>		
Forterra US Holdings, LLC <sup>(1)</sup>	45,107,250	69.6%
<b>Named Executive Officers</b>		
Karl H. Watson, Jr. <sup>(2)</sup>	507,265	*
Charlie Brown <sup>(3)</sup>	528,740	*
Richard Hunter <sup>(4)</sup>	105,809	*
Vikrant Bhatia <sup>(5)</sup>	250,277	*
Lori Browne <sup>(6)</sup>	217,171	*
Jeff Bradley <sup>(7)</sup>	195,184	*
<b>Directors</b>		
Richard "Chip" Cammerer, Jr. <sup>(8)</sup>	—	—
Rafael Colorado <sup>(8)</sup>	—	—
Maureen Harrell <sup>(8)</sup>	—	—
Chad Lewis <sup>(8)</sup>	—	—
Clint McDonnough <sup>(9)</sup>	43,712	*
John McPherson <sup>(9)</sup>	45,161	*
Chris Meyer <sup>(8)</sup>	62,500	*
Jacques Sarrazin <sup>(9)</sup>	16,041	*
<b>All directors and executive officers as a group (14 persons)<sup>(10)</sup></b>	<b>1,971,860</b>	<b>3.0%</b>

\* Represents less than 1% of total outstanding common stock.

(1) Forterra US Holdings, LLC, a Delaware limited liability company, is wholly owned by LSF9 Stardust Holdings, L.P., a Bermuda exempted limited partnership, which is controlled by its general partner, LSF9 Stardust GP, LLC, a Delaware limited liability company, which is wholly owned by Lone Star Fund IX (U.S.), L.P., a Delaware limited partnership, which is controlled by its general partner, Lone Star Partners IX, L.P., a Bermuda exempted limited partnership, which is controlled by its general partner, Lone Star Management Co. IX, Ltd., a Bermuda limited exempted company, which is controlled by its sole owner (shareholder) John P. Grayken. The address for such persons is 2711 North Haskell Avenue, Suite 1700, Dallas, Texas 75204.

(2) Mr. Watson is also a Director.

(3) Includes options to purchase 364,261 shares of common stock and 43,188 restricted stock units that have vested or will vest within 60 days of the Determination Date.

(4) Includes options to purchase 77,308 shares of common stock and 24,404 restricted stock units that have vested or will vest within 60 days of the Determination Date.

(5) Includes options to purchase 158,233 shares of common stock and 26,666 restricted stock units that have vested or will vest within 60 days of the Determination Date.

(6) Includes options to purchase 147,334 shares of common stock and 28,351 restricted stock units that have vested or will vest within 60 days of the Determination Date.

(7) Based on information available to us as of the Determination Date.

(8) Owns interests in entities which own direct or indirect non-controlling interests in Forterra US Holdings, LLC and therefore expressly disclaims any beneficial ownership of our common stock owned by Forterra US Holdings, LLC.

(9) Includes options to purchase 2,810 shares of common stock that have vested.

(10) Includes 755,566 options to purchase common stock and 122,609 restricted stock units that have vested

or will vest within 60 days of the Determination Date.

### **Item 13. Certain Relationships and Related Transactions, and Director Independence**

In connection with our IPO, we implemented a written policy pursuant to which our Audit Committee reviews and approves or ratifies transactions with our directors, executive officers and holders of more than 5% of our voting securities and their affiliates (each, a related party). Prior to approving or ratifying any transaction with a related party, the Audit Committee will consider the material facts as to the related party's relationship with us or interest in the transaction. We did not have a formal review and approval policy for related party transactions at the time of any transaction described below.

#### **Relationships with Lone Star and Affiliates**

Lone Star currently owns 69.7% of our outstanding common stock. For as long as Lone Star and its affiliates continue to beneficially own shares of common stock representing more than a majority of the voting power of our common stock, they will be able to direct the election of all of the members of our Board and exercise a controlling influence over our business and affairs, including any determinations with respect to mergers or other business combinations, the acquisition or disposition of assets, the incurrence of indebtedness, the issuance of any additional common stock or other equity securities, the repurchase or redemption of common stock and the payment of dividends. Similarly, Lone Star will have the power to determine matters submitted to a vote of our stockholders without the consent of our other stockholders, will have the power to prevent a change in our control and could take other actions that might be favorable to them.

#### **Registration Rights Agreement**

We entered into a registration rights agreement with Lone Star in connection with our IPO. The terms of the registration rights agreement include provisions for demand registration rights and piggyback registration rights in favor of Lone Star. The registration rights agreement does not provide for the payment of any consideration by us to Lone Star if a registration statement for the resale of shares of common stock held by Lone Star is not declared effective or if the effectiveness is not maintained. All of Lone Star's 45,107,250 shares of our common stock are entitled to these registration rights and were registered on a Form S-3 shelf registration statement filed in December 2019.

#### **Tax Receivable Agreement**

In connection with our IPO, we entered into a tax receivable agreement with Lone Star that provides for, among other things, the payment by us to Lone Star of 85% of the amount of certain covered tax benefits that we and our subsidiaries have generated or are expected to generate, which may reduce the actual liability for certain taxes that we might otherwise be required to pay. The tax benefits subject to the tax receivable agreement, or the Covered Tax Benefits, include: (i) all depreciation and amortization deductions, and any offset to taxable income and gain or increase to taxable loss, resulting from the tax basis that we had in our assets as of the time of the consummation of our IPO, (ii) the utilization of our and our subsidiaries' net operating losses and tax credits, if any, attributable to periods prior to our IPO, (iii) deductions in respect of payments made, funded or reimbursed by an initial party to the tax receivable agreement (other than us or one of our subsidiaries) or an affiliate thereof to participants under the LTIP, (iv) deductions in respect of transaction expenses attributable to the acquisition of U.S. Pipe and (v) certain other tax benefits attributable to payments made under the tax receivable agreement. The tax receivable agreement provides for payments to Lone Star in an amount equal to 85% of the aggregate reduction in U.S. federal, state, local and non-U.S. income taxes payable realized by us and our subsidiaries (using an assumed combined state and local income tax rate of 5%) from the utilization of such Covered Tax Benefits.

The obligations under the tax receivable agreement are our obligations and not obligations of our subsidiaries and are not conditioned upon Lone Star maintaining a continued direct or indirect ownership interest in us. For purposes of the tax receivable agreement, the aggregate reduction in income tax payable by us are computed by comparing our actual income tax liability with our hypothetical liability (using an assumed combined

state and local income tax rate of 5%) had we not been able to utilize the Covered Tax Benefits, taking into account several assumptions and adjustments, including, for example, that:

- we will pay state and local taxes at a rate of 5%, even though our actual effective state and local tax rate may be materially lower;
- tax benefits existing at the time of our IPO are deemed to be utilized before any post-closing/after-acquired tax benefits;
- a non-taxable transfer of assets by us to a non-consolidated entity is treated under the tax receivable agreement as a taxable sale at fair market value; and
- a taxable sale or other taxable transfer of subsidiary stock by us is (in cases where the subsidiary's tax basis in its assets exceeds our tax basis in the subsidiary's stock) treated under the tax receivable agreement as a taxable sale of the subsidiary's assets.

The foregoing assumptions and adjustments could cause us to be required to make payments under the tax receivable agreement that are significantly greater than the benefits we realize in respect of the Covered Tax Benefits. The tax receivable agreement will remain in effect until all Covered Tax Benefits have been used or expired, unless the agreement is terminated early, as described below.

We expect that the payments we make under the tax receivable agreement could be substantial. Based on our current estimates and assuming no material changes in the relevant tax law, and that we and our subsidiaries earn sufficient taxable income to realize the full tax benefits subject to the tax receivable agreement, we expect that future payments under the tax receivable agreement will aggregate to approximately \$77.4 million (excluding any payments that may be made to Lone Star under the tax receivable agreement as a result of tax benefits recognized in connection with payments under the LTIP). Depending on the amount and timing of our future earnings (if any) and on other factors, including the effect of any limitations imposed on our ability to use the Covered Tax Benefits, it is possible that all payments required under the tax receivable agreement could become due within a relatively short period of time. The actual amount and utilization of the Covered Tax Benefits, as well as the amount and timing of any payments under the tax receivable agreement, will vary depending upon a number of factors, including the amount, character, and timing of our and our subsidiaries' taxable income in the future.

Payments under the tax receivable agreement are generally due within a specified period of time following the filing of our tax return for the taxable year with respect to which the payment obligation arises, but interest on such payments will begin to accrue at a rate of LIBOR plus 100 basis points from the due date (without extensions) of such tax return. Late payments will generally accrue interest at a rate of LIBOR plus 500 basis points. The tax receivable agreement provides that if, at any time, we elect an early termination of the tax receivable agreement with approval of a majority of our independent directors and with Lone Star's consent, we are in material breach of our obligations under the agreement, or certain credit events described in the tax receivable agreement occur with respect to us (including a breach of the leverage covenant described below), we would be required to make an immediate payment equal to the present value of the anticipated future tax benefits to Lone Star. Such payment would be based on certain valuation assumptions, including the assumption that we and our subsidiaries have sufficient taxable income and tax liabilities to fully utilize such tax benefits. We may elect to completely terminate the tax receivable agreement early only with the written approval of Lone Star. The tax receivable agreement also provides that upon certain mergers, asset sales, other forms of business combinations or other changes of control, our (or our successor's) payments under the tax receivable agreement for each taxable year after any such event would be based on certain valuation assumptions, including the assumption that we and our subsidiaries have sufficient taxable income to fully utilize the Covered Tax Benefits. Accordingly, payments under the tax receivable agreement may be made years in advance of the actual realization, if any, of the anticipated future tax benefits and may be significantly greater than the benefits we realize in respect of the tax attributes subject to the tax receivable agreement.

In addition, were the Internal Revenue Service to successfully challenge the availability or amount of any of the Covered Tax Benefits, Lone Star would not reimburse us for any payments previously made under the tax receivable agreement, but future payments under the tax receivable agreement, if any, would be netted against any unreimbursed payments to reflect the result of any such successful challenge by the Internal Revenue

Service. As a result, we could make payments under the tax receivable agreement in excess of our actual cash savings in income tax.

We have full responsibility and sole discretion over all tax matters concerning the Company. However, we are required to notify Lone Star of any audit by a taxing authority, the outcome of which is reasonably expected to affect Lone Star's rights under the tax receivable agreement. We do not have the right to enter into any settlement of such an audit without the consent of Lone Star (not to be unreasonably withheld, conditioned or delayed). For so long as the tax receivable agreement remains outstanding, we are restricted from entering into any agreement that would be materially more restrictive with respect to our ability to make payments under the tax receivable agreement than the terms of our credit agreements entered into in connection with our IPO or, unless permitted by the terms of such credit agreements or any replacement credit agreements to the extent the terms thereof are no less restrictive in this regard than the applicable credit agreement it replaced, incurring debt that would cause our consolidated net leverage ratio (the ratio of consolidated funded indebtedness less unrestricted cash to consolidated EBITDA) to exceed a certain specified ratio, in each case without the prior written consent of Lone Star (not to be unreasonably withheld, conditioned or delayed).

In fiscal year 2019, we made aggregate payments to Lone Star of \$11.4 million under the tax receivable agreement.

Certain risks related to the tax receivable agreement are discussed in greater detail in Item 1A, Risk Factors.

### **Executive Officer and Director Indemnification Agreements**

Our amended and restated bylaws permit us to indemnify our executive officers and directors to the fullest extent permitted by law, subject to limited exceptions. We have entered into indemnification agreements with each of our executive officers and directors that provide, in general, that we will indemnify them to the fullest extent permitted by law in connection with their service to us or on our behalf.

### **Director Independence**

The Board has affirmatively determined that each of Messrs. McDonnough, McPherson and Sarrazin is independent under Nasdaq and SEC rules. Nasdaq's definition of independence includes a series of objective tests, such as that the director is not an employee of the Company and has not engaged in various types of business dealings involving the Company, which would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

### **Item 14. Principal Accounting Fees and Services**

**AUDIT AND NON-AUDIT FEES**

The table below sets forth the fees billed to us by its independent registered public accounting firm, Ernst & Young LLP for the fiscal years indicated.

	<b>2019</b>	<b>2018</b>
	(in thousands)	
Audit fees(1)	\$ 3,886	\$ 5,527
Audit-related fees(2)	\$ 94	\$ 401
Tax fees	—	—
All other fees	—	—
<b>TOTAL</b>	<b>\$ 3,980</b>	<b>\$ 5,928</b>

(1) Audit Fees--Consist of fees for professional services provided in connection with the annual audit of our consolidated financial statements; the reviews of our quarterly results of operations and reports on Form 10-Q; and the services that an independent auditor would customarily provide in connection with audits of our subsidiaries, other regulatory filings, and similar engagements for each fiscal year shown, such as consents and reviews of documents filed with the SEC.

(2) Audit-related Fees--Consist of fees for accounting consultations related to acquisitions, regulatory filings and other financial accounting and reporting matters.

**PRE-APPROVAL POLICIES AND PROCEDURES**

In connection with our IPO, the Board adopted a written policy for the pre-approval of certain audit and non-audit services provided by our independent registered public accounting firm. The policy balances the need to ensure the independence of our independent registered public accounting firm while recognizing that in certain situations our independent registered public accounting firm may possess both the technical expertise and knowledge about us to best advise us on issues and matters in addition to accounting and auditing. In general, our independent registered public accounting firm cannot be engaged to provide any audit or non-audit services unless the engagement is pre-approved by the Audit Committee in compliance with the Sarbanes-Oxley Act of 2002. Certain basic services may also be pre-approved by the Chairman of the Audit Committee under the policy. However, any service that is not specifically pre-approved under the policy must be specifically pre-approved by the Audit Committee if it is to be provided by the independent registered public accounting firm. In determining whether or not to pre-approve services, the Audit Committee determines whether the service is a permissible service under the SEC's rules, and, if permissible, the potential effect of such services on the independence of our independent registered public accounting firm. All of the fees identified in the table above were approved in accordance with SEC requirements and pursuant to the policies and procedures described above.

**PART IV****Item 15. Exhibits, Financial Statement Schedules**

The following documents are filed as part of this Annual Report on Form 10-K, or incorporated herein by reference:

1. Financial Statements. The Company's financial statements are included in Part II, Item 8, Financial Statements and Supplementary Data.
2. Financial Statement Schedules. All schedules are omitted since they are not applicable, not required, or the information required to be set forth herein is included in the Consolidated Financial Statements.
3. Exhibits. The exhibits listed in the Exhibit Index immediately below are filed as part of this Annual Report on Form 10-K or are incorporated by reference herein.

Exhibit No.	Description of Exhibit	
2.1+	<a href="#">Purchase Agreement, dated as of December 23, 2014, by and between HBMA Holdings LLC, Structerm Holdings Limited, Hanson America Holdings (4) Limited, Hanson Packed Products Limited and LSF9 Stardust Holdings LLC, and, solely for the purposes of Section 9.08 and Article IX thereto, HeidelbergCement AG.</a>	(a)
2.2	<a href="#">Amendment No. 1 to the Purchase Agreement, dated as of January 21, 2015, by and between HBMA Holdings LLC, Structerm Holdings Limited, Hanson America Holdings (4) Limited, Hanson Packed Products Limited and LSF9 Stardust Holdings LLC.</a>	(a)
2.3	<a href="#">Assignment and Amendment to the Purchase Agreement, dated as of March 13, 2015, by and between LSF9 Stardust Holdings LLC and LSF9 Concrete Ltd, and solely for the purposes of Article III thereto, HBMA Holdings LLC, Structerm Holdings Limited, Hanson America Holdings (4) Limited, Hanson Packed Products Limited, Stardust Acquisition I Company, LLC, Stardust Acquisition II Company, LLC, LSF9 Concrete UK Ltd, Stardust Canada Acquisition I Ltd And Stardust Canada Acquisition II Ltd.</a>	(a)
2.4+	<a href="#">Stock Purchase Agreement, dated as of August 20, 2015, by and among HBP Pipe &amp; Precast LLC, Cretex Companies, Inc. and Cretex Concrete Products, Inc.</a>	(a)
2.5+	<a href="#">Purchase Agreement, dated as of January 29, 2016, by and among Forterra Pipe &amp; Precast, LLC, Sherman-Dixie Concrete Industries, Inc., the shareholders named therein, and PKD Partnership.</a>	(a)
2.6+	<a href="#">Stock Purchase Agreement, dated as of February 12, 2016, by and among Forterra Pipe &amp; Precast, LLC, USP Holdings Inc., the stockholders and optionholders of USP Holdings Inc. named therein, and Alabama Seller Rep Inc.</a>	(a)
3.1	<a href="#">Amended and Restated Certificate of Incorporation of the Registrant.</a>	(d)
3.2	<a href="#">Amended and Restated Bylaws of the Registrant.</a>	(b)
4.1	<a href="#">Registration Rights Agreement dated as of October 19, 2016 between Forterra, Inc. and LSF9 Concrete Mid-Holdings Ltd.</a>	(b)
4.2	<a href="#">Form of Certificate of Common Stock of the Registrant.</a>	(e)

10.1	<a href="#">Amended and Restated Master Land and Building Lease dated June 5, 2018 between Pipe Portfolio Owner (Multi) LP and Forterra Pipe &amp; Precast LLC and certain affiliates.</a>	(l)
10.2	<a href="#">Amended and Restated Master Land and Building Lease dated June 5, 2018 between FORT-NOM HOLDINGS (ONQC) INC. and Forterra Pipe &amp; Precast, Ltd.</a>	(l)
10.3	<a href="#">Amended and Restated Limited Liability Company Agreement of Concrete Pipe &amp; Precast, LLC, dated as of August 3, 2012, by and among Concrete Pipe &amp; Precast, LLC, Americast, Inc. and Hanson Pipe &amp; Precast LLC.</a>	(a)
10.4	<a href="#">Form of Tax Receivable Agreement.</a>	(e)
10.5	<a href="#">Form of Indemnification Agreement for executive officers and directors.</a>	(b)
10.6#	<a href="#">Employment Agreement between HBP Pipe and Precast LLC and Jeff Bradley dated as of July 8, 2015.</a>	(a)
10.7#	<a href="#">LSF9 Concrete Holdings Ltd. Long Term Incentive Plan (with form of award agreement).</a>	(a)
10.8#	<a href="#">Notice regarding LSF9 Concrete Holdings Ltd. Long Term Incentive Plan dated December 14, 2016.</a>	(h)
10.9#	<a href="#">Forterra, Inc. 2016 Stock Incentive Plan.</a>	(g)
10.10#	<a href="#">Form of Grant Notice for 2016 Stock Incentive Plan Nonqualified Stock Options Award.</a>	(c)
10.11#	<a href="#">Form of Grant Notice for 2016 Stock Incentive Plan Incentive Stock Options Award.</a>	(c)
10.12#	<a href="#">Form of Grant Notice for 2016 Stock Incentive Plan Restricted Stock Award.</a>	(c)
10.13#	<a href="#">Form of Grant Notice for 2016 Stock Incentive Plan Restricted Stock Unit Award.</a>	(c)
10.14#	<a href="#">Form of Grant Notice for 2016 Stock Incentive Plan Performance Restricted Stock Unit Award.</a>	(c)
10.15#	<a href="#">Forterra, Inc. 2018 Stock Incentive Plan.</a>	(m)
10.16	<a href="#">Senior Lien Term Loan Credit Agreement dated October 25, 2016 by and among Forterra, Inc., Forterra Finance, LLC, as borrower, the lenders party thereto and Credit Suisse AG, Cayman Islands Branch, as administrative agent.</a>	(f)
10.17	<a href="#">ABL Credit Agreement dated October 25, 2016 by and among Forterra, Inc. and certain of its subsidiaries, as borrowers, the lenders party thereto and Bank of America, N.A., as agent.</a>	(f)
10.18	<a href="#">First Amendment to Senior Lien Term Loan Credit Agreement dated May 1, 2017 by and among Forterra, Inc., Forterra Finance, LLC, as borrower, the lenders party thereto and Credit Suisse AG, Cayman Islands Branch, as administrative agent.</a>	(i)
10.19#	<a href="#">Employment Agreement, dated as of September 6, 2017 by and between the Company and Charlie Brown.</a>	(j)
10.20#	<a href="#">Employment Agreement, dated as of December 18, 2017 by and between the Company and Lori Browne.</a>	(k)

10.21#	<a href="#">Employment Agreement, dated as of May 22, 2019 by and between the Company and Richard Hunter.</a>	(n)
10.22#	<a href="#">Employment Agreement, dated as of May 22, 2019 by and between the Company and Vikrant Bhatia.</a>	(n)
10.23#	<a href="#">Employment Agreement, dated as of June 21, 2019 by and between the Company and Karl Watson, Jr.</a>	(o)
10.24#	<a href="#">Separation and General Release Agreement between Jeff Bradley and Forterra, Inc. and USP Holdings, Inc. dated as of June 30, 2019.</a>	*
10.25#	<a href="#">Form of Grant Notice for 2018 Stock Incentive Plan Nonqualified Stock Options Award.</a>	*
10.26#	<a href="#">Form of Grant Notice for 2018 Stock Incentive Plan Restricted Stock Unit Award.</a>	*
10.27#	<a href="#">Form of Grant Notice for 2018 Stock Incentive Plan Performance Restricted Stock Unit Award.</a>	*
21.1	<a href="#">Subsidiaries of the Registrant.</a>	*
23.1	<a href="#">Consent of Ernst &amp; Young LLP.</a>	*
23.2	<a href="#">Consent of Moss Adams LLP.</a>	*
31.1	<a href="#">Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</a>	*
31.2	<a href="#">Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</a>	*
32.1	<a href="#">Certification of Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</a>	^
99.1	<a href="#">Financial Statements of Concrete Pipe &amp; Precast, LLC as of December 31, 2019 and 2018 and for the years ended December 31, 2019, 2018 and 2017.</a>	*
101.INS	XBRL Instance Document.	*
101.SCH	XBRL Taxonomy Extension Schema Document.	*
101.CAL	XBRL Taxonomy Calculation Linkbase Document.	*
101.DEF	XBRL Taxonomy Definition Linkbase Document.	*
101.LAB	XBRL Taxonomy Label Linkbase Document.	*
101.PRE	XBRL Taxonomy Presentation Linkbase Document.	*



- 
- \* Filed herewith
  - # Denotes management compensatory plan or arrangement
  - + Certain schedules to this agreement have been omitted in accordance with Item 601(b)(2) of Regulation S-K. A copy of any omitted schedules will be furnished supplementally to the SEC upon request.
  - ^ Exhibit 32.1 shall not be deemed filed with the SEC, nor shall it be deemed incorporated by reference in any filing with the SEC under the Exchange Act or the Securities Act of 1933, as amended, whether made before or after the date hereof and irrespective of any general incorporation language in any filings.
  - (a) Previously filed on July 8, 2016 as an exhibit to the Company's Registration Statement on Form S-1 (File No. 333-212449) and incorporated herein by reference.
  - (b) Previously filed on August 15, 2016 as an exhibit to Amendment No. 1 to the Company's Registration Statement on Form S-1 (File No. 333-212449) and incorporated herein by reference.
  - (c) Previously filed on September 8, 2016 as an exhibit to Amendment No. 2 to the Company's Registration Statement on Form S-1 (File No. 333-212449) and incorporated herein by reference.
  - (d) Previously filed on October 7, 2016 as an exhibit to Amendment No. 4 to the Company's Registration Statement on Form S-1 (File No. 333-212449) and incorporated herein by reference.
  - (e) Previously filed on October 17, 2016 as an exhibit to Amendment No. 5 to the Company's Registration Statement on Form S-1 (File No. 333-212449) and incorporated herein by reference.
  - (f) Previously filed on November 11, 2016 as an exhibit to the Company's Current Report on Form 8-K/A and incorporated herein by reference.
  - (g) Previously filed on January 10, 2017 as an exhibit to the Company's Registration Statement on Form S-8 (File No. 333-215504) and incorporated herein by reference.
  - (h) Previously filed on March 31, 2017 as an exhibit to the Company Annual Report on Form 10-K for the fiscal year ended December 31, 2017 and incorporated herein by reference.
  - (i) Previously filed on May 15, 2017 as an exhibit to the Company Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2017 and incorporated herein by reference.
  - (j) Previously filed on September 7, 2017 as an exhibit to the Company's Current Report on Form 8-K and incorporated herein by reference.
  - (k) Previously filed on December 20, 2017 as an exhibit to the Company's Current Report on Form 8-K and incorporated herein by reference.
  - (l) Previously filed on June 11, 2018 as an exhibit to the Company's Current Report on Form 8-K and incorporated herein by reference.
  - (m) Previously filed on April 20, 2018 as an exhibit to the Company's Definitive Proxy Statement and incorporated herein by reference.
  - (n) Previously filed on May 23, 2019 as an exhibit to the Company's Current Report on Form 8-K and incorporated herein by reference.
  - (o) Previously filed on Jun 24, 2019 as an exhibit to the Company's Current Report on Form 8-K and incorporated herein by reference.

**Item 16. Form 10-K Summary**

None.

**SIGNATURES**

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

**FORTERRA, INC.**

(Registrant)

/s/ Karl Watson, Jr.

February 27, 2020

By: Karl Watson, Jr.  
Chief Executive Officer  
(Principal Executive Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

/s/ Karl Watson, Jr.

Chief Executive Officer and Director  
(Principal Executive Officer)

February 27, 2020

Karl Watson, Jr.

/s/ Charles R. Brown, II

Executive Vice President and Chief Financial Officer  
(Principal Financial Officer, Principal Accounting Officer)

February 27, 2020

Charles R. Brown, II

/s/ Chris Meyer

Chairman of the Board, Director

February 27, 2020

Chris Meyer

/s/ Richard Cammerer, Jr.

Director

February 27, 2020

Richard Cammerer, Jr.

/s/ Rafael Colorado

Director

February 27, 2020

Rafael Colorado

/s/ Maureen Harrell

Director

February 27, 2020

Maureen Harrell

/s/ Chad Lewis

Director

February 27, 2020

Chad Lewis

/s/ Clint McDonnough

Director

February 27, 2020

Clint McDonnough

/s/ John McPherson

Director

February 27, 2020

John McPherson

/s/ Jacques Sarrazin

Director

February 27, 2020

Jacques Sarrazin



**SEPARATION AND GENERAL RELEASE AGREEMENT**

This SEPARATION AND GENERAL RELEASE AGREEMENT (this “Agreement”) is entered into by and between Jeff Bradley (“Executive”) and Forterra, Inc. (the “Company”) and is effective as of the Effective Date (as defined herein). The Company and Executive shall each be referred to in this Agreement as a “Party,” and collectively as the “Parties.”

WHEREAS, Executive has been employed by the Company as its Chief Executive Officer pursuant to that certain Employment Agreement dated July 8, 2015 between Executive and HBP Pipe and Precast LLC (the “Employment Agreement”), which sets forth certain severance obligations and ongoing post-Employment restrictive covenants that survive termination of employment;

WHEREAS, LSF9 Concrete Holdings Ltd, a private limited company incorporated under the laws of the Bailiwick of Jersey (“Concrete Holdings”) previously established the LSF9 Concrete Holdings Ltd. Long Term Incentive Plan (as amended, supplemented, restated, or otherwise modified, the “LTIP”), in accordance with which Executive and Concrete Holdings entered into that certain Award Agreement dated July 8, 2015 (as amended, supplemented, restated or otherwise modified, the “Award Agreement”);

WHEREAS, pursuant to that certain Assignment and Assumption Agreement dated as of October 14, 2016, Concrete Holdings assigned and transferred all rights, title, interest and certain obligations in and under the LTIP to the Company, and after such date the Company maintains the LTIP;

WHEREAS, the Parties have determined that it is in their mutual best interests for Executive’s service with the Company and its affiliates to terminate on the terms and conditions set forth herein; and

WHEREAS, Executive and the Company wish to resolve all matters related to Executive’s employment with the Company and the cessation thereof, the LTIP and the Award Agreement, on the terms and conditions expressed in this Agreement.

NOW THEREFORE, in consideration of the mutual promises contained herein, the Parties, intending to be legally bound, agree as follows:

1. Resolution of Disputes. The Parties have entered into this Agreement as a way of severing the employment relationship between them and amicably settling any and all potential disputes concerning Executive’s service with the Company, the cessation thereof, the LTIP and the Award Agreement (the “Disputes”). The Parties desire to resolve the Disputes and all issues raised by the Disputes, without the further expenditure of time or the expense of contested litigation. Additionally, the Parties desire to resolve any known or unknown claims. For these reasons, they have entered into this Agreement.

2. Separation Date. Executive and the Company agree that Executive’s employment with the Company has ceased effective at 11:59 p.m. central time on June 30, 2019 (the “Separation Date”), and that the Company will deem such cessation to be a termination without Cause (as defined under the Employment Agreement). In connection with such cessation, Executive has resigned from all positions Executive held with the Company and any of its affiliates, including his position on the Company’s Board of Directors, in each case effective on or prior to the Separation Date.

### 3. Payments and Benefits.

3.1 Accrued Rights. Executive shall be entitled to payment of the Accrued Rights (as defined in the Employment Agreement), in each case at the time and in the manner set forth in the Employment Agreement.

3.2 Separation Pay. Conditioned upon Executive's execution and delivery of this Agreement (including the General Release (as defined below) that forms a material part of this Agreement) within the 21-day period that immediately follows the Separation Date, Executive's non-revocation of this Agreement and Executive's continued compliance with his obligations under Section 6 of the Employment Agreement, the Company shall provide Executive with the following payments and benefits:

a. Payment of \$875,000, which amount shall be subject to all applicable taxes and withholdings and shall be payable in accordance with the Company's customary payroll practices, in a lump sum within fourteen (14) days following the Effective Date of this Agreement (as defined herein);

b. Payment of \$1,750,000, which represents one year of Executive's current base salary plus Executive's target Performance Bonus (as defined in the Employment Agreement), which amount shall be subject to all applicable taxes and withholdings and shall be payable in accordance with the Company's customary payroll practices, in a lump sum within fourteen (14) days following the Effective Date of this Agreement, in satisfaction of all obligations under Sections 5(c)(1) and (3) of the Employment Agreement;

c. Payment of \$433,904, which represents Executive's annual bonus for calendar year 2019 (assuming target performance for such year) pro-rated based on the number of days from January 1, 2019 through the Separation Date, which amount shall be subject to all applicable taxes and withholdings and shall be payable in accordance with the Company's customary payroll practices within fourteen (14) days following the Effective Date of this Agreement, in satisfaction of all obligations under Section 5(c)(2) of the Employment Agreement;

d. Reimbursement of the cost of COBRA premiums for Executive's and his dependents' coverage under the Company's group insurance plans for up to one year following the Separation Date, provided Executive timely elects and receives such coverage under such plans;

e. Reimbursement of Executive's documented legal fees incurred in connection with the termination of his employment and the negotiation of this Agreement, in an amount not to exceed \$7,500, which amount shall be paid in a lump sum within fourteen (14) days following the Effective Date of this Agreement; and

f. Executive may retain his cellular phone and contacts; provided that the Company shall first remove all confidential and proprietary information from such device.

Notwithstanding any of the foregoing, the Company shall not be obligated to make any of the payments or provide any of the benefits set forth in this Section 3.2 in the event Executive violates any of the obligations under this Agreement or Section 6 of the Employment Agreement and Executive shall be obligated to promptly return to the Company the gross amount of any amounts previously paid under this Section 3.2. By executing this Agreement, Executive acknowledges and agrees that the acceptance of the payments and benefits set forth in this Section 3.2 and attendant obligations as described in this Agreement is in consideration of Executive's promises and undertakings as set forth in this Agreement, and that if Executive violates any of the requirements and prohibitions set forth in this Agreement or

Section 6 of the Employment Agreement, Executive forfeits and has no right to the payments or benefits set forth in this Section 3.2 and Executive shall be obligated to promptly return to the Company the gross amount of any amounts previously paid under this Section 3.2.

3.3 LTIP. The Parties acknowledge and agree that Executive shall retain his 105,000 vested Pool Units granted to him under the Award Agreement and the LTIP until July 8, 2021 and shall remain entitled to all payments due to Executive in connection with any Liquidity Event (as defined in the LTIP) occurring on or before July 8, 2021 with respect to such vested Pool Units. Any payments due under the LTIP shall be made in accordance with the terms and conditions of the Award Agreement and the LTIP. Executive acknowledges that all other Pool Units which are unvested as of the Separation Date under the Terms of the Award Agreement shall be cancelled and forfeited without the payment of any additional consideration therefore as of the Separation Date.

3.4 Equity Awards. Executive's vested equity awards in the Company shall be governed by the terms of the applicable award agreements pertaining thereto and the terms of the Company's equity plans (including any applicable post-termination exercise period for vested stock options). Executive acknowledges and agrees that all other equity awards that he holds in the Company which are unvested as of the Separation Date under the terms of such awards shall be cancelled and forfeited without the payment of any additional consideration therefor as of the Separation Date.

3.5 No Other Benefits. Except as provided in Sections 3.1, 3.2 and 3.3 of this Agreement, Executive shall not be entitled to receive any other payment, benefit or other form of compensation as a result of his employment or the cessation thereof. Executive further acknowledges and agrees that Executive has received all compensation and benefits owed to him and that the Company or its affiliates do not owe any additional compensation or benefits, including but not limited to salary, wages, bonus, accrued time off, reimbursement for expenses, or any other alleged entitlement or benefit, other than as set forth in Sections 3.1, 3.2 and 3.3. Further, Executive agrees that, in connection with any appointments on management and advisory boards for the Company and any affiliates of the Company, and for any tasks performed in connection therewith, Executive shall not be entitled to any further remuneration and/or any other benefits.

3.6 No Representations as to Taxation. The Company makes no representations regarding the taxability or legal effect of the payments described in this Agreement, and Executive is not relying on any statement or representation of the Company in this regard. Executive will be solely responsible for the payment of any taxes assessed on the payments made hereunder.

#### 4. General Release.

a. In consideration of the payments and benefits (less all applicable withholdings) set forth in this Agreement and subject to the Company's execution and delivery of this Agreement in the space provided below, Executive, on behalf of himself and his agents, heirs, executors, successors and assigns (collectively, the "Executive Parties"), knowingly and voluntarily releases, remises, and forever discharges the Company, LSF9 Concrete Mid-Holdings Ltd., LSF9 Concrete Holdings Ltd., LSF9 Concrete Ltd., Lone Star Fund IX (U.S.), L.P. and, to the extent that they could be liable in respect of their positions with any of the foregoing, each of their respective parents, subsidiaries or affiliates, together with each of their current and former principals, officers, directors, partners, shareholders, attorneys, agents, representatives and employees, and each of their respective affiliates, and each of the above listed person's heirs, executors, successors and assigns whether or not acting in his or her representative, individual or any other capacity (each a "Company Released Party" and, collectively, the "Company Released Parties"), to the fullest extent permitted by law, from any and all debts, demands, actions, causes

of actions, accounts, covenants, contracts, agreements, claims, damages, costs, expenses, omissions, promises, and any and all claims and liabilities whatsoever, of every name and nature, known or unknown, suspected or unsuspected, both in law and equity (collectively, the “Claims”), including but not limited to those which Executive ever had, now has, or may hereafter claim to have against the Company Released Parties by reason of any matter, cause or thing whatsoever arising out of or connected with Executive’s employment with, or separation or termination from, the Company from the beginning of time to the time he signs this Agreement (the “General Release”). The General Release shall apply to any Claim of any type, including, without limitation, any Claims with respect to Executive’s entitlement to any wages, bonuses, benefits, payments, or other forms of compensation; any claims of wrongful discharge, breach of contract, breach of the covenant of good faith and fair dealing, violation of public policy, defamation, personal injury, or emotional distress; any Claims of any type that Executive may have arising under the common law; any Claims under Title VII of the Civil Rights Act of 1964, the Civil Rights Act of 1991, the Age Discrimination in Employment Act of 1967 (the “ADEA”), the Older Workers Benefit Protection Act, the Americans With Disabilities Act, the Family and Medical Leave Act, the Employee Retirement Income Security Act, the Fair Labor Standards Act, the federal Workers’ Adjustment and Retraining Notification Act, the Sarbanes-Oxley Act, each as amended; and any other federal, state or local statutes, regulations, ordinances or common law, or under any policy, agreement, contract, understanding or promise, written or oral, formal or informal, between any of the Company Released Parties and Executive, and shall further apply, without limitation, to any and all Claims in connection with, related to or arising out of Executive’s employment relationship, or the termination of his employment, with the Company or any Company Released Party.

b. Executive intends that this General Release extend to any and all Claims of any kind or character related to, arising out of or connected with Executive’s employment with, or separation and termination from, the Company, and Executive, on behalf of himself, his agents, heirs, executors, successors and assigns, therefore expressly waives any and all rights granted by federal or state law or regulation that may limit the release of unknown claims.

c. Except as provided in Section 3.2 above, Executive acknowledges and agrees that the Company has fully satisfied any and all obligations owed to him arising under the Employment Agreement, and no further sums are owed to him by the Company or by any of the other Company Released Parties at any time under the Employment Agreement.

d. Executive represents and warrants that Executive has not filed, and Executive will not file, any lawsuit or institute any proceeding, charge, complaint or action asserting any claim released by this Agreement before any federal, state, or local administrative agency or court against any Company Released Party, concerning any event occurring prior to the signing of this Agreement. Notwithstanding the foregoing, nothing contained in this Agreement shall be construed as prohibiting Executive from filing a charge or complaint with any federal, state or local governmental agency or commission (“Government Agencies”) or limits Executive’s ability provide information to or communicate with any Government Agencies or otherwise participate in any investigation or proceeding that may be conducted by any Government Agencies in connection with any charge or complaint, whether filed by Executive, on his behalf, or by any other individual. However, to the maximum extent permitted by law, Executive agrees that if such a charge or complaint is made, Executive shall not be entitled to recover any individual monetary relief or other individual remedies. This Agreement does not limit or prohibit Executive’s right to receive an award for information provided to any Government Agency to the extent that such limitation or prohibition is a violation of law. Furthermore, if Executive makes a confidential disclosure of any trade secret or confidential information of the Company to a government official or an attorney for the sole purpose of reporting or investigating a suspected violation of law, or in a court filing under seal, Executive

will not be held liable under this Agreement, the Employment Agreement, the Award Agreement, or under any federal or state trade secret law for such a disclosure. Executive also hereby agrees that nothing contained in this Agreement shall constitute or be treated as an admission of liability or wrongdoing by any of the Company Released Parties.

e. Nothing in this Section 4 shall be deemed to release (i) Executive's right to enforce the terms of this Agreement or the Employment Agreement (other than the Claims released hereunder) or any other agreement unrelated to his employment hereunder between the Company and any of the Company Released Parties, (ii) Executive's rights, if any, to any benefits as of Executive's last day of employment with the Company under the terms of an employee compensation or benefit plan, program or agreement in which Executive is a participant, including without limitation under the LTIP, (iii) Executive's rights to indemnification under any indemnification agreement he has with the Company or any other Company Released Party, under the Employment Agreement and/or under the Company's or any Company Released Party's charter or bylaws, or to whatever coverage Executive may have under the Company's or any Company Released Party's directors' and officers' insurance policy for acts and omissions when Executive was an officer or director of the Company or of any Company Released Party, or (iv) any claim that cannot be waived under applicable law, including any rights to workers' compensation or unemployment insurance.

f. Executive hereby represents and warrants to the Company Released Parties that Executive is the sole owner of any Claims that Executive may now have or in the past had against any of the Company Released Parties and that Executive has not assigned, transferred, or purported to assign or transfer any such Claim to any person or entity.

5. Return of Property. Executive represents and warrants that as of the Effective Date he has returned to the Company all property of the Company in whatever form in accordance with the terms of Section 5(g) of the Employment Agreement.

6. Cooperation. Executive agrees to make himself available as reasonably requested by the Company, and after reasonable advance notice that shall not materially interfere with Executive's other commitments, with respect to, and to use reasonable best efforts to cooperate in conjunction with any litigation, arbitration, inquiry, investigation (internal or external), proceeding, or dispute of any kind arising from or relating to events that occurred during Executive's employment with the Company and its affiliates (whether such litigation, arbitration, inquiry, investigation, proceeding or dispute is currently pending or subsequently initiated) involving the Company or any affiliate of the Company including providing interviews, testimony and preparing to provide testimony if so requested by the Company. Such cooperation obligations shall extend, without limitation to the following ongoing matters: Vuoncino v. Forterra, Inc., et al., In Re Forterra, Inc. Securities Litigation, Maloney v. Bradley, et al., Lee v. Bradley, et al., and the ongoing dispute with HeidelbergCement related to the payment of an earnout. Executive shall be entitled to reimbursement for any reasonable travel and other expenses incurred in connection with such cooperation. Nothing in this Agreement is intended to modify the rights and obligations of the Company or Executive under the Indemnification Agreement he has entered into with the Company, and Executive is expressly entitled to continued indemnification by the Company under and in accordance with the terms of such agreement.

7. Reemployment. Executive acknowledges in consideration of the payments and benefits described in Section 3.2 of this Agreement, that as of the date of Executive's execution of this Agreement, Executive does not intend to seek and will not seek to be rehired by the Company or any of the other Company Released Parties. Executive further acknowledges and agrees that should Executive seek rehire



with the Company or any of the other Company Released Parties in the future, and the Company or any of the other Company Released Parties does not offer Executive employment, that refusal to offer employment is in no way discriminatory or retaliatory.

8. Covenants. In consideration of the payments set forth in this Agreement, Executive reaffirms the covenants made in Section 6 of the Employment Agreement, which are incorporated herein by reference. As the sole exception to the exclusive arbitration provision in Section 11 of the Employment Agreement, Executive agrees that the Company may enforce the obligations of those covenants by injunctive action in the state or federal courts of Dallas County, Texas without prior notice and without posting bond, to the maximum extent permitted by law, and Executive hereby irrevocably consents to jurisdiction of such courts.

9. Consultation with Attorney: Voluntary Agreement. Executive understands and agrees that he is under no obligation to consent to the General Release set forth in Section 4 above. Executive acknowledges and agrees that the payments set forth in Section 3.2 of this Agreement and the prior provision by the Company of Confidential Information to Executive are sufficient consideration to require him to abide with his obligations under this Agreement and Section 6 of his Employment Agreement, including but not limited to the General Release set forth in Section 4 herein. Executive represents and agrees that Executive (i) is not relying upon any statements, understandings, representations, expectations or agreements other than those expressly set forth in this Agreement; (ii) has made his own investigation of the facts and is relying solely upon his own knowledge and the advice of his own legal counsel; (iii) knowingly waives any claim that this Agreement was induced by any misrepresentation or nondisclosure and any right to rescind or avoid this Agreement based upon presently existing facts, known or unknown; (iv) has read and understands the terms and effect of this Agreement and that this Agreement contains the full and final release of all claims against the Company and the Company Released Parties; (v) is entering into this Agreement knowingly and voluntarily; (vi) is not, and would not be, otherwise entitled to the payments or benefits described herein but for his undertakings and agreements set forth herein; (vii) is hereby advised to consult with an attorney before signing this Agreement; and (viii) the only consideration for him signing this Agreement are the terms stated herein and no other promises or representation of any kind have been made by any person or entity whatsoever to cause him to sign this Agreement.

10. Revocation Rights. Executive acknowledges that this Agreement includes a waiver of any rights and claims arising under the ADEA and the Older Workers Benefit Protection Act (the "ADEA Release"). Executive acknowledges that the consideration that Executive is receiving in exchange for this waiver of the rights and claims specified in this Agreement exceed anything of value to which Executive is already entitled. Executive acknowledges that Executive was advised in writing to consult with an attorney prior to executing this Agreement. Executive represents and agrees that Executive fully understands the right to discuss all aspects of this Agreement with legal counsel, and to the extent Executive has deemed it appropriate, Executive has fully availed himself of this right. Executive acknowledges and represents that he has been given at least twenty-one (21) days during which to review and consider the provisions of this Agreement and, specifically, the General Release set forth in Section 4 above, although he may sign and return it sooner if he so desires. Executive further acknowledges and represents that he has been advised by the Company that he has the right to revoke this Agreement for a period of seven (7) days after signing it. Executive acknowledges and agrees that, if he wishes to revoke this Agreement, he must do so in a writing, signed by him and received by the Company no later than 5:00 p.m. local time on the seventh (7th) day of the revocation period. If the last day of the revocation period falls on a Saturday, Sunday or holiday, the last day of the revocation period will be deemed to be the next business day. If no such revocation occurs, the General Release and this Agreement shall become effective on the eighth (8th) day following his execution of this Agreement (the "Effective Date").

Executive further acknowledges and agrees that, in the event that he revokes this Agreement, it shall have no force or effect, and he shall have no right to receive any payments or benefits pursuant to Section 3.2 hereof.

11. Governing Law; Dispute Resolution. This Agreement shall be construed and enforced under and be governed in all respects by the laws of the State of Texas, without regard to the conflict of laws principles thereof. Any dispute arising hereunder shall be governed by the arbitration provision set forth in Section 11 of the Employment Agreement.

12. Entire Agreement. This Agreement, the LTIP, the Award Agreement, and those provisions of the Employment Agreement that survive termination of Executive's employment, including Section 6 thereof, constitute the entire agreement between the Parties with respect to the subject matter hereof and supersede all prior agreements between the Parties with respect to such matters, unless specifically provided otherwise herein. For the avoidance of doubt, both parties expressly reaffirm their obligations under Section 6 of the Employment Agreement. Executive agrees that he is not relying on any representations outside this Agreement, such surviving provisions, the LTIP, or the Award Agreement.

13. Section 409A. The Parties intend that the payments and entitlements provided hereunder be exempt from or in compliance with Section 409A of the Internal Revenue Code, and accordingly, to the maximum extent permitted, this Agreement shall be interpreted to be exempt from Section 409A or in compliance therewith, as applicable. The payments to Executive pursuant to this Agreement are intended to be exempt from Section 409A to the maximum extent possible, under either the separation pay exemption pursuant to Treasury regulation §1.409A-1(b)(9)(iii) or as short-term deferrals pursuant to Treasury regulation §1.409A-1(b)(4), and for such purposes, each payment to Executive under this Agreement shall constitute a "separately identified" amount within the meaning of Treasury regulation §1.409A-2(b)(2). Nothing contained herein shall constitute any representation or warranty by the Company regarding compliance with Section 409A. In the event the terms of this Agreement would subject Executive to taxes or penalties under Section 409A ("409A Penalties"), Executive and the Company shall cooperate diligently to amend the terms of the Agreement to avoid such 409A Penalties, to the extent possible; provided that in no event shall the Company be responsible for any 409A Penalties that arise in connection with any amounts payable under this Agreement. A termination of employment shall not be deemed to have occurred for purposes of any provision of this Agreement providing for the payment of any amounts or benefits that are considered nonqualified deferred compensation under Section 409A upon or following a termination of employment, unless such termination is also a "separation from service" within the meaning of Section 409A and the payment thereof prior to a "separation from service" would violate Section 409A. For purposes of any such provision of this Agreement relating to any such payments or benefits, references to a "termination," "termination of employment" or like terms shall mean "separation from service" within the meaning of Treasury regulation §1.409A-1(h).

14. Amendment. This Agreement may be modified or amended only by a written instrument signed by Executive and by an expressly authorized representative of the Company.

15. Waiver. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving Party. The failure of either Party to require the performance of any term or obligation of this Agreement, or the waiver by either Party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach.

16. Successors and Assigns. This Agreement shall inure to the benefit of the Company and each of its successors and assigns. Executive shall not assign this Agreement or any part hereof. Any

purported assignment by Executive shall be null and void from the initial date of the purported assignment.

17. Drafting. This Agreement and the provisions contained in it shall not be construed or interpreted for or against either party because that party drafted or caused that party's legal representative to draft any of its provisions.

18. Headings. Descriptive headings in this Agreement are inserted for convenience only and shall be disregarded in construing or applying any provision of this Agreement.

19. Notices. All notices required by this Agreement must be in writing and shall be effective when delivered in person, consigned to a reputable national courier service or deposited in the United States mail, postage prepaid, registered or certified, and addressed to Executive at his last known address on the books of the Company or, in the case of the Company, at its principal place of business, attention of the Legal Department or to such other address as any Party may specify by notice to the other actually received.

20. Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, and both of which, taken together, shall constitute one and the same instrument. This Agreement may be executed and delivered by exchange of facsimile or other electronic means of transmitting signature, and such signatures shall be considered an original for purposes of enforcement of the Agreement.

IN WITNESS WHEREOF, this Agreement has been duly executed as of the dates written below.

Dated: June 30, 2019

/s/ Jeff Bradley

Jeff Bradley

Dated: June 30, 2019

Forterra, Inc.

By: /s/ Lori M. Brown

Name: Lori M. Brown

Title: Executive Vice President & General Counsel

By executing this Agreement in the space above and delivering it to Executive, the Company (for and on behalf of its affiliates and assigns) hereby releases and forever discharges the Executive and the Executive Parties from any Claims (as defined above, *mutatis mutandis*) which the Company may have against the Executive Parties related to, arising out of or connected with the Executive's employment with, or separation or termination from, the Company. The Company (for and on behalf of its affiliates and assigns) hereby makes, for the benefit of the Executive Parties, the representations and warranties and acknowledgements set forth in Sections 4(b) and 4(e) of this Agreement, *mutatis mutandis*. Notwithstanding anything in this Agreement to the contrary, this Agreement shall not relinquish, diminish, or in any way affect any of the Company's (or its affiliates' and assigns') rights or claims arising out of any breach by the Executive after the date hereof of the Employment Agreement if and to the extent those rights, in each case by their specific terms, survive termination of Executive's employment with the Company nor to enforce the terms of this Agreement or any other agreement between the Executive and the Company unrelated to his employment with any Company Released Party.

**FORTERRA, INC.**  
**GRANT NOTICE FOR 2018 STOCK INCENTIVE PLAN NONQUALIFIED STOCK OPTIONS**

FOR GOOD AND VALUABLE CONSIDERATION, Forterra, Inc. (the "Company"), hereby grants to Participant named below the nonqualified stock option (the "Option") to purchase any part or all of the number of shares of its common stock, par value \$0.001 per share (the "Common Stock"), that are covered by this Option, as specified below, at the Exercise Price per share specified below and upon the terms and subject to the conditions set forth in this Grant Notice, the Forterra, Inc. 2018 Stock Incentive Plan (the "Plan") and the Standard Terms and Conditions (the "Standard Terms and Conditions") promulgated under such Plan, each as amended from time to time. This Option is granted pursuant to the Plan and is subject to and qualified in its entirety by the Standard Terms and Conditions.

Name of Participant:	
Grant Date:	
Number of Shares Covered by Option:	
Exercise Price Per Share:	
Expiration Date:	
Vesting Schedule:	

This Option is not intended to qualify as an incentive stock option under Section 422 of the Internal Revenue Code of 1986, as amended. By accepting this Grant Notice, Participant acknowledges that he or she has received and read, and agrees that this Option shall be subject to, the terms of this Grant Notice, the Plan and the Standard Terms and Conditions.

**FORTERRA, INC.**                      **AWARD HOLDER**

By: \_\_\_\_\_

Name: \_\_\_\_\_ Printed Name and Address:

Title: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**FORTERRA, INC.**  
**STANDARD TERMS AND CONDITIONS FOR NONQUALIFIED STOCK OPTIONS**

These Standard Terms and Conditions apply to the Options granted pursuant to the Forterra, Inc. 2018 Stock Incentive Plan (the “Plan”), which are identified as nonqualified stock options and are evidenced by a Grant Notice or an action of the Committee that specifically refers to these Standard Terms and Conditions. In addition to these Terms and Conditions, the Option shall be subject to the terms of the Plan, which are incorporated into these Standard Terms and Conditions by this reference. Capitalized terms not otherwise defined herein shall have the meaning set forth in the Plan.

**1. Terms of Option**

Forterra, Inc. (the “Company”), has granted to the Participant named in the Grant Notice provided to said Participant herewith (the “Grant Notice”) a nonqualified stock option (the “Option”) to purchase up to the number of shares of the Company’s common stock, par value \$0.001 per share (the “Common Stock”), set forth in the Grant Notice. The exercise price per share and the other terms and subject to the conditions of the Option are set forth in the Grant Notice, these Standard Terms and Conditions (as amended from time to time), and the Plan. For purposes of these Standard Terms and Conditions and the Grant Notice, any reference to the Company shall include a reference to any Subsidiary.

**2. Nonqualified Stock Option**

The Option is not intended to be an incentive stock option under Section 422 of the Internal Revenue Code of 1986, as amended (the “Code”) and will be interpreted accordingly.

**3. Exercise of Option**

The Option shall not be exercisable as of the Grant Date set forth in the Grant Notice. After the Grant Date, to the extent not previously exercised, and subject to termination or acceleration as provided in these Standard Terms and Conditions and the Plan, the Option shall be exercisable only to the extent it becomes vested, as described in the Grant Notice or the terms of the Plan, to purchase up to that number of shares of Common Stock as set forth in the Grant Notice, provided that (except as set forth in Section 4(a) below) the Participant remains employed with the Company and does not experience a Termination of Employment. The vesting period and/or exercisability of an Option may be adjusted by the Committee to reflect the decreased level of employment during any period in which the Participant is on an approved leave of absence or is employed on a less than full time basis.

To exercise the Option (or any part thereof), the Participant shall deliver to the Company a “Notice of Exercise” in a form specified by the Committee, specifying the number of whole shares of Common Stock the Participant wishes to purchase and how the Participant’s shares of Common Stock should be registered (in the Participant’s name only or in the Participant’s and the Participant’s spouse’s names as community property or as joint tenants with right of survivorship).

The exercise price (the “Exercise Price”) of the Option is set forth in the Grant Notice. The Company shall not be obligated to issue any shares of Common Stock until the Participant shall have paid the total Exercise Price for that number of shares of Common Stock. The Exercise Price may be paid in Common Stock, cash or a combination thereof, including an irrevocable commitment by a broker to pay over such amount from a sale of the Common Stock issuable under the Option, the delivery of previously owned Common Stock, withholding of shares of Common Stock deliverable upon

exercise of the Option (but only to the extent share withholding is made available to the Participant by the Company), or in such other manners as may be permitted by the Committee.

Fractional shares may not be exercised. Shares of Common Stock will be issued as soon as practical after exercise. Notwithstanding the above, the Company shall not be obligated to deliver any shares of Common Stock during any period when the Company determines that the exercisability of the Option or the delivery of shares of Common Stock hereunder would violate any federal, state or other applicable laws.

#### **4. Expiration of Option**

The Option shall expire and cease to be exercisable as of the earlier of (i) the Expiration Date set forth in the Grant Notice or (ii) the date specified below in connection with the Participant's Termination of Employment. For purposes of this Award Agreement, "Retirement" means (i) for employees, retirement from active employment with the Company and its Subsidiaries at or after age 60 with 10 years of service recognized by the Company, or (ii) for nonemployee directors: retirement from active service with the Company after having served as a nonemployee director for at least an aggregate of three full years (excluding any service while a fulltime employee of the Company), and any determination of the Compensation Committee of the Company's Board of Directors as to an individual's Retirement shall be conclusive on all parties.

(a) If the Participant's Termination of Employment is by reason of death, Disability or Retirement, or by the Company without Cause within 24 months following the occurrence of a Change in Control, the Participant (or the Participant's estate, beneficiary or legal representative) may exercise the entire Option (regardless of whether then vested or exercisable) until the date that is twelve (12) months following the date of such Termination of Employment.

(b) If the Participant's Termination of Employment is for any reason other than death, Disability, Retirement, by the Company without Cause within 24 months following the occurrence of a Change in Control or Cause, the Participant may exercise any portion of the Option that is vested and exercisable at the time of such Termination of Employment until the date that is three (3) months following the date of such Termination of Employment. Any portion of the Option that is not vested and exercisable at the time of such Termination of Employment (after taking into account any accelerated vesting under Section 15 of the Plan or any other agreement between the Participant and the Company) shall be forfeited and canceled as of the date of such Termination of Employment.

(c) If the Participant's Termination of Employment is by the Company for Cause, the entire Option, whether or not then vested and exercisable, shall be immediately forfeited and canceled as of the date of such Termination of Employment.

(d) For purposes hereof, a Change in Control (as defined in the Plan) will not be deemed to occur until such date as the Company is no longer a controlled company of Lone Star Fund IX (U.S.), L.P.

**5. Restrictions on Resales of Shares Acquired Pursuant to Option Exercise**

The Company may impose such restrictions, conditions or limitations as it determines appropriate as to the timing and manner of any resales by the Participant or other subsequent transfers by the Participant of any shares of Common Stock issued as a result of the exercise of the Option, including without limitation (a) restrictions under an insider trading policy, (b) restrictions designed to delay and/or coordinate the timing and manner of sales by Participant and other optionholders and (c) restrictions as to the use of a specified brokerage firm for such resales or other transfers.

**6. Income Taxes**

The Company shall not deliver shares of Common Stock in respect of the exercise of any Option unless and until the Participant has made arrangements satisfactory to the Company to satisfy applicable withholding tax obligations. Unless the Participant pays the withholding tax obligations to the Company by cash or check in connection with the exercise of the Option (including an irrevocable commitment by a broker to pay over such amount from a sale of the Common Stock issuable under the Option), withholding may be effected, at the Company's option, withholding Common Stock issuable in connection with the exercise of the Option (provided that shares of Common Stock may be withheld only to the extent that such withholding will not result in adverse accounting treatment for the Company). The Participant acknowledges that the Company shall have the right to deduct any taxes required to be withheld by law in connection with the exercise of the Option from any amounts payable by it to the Participant (including, without limitation, future cash wages).

**7. NonTransferability of Option**

Except as permitted by the Committee or as permitted under the Plan, the Participant may not assign or transfer the Option to anyone other than by will or the laws of descent and distribution and the Option shall be exercisable only by the Participant during his or her lifetime. The Company may cancel the Participant's Option if the Participant attempts to assign or transfer it in a manner inconsistent with this Section 7.

**8. Other Agreements Superseded**

The Grant Notice, these Standard Terms and Conditions and the Plan constitute the entire understanding between the Participant and the Company regarding the Option. Any prior agreements, commitments or negotiations concerning the Option are superseded.

**9. Limitation of Interest in Shares Subject to Option**

Neither the Participant (individually or as a member of a group) nor any beneficiary or other person claiming under or through the Participant shall have any right, title, interest, or privilege in or to any shares of Common Stock allocated or reserved for the purpose of the Plan or subject to the Grant Notice or these Standard Terms and Conditions except as to such shares of Common Stock, if any, as shall have been issued to such person upon exercise of the Option or any part of it. Nothing in the Plan, in the Grant Notice, these Standard Terms and Conditions or any other instrument executed pursuant to the Plan shall confer upon the Participant any right to continue in the Company's employ or service nor limit in any way the Company's right to terminate the Participant's employment at any time for any reason.

**10. No Liability of Company**

The Company and any affiliate which is in existence or hereafter comes into existence shall not be liable to the Participant or any other person as to: (a) the nonissuance or sale of shares of Common



Stock as to which the Company has been unable to obtain from any regulatory body having jurisdiction the authority deemed by the Company's counsel to be necessary to the lawful issuance and sale of any shares hereunder; and (b) any tax consequence expected, but not realized, by the Participant or other person due to the receipt, exercise or settlement of any Option granted hereunder.

## **11. General**

(a) In the event that any provision of these Standard Terms and Conditions is declared to be illegal, invalid or otherwise unenforceable by a court of competent jurisdiction, such provision shall be reformed, if possible, to the extent necessary to render it legal, valid and enforceable, or otherwise deleted, and the remainder of these Standard Terms and Conditions shall not be affected except to the extent necessary to reform or delete such illegal, invalid or unenforceable provision.

(b) The headings preceding the text of the sections hereof are inserted solely for convenience of reference, and shall not constitute a part of these Standard Terms and Conditions, nor shall they affect its meaning, construction or effect.

(c) These Standard Terms and Conditions shall inure to the benefit of and be binding upon the parties hereto and their respective permitted heirs, beneficiaries, successors and assigns.

(d) These Standard Terms and Conditions shall be construed in accordance with and governed by the laws of the State of Delaware, without regard to principles of conflicts of law.

(e) In the event of any conflict between the Grant Notice, these Standard Terms and Conditions and the Plan, the Grant Notice and these Standard Terms and Conditions shall control. In the event of any conflict between the Grant Notice and these Standard Terms and Conditions, the Grant Notice shall control.

(f) All questions arising under the Plan or under these Standard Terms and Conditions shall be decided by the Committee in its total and absolute discretion.

(g) Notwithstanding anything herein or in the Plan to the contrary, no adjustments to the Option and/or any of the terms hereof shall be made pursuant to Section 15 of the Plan or otherwise in connection with the transactions to be consummated subsequent to Grant Date but prior to the consummation of the Company's initial public offering.

## **12. Electronic Delivery**

By executing the Grant Notice, the Participant hereby consents to the delivery of information (including, without limitation, information required to be delivered to the Participant pursuant to applicable securities laws) regarding the Company and the Subsidiaries, the Plan, the Option and the Common Stock via Company web site or other electronic delivery.

FORTERRA, INC.

GRANT NOTICE FOR 2018 STOCK INCENTIVE PLAN RESTRICTED STOCK UNIT AWARD

FOR GOOD AND VALUABLE CONSIDERATION, Forterra, Inc. (the "Company"), hereby grants to Participant named below the number of restricted stock units specified below (the "Award"). Each restricted stock unit represents the right to receive one share of the Company's common stock, par value \$0.001 (the "Common Stock"), upon the terms and subject to the conditions set forth in this Grant Notice, the Forterra, Inc. 2018 Stock Incentive Plan (the "Plan") and the Standard Terms and Conditions (the "Standard Terms and Conditions") promulgated under such Plan, each as amended from time to time. This Award is granted pursuant to the Plan and is subject to and qualified in its entirety by the Standard Terms and Conditions.

Name of Participant:	
Grant Date:	
Number of Restricted Stock Units:	
Vesting Schedule:	

By accepting this Grant Notice, Participant acknowledges that he or she has received and read, and agrees that this Award shall be subject to, the terms of this Grant Notice, the Plan and the Standard Terms and Conditions.

FORTERRA, INC.

AWARD HOLDER

By: \_\_\_\_\_

Name: \_\_\_\_\_ Printed Name and Address:

Title: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**FORTERRA, INC.**  
**STANDARD TERMS AND CONDITIONS FOR RESTRICTED STOCK UNITS**

These Standard Terms and Conditions apply to the Award of restricted stock units granted pursuant to the Forterra, Inc. 2018 Stock Incentive Plan (the “Plan”), which are evidenced by a Grant Notice or an action of the Committee that specifically refers to these Standard Terms and Conditions. In addition to these Terms and Conditions, the restricted stock units shall be subject to the terms of the Plan, which are incorporated into these Standard Terms and Conditions by this reference. Capitalized terms not otherwise defined herein shall have the meaning set forth in the Plan.

**1. TERMS OF RESTRICTED STOCK UNITS**

Forterra, Inc. (the “Company”), has granted to the Participant named in the Grant Notice provided to said Participant herewith (the “Grant Notice”) an award of a number of restricted stock units (the “Award” or the “Restricted Stock Units”) with each Restricted Stock Unit representing the right to receive one share of the Company’s common stock, par value \$0.001 (the “Common Stock”) specified in the Grant Notice. The Award is subject to the conditions set forth in the Grant Notice, these Standard Terms and Conditions, and the Plan, each as amended from time to time. For purposes of these Standard Terms and Conditions and the Grant Notice, any reference to the Company shall include a reference to any Subsidiary.

**2. VESTING OF RESTRICTED STOCK UNITS**

The Award shall not be vested as of the Grant Date set forth in the Grant Notice and shall be forfeitable unless and until otherwise vested pursuant to the terms of the Grant Notice and these Standard Terms and Conditions. After the Grant Date, subject to termination or acceleration as provided in these Standard Terms and Conditions and the Plan, the Award shall become vested as described in the Grant Notice with respect to that number of Restricted Stock Units as set forth in the Grant Notice. Restricted Stock Units that have vested and are no longer subject to forfeiture are referred to herein as “Vested RSUs.” Restricted Stock Units awarded hereunder that are not vested and remain subject to forfeiture are referred to herein as “Unvested RSUs.” Notwithstanding anything contained in these Standard Terms and Conditions to the contrary, upon a Participant’s Termination of Employment due to Participant’s death, Disability or Retirement, or upon a Termination of Employment by the Company without Cause within 24 months following the occurrence of a Change in Control, all Unvested RSUs shall become vested on the date of such Termination of Employment. For purposes of this Award Agreement, “Retirement” means (i) for employees, retirement from active employment with the Company and its Subsidiaries at or after age 60 with 10 years of service recognized by the Company, or (ii) for nonemployee directors: retirement from active service with the Company after having served as a nonemployee director for at least an aggregate of three full years (excluding any service while a fulltime employee of the Company), and any determination of the Compensation Committee of the Company’s Board of Directors as to an individual’s Retirement shall be conclusive on all parties. Upon a Participant’s Termination of Employment for any other reason, including a Termination of Employment by the Company without Cause that occurs prior to the occurrence of a Change in Control, any then Unvested RSUs held by the Participant shall be forfeited and canceled as of the date of such Termination of Employment. For purposes hereof, a Change in Control (as defined in the Plan) will not be deemed to occur until such date as the Company is no longer a controlled company of Lone Star Fund IX (U.S.), L.P.

### **3. RIGHTS AS STOCKHOLDER**

Participant shall not be, nor have any of the rights or privileges of, a stockholder of the Company in respect of any RSUs unless and until shares of Common Stock settled for such RSUs shall have been issued by the Company to Participant (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company). Notwithstanding the foregoing, from and after the Grant Date and until the earlier of (a) the time when the RSUs become nonforfeitable and payable in accordance with the terms hereof or (b) the time when the Participant's right to receive Common Stock upon payment of RSUs is forfeited, on the date that the Company pays a cash dividend (if any) to holders of Common Stock generally, the Participant shall be entitled to a number of additional whole RSUs determined by dividing (i) the product of (A) the dollar amount of the cash dividend paid per share of Common Stock on such date and (B) the total number of RSUs (including dividend equivalents paid thereon) previously credited to the Participant as of such date, by (ii) the Fair Market Value per share of Common Stock on such date. Such dividend equivalents (if any) shall be subject to the same terms and conditions and shall be settled or forfeited in the same manner and at the same time as the RSUs to which the dividend equivalents were credited.

### **4. RESTRICTIONS ON REALES OF SHARES**

The Company may impose such restrictions, conditions or limitations as it determines appropriate as to the timing and manner of any resales by the Participant or other subsequent transfers by the Participant of any shares of Common Stock issued pursuant to Vested RSUs, including without limitation (a) restrictions under an insider trading policy, (b) restrictions designed to delay and/or coordinate the timing and manner of sales by Participant and other holders and (c) restrictions as to the use of a specified brokerage firm for such resales or other transfers.

### **5. INCOME TAXES**

To the extent required by applicable federal, state, local or foreign law, the Participant shall make arrangements satisfactory to the Company for the satisfaction of any withholding tax obligations that arise by reason of the grant or vesting of the RSUs. The Company shall not be required to issue shares or to recognize the disposition of such shares until such obligations are satisfied.

### **6. NONTRANSFERABILITY OF AWARD**

The Participant understands, acknowledges and agrees that, except as otherwise provided in the Plan or as permitted by the Committee, the Award may not be sold, assigned, transferred, pledged or otherwise directly or indirectly encumbered or disposed of other than by will or the laws of descent and distribution.

### **7. OTHER AGREEMENTS SUPERSEDED**

The Grant Notice, these Standard Terms and Conditions and the Plan constitute the entire understanding between the Participant and the Company regarding the Award. Any prior agreements, commitments or negotiations concerning the Award are superseded.

### **8. LIMITATION OF INTEREST IN SHARES SUBJECT TO RESTRICTED STOCK UNITS**

Neither the Participant (individually or as a member of a group) nor any beneficiary or other person claiming under or through the Participant shall have any right, title, interest, or privilege in or to any shares of Common Stock allocated or reserved for the purpose of the Plan or subject to the Grant Notice or these Standard Terms and Conditions except as to such shares of Common

Stock, if any, as shall have been issued to such person in connection with the Award. Nothing in the Plan, in the Grant Notice, these Standard Terms and Conditions or any other instrument executed pursuant to the Plan shall confer upon the Participant any right to continue in the Company's employ or service nor limit in any way the Company's right to terminate the Participant's employment at any time for any reason.

**9. GENERAL**

(a) In the event that any provision of these Standard Terms and Conditions is declared to be illegal, invalid or otherwise unenforceable by a court of competent jurisdiction, such provision shall be reformed, if possible, to the extent necessary to render it legal, valid and enforceable, or otherwise deleted, and the remainder of these Standard Terms and Conditions shall not be affected except to the extent necessary to reform or delete such illegal, invalid or unenforceable provision.

(b) The headings preceding the text of the sections hereof are inserted solely for convenience of reference, and shall not constitute a part of these Standard Terms and Conditions, nor shall they affect its meaning, construction or effect.

(c) These Standard Terms and Conditions shall inure to the benefit of and be binding upon the parties hereto and their respective permitted heirs, beneficiaries, successors and assigns.

(d) These Standard Terms and Conditions shall be construed in accordance with and governed by the laws of the State of Delaware, without regard to principles of conflicts of law.

(e) In the event of any conflict between the Grant Notice, these Standard Terms and Conditions and the Plan, the Grant Notice and these Standard Terms and Conditions shall control. In the event of any conflict between the Grant Notice and these Standard Terms and Conditions, the Grant Notice shall control.

(f) All questions arising under the Plan or under these Standard Terms and Conditions shall be decided by the Committee in its total and absolute discretion.

**10. ELECTRONIC DELIVERY**

By executing the Grant Notice, the Participant hereby consents to the delivery of information (including, without limitation, information required to be delivered to the Participant pursuant to applicable securities laws) regarding the Company and the Subsidiaries, the Plan, and the Restricted Stock Units via Company web site or other electronic delivery.

**FORTERRA, INC.**  
**GRANT NOTICE FOR 2018 STOCK INCENTIVE PLAN PERFORMANCE-BASED RESTRICTED STOCK UNIT AWARD**

FOR GOOD AND VALUABLE CONSIDERATION, Forterra, Inc. (the “**Company**”), hereby grants to Participant named below the number of performance-based restricted stock units specified below (the “**PRSUs**” or the “**Award**”). Each performance-based restricted stock unit represents the right to receive one share of the Company’s common stock, par value \$0.001 (the “**Common Stock**”), upon the terms and subject to the conditions set forth in this Grant Notice, the Forterra, Inc. 2018 Stock Incentive Plan (the “**Plan**”) and the Standard Terms and Conditions (the “**Standard Terms and Conditions**”) promulgated under such Plan, each as amended from time to time. This Award is granted pursuant to the Plan and is subject to and qualified in its entirety by the Standard Terms and Conditions.

Name of Participant:	
Grant Date:	
Number of Performance- Based Restricted Stock Units:	
Performance Targets; Vesting Schedule:	<ul style="list-style-type: none"> <li>•The PRSUs granted hereunder shall become earned and eligible to vest based on the achievement of the performance targets set forth in <u>Exhibit A</u> attached hereto (each target, “<b>Performance Target</b>”).</li> <li>•The number of PRSUs earned upon the achievement of each Performance Target (in each case, the “<b>Earned PRSUs</b>”) shall vest as follows subject to Participant’s continued service with the Company or its Subsidiaries through the applicable vesting date: [ ].</li> </ul>

By accepting this Grant Notice, Participant acknowledges that he or she has received and read, and agrees that this Award shall be subject to, the terms of this Grant Notice, the Plan and the Standard Terms and Conditions.

**FORTERRA, INC.**                      **AWARD HOLDER**

By: \_\_\_\_\_

Name:                      Name:  
 Title:

**FORTERRA, INC.**  
**STANDARD TERMS AND CONDITIONS FOR PERFORMANCE-BASED RESTRICTED STOCK  
UNITS**

These Standard Terms and Conditions apply to the Award of performance-based restricted stock units granted pursuant to the Forterra, Inc. 2018 Stock Incentive Plan (the “**Plan**”), which are evidenced by a Grant Notice or an action of the Committee that specifically refers to these Standard Terms and Conditions. In addition to these Terms and Conditions, the performance-based restricted stock units shall be subject to the terms of the Plan, which are incorporated into these Standard Terms and Conditions by this reference. Capitalized terms not otherwise defined herein shall have the meaning set forth in the Plan.

**1. TERMS OF PERFORMANCE-BASED RESTRICTED STOCK UNITS**

Forterra, Inc. (the “**Company**”), has granted to the Participant named in the Grant Notice provided to said Participant herewith (the “**Grant Notice**”) an award of a number of performance-based restricted stock units (the “**Award**” or the “**PRSUs**”) with each PRSU representing the right to receive one share of the Company’s common stock, par value \$0.001 (the “**Common Stock**”) specified in the Grant Notice. The Award is subject to the conditions set forth in the Grant Notice, these Standard Terms and Conditions, and the Plan, each as amended from time to time. For purposes of these Standard Terms and Conditions and the Grant Notice, any reference to the Company shall include a reference to any Subsidiary.

**2. PERFORMANCE TARGETS; VESTING OF PRSUS**

The Award shall not be vested as of the Grant Date set forth in the Grant Notice and shall be forfeitable unless and until otherwise earned and vested pursuant to the terms of the Grant Notice and these Standard Terms and Conditions. Except as set forth below, the PRSUs shall not be eligible to vest unless and until the Performance Targets (as defined in the Grant Notice and as set forth in Exhibit A) with respect to such PRSUs have been achieved. After achievement of such Performance Targets, subject to termination or acceleration as provided in these Standard Terms and Conditions and the Plan, the Award shall become vested as described in the Grant Notice. PRSUs that have vested and are no longer subject to forfeiture are referred to herein as “**Vested PRSUs.**” PRSUs awarded hereunder that are not vested and remain subject to forfeiture are referred to herein as “**Unvested PRSUs.**”

Notwithstanding anything contained in these Standard Terms and Conditions to the contrary, the PRSUs shall be subject to the following termination and acceleration provisions:

- Upon Participant’s Termination of Employment by the Company and its Subsidiaries without Cause or due to Participant’s death or Disability, all Unvested PRSUs for which the applicable Performance Targets have been achieved prior to the date of Termination of Employment shall become vested on the date of such Termination of Employment. All Unvested PRSUs for which the applicable Performance Targets have not been achieved prior to the date of Termination of Employment shall be forfeited and canceled as of the date of such Termination of Employment without the payment of any consideration therefor.
- Upon Participant’s Termination of Employment due to Participant’s Retirement (which does not

include any Termination of Employment for Cause), a pro-rated portion of the Unvested PRSUs for which the applicable Performance Targets have been achieved prior to the date of Termination of Employment shall become vested on the date of such Termination of Employment. Such pro-rated portion shall be determined by multiplying (i) the Unvested PRSUs earned and eligible to vest based on achievement of the applicable Performance Target prior to the date of Termination of Employment by (ii) a fraction, the numerator of which shall equal the number of full months that Participant provided services to the Company or its Subsidiaries following the achievement of the applicable Performance Target and the denominator of which shall equal thirty-six (36). All other Unvested PRSUs that are not subject to such pro-rated accelerated vesting shall be forfeited and canceled as of the date of such Termination of Employment without the payment of any consideration therefor.

- Immediately prior to the occurrence of a Change in Control, each of the Performance Targets shall be deemed achieved and all Unvested PRSUs shall become vested as of immediately prior to the consummation of such Change in Control. For purposes hereof, a Change in Control (as defined in the Plan) will not be deemed to occur until such date as the Company is no longer a controlled company of Lone Star Fund IX (U.S.), L.P.

Upon a Participant's Termination of Employment for any other reason, any then Unvested PRSUs held by the Participant shall be forfeited and canceled as of the date of such Termination of Employment without the payment of any consideration therefor.

### **3. RIGHTS AS STOCKHOLDER**

Participant shall not be, nor have any of the rights or privileges of, a stockholder of the Company in respect of any PRSUs unless and until shares of Common Stock settled for such PRSUs shall have been issued by the Company to Participant (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company). For the avoidance of doubt, the Participant shall not be entitled to receive any dividends or dividend equivalents with respect to the PRSUs or have any voting rights with respect to the PRSUs unless and until shares of Common Stock settled for such PRSUs shall have been issued by the Company to Participant.

### **4. RESTRICTIONS ON REALES OF SHARES**

The Company may impose such restrictions, conditions or limitations as it determines appropriate as to the timing and manner of any resales by the Participant or other subsequent transfers by the Participant of any shares of Common Stock issued pursuant to Vested PRSUs, including without limitation (a) restrictions under an insider trading policy, (b) restrictions designed to delay and/or coordinate the timing and manner of sales by Participant and other holders and (c) restrictions as to the use of a specified brokerage firm for such resales or other transfers.

### **5. INCOME TAXES**

To the extent required by applicable federal, state, local or foreign law, the Participant shall make arrangements satisfactory to the Company for the satisfaction of any withholding tax obligations that arise by reason of the grant or vesting of the PRSUs. The Company shall not be required to issue shares or to recognize the disposition of such shares until such obligations are satisfied.

### **6. NON-TRANSFERABILITY OF AWARD**



The Participant understands, acknowledges and agrees that, except as otherwise provided in the Plan or as permitted by the Committee, the Award may not be sold, assigned, transferred, pledged or otherwise directly or indirectly encumbered or disposed of other than by will or the laws of descent and distribution.

## **7. OTHER AGREEMENTS SUPERSEDED**

The Grant Notice, these Standard Terms and Conditions and the Plan constitute the entire understanding between the Participant and the Company regarding the Award. Any prior agreements, commitments or negotiations concerning the Award are superseded.

## **8. LIMITATION OF INTEREST IN SHARES SUBJECT TO PRSUS**

Neither the Participant (individually or as a member of a group) nor any beneficiary or other person claiming under or through the Participant shall have any right, title, interest, or privilege in or to any shares of Common Stock allocated or reserved for the purpose of the Plan or subject to the Grant Notice or these Standard Terms and Conditions except as to such shares of Common Stock, if any, as shall have been issued to such person in connection with the Award. Nothing in the Plan, in the Grant Notice, these Standard Terms and Conditions or any other instrument executed pursuant to the Plan shall confer upon the Participant any right to continue in the Company's employ or service nor limit in any way the Company's right to terminate the Participant's employment at any time for any reason.

## **9. GENERAL**

- (a) In the event that any provision of these Standard Terms and Conditions is declared to be illegal, invalid or otherwise unenforceable by a court of competent jurisdiction, such provision shall be reformed, if possible, to the extent necessary to render it legal, valid and enforceable, or otherwise deleted, and the remainder of these Standard Terms and Conditions shall not be affected except to the extent necessary to reform or delete such illegal, invalid or unenforceable provision.
- (b) The headings preceding the text of the sections hereof are inserted solely for convenience of reference, and shall not constitute a part of these Standard Terms and Conditions, nor shall they affect its meaning, construction or effect.
- (c) These Standard Terms and Conditions shall inure to the benefit of and be binding upon the parties hereto and their respective permitted heirs, beneficiaries, successors and assigns.
- (d) These Standard Terms and Conditions shall be construed in accordance with and governed by the laws of the State of Delaware, without regard to principles of conflicts of law.
- (e) In the event of any conflict between the Grant Notice, these Standard Terms and Conditions and the Plan, the Grant Notice and these Standard Terms and Conditions shall control. In the event of any conflict between the Grant Notice and these Standard Terms and Conditions, the Grant Notice shall control.
- (f) All questions arising under the Plan or under these Standard Terms and Conditions shall be decided by the Committee in its total and absolute discretion.

## **10. ELECTRONIC DELIVERY**

By executing the Grant Notice, the Participant hereby consents to the delivery of information (including, without limitation, information required to be delivered to the Participant pursuant to applicable securities laws) regarding the Company and the Subsidiaries, the Plan, and the PRSUs via Company web site or other electronic delivery.

**Exhibit A**

**Performance Targets**

## SUBSIDIARIES OF FORTERRA, INC.

<b>Name of Subsidiary</b>	<b>Jurisdiction of Organization</b>
Bio Clean Environmental Services, Inc.	California
Concrete Pipe & Precast, LLC	Delaware
Constructure Fabrication, LLC	Delaware
Custom Fab, Inc.	Florida
DIP Acquisition LLC	Delaware
Fab Pipe LLC	Delaware
Forterra Brick America, Inc.	Michigan
Forterra Concrete Industries, Inc.	Tennessee
Forterra Concrete Operations, LLC	Texas
Forterra Concrete Products, Inc.	Iowa
Forterra Finance, LLC	Delaware
Forterra Pipe & Precast, LLC	Delaware
Forterra Pipe & Precast, Ltd.	Canada (British Columbia)
Forterra Pipe & Precast BC, ULC	Canada (British Columbia)
Forterra Precast Concepts, LLC	Delaware
Forterra Pressure Pipe, Inc.	Ohio
Forterra Pressure Pipe, ULC	Canada (British Columbia)
Forterra Properties Idaho, LLC	Idaho
Forterra Properties Utah, LLC	Utah
Forterra Structural Precast, LLC	Delaware
Forterra Transportation, LLC	Delaware
Griffin Pipe Products Co., LLC	Delaware
Mill Handling LLC	Delaware
Modular Wetland Systems, Inc.	California
Stardust Holdings (USA), LLC	Delaware
United States Pipe and Foundry Company, LLC	Alabama
US Pipe Fabrication, LLC	Delaware
U.S. Pipe Mexico S. de R.L. de C.V.	Mexico
USP Holdings Inc.	Delaware
USP Land Holdings FCP, LLC	Delaware
USP Land Holdings FP&P, LLC	Delaware

**Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in the following Registration Statements: (1) Registration Statement (Form S-3 No. 333-235501) of Forterra, Inc., (2) Registration Statement (Form S-8 No. 333-215504) pertaining to the 2016 Stock Incentive Plan of Forterra, Inc., and (3) Registration Statement (Form S-8 No. 333-229964) pertaining to the 2018 Stock Incentive Plan of Forterra, Inc.; of our reports dated February 27, 2020, with respect to the consolidated financial statements of Forterra, Inc. and the effectiveness of internal control over financial reporting of Forterra, Inc. included in this Annual Report (Form 10-K) of Forterra, Inc. for the year ended December 31, 2019.

/s/ Ernst & Young LLP

Dallas, Texas  
February 27, 2020

**CONSENT OF INDEPENDENT AUDITOR**

We consent to the incorporation by reference in the Registration Statements (Form S-3 No. 333-235501, Form S-8 Nos. 333-215504 and 333-229964) of our report dated February 27, 2020, relating to the financial statements of Concrete Pipe & Precast, LLC, appearing in this Annual Report (Form 10-K) of Forterra, Inc. for the year ended December 31, 2019.

/s/ Moss Adams LLP

Houston, Texas  
February 27, 2020

## SECTION 302 CERTIFICATION

I, Karl Watson, Jr., certify that:

1. I have reviewed this Annual Report on Form 10-K for the fiscal year ended December 31, 2019 of Forterra, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our 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;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2020

/s/ Karl Watson, Jr.

Karl Watson, Jr.

Chief Executive Officer

## SECTION 302 CERTIFICATION

I, Charles R. Brown II, certify that:

1. I have reviewed this Annual Report on Form 10-K for the fiscal year ended December 31, 2019 of Forterra, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our 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;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2020

/s/ Charles R. Brown, II

Charles R. Brown, II

*Executive Vice President and Chief*

*Financial Officer*



**CERTIFICATION**  
**Pursuant to 18 U.S.C. Section 1350**  
**Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report on Form 10-K for the fiscal year ended December 31, 2019 of Forterra, Inc. (the "Company") as filed with the U.S. Securities and Exchange Commission on the date hereof (the "Report"), and pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, each of the undersigned officers of the Company certifies to his knowledge that:

- the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 27, 2020

*/s/ Karl Watson, Jr.*

\_\_\_\_\_  
Karl Watson, Jr.

*President and Chief Executive Officer*

Date: February 27, 2020

*/s/ Charles R. Brown, II*

\_\_\_\_\_  
Charles R. Brown, II

*Executive Vice President and Chief*

*Financial Officer*

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

# CONCRETE PIPE & PRECAST, LLC

## FINANCIAL STATEMENTS

AS OF DECEMBER 31, 2019 AND 2018 AND FOR THE THREE YEARS ENDED DECEMBER 31, 2019

### Report of Independent Auditors

The Board of Managers and Members  
Concrete Pipe & Precast, LLC

#### Report on the Financial Statements

We have audited the accompanying financial statements of Concrete Pipe & Precast, LLC, which comprise the balance sheets as of December 31, 2019 and 2018, and the related statements of income, changes in members' equity, and cash flows for each of the three years in the period ended December 31, 2019, and the related notes to the financial statements.

#### *Management's Responsibility for the Financial Statements*

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### *Auditor's Responsibility*

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### *Opinion*

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Concrete Pipe & Precast, LLC as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in accordance with accounting principles generally accepted in the United States of America.

/s/ Moss Adams LLP

Houston, Texas  
February 27, 2020

# CONCRETE PIPE & PRECAST, LLC

## BALANCE SHEETS DECEMBER 31, 2019 and 2018

ASSETS	2019	2018
<b>CURRENT ASSETS</b>		
Cash	\$ 82,923	\$ 170,265
Trade accounts receivable - net	16,200,492	12,707,577
Inventories	18,839,714	19,584,290
Prepaid insurance and other assets	585,525	892,370
Due from affiliates	158,789	417
Non-trade notes receivable	—	—
Total current assets	35,867,443	33,354,919
<b>PROPERTY, PLANT, AND EQUIPMENT - NET</b>	58,931,042	61,529,473
<b>OTHER ASSETS</b>		
Property held for sale	—	—
Deposits and other assets	79,953	99,847
Total other assets	79,953	99,847
<b>Total Assets</b>	\$ 94,878,438	\$ 94,984,239
<b>LIABILITIES AND MEMBERS' EQUITY</b>		
<b>CURRENT LIABILITIES</b>		
Cash overdraft	\$ 1,282,100	\$ 702,032
Accounts payable	8,329,370	7,912,802
Due to affiliates	222,137	87,358
Other current liabilities	2,743,874	1,988,612
Total current liabilities	12,577,481	10,690,804
<b>LONG-TERM LIABILITIES</b>		
Notes payable	23,993,601	24,753,280
Total liabilities	36,571,082	35,444,084
Commitments and contingencies (see note 6 and note 8)		
<b>MEMBERS' EQUITY</b>	58,307,356	59,540,155
<b>Total Liabilities and Members' Equity</b>	\$ 94,878,438	\$ 94,984,239

# CONCRETE PIPE & PRECAST, LLC

## STATEMENTS OF INCOME FOR THE YEARS ENDED DECEMBER 31, 2019, 2018, and 2017

	2019	2018	2017
<b>Net sales</b>	\$ 152,739,737	\$ 140,494,299	\$ 153,407,901
<b>Cost of sales</b>	112,370,896	103,021,478	109,999,001
<b>Gross profit</b>	<u>40,368,841</u>	<u>37,472,821</u>	<u>43,408,900</u>
<b>Operating Expenses</b>			
Selling expenses	4,721,079	4,530,571	4,402,662
General and administrative expenses	14,198,208	12,843,245	13,320,939
Other operating income	(270,635)	(471,151)	(385,740)
<b>Income from Operations</b>	<u>21,720,189</u>	<u>20,570,156</u>	<u>26,071,039</u>
<b>Other income (expense)</b>			
Interest expense, net	(875,902)	(766,574)	(634,482)
<b>Net income</b>	<u>\$ 20,844,287</u>	<u>\$ 19,803,582</u>	<u>\$ 25,436,557</u>

*The accompanying notes are an integral part of these financial statements*

# CONCRETE PIPE & PRECAST, LLC

## STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2019, 2018, and 2017

	2019	2018	2017
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>			
Net income	\$ 20,844,287	\$ 19,803,582	\$ 25,436,557
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation	7,146,957	7,082,851	7,211,784
Amortization of debt issuance costs	21,993	21,991	48,267
Amortization of intangibles	—	—	347
Bad debt expense (recovery)	50,803	(80,265)	(78,471)
Net loss (gain) on disposal of assets	(12,758)	(669,816)	112,910
Changes in working capital:			
Trade accounts receivable	(3,543,718)	2,428,822	2,765,847
Inventories	744,576	(1,212,185)	(2,637,984)
Prepays and other assets	304,746	346,198	216,880
Due from / to affiliates	(23,593)	(244,377)	198,816
Accounts payable and accrued expenses	1,067,218	727,071	(2,147,976)
Cash overdraft	580,068	(2,020,193)	540,558
Net cash provided by operating activities	27,180,579	26,183,679	31,667,535
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>			
Capital expenditures	(4,444,156)	(3,020,894)	(5,899,647)
Proceeds from disposal of assets	13,000	2,306,405	—
Principal received on notes receivable	—	897,435	73,703
Net cash provided by (used in) investing activities	(4,431,156)	182,946	(5,825,944)
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>			
Distributions paid	(22,077,086)	(26,281,569)	(27,434,820)
Net (repayments) proceeds on revolving line of credit	(759,679)	(69,104)	1,685,614
Loan origination costs	—	—	(109,963)
Net cash used in financing activities	(22,836,765)	(26,350,673)	(25,859,169)
<b>NET INCREASE (DECREASE) IN CASH</b>	(87,342)	15,952	(17,578)
<b>CASH, BEGINNING OF YEAR</b>	170,265	154,313	171,891
<b>CASH, END OF YEAR</b>	\$ 82,923	\$ 170,265	\$ 154,313
<b>SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION</b>			
Cash paid for:			
Interest	\$ 861,888	\$ 744,322	\$ 633,770

## CONCRETE PIPE & PRECAST, LLC

### STATEMENTS OF CHANGES IN MEMBERS' EQUITY FOR THE YEARS ENDED DECEMBER 31, 2019, 2018, and 2017

<b>BALANCE AT DECEMBER 31, 2016</b>	\$	68,016,405
Distributions		(27,434,820)
Net income		25,436,557
<b>BALANCE AT DECEMBER 31, 2017</b>		66,018,142
Distributions		(26,281,569)
Net income		19,803,582
<b>BALANCE AT DECEMBER 31, 2018</b>		59,540,155
Distributions		(22,077,086)
Net income		20,844,287
<b>BALANCE AT DECEMBER 31, 2019</b>	\$	58,307,356

# CONCRETE PIPE & PRECAST, LLC

## NOTES TO FINANCIAL STATEMENTS

AS OF DECEMBER 31, 2018 AND 2017 AND FOR THE THREE YEARS ENDED DECEMBER 31, 2018

### 1. NATURE OF BUSINESS

Concrete Pipe & Precast, LLC ("CP&P" or the "Company") commenced operations on August 3, 2012, through a joint venture formation agreement by and between two pipe and precast companies; Americast, Inc., a Virginia corporation ("Americast"), and Hanson Pipe & Precast, LLC, a Delaware limited liability company ("Hanson") (collectively, the "Members"). The Members formed CP&P, a limited liability company under the laws of the State of Delaware. Both Members made initial contributions of tangible and intangible assets such as human resources, inventory, and property, plant, and equipment at the formation of CP&P. On March 13, 2015, Forterra Pipe and Precast, LLC ("Forterra") acquired Hanson's interest in CP&P. As such, Forterra became a member of CP&P. On September 30, 2019, Americast assigned its units in CP&P to Eagle Corporation (Americast's parent company, or "Eagle") and was subsequently dissolved.

CP&P is engaged primarily in the manufacture, marketing, sale, and distribution of concrete pipe and precast products. Operations are primarily in Virginia, West Virginia, Maryland, North Carolina, Pennsylvania, South Carolina, and Georgia, with sales to contiguous states.

CP&P's operating agreement stipulates how capital contributions, distributions, and income or losses of CP&P are to be allocated to each Member, which is not always in accordance with each Member's respective ownership percentage. Each of the Member's loss is limited to the amount of capital contributed. CP&P shall continue in existence until dissolved in accordance with the provisions of the agreement.

### 2. SIGNIFICANT ACCOUNTING POLICIES

#### *Basis of Presentation*

The accompanying financial statements and footnotes have been prepared in accordance with United States generally accepted accounting principles ("U.S. GAAP").

Certain prior year numbers were reclassified to conform with current year presentation. Such reclassification had no impact on the previously reported results of operations.

#### *Accounting Estimates*

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. The more significant estimates made by management relate to useful lives of property, plant, and equipment, inventory reserves, allowance for uncollectible accounts, and impairment of long-lived assets.

#### *Cash and Cash Equivalents*

For purposes of the statement of cash flows, CP&P considers all highly-liquid investments purchased with an original maturity of three months or less to be cash equivalents. Cash accounts in excess of federally-insured limits are subject to risk of loss.

#### *Accounts and Notes Receivable*

Accounts receivable, net consists of amounts billed to customers less an allowance for doubtful accounts. CP&P accounts for estimated uncollectible amounts by reducing earnings through a valuation allowance. This allowance is based on the judgment of management as to the estimated collectibility of the receivables balance at year-end and is

# CONCRETE PIPE & PRECAST, LLC

## NOTES TO FINANCIAL STATEMENTS

AS OF DECEMBER 31, 2018 AND 2017 AND FOR THE THREE YEARS ENDED DECEMBER 31, 2018

adjusted as experience, economic conditions, and other factors dictate. CP&P established an allowance for uncollectible accounts receivable of \$450,000 and \$415,000 as of December 31, 2019 and 2018, respectively, to report receivables at their net realizable value. Generally, accounts receivable balances are unsecured and subject to certain credit risks. However, certain accounts receivable balances are secured through liens or bonding agents.

Accounts receivable balances are considered delinquent once they are 90 days past due. Finance charges begin to accrue once an account is 30 days past due and continue to accrue regardless of status. Trade receivable balances that remain outstanding after CP&P has used reasonable collection efforts are written off by reducing accounts receivable and the valuation allowance.

Allowances for non-trade note receivable losses are determined primarily on the basis of management's best estimate of probable losses, including specific allowances for known troubled accounts. Interest income on notes receivable is accrued monthly.

In October of 2014, CP&P obtained a non-trade note receivable related to the sale of property, plant, and equipment. The total principal balance of the note amounted to \$1,050,000. The note accrued interest at an annual rate of 5.0% and required monthly payments of \$6,138 beginning on December 1, 2014. In October 2017, the note was amended such that principal and all accrued interest was payable in full on January 31, 2018. All payments of principal and interest were current as of December 31, 2017. The note was secured by the respective property, plant, and equipment. The outstanding balance of the note was \$897,435 at December 31, 2017 and was paid in full on January 19, 2018.

### ***Concentration of credit risk***

Financial instruments that potentially subject the Company to concentrations of credit risk are primarily receivables. The Company performs ongoing credit evaluations of its customers' financial condition and generally requires no collateral other than partial advance payments or deposits from its customers on major projects.

### ***Inventories***

Inventories are valued at the lower of cost or net realizable value using several cost flow assumptions including FIFO (first-in, first-out method) and average cost.

### ***Property, Plant, and Equipment***

All initial capital contributions of property, plant, and equipment by each Member were contributed at that Member's respective book values. Property, plant, and equipment is recorded at cost and depreciated using the straight-line method over the following estimated useful lives:

	<b>Estimated Useful Lives in Years</b>
Buildings and improvements	15 - 39
Machinery and equipment	5 - 20
Vehicles and delivery equipment	5 - 12
Office equipment	3 - 7

Depreciation expense, included in cost of sales and general and administrative expenses on the statements of income, were \$7,146,957 in 2019, \$7,082,851 in 2018, and \$7,211,784 in 2017.

The Company evaluates the recoverability of its long-lived assets in accordance with the provisions in Accounting Standards Codification (ASC) 360, Property, Plant, and Equipment (ASC 360). ASC 360 requires that long-lived



# CONCRETE PIPE & PRECAST, LLC

## NOTES TO FINANCIAL STATEMENTS

AS OF DECEMBER 31, 2018 AND 2017 AND FOR THE THREE YEARS ENDED DECEMBER 31, 2018

assets be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets is measured by comparing the carrying amount of an asset to future undiscounted net cash flows expected to be generated by the asset. No indication of impairment existed during any of the years presented. Such evaluations for impairment are significantly impacted by estimates of future prices for the Company's products, capital needs, economic trends in the construction sector, and other factors. If such assets are considered to be impaired, the impairment to be recognized is measured at the amount by which the carrying amount of the assets exceeds their fair value. Assets to be disposed of by sale are reflected at the lower of their carrying amount or fair value less cost to sell.

### ***Shipping and Handling Costs***

Shipping and handling costs are included in cost of sales on the statements of income. Delivery revenue is included in net sales on the statements of income.

### ***Income Taxes***

CP&P is a limited liability company. Accordingly, under the Internal Revenue Code, all taxable income or loss flows through to its Members. All state income taxes are passed through to the Members also. Therefore, no income tax expense or liability is recorded in the accompanying financial statements.

CP&P has reviewed and evaluated the relevant technical merits of each of its tax positions in accordance with guidance established by the Financial Accounting Standards Board (FASB) and determined that there are no uncertain tax positions that would have a material impact on the financial statements of CP&P. The open tax years related to state tax filings are 2014 - 2018 and will expire in 2018 - 2022. When and if applicable, potential interest and penalty costs are accrued as incurred with expenses recognized in general and administrative expenses on the statements of income.

### ***Revenue Recognition***

Substantially all of CP&P's revenue contracts are single performance obligations for the sale of products. All revenue recognized by the Company is recognized at the point in time when control is transferred to customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for the products. Revenues are recognized when the risks and rewards associated with the transaction have been transferred to the purchaser, which is demonstrated when all the following conditions are met: evidence of a binding arrangement exists, products have been delivered, there is no future performance required, fees are fixed or determinable and amounts are collectible under normal payment terms. The Company considers several indicators for the transfer of control to its customers, including the significant risks and rewards of ownership of products, the Company's right to payment and the legal title of the products. Based upon the assessment of control indicators, sales to trade customers and distributors are recognized at the point in time when products are delivered to customers. In most cases, the final delivery to the customers is within the same day that the shipment is picked up by a third party hauler.

All variable consideration that may affect the total transaction price, including contractual discounts, rebates, returns and credits are included in net sales. Estimates for variable consideration are based on historical experience, anticipated performance and management's judgment.

### ***Sales Taxes***

CP&P collects sales tax from customers and remits the entire amount to the taxing jurisdictions. CP&P's accounting policy is to exclude the tax collected and remitted to the taxing jurisdictions from revenues and cost of sales.

### ***Fair Value***

# CONCRETE PIPE & PRECAST, LLC

## NOTES TO FINANCIAL STATEMENTS

AS OF DECEMBER 31, 2018 AND 2017 AND FOR THE THREE YEARS ENDED DECEMBER 31, 2018

CP&P follows current accounting standards relating to fair value measurements and disclosures, which define fair value, establish guidelines for measuring fair value, establish a framework for measuring fair value, and expand disclosures regarding fair value measurement. The Company's financial instruments consist primarily of cash, trade receivables, accounts payable, other current liabilities, and debt. The carrying value of the Company's financial instruments approximates the fair value due to their highly liquid nature, short-term maturity, or competitive rates assigned to these financial instruments.

### **Members' Equity**

At the formation of CP&P, each member received 500 common voting units. As of December 31, 2019, each Member has 500 common units. Income and losses are allocated to the members based upon their relative share of common units, with the exception that depreciation, gains, and losses related to property, plant, and equipment as part of the initial contribution to CP&P are allocated back to the Members who originally contributed the assets. Depreciation, gains, and losses related to property, plant, and equipment acquired subsequent to the formation of CP&P are allocated based on common units.

CP&P distributes cash to the Members in an amount equal to the estimated tax amount on its taxable income. All distributions are divided equally among the Members.

### **Recent Accounting Pronouncements**

In May 2014, FASB issued Accounting Standards Update ("ASU") 2014-09, *Revenue from Contracts with Customers (Topic 606)* and issued subsequent amendments to the initial guidance. Topic 606 supersedes the revenue recognition requirements in ASC Topic 605, *Revenue Recognition*. The new guidance outlines a single comprehensive model for accounting for revenue arising from contracts with customers. This guidance requires an entity to recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services and also requires certain additional disclosures. The Company adopted the new standard on January 1, 2019 using the modified retrospective method which did not have a material impact on the Company's financial statements for the year ended December 31, 2019 and is not expected to have a material impact in future periods. No adjustment to retained earnings was required for the cumulative effect of initially applying the new standard. Results for periods beginning on or after January 1, 2019 are presented under Topic 606, which prior period amounts are not adjusted and continue to be reported in accordance with the prior accounting guidance under Topic 605, *Revenue Recognition*.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, amending the existing accounting standards for lease accounting, including requiring lessees to recognize most leases on their balance sheets and making targeted changes to lessor accounting. The amendments in this update are effective for annual reporting periods beginning after December 15, 2020, and interim periods within fiscal years beginning after December 15, 2020, and early adoption is permitted as of the standard's issuance date. ASU 2016-02 requires a modified retrospective transition approach for all leases existing at, or entered into after, the date of initial application, with an option to use certain transition relief. The Company believes this ASU will have a material impact on our financial statements, as it will result in most of the Company's leases and associated assets being presented on the balance sheet.

In August 2016, the FASB issued ASU 2016-15, *Statements of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*, providing clarifications as to the presentation and classification in the cash flows of eight specific issues, including but not limited to prepayment of debt or debt extinguishment costs and contingent consideration payments made after a business combination. The Company adopted this standard on January 1, 2019. The adoption of the ASU can have an impact on the Company's cash flow presentation in future periods.

### **Subsequent Events**

# CONCRETE PIPE & PRECAST, LLC

## NOTES TO FINANCIAL STATEMENTS

AS OF DECEMBER 31, 2018 AND 2017 AND FOR THE THREE YEARS ENDED DECEMBER 31, 2018

Management has evaluated subsequent events through February 27, 2020, which is the date the financial statements were available to be issued.

### 3. INVENTORIES

Inventories consisted of the following at December 31:

	2019	2018
Finished goods	\$ 15,806,040	\$ 15,595,655
Raw materials	2,986,068	3,950,455
Supplies	47,606	38,180
Total inventories	<u>\$ 18,839,714</u>	<u>\$ 19,584,290</u>

### 4. PROPERTY, PLANT, AND EQUIPMENT

Property, plant, and equipment consisted of the following at December 31:

	2019	2018
Land, buildings, and improvements	\$ 47,167,974	\$ 46,811,688
Machinery and equipment	115,677,357	111,622,852
Vehicles and delivery equipment	778,851	778,851
Office equipment	1,695,876	1,245,070
Assets under development	1,061,781	1,430,419
Total	<u>166,381,839</u>	<u>161,888,880</u>
Less: Accumulated depreciation	<u>(107,450,797)</u>	<u>(100,359,407)</u>
Net property, plant, and equipment	<u>\$ 58,931,042</u>	<u>\$ 61,529,473</u>

### 5. NOTES PAYABLE

Effective June 1, 2017, the Company amended its Wells Fargo Bank revolving line of credit (WF Revolver) in its Second Amended and Restated Credit Agreement with Wells Fargo Bank (Amended WF Revolver). Per the terms of the Amended WF Revolver, interest is payable monthly at a rate equal to LIBOR plus an applicable margin based upon performance, which approximated 3% as of December 31, 2019. The Amended WF Revolver also includes an unused commitment fee. The credit limit is the lower of \$40,000,000 or the Company's borrowing base, as defined in the amended credit agreement. Availability on the Amended WF Revolver as of December 31, 2019 and 2018 was \$15,974,599 and \$15,214,920, respectively, based on draws, outstanding letters of credit, and the allowable borrowing base. The Amended WF Revolver becomes due on May 31, 2022.

Effective December 19, 2018, the Company entered into the First Amendment to the Amended WF Revolver to, among other things, replace one of the loan covenants of basic Fixed Charge Coverage Ratio with Tangible Net worth (as defined in the First amendment).

The WF Revolver is secured by certain real property and all machinery and equipment, vehicles and delivery equipment, office equipment, other personal property, accounts receivable, general intangibles, and inventory.

The outstanding balance of the WF Revolver consisted of the following at December 31:

# CONCRETE PIPE & PRECAST, LLC

## NOTES TO FINANCIAL STATEMENTS

AS OF DECEMBER 31, 2018 AND 2017 AND FOR THE THREE YEARS ENDED DECEMBER 31, 2018

	2019	2018
Current portion	\$ —	\$ —
Long-term portion	23,993,601	24,753,280
Notes payable	<u>\$ 23,993,601</u>	<u>\$ 24,753,280</u>

CP&P is subject to three loan covenants: a Funded Debt to EBITDA (earnings before interest, taxes, depreciation, and amortization) Ratio, a Fixed Charge Coverage Ratio considering only tax distributions, and a Tangible Net Worth (as defined in the First Amendment). CP&P was in compliance with all financial loan covenants as of December 31, 2019 and 2018.

### 6. PROFIT SHARING PLANS AND COLLECTIVE BARGAINING AGREEMENT

CP&P has adopted a plan allowing all qualified employees to invest a portion of their current earnings in an employees' 401(k) retirement fund. CP&P matches a portion of the elective contributions made by the employees based on the terms of the plan. CP&P may also, at its sole discretion, make additional contributions for all eligible employees. Employer contributions to the plan amounted to approximately \$941,000 in 2019, \$899,000 in 2018, and \$907,000 in 2017.

CP&P entered into a collective bargaining agreement on August 28, 2012, with the union workforce at one production facility. The terms of the current agreement are up for renewal on August 28, 2021. Approximately 5% of the total production workforce is covered under this agreement as of December 2019.

### 7. RELATED PARTY TRANSACTIONS

CP&P, in its ordinary course of business, sells products to Americast, Eagle, as well as Eagle's other subsidiaries. CP&P also purchases products and services from subsidiaries of Eagle and subsidiaries of Forterra.

On August 3, 2012, CP&P entered into a Management Services Agreement with Eagle. For a monthly fee, Eagle is providing general and administrative services including information technology, payroll processing, 401(k) profit sharing plan management, and insurance coverage allocations. The agreement is subject to a Consumer Price Index (CPI) adjustment beginning in 2015. The agreement will automatically renew annually until terminated as described in the agreement.

Following table summarizes the related party transactions between CP&P and its affiliates during the years ended December 31, 2019, 2018 and 2017:

	2019	2018	2017
Sale of products to affiliates	\$499,212	\$37,490	\$104,024
Purchase of products and services from affiliates	681,176	340,291	464,371
Management fees paid to affiliates	544,571	529,842	513,220

During 2018, CP&P sold certain properties at its Hanover Plant in Ashland, Virginia, to an affiliate of Eagle, for cash proceeds of \$2,000,000.

The amount due from / to affiliates on the balance sheets as of December 31, 2019 and 2018 were the results of the transactions disclosed above.

# CONCRETE PIPE & PRECAST, LLC

## NOTES TO FINANCIAL STATEMENTS

AS OF DECEMBER 31, 2018 AND 2017 AND FOR THE THREE YEARS ENDED DECEMBER 31, 2018

### 8. COMMITMENTS AND CONTINGENT LIABILITIES

The Company is involved in legal proceedings and litigation in the ordinary course of business. In the opinion of management, the outcome of such matters will not have a material adverse effect on the Company's financial position, results of operations, or liquidity. Other than routine litigation incidental to the Company's business, there are no other material legal proceedings to which the Company is a party or to which any of the Company's properties are subject.

#### *Self-Insurance*

CP&P participates in self-funding programs for workers' compensation and liability insurance. The plans are administered by insurance companies who determine current funding requirements. CP&P has individual and aggregate stop-loss arrangements with the insurance companies to cover substantial claims. CP&P has approximately \$416,000 at December 31, 2019, and \$55,000 at December 31, 2018, as an estimated self-insurance liability recorded as part of other current liabilities.

#### *Operating Leases*

CP&P is obligated under various non-cancellable operating leases for property, equipment, vehicles, and computers, which have varying terms. Lease expense under these agreements approximated \$1,069,000 in 2019, \$1,048,000 in 2018, and \$1,026,000 in 2017.

Approximate minimum future operating lease rental payments required for the five-year period subsequent to December 31, 2019, are as follows:

2020	\$	590,591
2021		446,734
2022		285,422
2023		101,080
2024		11,248
Total	\$	<u>1,435,075</u>