B-8-20

NIFS ID: Department: Public Works

Capital:

SERVICE: Traffic Signal System Ops Ph 5-B08-20

Contract ID #:T62000-05ER NIFS Entry Date: Term: from to

New
Time Extension:
Addl. Funds:
Blanket Resolution:
RES#

1) Mandated Program:	N
2) Comptroller Approval Form Attached:	Y
3) CSEA Agmt. § 32 Compliance Attached:	Y
4) Vendor Ownership & Mgmt. Disclosure Attached:	Y
5) Insurance Required	N

Vendor Info:	
Name: **Welsbach Electric Corp of L.I.**	Vendor ID#: [redacted]
Address: 300 Newtown Road Plainview NY 11803	Contact Person: [redacted]
	Phone: [redacted]

Department:
Contact Name: Jeff Lindgren
Address: NCDPW 1194 Prospect Ave Westbury, NY 11590
Phone: 571-6998

Routing Slip

Department	**NIFS Entry: X**	**02-APR-20 -- LDIONISIO**
Department	**NIFS Approval: X**	**09-APR-20 -- KARNOLD**
DPW	**Capital Fund Approved:**	
OMB	**NIFA Approval: X**	**14-APR-20 -- CNOLAN**
OMB	**NIFS Approval: X**	**09-APR-20 -- NGUMIENIAK**
County Atty.	**Insurance Verification: X**	**10-APR-20 -- DMCDERMOTT**
County Atty.	**Approval to Form: X**	**10-APR-20 -- DMCDERMOTT**
CPO	**Approval: X**	**22-APR-20 -- KOHAGENCE**

DCEC	**Approval: X**	**01-MAY-20 -- JCHIARA**
Dep. CE	**Approval: X**	**01-MAY-20 -- BSCHNEIDER**
Leg. Affairs	**Approval/Review: X**	**21-MAY-20 -- JSCHANTZ**
Legislature	**Approval:**	
Comptroller	**Deputy:**	
NIFA	**NIFA Approval:**	

Contract Summary

Purpose: To provide day-to-day operation and maintenance of the County's Traffic signal control system and communications infrastructure including equipment in the County's Traffic Management Center in Westbury, NY
Method of Procurement: Contract was bid for 4 weeks and advertised in New York Newsday, NYS Contract Reporter and on the County's eProcurement site from September 25, 2019 till the bid opening on October 29, 2019
Procurement History: Two bids were received, a bid analysis was completed and Welsbach Electric was determined to be the lowest responsible bidder.
Description of General Provisions: Provide day-to-day operations personnel to manage and maintain our Traffic Signal and ITS on street infrastructure throughout the County.
Impact on Funding / Price Analysis: This project receives and 80% federal subsidy utilizing Federal Highway Funds. $3,417,792 - Federal Aid over three years $854,448 - County Operating Funding over three years The encumbrance of $1,246,000 is for one year, of which $996,800 will be covered by Federal Funds. The max amount of this contract is $4,272,240 Current MBWE utilization rate is 4.28%
Change in Contract from Prior Procurement: No prior procurement. The contract changes and adapts as our Traffic Signal and ITS infrastructure expands and is upgraded, but the main purpose remains the same to manage and maintain our Traffic Signal and ITS on street infrastructure.
Recommendation: (approve as submitted) Approve as Submitted

Advisement Information

BUDGET CODES	
Fund:	GEN
Control:	**01**
Resp:	**0154**
Object:	**DE554**
Transaction:	**103**
Project #:	
Detail:	

RENEWAL	
% Increase	
%	

FUNDING SOURCE	AMOUNT
Revenue Contract:	
County	$ 249,200.00
Federal	$ 996,800.00
State	$ 0.00
Capital	$ 0.00
Other	$ 0.00
TOTAL	$ **1,246,000.00**

LINE	INDEX/OBJECT CODE	AMOUNT
1	PWGEN0154DE554	$ 1,246,000.00
		$ 0.00
		$ 0.00
		$ 0.00
		$ 0.00
		$ 0.00
	TOTAL	$ 1,246,000.00

B08-20

RULES RESOLUTION NO. -2020

A RESOLUTION AUTHORIZING THE COUNTY EXECUTIVE TO AWARD AND EXECUTE A CONTRACT BETWEEN THE COUNTY OF NASSAU ACTING ON BEHALF OF THE NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS AND WELSBACH ELECTRIC CORP. OF L.I.

WHEREAS, in accordance with all Federal, State and Local Law, the County of Nassau on behalf of the NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS [“Department”] has received competitive bids for contract T62000-05ER, TRAFFIC SIGNAL SYSTEM OPERATIONS - PHASE V, P.I.N. 0760.59 [“Contract”], as more particularly described in the contract documents, a copy of which are on file with the Clerk of the Legislature; and

WHEREAS, the firm of WELSBACH ELECTRIC CORP. OF L.I.

[“Vendor”] has submitted the lowest responsible bid for the work described in the contract in accordance with all Federal, State and Local Law as determined by the Department, and

WHEREAS, the funding for this contract is from capital funds approved by the Nassau County Legislature and included in the current four year capital plan, and

WHEREAS, the Commissioner of the Department is representing that the total contract is estimated to be $ 4,272,240.00 now therefore be it

RESOLVED, that the Rules Committee of the Nassau County Legislature, based on the representations of the Department and the recommendation of the Commissioner of the Department, authorizes the County Executive to award and execute the said contract with the vendor.

NIFA Nassau County Interim Finance Authority

Contract Approval Request Form (As of January 1, 2015)

1. **Vendor:** Welsbach Electric Corp of L.I.

2. **Dollar amount requiring NIFA approval:** $4272240

   Amount to be encumbered: $1246000

   This is a New

If new contract - $ amount should be full amount of contract
If advisement – NIFA only needs to review if it is increasing funds above the amount previously approved by NIFA
If amendment - $ amount should be full amount of amendment only

3. **Contract Term: 36 Months**
   Has work or services on this contract commenced? N

   If yes, please explain:

4. **Funding Source:**

   X General Fund (GEN)
   Capital Improvement Fund (CAP)
   Other

   Grant Fund (GRT)
   Federal % 80
   State % 0
   County % 20

Is the cash available for the full amount of the contract? Y
If not, will it require a future borrowing? N

Has the County Legislature approved the borrowing? N/A
Has NIFA approved the borrowing for this contract? N/A

5. **Provide a brief description (4 to 5 sentences) of the item for which this approval is requested:**

   To provide day-to-day operation and maintenance of the County's Traffic signal control system and communications infrastructure including equipment in the County's Traffic Management Center in Westbury, NY

6. **Has the item requested herein followed all proper procedures and thereby approved by the:**

   Nassau County Attorney as to form

   Nassau County Committee and/or Legislature

   Date of approval(s) and citation to the resolution where approval for this item was provided:

7. **Identify all contracts (with dollar amounts) with this or an affiliated party within the prior 12 months:**

Contract ID	Date	Amount

AUTHORIZATION

To the best of my knowledge, I hereby certify that the information contained in this Contract Approv al Request Form and any additional information submitted in connection with this request is true an d accurate and that all expenditures that will be made in reliance on this authorization are in confor mance with the Nassau County Approved Budget and not in conflict with the Nassau County Multi-Year Financial Plan. I understand that NIFA will rely upon this information in its official deliberation s.

CNOLAN 14-APR-20

Authenticated User ***Date***

COMPTROLLER'S OFFICE

To the best of my knowledge, I hereby certify that the information listed is true and accurate and is in conformance with the Nassau County Approved Budget and not in conflict with the Nassau Cou nty Multi-Year Financial Plan.

Regarding funding, please check the correct response:

_ I certify that the funds are available to be encumbered pending NIFA approval of this contract.

If this is a capital project:

I certify that the bonding for this contract has been approved by NIFA.

Budget is available and funds have been encumbered but the project requires NIFA bonding authorization

Authenticated User ***Date***

NIFA

Amount being approved by NIFA: _

Payment is not guaranteed for any work commenced prior to this approval.

Authenticated User ***Date***

NOTE: All contract submissions MUST include the County's own routing slip, current NIFS pri ntouts for all relevant accounts and relevant Nassau County Legislature communication docu ments and relevant supplemental information pertaining to the item requested herein.

NIFA Contract Approval Request Form MUST be filled out in its entirety before being su bmitted to NIFA for review.

NIFA reserves the right to request additional information as needed.

Jack Schnirman
Comptroller

OFFICE OF THE COMPTROLLER
240 Old Country Road
Mineola, New York 11501

COMPTROLLER APPROVAL FORM FOR PERSONAL, PROFESSIONAL OR HUMAN SERVICES CONTRACTS

Attach this form along with all personal, professional or human services contracts, contract renewals, extensions and amendments.

CONTRACTOR NAME: Welsbach Electric Corp of L.I.

CONTRACTOR ADDRESS: 300 Newtown Road, Plainview, NY 11803

FEDERAL TAX ID #: 11-2354251

Instructions: **Please check the appropriate box ("☑") after one of the following roman numerals, and provide all the requested information.**

I. ☑ The contract was awarded to the lowest, responsible bidder after advertisement for sealed bids. The contract was awarded after a request for sealed bids was published in Newsday, Contract Reporter, Website [newspaper] on September 25, 2019 [date]. The sealed bids were publicly opened on October 29, 2019 [date]. 2 [#] of sealed bids were received and opened.

II. ☐ The contractor was selected pursuant to a Request for Proposals.
The Contract was entered into after a written request for proposals was issued on ____________ [date]. Potential proposers were made aware of the availability of the RFP by advertisement in ____________ [newspaper], posting on industry websites, via email to interested parties and by publication on the County procurement website. Proposals were due on ____________ [date]. ________ [state #] proposals were received and evaluated. The evaluation committee consisted of: ____________

____________ (list # of persons on committee and their respective departments). The proposals were scored and ranked. As a result of the scoring and ranking, the highest-ranking proposer was selected.

III. ☐ This is a renewal, extension or amendment of an existing contract.
The contract was originally executed by Nassau County on ____________________[date]. This is a renewal or extension pursuant to the contract, or an amendment within the scope of the contract or RFP (copies of the relevant pages are attached). The original contract was entered into after____

____

____ [describe procurement method, i.e., RFP, three proposals evaluated, etc.] Attach a copy of the most recent evaluation of the contractor's performance for any contract to be renewed or extended. If the contractor has not received a satisfactory evaluation, the department must explain why the contractor should nevertheless be permitted to continue to contract with the county.

IV. ☐ Pursuant to Executive Order No. 1 of 1993, as amended, at least three proposals were solicited and received. The attached memorandum from the department head describes the proposals received, along with the cost of each proposal.

☐ **A.** The contract has been awarded to the proposer offering the lowest cost proposal; **OR:**

☐ **B.** The attached memorandum contains a detailed explanation as to the reason(s) why the contract was awarded to other than the lowest-cost proposer. The attachment includes a specific delineation of the unique skills and experience, the specific reasons why a proposal is deemed superior, and/or why the proposer has been judged to be able to perform more quickly than other proposers.

V. ☐ Pursuant to Executive Order No. 1 of 1993 as amended, the attached memorandum from the department head explains why the department did not obtain at least three proposals.

☐ **A.** There are only one or two providers of the services sought or less than three providers submitted proposals. The memorandum describes how the contractor was determined to be the sole source provider of the personal service needed or explains why only two proposals could be obtained. If two proposals were obtained, the memorandum explains that the contract was awarded to the lowest cost proposer, or why the selected proposer offered the higher quality proposal, the proposer's unique and special experience, skill, or expertise, or its availability to perform in the most immediate and timely manner.

☐ **B.** The memorandum explains that the contractor's selection was dictated by the terms of a federal or New York State grant, by legislation or by a court order. (Copies of the relevant documents are attached).

☐ **C.** Pursuant to General Municipal Law Section 104, the department is purchasing the services required through a New York State Office of General Services contract no.____________________, and the attached memorandum explains how the purchase is within the scope of the terms of that contract.

☐ **D.** Pursuant to General Municipal Law Section 119-o, the department is purchasing the services required through an inter-municipal agreement.

VI. ☐ This is a human services contract with a not-for-profit agency for which a competitive process has not been initiated. Attached is a memorandum that explains the reasons for entering into this contract without conducting a competitive process, and details when the department intends to initiate a competitive process for the future award of these services. For any such contract, where the vendor has previously provided services to the county, attach a copy of the most recent evaluation of the vendor's performance. If the contractor has not received a satisfactory evaluation, the department must explain why the contractor should nevertheless be permitted to contract with the county.

In certain limited circumstances, conducting a competitive process and/or completing performance evaluations may not be possible because of the nature of the human services program, or because of a compelling need to continue services through the same provider. In those circumstances, attach an explanation of why a competitive process and/or performance evaluation is inapplicable.

VII. ☐ This is a public works contract for the provision of architectural, engineering or surveying services. The attached memorandum provides details of the department's compliance with Board of Supervisors' Resolution No. 928 of 1993, including its receipt and evaluation of annual Statements of Qualifications & Performance Data, and its negotiations with the most highly qualified firms.

Instructions with respect to Sections VIII, IX and X: **All Departments must check the box for VIII. Then, check the box for either IX or X, as applicable.**

VIII. ☑ Participation of Minority Group Members and Women in Nassau County Contracts. The selected contractor has agreed that it has an obligation to utilize best efforts to hire MWBE sub-contractors. Proof of the contractual utilization of best efforts as outlined in Exhibit "EE" may be requested at any time, from time to time, by the Comptroller's Office prior to the approval of claim vouchers.

IX. ☑ Department MWBE responsibilities. To ensure compliance with MWBE requirements as outlined in Exhibit "EE", Department will require vendor to submit list of sub-contractor requirements prior to submission of the first claim voucher, for services under this contract being submitted to the Comptroller.

X. ☐ Vendor will not require any sub-contractors.

In addition, if this is a contract with an individual or with an entity that has only one or two employees: ☐ a review of the criteria set forth by the Internal Revenue Service, *Revenue Ruling No*. 87-41, 1987-1 C.B. 296, attached as Appendix A to the Comptroller's Memorandum, dated February 13, 2004, concerning independent contractors and employees indicates that the contractor would not be considered an employee for federal tax purposes.

Department Head Signature

3/6/20

Date

***NOTE:* Any information requested above, or in the exhibit below, may be included in the county's "staff summary" form in lieu of a separate memorandum.**

Certificate of No Change Form

All fields must be filled.

A materially false statement willfully or fraudulently made in connection with this certification, and/or the failure to conduct appropriate due diligence in verifying the information that is the subject of this certification, may result in rendering the submitting entity non-responsible for the purpose of contract award.
A materially false statement willfully or fraudulently made in connection with this certification may subject the person making the false statement to criminal charges.

I, Joseph P Florio state that I have read and understand all the items contained in the disclosure documents listed below and certify that as of this date, these items have not changed. I further certify that, to the best of my knowledge, information and belief, those answers are full, complete, and accurate; and that, to the best of my knowledge, information, and belief, those answers continue to be full, complete, and accurate.

In addition, I further certify on behalf of the submitting vendor that the information contained in the principal questionnaire(s) have not changed and have been verified and continue, to the best of my knowledge, to be full, complete and accurate.

I understand that Nassau County will rely on the information supplied in this certification as additional inducement to enter into a contract with the submitting entity.

Vendor Disclosures

This refers to the vendor integrity and disclosure forms submitted for the vendor doing business with the County.

Name of Submitting Entity: Welsbach Electric Corp. of L.I.

Vendor's Address: 300 Newtown Rd Plainview NY US 11803

Vendor's EIN or TIN: 1[redacted]

Forms Submitted:

Political Campaign Contribution Disclosure Form:
05/02/2020 03:43:03 PM

Lobbyist Registration and Disclosure Form:
05/02/2020 03:43:21 PM

Business History Form certified:
04/22/2020 12:30:23 PM

Consultant's, Contractor's, and Vendor's Disclosure Form:
05/02/2020 03:43:34 PM

Principal Questionnaire(s)

This refers to the most recent principal questionnaire submissions.

Principal Name	Date Certified
Joseph P Florio [JOE_FLORIO@EMCORGROUP.COM]	05/02/2020 03:48:51 PM

I, Joseph P Florio hereby acknowledge that a materially false statement willfully or fraudulently made in connection with this form may result in rendering the submitting business entity and/or any affiliated entities non-responsible, and, in addition, may subject me to criminal charges.

I further certify that I have read and understand all the items contained in this form; that I supplied full and complete answers to each item therein to the best of my knowledge, information and belief; that I will notify the County in writing of any change in circumstances occurring after the submission of this form; and that all information supplied by me is true to the best of my knowledge, information and belief. I understand that the County will rely on the information supplied in this form as additional inducement to enter into a contract with the submitting business entity

CERTIFICATION

A MATERIALLY FALSE STATEMENT WILLFULLY OR FRAUDULENTLY MADE IN CONNECTION WITH THIS QUESTIONNAIRE MAY RESULT IN RENDERING THE SUBMITTING BUSINESS ENTITY NOT RESPONSIBLE WITH RESPECT TO THE PRESENT BID OR FUTURE BIDS, AND, IN ADDITION, MAY SUBJECT THE PERSON MAKING THE FALSE STATEMENT TO CRIMINAL CHARGES."

Joseph P Florio

Name

President / C.E.O.

Title

Welsbach Electric Corp. of L.I.

Name of Submitting Entity

05/02/2020 03:51:06 PM

Date

COUNTY OF NASSAU

POLITICAL CAMPAIGN CONTRIBUTION DISCLOSURE FORM

1. Has the vendor or any corporate officers of the vendor provided campaign contributions pursuant to the New York State Election Law in (a) the period beginning April 1, 2016 and ending on the date of this disclosure, or (b), beginning April 1, 2018, the period beginning two years prior to the date of this disclosure and ending on the date of this disclosure, to the campaign committees of any of the following Nassau County elected officials or to the campaign committees of any candidates for any of the following Nassau County elected offices: the County Executive, the County Clerk, the Comptroller, the District Attorney, or any County Legislator?

YES [ ] NO [X] If yes, to what campaign committee?

2. VERIFICATION: This section must be signed by a principal of the consultant, contractor or Vendor authorized as a signatory of the firm for the purpose of executing Contracts.

The undersigned affirms and so swears that he/she has read and understood the foregoing statements and they are, to his/her knowledge, true and accurate.

The undersigned further certifies and affirms that the contribution(s) to the campaign committees identified above were made freely and without duress, threat or any promise of a governmental benefit or in exchange for any benefit or remuneration.

Electronically signed and certified at the date and time indicated by:
Joseph P. Florio [JOE_FLORIO@EMCORGROUP.COM]

Dated: 05/02/2020 03:43:03 PM

Vendor: Welsbach Electric Corp. of L.I.

Title: President / C.E.O.

 Rev. 3-2016

COUNTY OF NASSAU

LOBBYIST REGISTRATION AND DISCLOSURE FORM

1. Name, address and telephone number of lobbyist(s)/lobbying organization. The term "lobbyist" means any and every person or organization retained, employed or designated by any client to influence - or promote a matter before - Nassau County, its agencies, boards, commissions, department heads, legislators or committees, including but not limited to the Open Space and Parks Advisory Committee and Planning Commission. Such matters include, but are not limited to, requests for proposals, development or improvement of real property subject to County regulation, procurements. The term "lobbyist" does not include any officer, director, trustee, employee, counsel or agent of the County of Nassau, or State of New York, when discharging his or her official duties.

NONE

2. List whether and where the person/organization is registered as a lobbyist (e.g., Nassau County, New York State):

NONE

3. Name, address and telephone number of client(s) by whom, or on whose behalf, the lobbyist is retained, employed or designated:

NONE

4. Describe lobbying activity conducted, or to be conducted, in Nassau County, and identify client(s) for each activity listed. See the last page for a complete description of lobbying activities.

NONE

5. The name of persons, organizations or governmental entities before whom the lobbyist expects to lobby:

NONE

6. If such lobbyist is retained or employed pursuant to a written agreement of retainer or employment, you must attach a copy of such document; and if agreement of retainer or employment is oral, attach a written statement of the substance thereof. If the written agreement of retainer or employment does not contain a signed authorization from the client by whom you have been authorized to lobby. separately attach such a written authorization from the client.

7. Has the lobbyist/lobbying organization or any of its corporate officers provided campaign contributions pursuant to the New York State Election Law in (a) the period beginning April 1, 2016 and ending on the date of this disclosure, or (b), beginning April 1, 2018, the period beginning two years prior to the date of this disclosure and ending on the date of this disclosure, to the campaign committees of any of the following Nassau County elected officials or to the campaign committees of any candidates for any of the following Nassau County elected offices: the County Executive, the County Clerk, the Comptroller, the District Attorney, or any County Legislator?

YES [ ] NO [X] If yes, to what campaign committee? If none, you must so state:

I understand that copies of this form will be sent to the Nassau County Department of Information Technology ("IT") to be posted on the County's website.

I also understand that upon termination of retainer, employment or designation I must give written notice to the County Attorney within thirty (30) days of termination.

VERIFICATION: The undersigned affirms and so swears that he/she has read and understood the foregoing statements and they are, to his/her knowledge, true and accurate.

The undersigned further certifies and affirms that the contribution(s) to the campaign committees listed above were made freely and without duress. threat or any promise of a governmental benefit or in exchange for any benefit or remuneration.

Electronically signed and certified at the date and time indicated by:
Joseph P. Florio [JOE_FLORIO@EMCORGROUP.COM]

Dated: 05/02/2020 03:43:21 PM

Vendor: Welsbach Electric Corp. of L.I.

Title: President / C.E.O.

The term lobbying shall mean any attempt to influence: any determination made by the Nassau County Legislature, or any member thereof, with respect to the introduction, passage, defeat, or substance of any local legislation or resolution; any determination by the County Executive to support, oppose, approve or disapprove any local legislation or resolution, whether or not such legislation has been introduced in the County Legislature; any determination by an elected County official or an officer or employee of the County with respect to the procurement of goods, services or construction, including the preparation of contract specifications, including by not limited to the preparation of requests for proposals, or solicitation, award or administration of a contract or with respect to the solicitation, award or administration of a grant, loan, or agreement involving the disbursement of public monies; any determination made by the County Executive, County Legislature, or by the County of Nassau, its agencies, boards, commissions department heads or committees, including but not limited to the Open Space and Parks Advisory Committee, the Planning Commission with respect to the zoning, use, development or improvement of real property subject to County regulation, or any agencies, boards, commissions, department heads or committees with respect to requests for proposals, bidding, procurement or contracting for services for the County; any determination made by an elected county official or an officer or employee of the county with respect to the terms of the acquisition or disposition by the county of any interest in real property, with respect to a license or permit for the use of real property of or by the county, or with respect to a franchise, concession or revocable consent; the proposal, adoption, amendment or rejection by an agency of any rule having the force and effect of law; the decision to hold, timing or outcome of any rate making proceeding before an agency; the agenda or any determination of a board or commission; any determination regarding the calendaring or scope of any legislature oversight hearing; the issuance, repeal, modification or substance of a County Executive Order; or any determination made by an elected county official or an officer or employee of the county to support or oppose any state or federal legislation, rule or regulation, including any determination made to support or oppose that is contingent on any amendment of such legislation, rule or regulation, whether or not such legislation has been formally introduced and whether or not such rule or regulation has been formally proposed.

The term "lobbying" or "lobbying activities" does not include: Persons engaged in drafting legislation, rules, regulations or rates; persons advising clients and rendering opinions on proposed legislation, rules, regulations or rates, where such professional services are not otherwise connected with legislative or executive action on such legislation or administrative action on such rules, regulations or rates; newspapers and other periodicals and radio and television stations and owners and employees thereof, provided that their activities in connection with proposed legislation, rules, regulations or rates are limited to the publication or broadcast of news items, editorials or other comment, or paid advertisements; persons who participate as witnesses. attorneys or other representatives in public rule-making or rate-making proceedings of a County agency, with respect to all participation by such persons which is part of the public record thereof and all preparation by such persons for such participation; persons who attempt to influence a County agency in an adjudicatory proceeding, as defined by § 102 of the New York State Administrative Procedure Act.

PRINCIPAL QUESTIONNAIRE FORM

All questions on these questionnaires must be answered by all officers and any individuals who hold a ten percent (10%) or greater ownership interest in the proposer. Answers typewritten or printed in ink. If you need more space to answer any question, make as many photocopies of the appropriate page(s) as necessary and attach them to the questionnaire.

COMPLETE THIS QUESTIONNAIRE CAREFULLY AND COMPLETELY. FAILURE TO SUBMIT A COMPLETE QUESTIONNAIRE MAY MEAN THAT YOUR BID OR PROPOSAL WILL BE REJECTED AS NON-RESPONSIVE AND IT WILL NOT BE CONSIDERED FOR AWARD

1. Principal Name: Joseph P Florio
   Date of birth: 08/02/1955
   Home address: [redacted]
   City: [redacted] State/Province/Territory: [redacted] Zip/Postal Code: [redacted]
   Country: US

   Business Address: 300 Newtown Road
   City: Plainview State/Province/Territory: NY Zip/Postal Code: 11803
   Country US
   Telephone: (516) 454-0023

   Other present address(es):
   City: Plainview State/Province/Territory: NY Zip/Postal Code: 11803
   Country: US
   Telephone: 5164540023

   List of other addresses and telephone numbers attached

2. Positions held in submitting business and starting date of each (check all applicable)

President	02/15/2002	Treasurer	
Chairman of Board		Shareholder	
Chief Exec. Officer	02/15/2002	Secretary	
Chief Financial Officer	11/05/1989	Partner	
Vice President	05/01/1992		
(Other)			

3. Do you have an equity interest in the business submitting the questionnaire?
   YES [ ] NO [X] If Yes, provide details.

4. Are there any outstanding loans, guarantees or any other form of security or lease or any other type of contribution made in whole or in part between you and the business submitting the questionnaire?
   YES [ ] NO [X] If Yes, provide details.

5. Within the past 3 years, have you been a principal owner or officer of any business or notfor-profit organization other than the one submitting the questionnaire?
   YES [ ] NO [X] If Yes, provide details.

6. Has any governmental entity awarded any contracts to a business or organization listed in Section 5 in the past 3 years while you were a principal owner or officer?

YES		NO	X	If Yes, provide details.

NOTE: An affirmative answer is required below whether the sanction arose automatically, by operation of law, or as a result of any action taken by a government agency. Provide a detailed response to all questions checked "YES". If you need more space, photocopy the appropriate page and attach it to the questionnaire.

7. In the past (5) years, have you and/or any affiliated businesses or not-for-profit organizations listed in Section 5 in which you have been a principal owner or officer:

a. Been debarred by any government agency from entering into contracts with that agency?

YES		NO	X	If yes, provide an explanation of the circumstances and corrective action taken.

b. Been declared in default and/or terminated for cause on any contract, and/or had any contracts cancelled for cause?

YES		NO	X	If yes, provide an explanation of the circumstances and corrective action taken.

c. Been denied the award of a contract and/or the opportunity to bid on a contract, including, but not limited to, failure to meet pre-qualification standards?

YES		NO	X	If yes, provide an explanation of the circumstances and corrective action taken.

d. Been suspended by any government agency from entering into any contract with it; and/or is any action pending that could formally debar or otherwise affect such business's ability to bid or propose on contract?

YES		NO	X	If yes, provide an explanation of the circumstances and corrective action taken.

8. Have any of the businesses or organizations listed in response to Question 5 filed a bankruptcy petition and/or been the subject of involuntary bankruptcy proceedings during the past 7 years, and/or for any portion of the last 7 year period, been in a state of bankruptcy as a result of bankruptcy proceedings initiated more than 7 years ago and/or is any such business now the subject of any pending bankruptcy proceedings, whenever initiated?

YES [ ] NO [X] If 'Yes', provide details for each such instance. (Provide a detailed response to all questions check "Yes". If you need more space, photocopy the appropriate page and attached it to the questionnaire.)

9.

a. Is there any felony charge pending against you?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

b. Is there any misdemeanor charge pending against you?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

c. Is there any administrative charge pending against you?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

d. In the past 10 years, have you been convicted, after trial or by plea, of any felony, or of any other crime, an element of which relates to truthfulness or the underlying facts of which related to the conduct of business? Y
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

e. In the past 5 years, have you been convicted, after trial or by plea, of a misdemeanor?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

f. In the past 5 years, have you been found in violation of any administrative or statutory charges?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

10. In addition to the information provided in response to the previous questions, in the past 5 years, have you been the subject of a criminal investigation and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency and/or the subject of an investigation where such investigation was related to activities performed at, for, or on behalf of the submitting business entity and/or an affiliated business listed in response to Question 5?

YES		NO	X	If yes, provide an explanation of the circumstances and corrective action taken.

11. In addition to the information provided, in the past 5 years has any business or organization listed in response to Question 5, been the subject of a criminal investigation and/or a civil anti-trust investigation and/or any other type of investigation by any government agency, including but not limited to federal, state, and local regulatory agencies while you were a principal owner or officer?

YES		NO	X	If yes, provide an explanation of the circumstances and corrective action taken.

12. In the past 5 years, have you or this business, or any other affiliated business listed in response to Question 5 had any sanction imposed as a result of judicial or administrative proceedings with respect to any professional license held?

YES		NO	X	If yes, provide an explanation of the circumstances and corrective action taken.

13. For the past 5 tax years, have you failed to file any required tax returns or failed to pay any applicable federal, state or local taxes or other assessed charges, including but not limited to water and sewer charges?

YES		NO	X	If yes, provide an explanation of the circumstances and corrective action taken.

I, Joseph P Florio , hereby acknowledge that a materially false statement willfully or fraudulently made in connection with this form may result in rendering the submitting business entity and/or any affiliated entities non-responsible, and, in addition, may subject me to criminal charges.

I, Joseph P Florio , hereby certify that I have read and understand all the items contained in this form; that I supplied full and complete answers to each item therein to the best of my knowledge, information and belief; that I will notify the County in writing of any change in circumstances occurring after the submission of this form; and that all information supplied by me is true to the best of my knowledge, information and belief. I understand that the County will rely on the information supplied in this form as additional inducement to enter into a contract with the submitting business entity.

CERTIFICATION

A MATERIALLY FALSE STATEMENT WILLFULLY OR FRAUDULENTLY MADE IN CONNECTION WITH THIS QUESTIONNAIRE MAY RESULT IN RENDERING THE SUBMITTING BUSINESS ENTITY NOT RESPONSIBLE WITH RESPECT TO THE PRESENT BID OR FUTURE BIDS, AND, IN ADDITION, MAY SUBJECT THE PERSON MAKING THE FALSE STATEMENT TO CRIMINAL CHARGES.

Welsbach Electric Corp. of L.I.

Name of submitting business

Electronically signed and certified at the date and time indicated by:
Joseph P Florio [JOE_FLORIO@EMCORGROUP.COM]

President / C.E.O.

Title

05/02/2020 03:48:51 PM

Date

PRINCIPAL QUESTIONNAIRE FORM

All questions on these questionnaires must be answered by all officers and any individuals who hold a ten percent (10%) or greater ownership interest in the proposer. Answers typewritten or printed in ink. If you need more space to answer any question, make as many photocopies of the appropriate page(s) as necessary and attach them to the questionnaire.

COMPLETE THIS QUESTIONNAIRE CAREFULLY AND COMPLETELY. FAILURE TO SUBMIT A COMPLETE QUESTIONNAIRE MAY MEAN THAT YOUR BID OR PROPOSAL WILL BE REJECTED AS NON-RESPONSIVE AND IT WILL NOT BE CONSIDERED FOR AWARD

1. Principal Name: Daniel T. Piquette
Date of birth: 06/21/1973
Home address: [redacted]
City: [redacted] State/Province/Territory: [redacted] Zip/Postal Code [redacted]
Country: US

Business Address: 300 Newtown Rd
City: Plainview State/Province/Territory: NY Zip/Postal Code: 11803
Country US
Telephone: 5164540023

Other present address(es):
City: Plainview State/Province/Territory: NY Zip/Postal Code: 11803
Country: US
Telephone: 5164540023

List of other addresses and telephone numbers attached

2. Positions held in submitting business and starting date of each (check all applicable)

President ______ Treasurer ______
Chairman of Board ______ Shareholder ______
Chief Exec. Officer ______ Secretary ______
Chief Financial Officer ______ Partner ______
Vice President ______
(Other)

Type	Description	Start Date
Other	Asst. Vice President	05/20/2015

3. Do you have an equity interest in the business submitting the questionnaire?
YES [ ] NO [X] If Yes, provide details.

4. Are there any outstanding loans, guarantees or any other form of security or lease or any other type of contribution made in whole or in part between you and the business submitting the questionnaire?
YES [ ] NO [X] If Yes, provide details.

5. Within the past 3 years, have you been a principal owner or officer of any business or notfor-profit organization other than the one submitting the questionnaire?

YES [ ] NO [X] If Yes, provide details.

6. Has any governmental entity awarded any contracts to a business or organization listed in Section 5 in the past 3 years while you were a principal owner or officer?

YES [ ] NO [X] If Yes, provide details.

NOTE: An affirmative answer is required below whether the sanction arose automatically, by operation of law, or as a result of any action taken by a government agency. Provide a detailed response to all questions checked "YES". If you need more space, photocopy the appropriate page and attach it to the questionnaire.

7. In the past (5) years, have you and/or any affiliated businesses or not-for-profit organizations listed in Section 5 in which you have been a principal owner or officer:

a. Been debarred by any government agency from entering into contracts with that agency?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

b. Been declared in default and/or terminated for cause on any contract, and/or had any contracts cancelled for cause?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

c. Been denied the award of a contract and/or the opportunity to bid on a contract, including, but not limited to, failure to meet pre-qualification standards?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

d. Been suspended by any government agency from entering into any contract with it; and/or is any action pending that could formally debar or otherwise affect such business's ability to bid or propose on contract?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

8. Have any of the businesses or organizations listed in response to Question 5 filed a bankruptcy petition and/or been the subject of involuntary bankruptcy proceedings during the past 7 years, and/or for any portion of the last 7 year period, been in a state of bankruptcy as a result of bankruptcy proceedings initiated more than 7 years ago and/or is any such business now the subject of any pending bankruptcy proceedings, whenever initiated?
YES [ ] NO [X] If 'Yes', provide details for each such instance. (Provide a detailed response to all questions check "Yes". If you need more space, photocopy the appropriate page and attached it to the questionnaire.)

9.

a. Is there any felony charge pending against you?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

b. Is there any misdemeanor charge pending against you?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

c. Is there any administrative charge pending against you?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

d. In the past 10 years, have you been convicted, after trial or by plea, of any felony, or of any other crime, an element of which relates to truthfulness or the underlying facts of which related to the conduct of business? Y
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

e. In the past 5 years, have you been convicted, after trial or by plea, of a misdemeanor?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

f. In the past 5 years, have you been found in violation of any administrative or statutory charges?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

10. In addition to the information provided in response to the previous questions, in the past 5 years, have you been the subject of a criminal investigation and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency and/or the subject of an investigation where such investigation was related to activities performed at, for, or on behalf of the submitting business entity and/or an affiliated business listed in response to Question 5?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

11. In addition to the information provided, in the past 5 years has any business or organization listed in response to Question 5, been the subject of a criminal investigation and/or a civil anti-trust investigation and/or any other type of investigation by any government agency, including but not limited to federal, state, and local regulatory agencies while you were a principal owner or officer?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

12. In the past 5 years, have you or this business, or any other affiliated business listed in response to Question 5 had any sanction imposed as a result of judicial or administrative proceedings with respect to any professional license held?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

13. For the past 5 tax years, have you failed to file any required tax returns or failed to pay any applicable federal, state or local taxes or other assessed charges, including but not limited to water and sewer charges?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

I, Daniel T. Piquette , hereby acknowledge that a materially false statement willfully or fraudulently made in connection with this form may result in rendering the submitting business entity and/or any affiliated entities non-responsible, and, in addition, may subject me to criminal charges.

I, Daniel T. Piquette , hereby certify that I have read and understand all the items contained in this form; that I supplied full and complete answers to each item therein to the best of my knowledge, information and belief; that I will notify the County in writing of any change in circumstances occurring after the submission of this form; and that all information supplied by me is true to the best of my knowledge, information and belief. I understand that the County will rely on the information supplied in this form as additional inducement to enter into a contract with the submitting business entity.

CERTIFICATION
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Welsbach Electric Corp. of LI
Name of submitting business

Electronically signed and certified at the date and time indicated by:
Daniel T. Piquette [DAN_PIQUETTE@EMCORGROUP.COM]

Asst. Vice President
Title

05/04/2020 01:58:13 PM
Date

PRINCIPAL QUESTIONNAIRE FORM

All questions on these questionnaires must be answered by all officers and any individuals who hold a ten percent (10%) or greater ownership interest in the proposer. Answers typewritten or printed in ink. If you need more space to answer any question, make as many photocopies of the appropriate page(s) as necessary and attach them to the questionnaire.

COMPLETE THIS QUESTIONNAIRE CAREFULLY AND COMPLETELY. FAILURE TO SUBMIT A COMPLETE QUESTIONNAIRE MAY MEAN THAT YOUR BID OR PROPOSAL WILL BE REJECTED AS NON-RESPONSIVE AND IT WILL NOT BE CONSIDERED FOR AWARD

1. Principal Name: Michele L Valenti
   Date of birth: 05/03/1968
   Home address: [redacted]
   City: [redacted] State/Province/Territory: [redacted] Zip/Postal Code: [redacted]
   Country: US

   Business Address: 300 Newtown Road
   City: Plainview State/Province/Territory: NY Zip/Postal Code: 11803
   Country US
   Telephone: 516-454-0023

   Other present address(es):
   City: State/Province/Territory: Zip/Postal Code:
   Country:
   Telephone:

   List of other addresses and telephone numbers attached

2. Positions held in submitting business and starting date of each (check all applicable)

President		Treasurer	
Chairman of Board		Shareholder	
Chief Exec. Officer		Secretary	
Chief Financial Officer		Partner	
Vice President			
(Other)			

Type	Description	Start Date
Other	Asst. Secretary / Asst. Treasurer	06/01/2002

3. Do you have an equity interest in the business submitting the questionnaire?
   YES [ ] NO [X] If Yes, provide details.

4. Are there any outstanding loans, guarantees or any other form of security or lease or any other type of contribution made in whole or in part between you and the business submitting the questionnaire?
   YES [ ] NO [X] If Yes, provide details.

5. Within the past 3 years, have you been a principal owner or officer of any business or notfor-profit organization other than the one submitting the questionnaire?

YES [ ] NO [X] If Yes, provide details.

6. Has any governmental entity awarded any contracts to a business or organization listed in Section 5 in the past 3 years while you were a principal owner or officer?

YES [ ] NO [X] If Yes, provide details.

NOTE: An affirmative answer is required below whether the sanction arose automatically, by operation of law, or as a result of any action taken by a government agency. Provide a detailed response to all questions checked "YES". If you need more space, photocopy the appropriate page and attach it to the questionnaire.

7. In the past (5) years, have you and/or any affiliated businesses or not-for-profit organizations listed in Section 5 in which you have been a principal owner or officer:

a. Been debarred by any government agency from entering into contracts with that agency?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

b. Been declared in default and/or terminated for cause on any contract, and/or had any contracts cancelled for cause?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

c. Been denied the award of a contract and/or the opportunity to bid on a contract, including, but not limited to, failure to meet pre-qualification standards?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

d. Been suspended by any government agency from entering into any contract with it; and/or is any action pending that could formally debar or otherwise affect such business's ability to bid or propose on contract?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

8. Have any of the businesses or organizations listed in response to Question 5 filed a bankruptcy petition and/or been the subject of involuntary bankruptcy proceedings during the past 7 years, and/or for any portion of the last 7 year period, been in a state of bankruptcy as a result of bankruptcy proceedings initiated more than 7 years ago and/or is any such business now the subject of any pending bankruptcy proceedings, whenever initiated?
YES [ ] NO [X] If 'Yes', provide details for each such instance. (Provide a detailed response to all questions check "Yes". If you need more space, photocopy the appropriate page and attached it to the questionnaire.)

9.

a. Is there any felony charge pending against you?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

b. Is there any misdemeanor charge pending against you?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

c. Is there any administrative charge pending against you?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

d. In the past 10 years, have you been convicted, after trial or by plea, of any felony, or of any other crime, an element of which relates to truthfulness or the underlying facts of which related to the conduct of business? Y
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

e. In the past 5 years, have you been convicted, after trial or by plea, of a misdemeanor?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

f. In the past 5 years, have you been found in violation of any administrative or statutory charges?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

10. In addition to the information provided in response to the previous questions, in the past 5 years, have you been the subject of a criminal investigation and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency and/or the subject of an investigation where such investigation was related to activities performed at, for, or on behalf of the submitting business entity and/or an affiliated business listed in response to Question 5?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

11. In addition to the information provided, in the past 5 years has any business or organization listed in response to Question 5, been the subject of a criminal investigation and/or a civil anti-trust investigation and/or any other type of investigation by any government agency, including but not limited to federal, state, and local regulatory agencies while you were a principal owner or officer?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

12. In the past 5 years, have you or this business, or any other affiliated business listed in response to Question 5 had any sanction imposed as a result of judicial or administrative proceedings with respect to any professional license held?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

13. For the past 5 tax years, have you failed to file any required tax returns or failed to pay any applicable federal, state or local taxes or other assessed charges, including but not limited to water and sewer charges?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

I, Michele L Valenti, hereby acknowledge that a materially false statement willfully or fraudulently made in connection with this form may result in rendering the submitting business entity and/or any affiliated entities non-responsible, and, in addition, may subject me to criminal charges.

I, Michele L Valenti, hereby certify that I have read and understand all the items contained in this form; that I supplied full and complete answers to each item therein to the best of my knowledge, information and belief; that I will notify the County in writing of any change in circumstances occurring after the submission of this form; and that all information supplied by me is true to the best of my knowledge, information and belief. I understand that the County will rely on the information supplied in this form as additional inducement to enter into a contract with the submitting business entity.

CERTIFICATION

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Welsbach Electric Corp. of L.I.

Name of submitting business

Electronically signed and certified at the date and time indicated by:
Michele L Valenti [MVALENTI@EMCOR.NET]

Asst. Secretary / Asst. Treasurer

Title

05/09/2020 09:25:31 PM

Date

Business History Form

The contract shall be awarded to the responsible proposer who, at the discretion of the County, taking into consideration the reliability of the proposer and the capacity of the proposer to perform the services required by the County, offers the best value to the County and who will best promote the public interest.

In addition to the submission of proposals, each proposer shall complete and submit this questionnaire. The questionnaire shall be filled out by the owner of a sole proprietorship or by an authorized representative of the firm, corporation or partnership submitting the Proposal.

NOTE: All questions require a response, even if response is "none" or "not-applicable." No blanks.

(USE ADDITIONAL SHEETS IF NECESSARY TO FULLY ANSWER THE FOLLOWING QUESTIONS).

Date: 01/23/2020

1) Proposer's Legal Name: Welsbach Electric Corp. of L.I.

2) Address of Place of Business: 300 Newtown Rd

City: Plainview State/Province/Territory: NY Zip/Postal Code: 11803

Country: US

3) Mailing Address (if different): ____

City: ____ State/Province/Territory: ____ Zip/Postal Code: ____

Country: ____

Phone: ____

Does the business own or rent its facilities? Rent If other, please provide details:

4) Dun and Bradstreet number: 01-272-8168

5) Federal I.D. Number: 11-2354251

6) The proposer is a: Corporation (Describe) ____

7) Does this business share office space, staff, or equipment expenses with any other business?

YES [ ] NO [X] If yes, please provide details:

8) Does this business control one or more other businesses?

YES [ ] NO [X] If yes, please provide details:

9) Does this business have one or more affiliates, and/or is it a subsidiary of, or controlled by, any other business?

YES [X] NO [ ] If yes, please provide details:

Welsbach Electric Corp. of L.I. is a wholly owned subsidiary of Emcor Group, Inc. See Emcor Group, Inc. 2018

Annual Report attached. Affiliates listed on page 98

1 File(s) Uploaded: EME_AR_10K_2018.pdf

10) Has the proposer ever had a bond or surety cancelled or forfeited, or a contract with Nassau County or any other government entity terminated?
YES [ ] NO [X] If yes, state the name of bonding agency, (if a bond), date, amount of bond and reason for such cancellation or forfeiture: or details regarding the termination (if a contract).

11) Has the proposer, during the past seven years, been declared bankrupt?
YES [ ] NO [X] If yes, state date, court jurisdiction, amount of liabilities and amount of assets

12) In the past five years, has this business and/or any of its owners and/or officers and/or any affiliated business, been the subject of a criminal investigation and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency? And/or, in the past 5 years, have any owner and/or officer of any affiliated business been the subject of a criminal investigation and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency, where such investigation was related to activities performed at, for, or on behalf of an affiliated business.
YES [ ] NO [X] If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

13) In the past 5 years, has this business and/or any of its owners and/or officers and/or any affiliated business been the subject of an investigation by any government agency, including but not limited to federal, state and local regulatory agencies? And/or, in the past 5 years, has any owner and/or officer of an affiliated business been the subject of an investigation by any government agency, including but not limited to federal, state and local regulatory agencies, for matters pertaining to that individual's position at or relationship to an affiliated business.
YES [X] NO [ ] If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

See attachment of affiliate(s) schedule of investigations as provided by Emcor Group, Inc.

1 File(s) Uploaded: WEC LI BH Form, Affliate Investigations.pdf

14) Has any current or former director, owner or officer or managerial employee of this business had, either before or during such person's employment, or since such employment if the charges pertained to events that allegedly occurred during the time of employment by the submitting business, and allegedly related to the conduct of that business:
a) Any felony charge pending?
YES [ ] NO [X] If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

b) Any misdemeanor charge pending?
YES [ ] NO [X] If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

c) In the past 10 years, you been convicted, after trial or by plea, of any felony and/or any other crime, an element of which relates to truthfulness or the underlying facts of which related to the conduct of business?
YES [ ] NO [X] If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

d) In the past 5 years, been convicted, after trial or by plea, of a misdemeanor?
YES [ ] NO [X] If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

e) In the past 5 years, been found in violation of any administrative, statutory, or regulatory provisions?
YES [ ] NO [X] If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

15) In the past (5) years, has this business or any of its owners or officers, or any other affiliated business had any sanction imposed as a result of judicial or administrative proceedings with respect to any professional license held?
YES [ ] NO [X] If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

16) For the past (5) tax years, has this business failed to file any required tax returns or failed to pay any applicable federal, state or local taxes or other assessed charges, including but not limited to water and sewer charges?
YES [ ] NO [X] If yes, provide details for each such year. Provide a detailed response to all questions checked 'YES'. If you need more space, photocopy the appropriate page and attach it to the questionnaire.

17 Conflict of Interest:

a) Please disclose any conflicts of interest as outlined below. NOTE: If no conflicts exist, please expressly state "No conflict exists."

(i) Any material financial relationships that your firm or any firm employee has that may create a conflict of interest or the appearance of a conflict of interest in acting on behalf of Nassau County.

No conflict exists.

(ii) Any family relationship that any employee of your firm has with any County public servant that may create a conflict of interest or the appearance of a conflict of interest in acting on behalf of Nassau County.

No conflict exists.

(iii) Any other matter that your firm believes may create a conflict of interest or the appearance of a conflict of interest in acting on behalf of Nassau County.

No conflict exists.

b) Please describe any procedures your firm has, or would adopt, to assure the County that a conflict of interest would not exist for your firm in the future.

It is Welsbach Electric Corp. of L.I.'s policy that should any actual or potential conflict of interest be suspected, management is to be notified immediately. At such time, all parties would be notified and actions pursued to resolve said conflict.

A. Include a resume or detailed description of the Proposer's professional qualifications, demonstrating extensive experience in your profession. Any prior similar experiences, and the results of these experiences, must be identified.

Have you previously uploaded the below information under in the Document Vault?

YES [ ] NO [X]

Is the proposer an individual?

YES [ ] NO [X] Should the proposer be other than an individual, the Proposal MUST include:

i) Date of formation;

10/28/2019

ii) Name, addresses, and position of all persons having a financial interest in the company, including shareholders, members, general or limited partner. If none, explain.

None

No individuals with a financial interest in the company have been attached..

iii) Name, address and position of all officers and directors of the company. If none, explain.

Joseph P. Florio, President / C.E.O. 1 Lyn Oak La, Kings Park, NY
Dan Piquette, Sr., Asst. Vice President 7 Boston Ave, Medford, NY
Michele Valenti, Asst. Secretary / Asst. Treasurer 120 Cockenoe Ave, Babylon, NY

No officers and directors from this company have been attached.

1 File(s) Uploaded: WEC LI Officer Affidavit.pdf

iv) State of incorporation (if applicable);

NY

v) The number of employees in the firm;

50

vi) Annual revenue of firm;

18000000

vii) Summary of relevant accomplishments

Largest traffic and street lighting contractor on Long Island. Public safety is our priority.

viii) Copies of all state and local licenses and permits.

3 File(s) Uploaded: DP, Town of Hemp Tr-Town Exp 12.31.20.pdf, DP, Town of North Hemp Exp 12.31.22.pdf, DP, Town of Oyster Bay Exp 12.31.20.pdf

B. Indicate number of years in business.

64

C. Provide any other information which would be appropriate and helpful in determining the Proposer's capacity and reliability to perform these services.

Current Traffic Signal Maintenance contractor and current Traffic Signal Operations contractor

D. Provide names and addresses for no fewer than three references for whom the Proposer has provided similar services or who are qualified to evaluate the Proposer's capability to perform this work.

Company	New York State D.O.T.		
Contact Person	Andrew Mareska		
Address	140 Nikon Court		
City	Hauppauge	State/Province/Territory	NY
Country	US		
Telephone	(631) 904-3010		
Fax #			
E-Mail Address	AMareska@Dot.State.NY.gov		

Company	Nassau County DPW		
Contact Person	Sheila Dukacz		
Address	1194 Prospect Ave, Suite 183		
City	Westbury	State/Province/Territory	NY
Country	US		
Telephone	(516) 572-0465		
Fax #	(516) 571-9363		
E-Mail Address	SDukacz@NassauCountyNY.gov		

Company	Town of Huntington		
Contact Person	Brad Kusko		
Address	300 Newtown Rd		
City	Plainview	State/Province/Territory	NY
Country	US		
Telephone	(516) 454-0023		
Fax #	(631) 351-3066		
E-Mail Address	Joe_Florio@EmcorGroup.com		

I, Joseph P Florio , hereby acknowledge that a materially false statement willfully or fraudulently made in connection with this form may result in rendering the submitting business entity and/or any affiliated entities non-responsible, and, in addition, may subject me to criminal charges.

I, Joseph P Florio , hereby certify that I have read and understand all the items contained in this form; that I supplied full and complete answers to each item therein to the best of my knowledge, information and belief; that I will notify the County in writing of any change in circumstances occurring after the submission of this form; and that all information supplied by me is true to the best of my knowledge, information and belief. I understand that the County will rely on the information supplied in this form as additional inducement to enter into a contract with the submitting business entity.

CERTIFICATION

A MATERIALLY FALSE STATEMENT WILLFULLY OR FRAUDULENTLY MADE IN CONNECTION WITH THIS QUESTIONNAIRE MAY RESULT IN RENDERING THE SUBMITTING BUSINESS ENTITY NOT RESPONSIBLE WITH RESPECT TO THE PRESENT BID OR FUTURE BIDS, AND, IN ADDITION, MAY SUBJECT THE PERSON MAKING THE FALSE STATEMENT TO CRIMINAL CHARGES.

Name of submitting business: Welsbach Electric Corp. of L.I.

Electronically signed and certified at the date and time indicated by:
Joseph P Florio [JOE_FLORIO@EMCORGROUP.COM]

President / C.E.O.
Title

04/22/2020 12:30:23 PM
Date

Welsbach Electric of Long Island
An EMCOR Company

Welsbach Electric Corp. of L.I.
300 Newtown Road
Plainview, NY 11803
516.454.0023 • Fax: 516.454.0282

Business History Form

Referring to affirmative answer to Question 13

13. In the past 5 years, has this business and/or any of its owners and/or officers and/or any affiliated business been the subject of an investigation by any government agency, including but not limited to federal, state and local regulatory agencies? And/or, in the past 5 years, has any owner and/or officer of an affiliated business been the subject of an investigation by any government agency, including but not limited to federal, state and local regulatory agencies, for matters pertaining to that individual's position at or relationship to an affiliated business.

The following is a schedule detailing same for the past five (5) years:

J.C. HIGGINS CORP (Including its division, Tucker Mechanical)

Date	Agency	Complaint	Outcome
02/23/2015	OSHA	Failure to establish a program consisting of an energy control procedure, employee training and periodic inspections to ensure that before any employee performed any servicing or maintenance on a machine or equipment where the unexpected energizing , startup or release of stored energy could occur and cause injury, the machine or equipment shall be isolated from the energy source and rendered inoperative.	Settlement: 3/16/2015 Paid: $ 6,300 Citation: Serious
03/18/2015	OSHA	The employer did not instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his/her environment to control or eliminate any hazards or other exposure to illness or injury. The employer did to instruct employees in the proper tools to be used to install bits on a Milwaukee coring machine or to inspect drill bits for surfaces that are not smooth which could create a hazard by snagging a loose article of closing or a glove.	Settlement: 4/24/2015 Paid: $ 4,950 Citation: Serious

Except for common ownership by the same parent, there is no direct relationship between Welsbach Electric Corp. of L.I. and J.C. Higgins Corp., including no common management, personnel, facilities or operations.

HERITAGE MECHANICAL SERVICES, INC.

Date	Agency	Complaint	Outcome
12/16/2015	OSHA	Citation 2, Item 2 - Energy Control Program. The employer shall establish a program consisting of energy control procedures and employee training.	Citation: Serious Abated Paid: $ 3,000
12/16/2015	OSHA	Citation 2, Item 3 - Procedures shall be developed, documented and utilized for the control of potentially hazardous energy when employees are engaged in the activities to change dies on the equipment.	Citation: Serious Abated Paid: $ 3,000

HERITAGE MECHANICAL SERVICES, INC. (Cont'd)			
Date	**Agency**	**Complaint**	**Outcome**
12/16/2015	OSHA	Citation 2, Item 4 - Each employee shall be instructed in the purpose and use of the energy control procedure.	Citation: Serious Abated Paid: $ 3,000
12/16/2015	OSHA	Citation 2, Item 5 - Point(s) of operation of machinery were not guarded to present employee(s) from having any part of their body in the danger zone(s) during operating cycle(s).	Citation: Serious Abated Paid: $ 4,800
03/10/2017	NYS Division of Human Rights	Gender Discrimination (Melanie Demicco)	12/14/2017 EEOC issued Right to sue. Have not received service.
07/05/2019	NYS Division of Human Rights	Discrimination (Dilber Pacheco)	Pending

Except for common ownership by the same parent, there is no direct relationship between Welsbach Electric Corp. of L.I. and Heritage Mechanical Services Inc., including no common management, personnel, facilities or operations.

FOREST ELECTRIC CORP			
Date	**Agency**	**Complaint**	**Outcome**
03/25/2015	EEOC	Discrimination Claim: Disability (Nicole Menendez)	Dismissal. Closed.

Except for common ownership by the same parent, there is no direct relationship between Welsbach Electric Corp. of L.I. and Forest Electric Corp., including no common management, personnel, facilities or operations.

WELSBACH ELECTRIC CORP (College Point)			
Date	**Agency**	**Complaint**	**Outcome**
09/12/2019	OSHA	Fatal motor accident while performing traffic signal maintenance on behalf of NYCDOT. OSHA conducting an accident investigation. Welsbach is cooperating with the investigation and has provided information in connection with the investigation. Welsbach has not been advised that it is the target of the investigation and has not received citations in connection with the accident.	Pending

Except for common ownership by the same parent, there is no direct relationship between Welsbach Electric Corp. of L.I. and Welsbach Electric Corp., including no common management, personnel, facilities or operations.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended December 31, 2018

☐ 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 1-8267

EMCOR Group, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**11-2125338**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
301 Merritt Seven Norwalk, Connecticut	**06851-1092**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: (203) 849-7800
Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock	**New York Stock Exchange**

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 Securities Exchange 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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (Section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (Section 229.405) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

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

Large accelerated filer	☒	Accelerated filer	☐	Non-accelerated filer	☐	(Do not check if a smaller reporting company)	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 by Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the common stock held by non-affiliates of the registrant was approximately $3,270,000,000 as of the last business day of the registrant's most recently completed second fiscal quarter, based upon the closing sale price on the New York Stock Exchange reported for such date. Shares of common stock held by each executive officer and director and by each person who owns 5% or more of the outstanding common stock (based solely on filings of such 5% holders) have been excluded from such calculation as such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

Number of shares of the registrant's common stock outstanding as of the close of business on February 15, 2019: 55,997,627 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Part III. Portions of the definitive proxy statement for the 2019 Annual Meeting of Stockholders, which document will be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year to which this Form 10-K relates, are incorporated by reference into Items 10 through 14 of Part III of this Form 10-K.

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FORWARD-LOOKING STATEMENTS

Certain information included in this report, or in other materials we have filed or will file with the Securities and Exchange Commission (the "SEC") (as well as information included in oral statements or other written statements made or to be made by us) contains or may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 (the "1995 Act"). Such statements are being made pursuant to the 1995 Act and with the intention of obtaining the benefit of the "Safe Harbor" provisions of the 1995 Act. Forward-looking statements are based on information available to us and our perception of such information as of the date of this report and our current expectations, estimates, forecasts and projections about the industries in which we operate and the beliefs and assumptions of our management. You can identify these statements by the fact that they do not relate strictly to historical or current facts. They contain words such as "anticipate," "estimate," "expect," "project," "intend," "plan," "believe," "may," "can," "could," "might," variations of such wording and other words or phrases of similar meaning in connection with a discussion of our future operating or financial performance, and other aspects of our business, including market share growth, gross profit, project mix, projects with varying profit margins, selling, general and administrative expenses, and trends in our business and other characterizations of future events or circumstances. From time to time, forward-looking statements are also included in our other periodic reports on Forms 10-Q and 8-K, in press releases, in our presentations, on our website and in other material released to the public. Any or all of the forward-looking statements included in this report and in any other reports or public statements made by us are only predictions and are subject to risks, uncertainties and assumptions, including those identified below in the "Risk Factors" section, the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section, and other sections of this report, and in our Forms 10-Q for the three months ended March 31, 2018, June 30, 2018 and September 30, 2018 and in other reports filed by us from time to time with the SEC as well as in press releases, in our presentations, on our website and in other material released to the public. Such risks, uncertainties and assumptions are difficult to predict, beyond our control and may turn out to be inaccurate, causing actual results to differ materially from those that might be anticipated from our forward-looking statements. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise. However, any further disclosures made on related subjects in our subsequent reports on Forms 10-K, 10-Q and 8-K should be consulted.

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PART I

ITEM 1. BUSINESS

References to the "Company," "EMCOR," "we," "us," "our" and similar words refer to EMCOR Group, Inc. and its consolidated subsidiaries unless the context indicates otherwise.

General

We are one of the largest electrical and mechanical construction and facilities services firms in the United States. In addition, we provide a number of building services and industrial services. In 2018, we had revenues of approximately $8.1 billion. Our services are provided to a broad range of commercial, industrial, utility and institutional customers through approximately 80 operating subsidiaries and joint venture entities. Our executive offices are located at 301 Merritt Seven, Norwalk, Connecticut 06851-1092, and our telephone number at those offices is (203) 849-7800.

We specialize principally in providing construction services relating to electrical and mechanical systems in all types of facilities and in providing various services relating to the operation, maintenance and management of facilities, including refineries and petrochemical plants.

Our electrical and mechanical construction services primarily involve the design, integration, installation, start-up, operation and maintenance, and provision of services relating to:

- Electric power transmission and distribution systems;
- Premises electrical and lighting systems;
- Process instrumentation in the refining, chemical processing, food processing and mining industries;
- Low-voltage systems, such as fire alarm, security and process control systems;
- Voice and data communications systems;
- Roadway and transit lighting and fiber optic lines;
- Heating, ventilation, air conditioning, refrigeration and clean-room process ventilation systems;
- Fire protection systems;
- Plumbing, process and high-purity piping systems;
- Controls and filtration systems;
- Water and wastewater treatment systems;
- Central plant heating and cooling systems;
- Crane and rigging services;
- Millwright services; and
- Steel fabrication, erection, and welding services.

Our building services operations, which are provided to a wide range of facilities, including commercial, utility, institutional and governmental facilities, include:

- Commercial and government site-based operations and maintenance;
- Facility maintenance and services, including reception, security and catering services;
- Outage services to utilities and industrial plants;
- Military base operations support services;
- Mobile mechanical maintenance and services;

- Floor care and janitorial services;
- Landscaping, lot sweeping and snow removal;
- Facilities management;
- Vendor management;
- Call center services;
- Installation and support for building systems;
- Program development, management and maintenance for energy systems;
- Technical consulting and diagnostic services;
- Infrastructure and building projects for federal, state and local governmental agencies and bodies; and
- Small modification and retrofit projects.

Our industrial services are provided to refineries and petrochemical plants and include:

- On-site repairs, maintenance and service of heat exchangers, towers, vessels and piping;
- Design, manufacturing, repair and hydro blast cleaning of shell and tube heat exchangers and related equipment;
- Refinery turnaround planning and engineering services;
- Specialty welding services;
- Overhaul and maintenance of critical process units in refineries and petrochemical plants; and
- Specialty technical services for refineries and petrochemical plants.

We provide construction services and building services directly to corporations, municipalities and federal and state governmental entities, owners/developers, and tenants of buildings. We also provide our construction services indirectly by acting as a subcontractor to general contractors, systems suppliers, construction managers, developers, property managers and other subcontractors. Our industrial services are generally provided directly to refineries and petrochemical plants. Worldwide, as of December 31, 2018, we had approximately 33,000 employees.

Our revenues are derived from many different customers in numerous industries, which have operations in several different geographical areas. Of our 2018 revenues, approximately 95% were generated in the United States and approximately 5% were generated in foreign countries, substantially all in the United Kingdom. In 2018, approximately 61% of revenues were derived from our construction operations, approximately 28% of revenues were derived from our building services operations and approximately 11% of revenues were derived from our industrial services operations.

During the third quarter of 2014, we ceased construction operations in the United Kingdom. The results of the construction operations of our United Kingdom segment for all periods are presented as discontinued operations.

The broad scope of our operations is more particularly described below. For information regarding the revenues, operating income and total assets of each of our segments with respect to each of the last three years, and our revenues and assets attributable to the United States and the United Kingdom for the last three years, see Note 18 - Segment Information of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data.

Operations

The electrical and mechanical construction services industry has grown over the years due principally to the increased content, complexity and sophistication of electrical and mechanical systems, as well as the installation of more technologically advanced voice and data communications, lighting, and environmental control systems in all types of facilities, in large part due to the integration of digital processing and information technology. For these reasons, buildings need extensive electrical distribution systems. In addition, advanced voice and data communication systems require sophisticated power supplies and extensive low-voltage and fiber-optic communications cabling. Moreover, the need for substantial environmental controls within a building, due to the heightened need for climate control to maintain extensive computer systems at optimal temperatures, and the demand for energy savings and environmental controls in individual spaces have over the years expanded opportunities for our electrical and mechanical services businesses. The demand for these services is typically driven by non-residential construction and renovation activity.

Our electrical and mechanical construction services primarily involve the design, integration, installation and start-up of, and provision of services relating to: (a) electric power transmission and distribution systems, including power cables, conduits, distribution panels, transformers, generators, uninterruptible power supply systems and related switch gear and controls; (b) premises electrical and lighting systems, including fixtures and controls; (c) process instrumentation in the refining, chemical processing, food processing and mining industries; (d) low-voltage systems, such as fire alarm, security and process control systems; (e) voice and data communications systems, including fiber-optic and low-voltage cabling; (f) roadway and transit lighting and fiber-optic lines; (g) heating, ventilation, air conditioning, refrigeration and clean-room process ventilation systems; (h) fire protection systems; (i) plumbing, process and high-purity piping systems; (j) controls and filtration systems; (k) water and wastewater treatment systems; (l) central plant heating and cooling systems; (m) cranes and rigging; (n) millwrighting; and (o) steel fabrication, erection and welding.

Our electrical and mechanical construction services generally fall into one of three categories: (a) large installation projects with contracts often in the multi-million dollar range that involve construction of manufacturing and commercial buildings and institutional and public works projects or the fit-out of large blocks of space within commercial buildings, (b) large and medium sized capital and maintenance projects for manufacturing, petrochemical, oil, industrial and commercial clients and (c) smaller installation projects typically involving fit-out, renovation and retrofit work.

Our United States electrical and mechanical construction operations accounted for about 61% of our 2018 worldwide revenues. Of such revenues, approximately 39% were generated by our electrical construction operations and approximately 61% were generated by our mechanical construction operations.

We provide electrical and mechanical construction services for both large and small installation and renovation projects. Our largest projects have included those: (a) for institutional purposes (such as educational and correctional facilities and research laboratories); (b) for manufacturing purposes (such as pharmaceutical plants, steel, pulp and paper mills, chemical, food, automotive and semiconductor manufacturing facilities and power generation); (c) for transportation purposes (such as highways, bridges, airports and transit systems); (d) for commercial purposes (such as office buildings, data centers, convention centers, sports stadiums and shopping malls); (e) for hospitality purposes (such as resorts, hotels and gaming facilities); (f) for water and wastewater purposes; (g) for healthcare purposes; (h) for process facilities (such as oil and gas refineries and chemical processing plants); and (i) for oil and gas pipeline compressor stations and terminal and metering facilities. Our largest projects, which typically range in size from $10.0 million up to and occasionally exceeding $150.0 million and are frequently multi-year projects, represented approximately 30% of our worldwide construction services revenues in 2018.

Our projects of less than $10.0 million accounted for approximately 70% of our worldwide construction services revenues in 2018. These projects are typically completed in less than one year. They usually involve electrical and mechanical construction services when an end-user or owner undertakes construction or modification of a facility to accommodate a specific use. These projects frequently require electrical and mechanical systems to meet special needs such as critical systems power supply, fire protection systems, special environmental controls and high-purity air systems, sophisticated electrical and mechanical systems for data centers, new production lines in manufacturing plants, and office arrangements in existing office buildings. They are not usually dependent upon the new construction market. Demand for these projects and types of services is often prompted by the expiration of leases, changes in technology, or changes in the customer's plant or office layout in the normal course of a customer's business.

We have a broad customer base with many long-standing relationships. We perform construction services pursuant to contracts with owners (such as corporations, municipalities and other governmental entities), general contractors, systems suppliers, construction managers, developers, other subcontractors and tenants of commercial properties. Institutional and public works projects are frequently long-term complex projects that require significant technical and management skills and the financial strength to obtain bid and performance bonds, which are often a condition to bidding for and winning these projects.

We also install and maintain lighting for streets, highways, bridges and tunnels, traffic signals, computerized traffic control systems, and signal and communication systems for mass transit systems in several metropolitan areas. In addition, in the United States, we manufacture and install sheet metal air handling systems for both our own mechanical construction operations and for unrelated mechanical contractors. We also maintain welding and pipe fabrication shops in support of some of our mechanical operations.

Our United States building services segment offers a broad range of services, including operation, maintenance and service of electrical and mechanical systems; commercial and government site-based operations and maintenance; facility maintenance and services, including outage services to utilities and manufacturing facilities; military base operations support services; mobile mechanical maintenance and services; floor care and janitorial services; landscaping, lot sweeping and snow removal; facilities management; vendor management; call center services; installation and support for building systems; program development, management and maintenance with respect to energy systems; technical consulting and diagnostic services; infrastructure and building projects for federal, state and local governmental agencies and bodies; and small modification and retrofit projects.

Our building services operations, which generated approximately 28% of our 2018 worldwide revenues, provide services to owners, operators, tenants and managers of all types of facilities both on a contractual basis for a specified period of time and on an individual task order basis. Of our 2018 building services revenues, approximately 82% were generated in the United States and approximately 18% were generated in the United Kingdom.

Our building services operations have built upon our traditional electrical and mechanical services operations and our client relationships to expand the scope of services being offered and to develop packages of services for customers on a regional and national basis.

Demand for our building services is often driven by customers' decisions to focus on their core competencies, customers' programs to reduce costs, the increasing technical complexity of their facilities and their mechanical, electrical, voice and data and other systems, and the need for increased reliability, especially in electrical and mechanical systems. These trends have led to outsourcing and privatization programs whereby customers in both the private and public sectors seek to contract out those activities that support, but are not directly associated with, the customer's core business. Clients of our building services business include federal and state governments, institutional organizations, utilities, independent power producers, healthcare providers, and major corporations engaged in information technology, telecommunications, pharmaceuticals, financial services, and manufacturing, as well as large retailers and other businesses with geographically dispersed portfolios throughout the United States.

We currently provide building services in a majority of the states in the United States to commercial, industrial, institutional and governmental customers and as part of our operations are responsible for: (a) the oversight of all or most of the facilities operations, including repair and maintenance; (b) servicing, upgrade and retrofit of HVAC, electrical, plumbing and industrial piping and sheet metal systems in existing facilities; (c) interior and exterior services, including floor care and janitorial services, landscaping, lot sweeping and snow removal; (d) diagnostic and solution engineering for building systems and their components; and (e) maintenance and support services to manufacturers and power producers.

We provide building services at a number of preeminent buildings, including those that house the Secret Service, the Federal Deposit Insurance Corporation, the National Foreign Affairs Training Center, and the Department of Health and Human Services, as well as other government facilities, including the NASA Jet Propulsion Laboratory. We also provide building services to a number of military bases, including base operations support services to the Navy National Capital Region and the Army's Fort Huachuca in Arizona, and are involved in a joint venture providing building services to NASA's Armstrong Flight Research Center in Edwards, California. The agreements pursuant to which this division provides services to the federal government are frequently for a base period and a number of option years exercisable at the sole discretion of the government, are often subject to renegotiation by the government in terms of scope of services, and are subject to termination by the government prior to the expiration of the applicable term.

Our United Kingdom subsidiary primarily focuses on building services and currently provides a broad range of services under multi-year agreements to public and private sector customers, including utilities, airlines, airports, real estate property managers, manufacturers, governmental agencies and the finance sector.

Our industrial services business, which generated approximately 11% of our 2018 worldwide revenues, is a recognized leader in the refinery turnaround market and has a growing presence in the petrochemical market. Our industrial services business: (a) provides maintenance, repair and cleaning services for highly engineered shell and tube heat exchangers for refineries and petrochemical plants both in the field and at our own shops, including tube and shell repairs, bundle repairs, and extraction services, and (b) designs and manufactures new highly engineered shell and tube heat exchangers. We also perform a broad range of turnaround and maintenance services for critical units of refineries so as to upgrade, repair and maintain them. Such services include turnaround and maintenance services relating to: (i) engineering and planning services in advance of complex refinery turnarounds; (ii) overhaul and maintenance of critical process units (including hydrofluoric alkylation units, fluid catalytic cracking units, coking units, heaters, heat exchangers and related mechanical equipment) during refinery and petrochemical plant shut downs; (iii) replacement and new construction capital projects for refineries and petrochemical plants; and (iv) other related specialty services such as (a) welding (including pipe welding) and fabrication; (b) heater, boiler, and reformer repairs and replacements; converter repair and revamps; and vessel, exchanger and tower services; (c) tower and column repairs in refineries and petrochemical facilities; (d) installation and repair of refractory materials for critical units in process plants so as to protect equipment from corrosion, erosion, and extreme temperatures; and (e) acid-proofing services to protect critical components at refineries from chemical exposure.

Competition

In our construction services, building services and industrial services businesses, we compete with national, regional and local companies, many of which are small, owner-operated entities that carry on their businesses in a limited geographic area, as well as with certain foreign companies.

We believe that the electrical and mechanical construction services industry is highly fragmented and our competition includes thousands of small companies across the United States. In the United States, there are a few public companies focused on providing either electrical and/or mechanical construction services, such as Integrated Electrical Services, Inc., Comfort Systems USA, Inc. and Tutor Perini Corporation. A majority of our revenues are derived from projects requiring competitive bids; however, an invitation to bid is often conditioned upon prior experience, technical capability and financial strength. Because we have total assets, annual revenues, access to bank credit and surety bonding, and expertise significantly greater than most of our competitors, we believe we have a significant competitive advantage over our competitors in providing electrical and mechanical construction services. Competitive factors in the electrical and mechanical construction services business include: (a) the availability of qualified and/or licensed personnel; (b) reputation for integrity and quality; (c) safety record; (d) cost structure; (e) relationships with customers; (f) geographic diversity; (g) the ability to control project costs; (h) experience in specialized markets; (i) the ability to obtain surety bonding; (j) adequate working capital; (k) access to bank credit; and (l) price. However, there are relatively few significant barriers to entry to several types of our construction services business.

While the building services industry is also highly fragmented, with most competitors operating in a specific geographic region, a number of large United States based corporations such as AECOM Technology Corporation, Johnson Controls, Inc., Fluor Corp., J&J Worldwide Services, Cushman & Wakefield Inc., CB Richard Ellis, Inc., Jones Lang LaSalle Incorporated, Sodexo, Inc., Aramark Corporation and ABM Industries Incorporated are engaged in this field, as are large original equipment manufacturers such as Carrier Corp. and Trane Inc. In addition, we compete with several regional firms serving all or portions of the markets we target, such as Brickman Valley Crest, Inc., Kellermeyer Bergensons Services, Inc., SMS Assist, LLC and Ferandino & Sons, Inc. Our principal services competitors in the United Kingdom include ISS UK Ltd. and MITIE Group plc. The key competitive factors in the building services business include price, service, quality, technical expertise, geographic scope and the availability of qualified personnel and managers. Due to our size, both financial and geographic, and our technical capability and management experience, we believe we are in a strong competitive position in the building services business. However, there are relatively few barriers to entry to most of our building services businesses.

In our industrial services business, we are one of the leading North American providers of maintenance and repair services for, and manufacturing of, highly engineered shell and tube heat exchangers and related equipment and a leader in providing specialized services to refineries and petrochemical plants. The market for providing these services and products to refineries and petrochemical plants is highly fragmented and includes large national industrial services providers, as well as numerous regional companies, including JV Industrial Companies Ltd., Matrix Service Company, Starcon, Turner Industries, Team, Inc., Cust-O-Fab, Dunn Heat, and Wyatt Field Service Company, among others. In the manufacture of heat exchangers, we compete with both U.S. and foreign manufacturers. The key competitive factors in the industrial services market include service, quality, ability to respond quickly, technical expertise, price, safety record and availability of qualified personnel. Due to our technical capabilities, safety record and skilled workforce, we believe that we are in a strong competitive position in the industrial services markets that we serve. Because of the complex tasks associated with turnarounds and the precision required in manufacturing heat exchangers, we believe that the barriers to entry in this business are significant.

Employees

At December 31, 2018, we employed approximately 33,000 people, approximately 57% of whom are represented by various unions pursuant to approximately 400 collective bargaining agreements between our individual subsidiaries and local unions. We believe that our employee relations are generally good. Only two of these collective bargaining agreements are national or regional in scope.

Remaining Unsatisfied Performance Obligations

Our remaining unsatisfied performance obligations ("remaining performance obligations") at December 31, 2018 were $3.96 billion. Remaining performance obligations increase with awards of new contracts and decrease as we perform work and recognize revenue on existing contracts. We include a project within our remaining performance obligations at such time as the project is awarded and agreement on contract terms has been reached. Our remaining performance obligations include amounts related to contracts for which a fixed price contract value is not assigned when a reasonable estimate of total transaction price can be made.

Remaining performance obligations include unrecognized revenues to be realized from uncompleted construction contracts. Although many of our construction contracts are subject to cancellation at the election of our customers, in accordance with industry practice, we do not limit the amount of unrecognized revenue included within remaining performance obligations due to the inherent substantial economic penalty that would be incurred by our customers upon cancellation. We believe our reported remaining performance obligations for our construction contracts are firm and contract cancellations have not had a material adverse effect on us.

Remaining performance obligations also include unrecognized revenues expected to be realized over the remaining term of service contracts. However, to the extent a service contract includes a cancellation clause which allows for the termination of such contract by either party without a substantive penalty, the remaining contract term, and therefore, the amount of unrecognized revenues included within remaining performance obligations, is limited to the notice period required for the termination.

Our remaining performance obligations are comprised of: (a) original contract amounts, (b) change orders for which we have received written confirmations from our customers, (c) pending change orders for which we expect to receive confirmations in the ordinary course of business, (d) claim amounts that we have made against customers for which we have determined we have a legal basis under existing contractual arrangements and as to which the variable consideration constraint does not apply, and (e) other forms of variable consideration to the extent that such variable consideration has been included within the transaction price of our contracts. Such claim and other variable consideration amounts were immaterial for all periods presented.

We estimate that 83% of our remaining performance obligations as of December 31, 2018 will be recognized as revenues during 2019.

Available Information

We file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission, which we refer to as the "SEC". These filings are available to the public over the internet at the SEC's website at http://www.sec.gov. You may also read and copy any document we file at the SEC's Public Reference Room located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room.

Our Internet address is www.emcorgroup.com. We make available free of charge through www.emcorgroup.com our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. References to our website addressed in this report are provided as a convenience and do not constitute, and should not be viewed as, an incorporation by reference of the information contained on, or available through, the website. Therefore, such information should not be considered part of this report.

Our Board of Directors has an audit committee, a compensation and personnel committee and a nominating and corporate governance committee. Each of these committees has a formal charter. We also have Corporate Governance Guidelines, which include guidelines regarding related party transactions, a Code of Ethics for our Chief Executive Officer and Senior Financial Officers, and a Code of Ethics and Business Conduct for Directors, Officers and Employees. Copies of these charters, guidelines and codes, and any waivers or amendments to such codes which are applicable to our executive officers, senior financial officers or directors, can be obtained free of charge on our website, www.emcorgroup.com.

You may request a copy of the foregoing filings (excluding exhibits), charters, guidelines and codes and any waivers or amendments to such codes which are applicable to our executive officers, senior financial officers or directors, at no cost by writing to us at EMCOR Group, Inc., 301 Merritt Seven, Norwalk, CT 06851-1092, Attention: Corporate Secretary, or by telephoning us at (203) 849-7800.

ITEM 1A. RISK FACTORS

Our business is subject to a variety of risks, including the risks described below as well as adverse business and market conditions and risks associated with foreign operations. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties not known to us or not described below which we have not determined to be material may also impair our business operations. You should carefully consider the risks described below, together with all other information in this report, including information contained in the "Business," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Quantitative and Qualitative Disclosures about Market Risk" sections. If any of the following risks actually occur, our business, financial position, results of operations and/or cash flows could be adversely affected, and we may not be able to achieve our goals. Such events may cause actual results to differ materially from expected and historical results, and the trading price of our common stock could decline.

Economic downturns have led to reductions in demand for our services. Negative conditions in the credit markets may adversely impact our ability to operate our business. The level of demand from our clients for our services has been, in the past, adversely impacted by slowdowns in the industries we service, as well as in the economy in general. When the general level of economic activity has been reduced from historical levels, certain of our ultimate customers have delayed or cancelled projects or capital spending, especially with respect to more profitable private sector work, and such slowdowns adversely affect our ability to grow, reducing our revenues and profitability. A number of economic factors, including financing conditions for the industries we serve, have, in the past, adversely affected our ultimate customers and their ability or willingness to fund expenditures. General concerns about the fundamental soundness of domestic and foreign economies may cause ultimate customers to defer projects even if they have credit available to them. Worsening of financial and macroeconomic conditions could have a significant adverse effect on our revenues and profitability.

Many of our clients depend on the availability of credit to help finance their capital and maintenance projects. At times, tightened availability of credit has negatively impacted the ability of existing and prospective ultimate customers to fund projects we might otherwise perform, particularly those in the more profitable private sector. As a result, our ultimate customers may defer such projects for an unknown, and perhaps lengthy, period. Any such deferrals would inhibit our growth and would adversely affect our results of operations.

In a weak economic environment, particularly in a period of restrictive credit markets, we may experience greater difficulties in collecting payments from, and negotiating change orders and/or claims with, our clients due to, among other reasons, a diminution in our ultimate customers' access to the credit markets. If clients delay in paying or fail to pay a significant amount of our outstanding receivables, or we fail to successfully negotiate a significant portion of our change orders and/or claims with clients, it could have an adverse effect on our liquidity, results of operations and financial position.

Our business has traditionally lagged recoveries in the general economy and, therefore, after an economic downtown we may not recover as quickly as the economy at large.

The loss of one or a few customers could have an adverse effect on us. A few clients have in the past and may in the future account for a significant portion of our revenues in any one year or over a period of several consecutive years. Although we have long-standing relationships with many of our significant clients, our clients may unilaterally reduce, fail to renew or terminate their contracts with us at any time. A loss of business from a significant client could have a material adverse effect on our business, financial position and results of operations.

Our business is vulnerable to the cyclical nature of the markets in which our clients operate and is dependent upon the timing and funding of new awards. We provide construction and maintenance services to ultimate customers operating in a number of markets which have been, and we expect will continue to be, cyclical and subject to significant fluctuations due to a variety of factors beyond our control, including economic conditions and changes in client spending.

Regardless of economic or market conditions, investment decisions by our ultimate customers may vary by location or as a result of other factors like the availability of labor, relative construction costs or competitive conditions in their industries. Because we are dependent on the timing and funding of new awards, we are therefore vulnerable to changes in our clients' markets and investment decisions.

Our business may be adversely affected by significant reductions in government spending or delays or disruptions in the government appropriations process. Some of our businesses derive a significant portion of their revenues from federal, state and local governmental agencies. As a result, reduced or delayed spending by the federal government and/or state and local governments may have a material and adverse impact on our business, financial condition, results of operations and cash flows. Significant reductions in spending aimed at reducing federal, state or local budget deficits, the absence of a bipartisan agreement on the federal government's budget, the impact of sequestration or other changes in budget priorities could result in the deferral, delay, disruption or cancellation of projects or contracts that we might otherwise have sought to perform, personnel reductions or the closure of government facilities and offices. These potential events could impact the level of demand for our services and our ability to execute, complete and receive compensation for our current contracts, or bid for and enter into new contracts with governmental agencies.

An increase in the prices of certain materials used in our businesses and protectionist trade measures could adversely affect our businesses. We are exposed to market risk of increases in certain commodity prices of materials, such as copper and steel, which are used as components of supplies or materials utilized in all of our operations. We are also exposed to increases in energy prices, particularly as they relate to gasoline prices for our fleet of approximately 11,000 vehicles. While we believe we can increase our prices to adjust for some price increases in commodities, there can be no assurance that price increases of commodities, if they were to occur, would be recoverable. Additionally, our fixed price contracts do not allow us to adjust our prices and, as a result, increases in material or fuel costs could reduce our profitability with respect to such projects. Fluctuations in energy prices as well as in commodity prices of materials, whether resulting from fluctuations in market supply or demand or geopolitical conditions, including an increase in trade protection measures such as tariffs and the disruption, modification or cancellation of multilateral trade agreements, may adversely affect our customers and as a result cause them to curtail the use of our services. Prolonged volatility in the price of oil has caused some of our refinery customers to curtail or delay maintenance or capital projects. Continued volatility in the price of oil may adversely affect some of our refinery customers causing them to defer maintenance and/or capital projects performed by companies in our United States industrial services segment or delay purchases or repairs of heat exchangers that are manufactured and repaired by some of our companies.

Our industry is highly competitive. Our industry is served by numerous small, owner-operated private companies, a few public companies and several large regional companies. In addition, relatively few barriers prevent entry into most of our businesses. As a result, any organization that has adequate financial resources and access to technical expertise may become a competitor. Competition in our industry depends on numerous factors, including price. Certain of our competitors have lower overhead cost structures and, therefore, are able to provide their services at lower rates than we are currently able to provide. In addition, some of our competitors have greater resources than we do. We cannot be certain that our competitors will not develop the expertise, experience and resources necessary to provide services that are superior in quality and lower in price to ours. Similarly, we cannot be certain that we will be able to maintain or enhance our competitive position within our industries or maintain a customer base at current levels. We may also face competition from the in-house service organizations of existing or prospective customers, particularly with respect to building services. Many of our customers employ personnel who perform some of the same types of building services that we do. We cannot be certain that our existing or prospective customers will continue to outsource building services in the future.

We are subject to many laws and regulations in the jurisdictions in which we operate; changes to such laws and regulations may result in additional costs and impact our operations. We are committed to upholding the highest standards of corporate governance and legal and ethical compliance. We are subject to many laws and regulations, including various laws and regulations that apply specifically to U.S. public companies. These include the rules and regulations of the New York Stock Exchange, the Sarbanes-Oxley Act of 2002 and the Dodd-Frank Wall Street Reform and Consumer Protection Act, as well as the various regulations, standards and guidance put forth by the SEC and other governmental agencies to implement those laws. New laws, rules and regulations, or changes to existing laws or their interpretations, could create added legal and financial costs and uncertainty for us. In addition, our United Kingdom operations are subject to laws and regulations that are in some cases different from those of the United Sates, including labor laws such as the U.K. Modern Slavery Act and laws and regulations governing information collected from employees, customers and others, specifically the European Union's General Data Protection Regulation, which went into effect in May 2018. These laws and regulations, and the economic, financial, political and regulatory impact of the United Kingdom's decision to leave the European Union, could increase the cost and complexity of doing business in the U.K. and negatively impact our financial position and results of operations. Our efforts to comply with evolving laws, regulations and reporting standards may increase our general and administrative expenses, divert management time and attention or limit our operational flexibility, all of which could have a material adverse effect on our financial position and results of operations. Many of our non-public competitors and competitors operating solely in the U.S. are not subject to these laws and regulations and the related costs and expenses of compliance.

The Tax Cuts and Jobs Act of 2017 could have negative or unexpected consequences for our customers; reduced government spending may adversely affect our own business. The long-term impact of the Tax Cuts and Jobs Act of 2017 on the general economy cannot be reliably predicted at this time and will require rule-making and interpretation in a number of areas. To the extent that certain of our customers are negatively affected by the new tax law and/or any uncertainty around the changes in the law or how it will be enforced, they may reduce spending and defer, delay or cancel projects or contracts. Reduced government revenues resulting from the new tax law may also lead to reduced government spending, which may negatively impact our government contracting business.

We are a decentralized company, which presents certain risks. While we believe decentralization has enhanced our growth and enabled us to remain responsive to opportunities and to our customers' needs, it necessarily places significant control and decision-making powers in the hands of local management. This presents various risks, including the risk that we may be slower or less able to identify or react to problems affecting a key business than we would in a more centralized environment.

Our business may be affected by weather conditions. Adverse weather conditions, particularly during the winter season, could impact our construction services operations as those conditions affect our ability to perform efficient work outdoors in certain regions of the United States, adversely affecting the revenues and profitability of those operations. However, the absence of snow in certain regions of the United States during the winter could also cause us to experience reduced revenues and profitability in our United States building services segment, which has meaningful snow removal operations. In addition, cooler than normal temperatures during the summer months could reduce the need for our services, particularly in our businesses that install or service air conditioning units, and result in reduced revenues and profitability during the period such unseasonal weather conditions persist. Hurricanes and other severe weather may cause our projects to be delayed or canceled by our customers. The increased incidence of severe weather and its related impacts, such as hurricanes, flooding and wildfires, could adversely impact our operations.

Natural disasters, terrorist attacks and other catastrophic events could disrupt our operations and services. Natural disasters, acts of terrorism and other catastrophic events, and the actions taken by the United States and/or other governments or actors in response to such events, may result in property damage, supply disruption or economic dislocations throughout the country. Although it is not possible to predict such events or their consequences, these events could increase the volatility of our financial results due to decreased demand and unforeseen costs, with partial or no corresponding compensation from clients.

Our business may be affected by the work environment. We perform our work under a variety of conditions, including but not limited to, difficult terrain, difficult site conditions and busy urban centers where delivery of materials and availability of labor may be impacted, clean-room environments where strict procedures must be followed, and sites which contain harsh or hazardous conditions, especially at chemical plants, refineries and other process facilities. Performing work under these conditions can negatively affect efficiency and, therefore, our profitability.

Our dependence upon fixed price contracts could adversely affect our business. We currently generate, and expect to continue to generate, a significant portion of our revenues from fixed price contracts. We must estimate the total costs of a particular project to bid for fixed price contracts. The actual cost of labor and materials, however, may vary from the costs we originally estimated. These variations, along with other risks, inherent in performing fixed price contracts, may cause actual gross profits from projects to differ from those we originally estimated and could result in reduced profitability or losses on projects. Depending upon the size of a particular project, variations from the estimated contract costs can have a significant impact on our operating results for any fiscal quarter or year.

We could incur additional costs to cover certain guarantees. In some instances, we guarantee completion of a project by a specific date or price, cost savings, achievement of certain performance standards or performance of our services at a certain standard of quality. If we subsequently fail to meet such guarantees, we may be held responsible for costs resulting from such failures. Such a failure could result in our payment of liquidated or other damages. To the extent that any of these events occur, the total costs of a project could exceed the original estimated costs, and we would experience reduced profits or, in some cases, a loss.

Many of our contracts, especially our building services contracts for governmental and non-governmental entities, may be canceled on short notice, and we may be unsuccessful in replacing such contracts if they are canceled or as they are completed or expire. We could experience a decrease in revenues, net income and liquidity if any of the following occur:

- customers cancel a significant number of contracts;
- we fail to win a significant number of our existing contracts upon re-bid;
- we complete a significant number of non-recurring projects and cannot replace them with similar projects; or
- we fail to reduce operating and overhead expenses consistent with any decrease in our revenues.

We may be unsuccessful in generating internal growth. Our ability to generate internal growth will be affected by, among other factors, our ability to:

- expand the range of services offered to customers to address their evolving needs;
- attract new customers; and
- retain and/or increase the number of projects performed for existing customers.

In addition, existing and potential customers in the past have reduced, and may continue to reduce, the number or size of projects available to us because of general economic conditions or due to their inability to obtain capital or pay for services we provide. Many of the factors affecting our ability to generate internal growth are beyond our control, and we cannot be certain that our strategies will be successful or that we will be able to generate cash flow sufficient to fund our operations and to support internal growth. If we are not successful, we may not be able to achieve internal growth, expand operations or grow our business.

The departure of key personnel could disrupt our business. We depend on the continued efforts of our senior management. The loss of key personnel, or the inability to hire and retain qualified executives, could negatively impact our ability to manage our business.

We may be unable to attract and retain skilled employees. Our ability to grow and maintain productivity and profitability will be limited by our ability to employ, train and retain skilled personnel necessary to meet our requirements. We are dependent upon our project managers and field supervisors who are responsible for managing our projects, and there can be no assurance that any individual will continue in his or her capacity for any particular period of time. The loss of such qualified employees could have an adverse effect on our business. We cannot be certain that we will be able to maintain an adequate skilled labor force necessary to operate efficiently and to support our business strategy or that labor expenses will not increase as a result of a shortage in the supply of these skilled personnel. The availability and cost of a skilled labor force could be impacted by factors we cannot control, including changes in the unemployment rate, prevailing wage rates, benefit costs and competition for labor from our competitors in the markets we serve. Labor shortages or increased labor costs could impair our ability to maintain our business or grow our revenues.

Our unionized workforce could adversely affect our operations, and we participate in many multiemployer union pension plans which could result in substantial liabilities being incurred. As of December 31, 2018, approximately 57% of our employees were covered by collective bargaining agreements. Although the majority of these agreements prohibit strikes and work stoppages, we cannot be certain that strikes or work stoppages will not occur in the future. However, only two of our collective bargaining agreements are national or regional in scope, and not all of our collective bargaining agreements expire at the same time. Strikes or work stoppages would adversely impact our relationships with our customers and could have a material adverse effect on our financial position, results of operations and cash flows. We contribute to approximately 200 multiemployer union pension plans based upon wages paid to our union employees that could result in our being responsible for a portion of the unfunded liabilities under such plans. Our potential liability for unfunded liabilities could be material. Under the Employee Retirement Income Security Act, we may become liable for our proportionate share of a multiemployer pension plan's underfunding if we cease to contribute to that pension plan or significantly reduce the employees in respect of which we make contributions to that pension plan. See Note 15 - Retirement Plans of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for additional information regarding multiemployer plans.

Fluctuating foreign currency exchange rates impact our financial results. We have operations in the United Kingdom, which in 2018 accounted for approximately 5% of our revenues. Our reported financial position and results of operations are exposed to the effects (both positive and negative) that fluctuating exchange rates have on the process of translating the financial statements of our United Kingdom operations, which are denominated in local currencies, into the U.S. dollar. It is unclear at this time what effect, if any, the United Kingdom's potential exit from the European Union may have on such exchange rates.

Our failure to comply with environmental laws could result in significant liabilities. Our operations are subject to various laws, including environmental laws and regulations, among which many deal with the handling and disposal of asbestos and other hazardous or universal waste products, PCBs and fuel storage. A violation of such laws and regulations may expose us to various claims, including claims by third parties, as well as remediation costs and fines. We own and lease many facilities. Some of these facilities contain hazardous materials, such as lead and asbestos, and fuel storage tanks, which may be above or below ground. If these tanks were to leak, we could be responsible for the cost of remediation as well as potential fines. As a part of our business, we also install fuel storage tanks and are sometimes required to deal with hazardous materials, all of which may expose us to environmental liability.

In addition, new laws and regulations, stricter enforcement of existing laws and regulations, the discovery of previously unknown contamination or leaks, the imposition of new clean-up requirements, or the exposure of our employees or other contractors to hazardous materials, could require us to incur significant costs or become the basis for new or increased liabilities that could harm our financial position and results of operations, although certain of these costs might be covered by insurance. In some instances, we have obtained indemnification or covenants from third parties (including predecessors or lessors) for such clean-up and other obligations and liabilities, and we believe such indemnities and covenants are adequate to cover such obligations and liabilities. However, such third-party indemnities or covenants may not cover all of such costs or third-party indemnitors may default on their obligations. In addition, unanticipated obligations or liabilities, or future obligations and liabilities, may have a material adverse effect on our business operations. Further, we cannot be certain that we will be able to identify, or be indemnified for, all potential environmental liabilities relating to any acquired business.

Adverse resolution of litigation and other legal and regulatory proceedings may harm our operating results or financial position. From time to time, we are a party to lawsuits and other legal proceedings, most of which occur in the normal course of our business. These actions and proceedings may involve actual or threatened claims by customers, employees or other third parties for, among other things, compensation for alleged personal injury, workers' compensation, employment discrimination, breach of contract, property damage or other general commercial disputes. In addition, we may be subject to class action claims alleging violations of the Fair Labor Standards Act and state wage and hour laws. Litigation and other legal proceedings can be expensive, lengthy and disruptive to normal business operations, and their outcome is inherently uncertain and difficult to accurately predict or quantify. In addition, plaintiffs in many types of actions may seek punitive damages, civil penalties, consequential damages or other losses, or injunctive or declaratory relief. An unfavorable resolution of a particular legal proceeding or claim, whether through a settlement, mediation, court judgment or otherwise, could have a material adverse effect on our business, operating results, financial position and cash flows, and in some cases, on our reputation or our ability to obtain projects from customers, including governmental entities. See Item 3. Legal Proceedings and Note 16 - Commitments and Contingencies of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data, for more information regarding legal proceedings in which we are involved.

Opportunities within the government sector could lead to increased governmental rules and regulations applicable to us. As a government contractor we are subject to a number of procurement rules and other regulations, any deemed violation of which could lead to fines or penalties or a loss of business. Government agencies routinely audit and investigate government contractors. Government agencies may review a contractor's performance under its contracts, cost structure and compliance with applicable laws, regulations and standards. If government agencies determine through these audits or reviews that costs are improperly allocated to specific contracts, they will not reimburse the contractor for those costs or may require the contractor to refund previously reimbursed costs. If government agencies determine that we are engaged in improper activity, we may be subject to civil and criminal penalties and debarment or suspension from doing business with the government. Government contracts are also subject to renegotiation of terms by the government, termination by the government prior to the expiration of the term, and non-renewal by the government.

A material portion of our business depends on our ability to provide surety bonds. We may be unable to compete for or work on certain projects if we are not able to obtain the necessary surety bonds. Our construction contracts frequently require that we obtain from surety companies and provide to our customers payment and performance bonds as a condition to the award of such contracts. Such surety bonds secure our payment and performance obligations. Under standard terms in the surety market, surety companies issue bonds on a project-by-project basis and can decline to issue bonds at any time or require the posting of collateral as a condition to issuing any bonds. Current or future market conditions, as well as changes in our sureties' assessment of our or their own operating and financial risk, could cause our surety companies to decline to issue, or substantially reduce the amount of, bonds for our work or to increase our bonding costs. These actions can be taken on short notice. If our surety companies were to limit or eliminate our access to bonding, our alternatives would include seeking bonding capacity from other surety companies, increasing business with clients that do not require bonds and posting other forms of collateral for project performance, such as letters of credit, parent company guarantees or cash. We may be unable to secure these alternatives in a timely manner, on acceptable terms, or at all. Accordingly, if we were to experience an interruption or reduction in the availability of bonding, we may be unable to compete for or work on certain projects. Increases in the costs of surety bonds could also adversely impact our profitability.

We are effectively self-insured against many potential liabilities. Although we maintain insurance policies with respect to a broad range of risks, including automobile liability, general liability, workers' compensation and employee group health, these policies do not cover all possible claims and certain of the policies are subject to large deductibles. Accordingly, we are effectively self-insured for a substantial number of actual and potential claims. In addition, if any of our insurance carriers defaulted on its obligations to provide insurance coverage by reason of its insolvency or for other reasons, our exposure to claims would increase and our profits would be adversely affected. Our estimates for unpaid claims and expenses are based on known facts, historical trends and industry averages, utilizing the assistance of an actuary. The determination of such estimated liabilities and their appropriateness are reviewed and updated at least quarterly. However, these liabilities are difficult to assess and estimate due to many relevant factors, the effects of which are often unknown, including the severity of an injury or damage, the determination of liability in proportion to other parties, the timeliness of reported claims, the effectiveness of our risk management and safety programs and the terms and conditions of our insurance policies. Our accruals are based upon known facts, historical trends and our reasonable estimate of future expenses, and we believe such accruals are adequate. However, unknown or changing trends, risks or circumstances, such as increases in claims, a weakening economy, increases in medical costs, changes in case law or legislation, or changes in the nature of the work we perform, could render our current estimates and accruals inadequate. In such case, adjustments to our balance sheet may be required and these increased liabilities would be recorded in the period that the experience becomes known. Insurance carriers may be unwilling, in the future, to provide our current levels of coverage without a significant increase in insurance premiums and/or collateral requirements to cover our obligations to them. Increased collateral requirements may be in the form of additional letters of credit and/or cash, and an increase in collateral requirements could significantly reduce our liquidity. If insurance premiums increase, and/or if insurance claims are higher than our estimates, our profitability could be adversely affected.

We may incur liabilities or suffer negative financial impacts relating to occupational, health and safety matters. Our operations are subject to extensive laws and regulations relating to the maintenance of safe conditions in the workplace. While we have invested, and will continue to invest, substantial resources in our robust occupational, health and safety programs, many of our businesses involve a high degree of operational risk, and there can be no assurance that we will avoid significant exposure. These hazards can cause personal injury and loss of life, severe damage to or destruction of property and equipment and other consequential damages and could lead to suspension of operations, large damage claims and, in extreme cases, criminal liability.

Our customers seek to minimize safety risks on their sites and they frequently review the safety records of contractors during the bidding process. If our safety record were to substantially deteriorate over time, we might become ineligible to bid on certain work and our customers could cancel our contracts and/or not award us future business.

Acquisitions could adversely affect our business and results of operations. As part of our growth strategy, we acquire companies that expand, complement and/or diversify our businesses. Realization of the anticipated benefits of an acquisition will depend, among other things, upon our ability to: (a) effectively conduct due diligence on companies we propose to acquire to identify problems at these companies and (b) recognize incompatibilities or other obstacles to successful integration of the acquired business with our other operations and gain greater efficiencies and scale that will translate into reduced costs in a timely manner. However, there can be no assurance that an acquisition we may make in the future will provide the benefits anticipated when entering into the transaction. Acquisitions we have made and future acquisitions may expose us to operational challenges and risks, including the diversion of management's attention from our existing businesses, the failure to retain key personnel or customers of the acquired business and the assumption of unknown liabilities of the acquired business for which there are inadequate reserves. Our ability to sustain our growth and maintain our competitive position may be affected by our ability to identify and acquire desirable businesses and successfully integrate any business acquired.

Our results of operations could be adversely affected as a result of goodwill and other identifiable intangible asset impairments. When we acquire a business, we record an asset called "goodwill" equal to the excess amount paid for the business, including liabilities assumed, over the fair value of the tangible and identifiable intangible assets of the business acquired. The Financial Accounting Standards Board ("FASB") requires that all business combinations be accounted for using the acquisition method of accounting and that certain identifiable intangible assets acquired in a business combination be recognized as assets apart from goodwill. FASB Accounting Standard Codification ("ASC") Topic 350, "Intangibles-Goodwill and Other" ("ASC 350"), provides that goodwill and other identifiable intangible assets that have indefinite useful lives not be amortized, but instead be tested at least annually for impairment, and identifiable intangible assets that have finite useful lives should continue to be amortized over their useful lives and be tested for impairment whenever facts and circumstances indicate that the carrying values may not be fully recoverable. ASC 350 also provides specific guidance for testing goodwill and other non-amortized identifiable intangible assets for impairment, which we test annually each October 1. ASC 350 requires management to make certain estimates and assumptions to allocate goodwill to reporting units and to determine the fair value of reporting unit net assets and liabilities. Such fair value is determined using discounted estimated future cash flows. Our development of the present value of future cash flow projections is based upon assumptions and estimates by management from a review of our operating results, business plans, anticipated growth rates and margins and the weighted average cost of capital, among others. Much of the information used in assessing fair value is outside the control of management, such as interest rates, and these assumptions and estimates can change in future periods. There can be no assurance that our estimates and assumptions made for purposes of our goodwill and identifiable intangible asset impairment testing will prove to be accurate predictions of the future. If our assumptions regarding business plans or anticipated growth rates and/or margins are not achieved, or there is a rise in interest rates, we may be required to record goodwill and/or identifiable intangible asset impairment charges in future periods, whether in connection with our next annual impairment testing on October 1, 2019 or earlier, if an indicator of an impairment is present prior to the quarter in which the annual goodwill impairment test is to be performed. It is not possible at this time to determine if any such impairment charge would result or, if it does, whether such a charge would be material to our results of operations.

Amounts included in our remaining performance obligations may not result in actual revenues or translate into profits. Many contracts are subject to cancellation or suspension on short notice at the discretion of the client, and the contracts in our remaining performance obligations are subject to changes in the scope of services to be provided as well as adjustments to the costs relating to the contract. Accordingly, there is no assurance that revenue from remaining performance obligations will actually be realized. If our remaining performance obligations fail to materialize, we could experience a decline in profitability, which could result in a deterioration of our financial position and liquidity.

We recognize revenue for the majority of our construction projects based on estimates; therefore, variations of actual results from our assumptions may reduce our profitability. In accordance with United States generally accepted accounting principles, we record revenue as work on the contract progresses. The cumulative amount of revenues recorded on a contract at a specified point in time is that percentage of total estimated revenues that costs incurred to date bear to estimated total costs. Accordingly, contract revenues and total cost estimates are reviewed and revised as the work progresses. Adjustments are reflected in contract revenues in the period when such estimates are revised. Estimates are based on management's reasonable assumptions and experience, but are only estimates. Variations of actual results from assumptions on an unusually large project or on a number of average size projects could be material. We are also required to immediately recognize the full amount of the estimated loss on a contract when estimates indicate such a loss. Such adjustments and accrued losses could result in reduced profitability, which could negatively impact our cash flow from operations.

We are increasingly dependent on sophisticated information technology systems; disruption, failure or cyber-security breaches of these systems could adversely affect our business and results of operations. We and our customers and third party providers rely on information technology systems, hardware and software to run critical accounting, project management and financial information systems. We rely upon security measures, products and services to secure our information technology systems and the confidential, proprietary and sensitive information they contain. However, our information technology systems and those of our customers and third-party providers could become subject to cyber-attacks, hacking, or other intrusions, failure or damage, which could result in operational disruptions or information misappropriation, such as theft of intellectual property or inappropriate disclosure of customer data or confidential or personal information. In addition, the proper functioning of these systems may be impacted by other causes and circumstances beyond our control, including the decision by software vendors to discontinue further development, integration or long-term software maintenance support for our information systems, or hardware interruption, damage or disruption as a result of power outages, natural disasters, or computer network failures. To the extent that our information technology systems, or those of our customers or third party providers, are disabled for a long period of time, certain key business processes could be interrupted. Any such operational disruptions and/or misappropriation or inappropriate disclosure of information could result in lost or reduced revenues, negative publicity, or business delays that could have a material adverse effect on our business, financial position and results of operations. We may also be required to expend significant resources to protect against the threat of such system disruptions and security breaches or to alleviate problems caused by such disruptions and breaches.

Our failure to comply with anti-bribery statutes such as the Foreign Corrupt Practices Act and the U.K. Bribery Act of 2010 could result in fines, criminal penalties and other sanctions that could have an adverse effect on our business. The U.S. Foreign Corrupt Practices Act (the "FCPA"), the U.K. Bribery Act of 2010 (the "Bribery Act") and similar anti-bribery laws in other jurisdictions generally prohibit companies and their intermediaries from making improper payments to foreign officials for the purpose of obtaining or retaining business or securing an improper advantage. We conduct a modest amount of business in a few countries that have experienced corruption to some degree. Our policies require that all of our employees, subcontractors, vendors and agents worldwide must comply with applicable anti-bribery laws. However, there is no assurance that our policies and procedures to ensure compliance with the FCPA, the Bribery Act and similar anti-bribery laws will eliminate the possibility of liability under such laws for actions taken by our employees, agents and intermediaries. If we were found to be liable for violations under the FCPA, the Bribery Act or similar anti-bribery laws, either due to our own acts or omissions or due to the acts or omissions of others, we could incur substantial legal expenses and suffer civil and criminal penalties or other sanctions, which could have a material adverse effect on our business, financial condition and results of operations, as well as our reputation. In addition, whether or not such expenses, penalties or sanctions are actually incurred, the actual or alleged violation of the FCPA, Bribery Act or similar anti-bribery laws could have a negative impact on our reputation.

Certain provisions of our corporate governance documents could make an acquisition of us, or a substantial interest in us, more difficult. The following provisions of our certificate of incorporation and by-laws, as currently in effect, as well as Delaware law, could discourage potential proposals to acquire us, delay or prevent a change in control of us, or limit the price that investors may be willing to pay in the future for shares of our common stock:

- our certificate of incorporation permits our board of directors to issue "blank check" preferred stock and to adopt amendments to our by-laws;
- our by-laws contain restrictions regarding the right of our stockholders to nominate directors and to submit proposals to be considered at stockholder meetings;
- our certificate of incorporation and by-laws limit the right of our stockholders to call a special meeting of stockholders and to act by written consent; and
- we are subject to provisions of Delaware law, which prohibit us from engaging in any of a broad range of business transactions with an "interested stockholder" for a period of three years following the date such stockholder becomes classified as an interested stockholder.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our operations are conducted primarily at leased properties. The following table lists facilities over 50,000 square feet, both leased and owned, and identifies the business segment that is the principal user of each such facility.

	Approximate Square Feet	Lease Expiration Date, Unless Owned
17905 and 18101 S. Broadway Carson, California (b)	68,160	7/31/2020
1168 Fesler Street El Cajon, California (b)	67,560	8/31/2025
22302 Hathaway Avenue Hayward, California (b)	105,000	7/31/2021
4462 Corporate Center Drive Los Alamitos, California (a)	57,863	12/31/2019
3535 Medford Street Los Angeles, California (a)	60,000	5/31/2021
940 Remillard Court San Jose, California (c)	119,560	7/31/2029
55 Gerber Road South Windsor, Connecticut (c)	60,047	12/31/2028
3100 Woodcreek Drive Downers Grove, Illinois (a)	56,551	7/31/2027
2219 Contractors Drive Fort Wayne, Indiana (b)	175,000	7/31/2023
5210 Investment Drive Fort Wayne, Indiana (b)	99,579	10/31/2023
7614 and 7720 Opportunity Drive Fort Wayne, Indiana (b)	144,695	7/31/2026
2655 Garfield Avenue Highland, Indiana (a)	57,765	6/30/2019
4250 Highway 30 St. Gabriel, Louisiana (d)	90,000	Owned
1750 Swisco Road Sulphur, Louisiana (d)	112,000	Owned
111-01 and 111-21 14th Avenue College Point, New York (a)	73,013	2/28/2024
70 Schmitt Boulevard Farmingdale, New York (b)	76,380	7/31/2026
3000 Comfort Court Raleigh, North Carolina (c)	70,000	12/31/2023
6101 and 6025 Triangle Drive Raleigh, North Carolina (b)	53,394	12/31/2024
2900 Newpark Drive Barberton, Ohio (b)	113,663	10/31/2027
16251 SE 98th Avenue Clackamas, Oregon (a)	98,860	12/31/2020
1700 Markley Street Norristown, Pennsylvania (c)	90,767	9/30/2021
6045 East Shelby Drive Memphis, Tennessee (c)	53,618	5/31/2023
937 Pine Street Beaumont, Texas (d)	78,962	Owned

	Approximate Square Feet	Lease Expiration Date, Unless Owned
895 North Main Street Beaumont, Texas (d)	75,000	Owned
410 Flato Road Corpus Christi, Texas (d)	57,000	Owned
5550 Airline Drive and 25 Tidwell Road Houston, Texas (b)	97,936	12/31/2024
12415 Highway 225 La Porte, Texas (d)	78,000	Owned
2455 West 1500 South Salt Lake City, Utah (a)	59,677	4/30/2025
2345 South CCI Way West Valley City, Utah (c)	69,229	8/31/2032

We believe that our property, plant and equipment are well maintained, in good operating condition and suitable for the purposes for which they are used.

See Note 16 - Commitments and Contingencies of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for additional information regarding lease costs. We utilize substantially all of our leased or owned facilities and believe there will be no difficulty either in negotiating the renewal of our real property leases as they expire or in finding alternative space, if necessary.

(a) Principally used by a company engaged in the “United States electrical construction and facilities services” segment.

(b) Principally used by a company engaged in the “United States mechanical construction and facilities services” segment.

(c) Principally used by a company engaged in the “United States building services” segment.

(d) Principally used by a company engaged in the “United States industrial services” segment.

ITEM 3. LEGAL PROCEEDINGS

We are involved in several proceedings in which damages and claims have been asserted against us. We believe that we have a number of valid defenses to such proceedings and claims and intend to vigorously defend ourselves. Other potential claims may exist that have not yet been asserted against us. We do not believe that any such matters will have a material adverse effect on our financial position, results of operations or liquidity. Litigation is subject to many uncertainties and the outcome of litigation is not predictable with assurance. It is possible that some litigation matters for which liabilities have not been recorded could be decided unfavorably to us, and that any such unfavorable decisions could have a material adverse effect on our financial position, results of operations or liquidity. See Note 16 - Commitments and Contingencies of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for a discussion regarding certain legal proceedings.

ITEM 4. MINE SAFETY DISCLOSURES

Information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K (17 CFR 229.104) is included in Exhibit 95 to this Form 10-K.

EXECUTIVE OFFICERS OF THE REGISTRANT

Anthony J. Guzzi, Age 54; President since October 2004, Chief Executive Officer since January 2011 and Chairman of the Board since June 2018. From October 2004 to January 2011, Mr. Guzzi served as Chief Operating Officer of the Company. From August 2001 until he joined the Company, Mr. Guzzi was President of the North American Distribution and Aftermarket Division of Carrier Corporation ("Carrier"). Carrier is a manufacturer and distributor of commercial and residential HVAC and refrigeration systems and equipment and a provider of aftermarket services and components of its own products and those of other manufacturers in both the HVAC and refrigeration industries.

Mark A. Pompa, Age 54; Executive Vice President and Chief Financial Officer of the Company since April 2006. From June 2003 to April 2006, Mr. Pompa was Senior Vice President-Chief Accounting Officer of the Company, and from June 2003 to January 2007, Mr. Pompa was also Treasurer of the Company. From September 1994 to June 2003, Mr. Pompa was Vice President and Controller of the Company.

R. Kevin Matz, Age 60; Executive Vice President-Shared Services of the Company since December 2007 and Senior Vice President-Shared Services from June 2003 to December 2007. From April 1996 to June 2003, Mr. Matz served as Vice President and Treasurer of the Company and Staff Vice President-Financial Services of the Company from March 1993 to April 1996.

Maxine L. Mauricio, Age 47; Senior Vice President, General Counsel and Secretary of the Company since January 2016. From January 2012 to December 2015, Ms. Mauricio was Vice President and Deputy General Counsel of the Company, and from May 2002 to December 2011, she served as Assistant General Counsel of the Company. Prior to joining the Company, Ms. Mauricio was an associate at Ropes & Gray LLP.

PART II

ITEM 5. MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information. Our common stock trades on the New York Stock Exchange under the symbol “EME”.

The following table sets forth high and low sales prices for our common stock for the periods indicated as reported by the New York Stock Exchange:

2018	High	Low
First Quarter	$ 85.08	$ 73.26
Second Quarter	$ 82.04	$ 72.26
Third Quarter	$ 81.37	$ 73.73
Fourth Quarter	$ 76.18	$ 57.29

2017	High	Low
First Quarter	$ 72.88	$ 59.76
Second Quarter	$ 69.14	$ 60.30
Third Quarter	$ 70.26	$ 62.15
Fourth Quarter	$ 84.11	$ 68.77

Holders. As of February 15, 2019, there were approximately 288 stockholders of record and, as of that date, we estimate there were approximately 41,791 beneficial owners holding our common stock in nominee or “street” name.

Dividends. We have paid quarterly dividends since October 25, 2011. We expect that such quarterly dividends will be paid in the foreseeable future. Prior to October 25, 2011, no cash dividends had been paid on the Company’s common stock. We currently pay a regular quarterly dividend of $0.08 per share. Our 2016 Credit Agreement places limitations on the payment of dividends on our common stock. However, we do not believe that the terms of such agreement currently materially limit our ability to pay a quarterly dividend of $0.08 per share for the foreseeable future. See Note 10 - Debt of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for further information regarding our 2016 Credit Agreement.

Securities Authorized for Issuance Under Equity Compensation Plans. The following table summarizes, as of December 31, 2018, certain information regarding equity compensation plans that were approved by stockholders and equity compensation plans that were not approved by stockholders. The information in the table and in the notes thereto has been adjusted for stock splits.

	Equity Compensation Plan Information		
	A	B	C
Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans (Excluding Securities Reflected in Column A)
Equity Compensation Plans Approved by Security Holders	589,357 (1)	$ 1.66 (1)	1,327,307 (2)
Equity Compensation Plans Not Approved by Security Holders	—	—	—
Total	589,357	$ 1.66	1,327,307

(1) Included within this amount are 549,357 restricted stock units awarded to our non-employee directors and employees. The weighted average exercise price would have been $24.48 had the weighted average exercise price calculation excluded such restricted stock units.

(2) Represents shares of our common stock available for future issuance under our 2010 Incentive Plan (the "2010 Plan"), which may be issuable in respect of options and/or stock appreciation rights granted under the 2010 Plan and/or may also be issued pursuant to the award of restricted stock, unrestricted stock and/or awards that are valued in whole or in part by reference to, or are otherwise based on the fair market value of, our common stock.

Purchase of Equity Securities by the Issuer and Affiliated Purchasers

The following table summarizes repurchases of our common stock made by us during the quarter ended December 31, 2018:

Period	Total Number of Shares Purchased(1)(2)	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number (or Approximate Dollar Value) of Shares That May Yet be Purchased Under the Plan or Programs
October 1, 2018 to October 31, 2018	425,947	$72.48	425,947	$248,237,181
November 1, 2018 to November 30, 2018	279,856	$71.90	279,856	$228,115,562
December 1, 2018 to December 31, 2018	1,096,213	$63.50	1,096,213	$158,506,898
Total	1,802,016	$66.93	1,802,016	

(1) On September 26, 2011, our Board of Directors authorized us to repurchase up to $100.0 million of our outstanding common stock. On December 5, 2013, October 23, 2014, October 28, 2015, October 25, 2017 and October 23, 2018, our Board of Directors authorized us to repurchase up to an additional $100.0 million, $250.0 million, $200.0 million, $100.0 million and $200.0 million of our outstanding common stock, respectively. As of December 31, 2018, there remained authorization for us to repurchase approximately $158.5 million of our shares. No shares have been repurchased by us since the programs have been announced other than pursuant to these publicly announced programs. The repurchase programs have no expiration date and do not obligate the Company to acquire any particular amount of common stock and may be suspended, recommenced or discontinued at any time or from time to time without prior notice. We may repurchase our shares from time to time to the extent permitted by securities laws and other legal requirements, including provisions in our credit agreement, placing limitations on such repurchases.

(2) Excludes 1,416 shares surrendered to the Company by participants in our share-based compensation plans to satisfy minimum tax withholdings for common stock issued under such plans.

ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data has been derived from our audited financial statements and should be read in conjunction with the consolidated financial statements, the related notes thereto and the report of our independent registered public accounting firm thereon included elsewhere in this and our previously filed annual reports on Form 10-K.

See Note 4 - Acquisitions of Businesses and Note 5 - Disposition of Assets of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for a discussion regarding acquisitions and dispositions. During the third quarter of 2014, we ceased construction operations in the United Kingdom. The results of the construction operations of our United Kingdom segment for all periods are presented as discontinued operations.

Income Statement Data
(In thousands, except per share data)

	Years Ended December 31,				
	2018	2017	2016	2015	2014
Revenues	$8,130,631	$7,686,999	$7,551,524	$6,718,726	$6,424,965
Gross profit	$1,205,453	$1,147,012	$1,037,862	$ 944,479	$ 907,246
Impairment loss on goodwill and identifiable intangible assets	$ 907	$ 57,819	$ 2,428	$ —	$ 1,471
Gain on sale of building	$ —	$ —	$ —	$ —	$ 11,749
Operating income	$ 403,083	$ 328,902	$ 306,929	$ 285,336	$ 289,342
Net income attributable to EMCOR Group, Inc.	$ 283,531	$ 227,196	$ 181,935	$ 172,286	$ 168,664
Basic earnings (loss) per common share:					
From continuing operations	$ 4.92	$ 3.85	$ 3.05	$ 2.74	$ 2.61
From discontinued operations	(0.04)	(0.01)	(0.05)	(0.00)	(0.07)
	$ 4.88	$ 3.84	$ 3.00	$ 2.74	$ 2.54
Diluted earnings (loss) per common share:					
From continuing operations	$ 4.89	$ 3.83	$ 3.02	$ 2.72	$ 2.59
From discontinued operations	(0.04)	(0.01)	(0.05)	(0.00)	(0.07)
	$ 4.85	$ 3.82	$ 2.97	$ 2.72	$ 2.52

Balance Sheet Data
(In thousands)

	As of December 31,				
	2018	2017	2016	2015	2014
Equity (1)	$1,741,441	$1,674,117	$1,537,942	$1,480,056	$1,429,387
Total assets	$4,088,807	$3,965,904	$3,852,438	$3,506,706	$3,354,558
Goodwill	$ 990,887	$ 964,893	$ 979,628	$ 843,170	$ 834,102
Borrowings under revolving credit facility	$ 25,000	$ 25,000	$ 125,000	$ —	$ —
Term loan, including current maturities	$ 269,620	$ 284,810	$ 300,000	$ 315,000	$ 332,500
Other long-term debt, including current maturities	$ 9	$ 20	$ 31	$ 44	$ 57
Capital lease obligations, including current maturities	$ 4,213	$ 4,571	$ 3,732	$ 3,869	$ 2,883

(1) During 2018, we repurchased approximately 3.1 million shares of our common stock for approximately $216.2 million. Since the inception of the repurchase programs in 2011 through December 31, 2018, we have repurchased approximately 15.9 million shares of our common stock for approximately $791.5 million. We have paid quarterly dividends since October 25, 2011. We currently pay a regular quarterly dividend of $0.08 per share, and we expect that quarterly dividends will be paid in the foreseeable future. These transactions result in a reduction of our equity.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

We are one of the largest electrical and mechanical construction and facilities services firms in the United States. In addition, we provide a number of building services and industrial services. Our services are provided to a broad range of commercial, industrial, utility and institutional customers through approximately 80 operating subsidiaries and joint venture entities. Our offices are located in the United States and the United Kingdom.

Operating Segments

Our reportable segments reflect certain reclassifications of prior year amounts from our United States mechanical construction and facilities services segment to our United States building services segment due to changes in our internal reporting structure.

We have the following reportable segments, which provide services associated with the design, integration, installation, start-up, operation and maintenance of various systems: (a) United States electrical construction and facilities services (involving systems for electrical power transmission and distribution; premises electrical and lighting systems; process instrumentation in the refining, chemical processing, food processing and mining industries; low-voltage systems, such as fire alarm, security and process control; voice and data communication; roadway and transit lighting; and fiber optic lines); (b) United States mechanical construction and facilities services (involving systems for heating, ventilation, air conditioning, refrigeration and clean-room process ventilation; fire protection; plumbing, process and high-purity piping; controls and filtration; water and wastewater treatment; central plant heating and cooling; cranes and rigging; millwrighting; and steel fabrication, erection and welding); (c) United States building services; (d) United States industrial services; and (e) United Kingdom building services. The "United States building services" and "United Kingdom building services" segments principally consist of those operations which provide a portfolio of services needed to support the operation and maintenance of customers' facilities, including commercial and government site-based operations and maintenance; facility maintenance and services, including reception, security and catering services; outage services to utilities and industrial plants; military base operations support services; mobile mechanical maintenance and services; floor care and janitorial services; landscaping, lot sweeping and snow removal; facilities management; vendor management; call center services; installation and support for building systems; program development, management and maintenance for energy systems; technical consulting and diagnostic services; infrastructure and building projects for federal, state and local governmental agencies and bodies; and small modification and retrofit projects, which services are not generally related to customers' construction programs. The "United States industrial services" segment principally consists of those operations which provide industrial maintenance and services, including those for refineries and petrochemical plants, including on-site repairs, maintenance and service of heat exchangers, towers, vessels and piping; design, manufacturing, repair and hydro blast cleaning of shell and tube heat exchangers and related equipment; refinery turnaround planning and engineering services; specialty welding services; overhaul and maintenance of critical process units in refineries and petrochemical plants; and specialty technical services for refineries and petrochemical plants.

2018 versus 2017

Overview

The following table presents selected financial data for the fiscal years ended December 31, 2018 and 2017 (in thousands, except percentages and per share data):

	2018	2017
Revenues	$ 8,130,631	$ 7,686,999
Revenues increase from prior year	5.8%	1.8%
Restructuring expenses	$ 2,306	$ 1,577
Impairment loss on goodwill and identifiable intangible assets	$ 907	$ 57,819
Operating income	$ 403,083	$ 328,902
Operating income as a percentage of revenues	5.0%	4.3%
Income from continuing operations	$ 285,922	$ 228,050
Net income attributable to EMCOR Group, Inc.	$ 283,531	$ 227,196
Diluted earnings per common share from continuing operations	$ 4.89	$ 3.83

The results of our operations for 2018 set new company records in terms of revenues, operating income, operating margin (operating income as a percentage of revenues), net income attributable to EMCOR Group, Inc. and diluted earnings per common share from continuing operations. The strong operating results were due to revenue growth within all of our reportable segments and an increase in operating income within the majority of our reportable segments.

Operating income and operating margin increased within all of our domestic reportable segments, except for our United States electrical construction and facilities services segment. The improved operating results were primarily attributable to: (a) our United States industrial services segment, as this segment's results were negatively impacted by Hurricane Harvey during the second half of 2017, and (b) improved operating performance within all divisions of our United States building services segment. The decrease in operating income and operating margin within our United States electrical construction and facilities services segment was attributable to $10.0 million of losses incurred on a transportation construction project in the Western region of the United States, which negatively impacted our consolidated operating margin by 0.1%.

Operating income for 2017 included $57.8 million of non-cash impairment charges, which resulted in a 0.8% negative impact on the Company's operating margin. The results for 2017 also included the recovery of certain contract costs previously disputed on a project that was completed in 2016 within our United States mechanical construction and facilities services segment, which resulted in $18.1 million of gross profit and favorably impacted consolidated operating margin by 0.2%.

The increase in net income attributable to EMCOR Group, Inc. and diluted earnings per common share from continuing operations in 2018 was due to an increase in operating income and the reduction in the U.S federal corporate tax rate due to the enactment of the Tax Cuts and Jobs Act (the "Tax Act"). Our diluted earnings per common share from continuing operations for 2018 additionally benefited from a decrease in the weighted average number of shares outstanding as a result of the continued repurchase of our common stock.

Impact of Acquisitions

In order to provide a more meaningful period-over-period discussion of our operating results, we may discuss amounts generated or incurred (revenues, gross profit, selling, general and administrative expenses and operating income) from companies acquired. The amounts discussed reflect the acquired companies' operating results in the current reported period only for the time period these entities were not owned by EMCOR in the comparable prior reported period.

We acquired four companies in 2018. Two companies provide mobile mechanical services, one within the Eastern region and the other within the Western region of the United States. The third company is a full service provider of mechanical services within the Southern region of the United States. The results of these three companies have been included in our United States building services segment. The fourth company provides electrical construction and maintenance services for industrial and commercial buildings in North Texas, and its results have been included in our United States electrical construction and facilities services segment.

We acquired three companies during 2017. One company provides fire protection and alarm services primarily in the Southern region of the United States. The second company provides millwright services for manufacturing companies throughout the United States. Both of their results have been included in our United States mechanical construction and facilities services segment. The third company provides mobile mechanical services within the Western region of the United States, and its results have been included in our United States building services segment.

Companies acquired in 2018 and 2017 generated incremental revenues of $90.1 million and incremental operating income of $5.8 million, inclusive of $2.9 million of amortization expense associated with identifiable intangible assets, for the year ended December 31, 2018.

Discussion and Analysis of Results of Operations

Revenues

The following table presents our revenues for each of our operating segments and the approximate percentages that each segment's revenues were of total revenues for the years ended December 31, 2018 and 2017 (in thousands, except for percentages):

	2018	% of Total	2017	% of Total
Revenues from unrelated entities:				
United States electrical construction and facilities services	$ 1,954,323	24%	$ 1,829,567	24%
United States mechanical construction and facilities services	3,020,307	37%	2,963,815	39%
United States building services	1,875,485	23%	1,753,703	23%
United States industrial services	865,645	11%	799,169	10%
Total United States operations	7,715,760	95%	7,346,254	96%
United Kingdom building services	414,871	5%	340,745	4%
Total worldwide operations	$ 8,130,631	100%	$ 7,686,999	100%

As described in more detail below, revenues for 2018 were $8.1 billion compared to $7.7 billion for 2017. The increase in revenues was attributable to increased revenues from all of our reportable segments. Companies acquired in 2018 and 2017, which are reported in our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment and our United States building services segment, generated incremental revenues of $90.1 million in 2018.

Revenues of our United States electrical construction and facilities services segment were $1,954.3 million for the year ended December 31, 2018 compared to revenues of $1,829.6 million for the year ended December 31, 2017. The increase in revenues was attributable to an increase in activity within all of the market sectors in which we operate, except for the transportation market sector, as we approached substantial completion on several large multi-year transportation construction projects in 2018. In addition, the results for the year ended December 31, 2018 included $20.2 million of incremental revenues generated by a company acquired in 2018.

Our United States mechanical construction and facilities services segment revenues for the year ended December 31, 2018 were $3,020.3 million, a $56.5 million increase compared to revenues of $2,963.8 million for the year ended December 31, 2017. The increase in revenues was primarily attributable to an increase in revenues from commercial and institutional construction projects, partially offset by a decrease in revenues from large projects within the manufacturing market sector. In addition, the results for the year ended December 31, 2018 included $35.3 million of incremental revenues generated by a company acquired in 2017.

Revenues of our United States building services segment were $1,875.5 million and $1,753.7 million in 2018 and 2017, respectively. The increase in revenues was due to: (a) greater project and repair service activities within our mobile mechanical services operations, (b) large project activity within our energy services operations, (c) increased revenues from government site-based operations, partially as a result of additional indefinite-delivery, indefinite-quantity project activity, and (d) an increase in snow removal activity within our commercial site-based services operations. These increases were partially offset by a decrease in revenues due to the loss of certain contracts not renewed pursuant to rebid within our commercial site-based services operations. In addition, the results for the year ended December 31, 2018 included $34.6 million of incremental revenues generated by companies acquired in 2018 and 2017.

Revenues of our United States industrial services segment for the year ended December 31, 2018 increased by $66.5 million compared to the year ended December 31, 2017. The increase in revenues was due to an increase in revenues from both our field and shop services operations. The increase in revenues from our field services operations was due to an increase in turnaround project activity during the second half of 2018 as this division began to recover from the negative impact of Hurricane Harvey, which resulted in the cancellation of previously scheduled turnarounds during 2017 and early 2018. The increase in revenues from our shop services operations was due to increases in demand for new build heat exchangers, as well as our cleaning, repair and maintenance services.

Our United Kingdom building services segment revenues were $414.9 million in 2018 compared to $340.7 million in 2017. The increase in revenues was the result of increased project activity with existing customers and new contract awards within the commercial, institutional and water and wastewater market sectors. This segment's revenues were positively impacted by $15.2 million related to the effect of favorable exchange rates for the British pound versus the United States dollar.

Cost of sales and Gross profit

The following table presents cost of sales, gross profit (revenues less cost of sales), and gross profit margin (gross profit as a percentage of revenues) for the years ended December 31, 2018 and 2017 (in thousands, except for percentages):

	2018	2017
Cost of sales	$ 6,925,178	$ 6,539,987
Gross profit	$ 1,205,453	$ 1,147,012
Gross profit margin	14.8%	14.9%

Our gross profit for the year ended December 31, 2018 was $1,205.5 million, a $58.4 million increase compared to gross profit of $1,147.0 million for the year ended December 31, 2017. Our gross profit margin was 14.8% and 14.9% for 2018 and 2017, respectively. The increase in gross profit was attributable to improved operating performance within all of our reportable segments, except for the United States electrical construction and facilities services segment. Gross profit and gross profit margin for the year ended December 31, 2017 were favorably impacted by the recovery of certain contract costs previously disputed on a project that was completed in 2016 within our United States mechanical construction and facilities services segment, resulting in $18.1 million of gross profit and a 0.2% favorable impact on the Company’s 2017 gross profit margin.

Selling, general and administrative expenses

The following table presents selling, general and administrative expenses and SG&A margin (selling, general and administrative expenses as a percentage of revenues) for the years ended December 31, 2018 and 2017 (in thousands, except for percentages):

	2018	2017
Selling, general and administrative expenses	$ 799,157	$ 758,714
Selling, general and administrative expenses as a percentage of revenues	9.8%	9.9%

Our selling, general and administrative expenses for the year ended December 31, 2018 were $799.2 million, a $40.4 million increase compared to selling, general and administrative expenses of $758.7 million for the year ended December 31, 2017. Selling, general and administrative expenses as a percentage of revenues were 9.8% and 9.9% for 2018 and 2017, respectively. The increase in selling, general and administrative expenses for the year ended December 31, 2018 included $12.5 million of incremental expenses directly related to companies acquired in 2018 and 2017, including amortization expense attributable to identifiable intangible assets of $1.3 million. In addition to the impact of acquisitions, selling, general and administrative expenses increased due to: (a) an increase in salaries, partially as a result of an increase in headcount due to higher revenues than in the prior year, (b) an increase in incentive compensation expense, due to higher annual operating results than in the prior year , and (c) increases in other selling, general and administrative expenses, such as information technology, consulting and other professional fees. The decrease in SG&A margin for the year ended December 31, 2018 was partially due to a reduction in the provision for doubtful accounts, primarily within our United States electrical construction and facilities services segment and our United States building services segment, as well as an increase in revenues without commensurate increases in our overhead cost structure.

Restructuring expenses

Restructuring expenses, primarily relating to severance obligations, were $2.3 million and $1.6 million for the years ended December 31, 2018 and 2017, respectively. As of December 31, 2018 and 2017, the balance of restructuring related obligations yet to be paid was $1.6 million and $0.5 million, respectively. The majority of obligations outstanding as of December 31, 2017 were paid during 2018. The majority of obligations outstanding as of December 31, 2018 will be paid throughout 2019 and 2020. No material expenses in connection with restructuring from continuing operations are expected to be incurred during 2019.

Impairment loss on goodwill and identifiable intangible assets

During the second quarter of 2018 and prior to our 2018 annual impairment test on October 1, we recorded a $0.9 million non-cash impairment charge associated with a finite-lived subsidiary trade name within our United States industrial services segment. No additional impairment of our identifiable intangible assets was recognized for the year ended December 31, 2018. Additionally, no impairment of our goodwill was recognized for the year ended December 31, 2018.

In conjunction with our 2017 annual impairment test, we recognized $57.8 million of non-cash impairment charges. Of this amount, $57.5 million related to goodwill within our United States industrial services segment and $0.3 million related to a subsidiary trade name within our United States building services segment. The goodwill impairment primarily resulted from both lower forecasted revenues and operating margins from our United States industrial services segment, which had been adversely affected by poor market conditions, predominately within its shop services operations due to: (a) a prolonged curtailment in capital spending from customers, (b) increased foreign competition and (c) economic uncertainty within certain South American markets which caused us to limit our pursuit of opportunities within such countries.

Operating income (loss)

The following table presents by segment our operating income (loss) and each segment's operating income (loss) as a percentage of such segment's revenues from unrelated entities for the years ended December 31, 2018 and 2017 (in thousands, except for percentages):

	2018	% of Segment Revenues	2017	% of Segment Revenues
Operating income (loss):				
United States electrical construction and facilities services	$ 139,430	7.1%	$ 150,001	8.2%
United States mechanical construction and facilities services	219,352	7.3%	212,396	7.2%
United States building services	93,827	5.0%	81,720	4.7%
United States industrial services	28,172	3.3%	19,084	2.4%
Total United States operations	480,781	6.2%	463,201	6.3%
United Kingdom building services	15,930	3.8%	12,905	3.8%
Corporate administration	(90,415)	—	(87,808)	—
Restructuring expenses	(2,306)	—	(1,577)	—
Impairment loss on goodwill and identifiable intangible assets	(907)	—	(57,819)	—
Total worldwide operations	403,083	5.0%	328,902	4.3%
Other corporate items:				
Net periodic pension (cost) income	2,743		1,652	
Interest expense	(13,544)		(12,770)	
Interest income	2,746		965	
Income from continuing operations before income taxes	$ 395,028		$ 318,749	

As described in more detail below, we had operating income of $403.1 million for 2018 compared to operating income of $328.9 million for 2017. Operating margin was 5.0% and 4.3% for 2018 and 2017, respectively. Operating income and operating margin increased within all of our domestic reportable segments, except for our United States electrical construction and facilities services segment. In addition, operating income increased within our United Kingdom building services segment, while operating margin remained flat.

The Company's operating income and operating margin for the year ended December 31, 2017 included $57.8 million of non-cash impairment charges, which resulted in a 0.8% negative impact on the Company's operating margin. Operating income and operating margin for the year ended December 31, 2017 benefited from the recovery of certain contract costs previously disputed on a project completed in 2016 within our United States mechanical construction and facilities services segment, which resulted in a 0.2% favorable impact on the Company's operating margin.

Operating income of our United States electrical construction and facilities services segment for the year ended December 31, 2018 was $139.4 million compared to operating income of $150.0 million for the year ended December 31, 2017. The decrease in operating income was attributable to a decrease in gross profit from institutional and healthcare construction projects, partially offset by an increase in gross profit from manufacturing, hospitality and commercial construction projects. In addition, otherwise strong performance by this segment within the transportation market sector in 2018 was negatively impacted by $10.0 million of losses incurred on a construction project in the Western region of the United States, resulting in part from contract scope issues. The decrease in operating margin was primarily due to the loss discussed above, which negatively impacted this segment's operating margin by 0.6% for the year ended December 31, 2018.

Our United States mechanical construction and facilities services segment operating income for the year ended December 31, 2018 was $219.4 million, a $7.0 million increase compared to operating income of $212.4 million for the year ended December 31, 2017. The increase in operating income for the year ended December 31, 2018 was attributable to an increase in gross profit from commercial, manufacturing and hospitality construction projects, partially offset by a decrease in gross profit from institutional and water and wastewater construction projects. A company acquired in 2017 contributed incremental operating income of $3.6 million, inclusive of $0.8 million of amortization expense associated with identifiable intangible assets. The increase in operating margin for the year ended December 31, 2018 was attributable to an increase in gross profit margin. This segment's operating income in 2017 benefited from the recovery of certain contract costs previously disputed on a project completed in 2016, which resulted in $18.1 million of gross profit and favorably impacted this segment's operating margin by 0.6%.

Operating income of our United States building services segment was $93.8 million and $81.7 million in 2018 and 2017, respectively. The increase in operating income for the year ended December 31, 2018 was due to increases in operating income from: (a) our energy services operations, due to large project activity, (b) our government site-based services operations, partially as a result of an increase in indefinite-delivery, indefinite-quantity project activity, (c) our mobile mechanical services operations, as a result of increases in gross profit from project, service and control activities, and (d) our commercial site-based operations, partially as a result of (i) scope expansion on existing contracts and (ii) an increase in snow removal activities from contracts that are based on a per snow event basis. Additionally, companies acquired in 2018 and 2017 within our mobile mechanical services division, contributed incremental operating income of $2.4 million, inclusive of $1.7 million of amortization expense associated with identifiable intangible assets, for the year ended December 31, 2018. The increase in operating margin for the year ended December 31, 2018 was attributable to an increase in gross profit margin and a decrease in the ratio of selling, general and administrative expenses to revenues.

Operating income of our United States industrial services segment for the year ended December 31, 2018 was $28.2 million, a $9.1 million increase compared to operating income of $19.1 million for the year ended December 31, 2017. The increase in operating income for the year ended December 31, 2018 was attributable to an increase in demand and improved operating performance within both our shop and field services operations. The increase in operating income from our shop services operations was due to increases in demand for new build heat exchangers, as well as our cleaning, repair and maintenance services. The increase in operating income from our field services operations was due to an increase in turnaround project activity during the second half of 2018 as this division began to recover from the negative impact of Hurricane Harvey, which resulted in the cancellation of previously scheduled turnarounds during 2017 and early 2018. The increase in operating margin was attributable to a decrease in the ratio of selling, general and administrative expenses to revenues.

Our United Kingdom building services segment's operating income for the year ended December 31, 2018 was $15.9 million compared to operating income of $12.9 million for the year ended December 31, 2017. Operating income increased primarily due to an increase in gross profit from project activity with existing customers. In addition, the results for the year ended December 31, 2018 benefited from an increase in gross profit from new contract awards within the commercial, institutional and water and wastewater market sectors. This segment's results included an increase in operating income of $0.6 million relating to the effect of favorable exchange rates for the British pound versus the United States dollar.

Our corporate administration operating loss was $90.4 million for 2018 compared to $87.8 million in 2017. The increase in corporate administration expenses for the year ended December 31, 2018 was due to an increase in consulting and other professional fees, primarily related to certain information technology and cybersecurity initiatives currently in process.

Non-operating items

Interest expense was $13.5 million and $12.8 million for 2018 and 2017, respectively. Interest income was $2.7 million and $1.0 million for 2018 and 2017, respectively. The increase in interest expense and interest income resulted from higher interest rates. The increase in interest expense was partially offset by the impact of reduced average outstanding borrowings.

For joint ventures that have been accounted for using the consolidation method of accounting, noncontrolling interests represent the allocation of earnings to our joint venture partners who either have a minority-ownership interest in the joint venture or are not at risk for the majority of losses of the joint venture.

Our 2018 income tax provision from continuing operations was $109.1 million compared to $90.7 million for 2017. The actual income tax rates on income from continuing operations before income taxes, less amounts attributable to noncontrolling interests, for the years ended December 31, 2018 and 2017, were 27.6% and 28.5%, respectively. The increase in the 2018 income tax provision was primarily due to increased income before income taxes. The decrease in the 2018 actual income tax rate was due to the net impact of the Tax Act, including the reduction of the U.S. federal corporate tax rate from 35% to 21% in 2018, offset by the benefit associated with the re-measurement of our net deferred tax liability balance in 2017.

Discontinued operations

During the third quarter of 2014, we ceased construction operations in the United Kingdom. The results of the construction operations of our United Kingdom segment for all periods are presented in the Consolidated Financial Statements as discontinued operations.

Remaining Unsatisfied Performance Obligations

The following table presents the transaction price allocated to remaining unsatisfied performance obligations ("remaining performance obligations") in accordance with Accounting Standards Codification Topic 606, "Revenue from Contracts with Customers" ("ASC 606") for each of our reportable segments and their respective percentage total of remaining performance obligations (in thousands, except for percentages):

	December 31, 2018	% of Total	September 30, 2018	% of Total
Remaining performance obligations:				
United States electrical construction and facilities services	$ 1,085,571	27%	$ 1,181,620	30%
United States mechanical construction and facilities services	2,245,584	57%	2,152,271	54%
United States building services	435,074	11%	434,386	11%
United States industrial services	67,529	2%	74,659	2%
Total United States operations	3,833,758	97%	3,842,936	97%
United Kingdom building services	130,524	3%	126,732	3%
Total worldwide operations	$ 3,964,282	100%	$ 3,969,668	100%

Our remaining performance obligations at December 31, 2018 were $3.96 billion. Remaining performance obligations increase with awards of new contracts and decrease as we perform work and recognize revenue on existing contracts. We include a project within our remaining performance obligations at such time as the project is awarded and agreement on contract terms has been reached. Our remaining performance obligations include amounts related to contracts for which a fixed price contract value is not assigned when a reasonable estimate of total transaction price can be made.

Remaining performance obligations include unrecognized revenues to be realized from uncompleted construction contracts. Although many of our construction contracts are subject to cancellation at the election of our customers, in accordance with industry practice, we do not limit the amount of unrecognized revenue included within remaining performance obligations due to the inherent substantial economic penalty that would be incurred by our customers upon cancellation. We believe our reported remaining performance obligations for our construction contracts are firm and contract cancellations have not had a material adverse effect on us.

Remaining performance obligations also include unrecognized revenues expected to be realized over the remaining term of service contracts. However, to the extent a service contract includes a cancellation clause which allows for the termination of such contract by either party without a substantive penalty, the remaining contract term, and therefore, the amount of unrecognized revenues included within remaining performance obligations, is limited to the notice period required for the termination.

Our remaining performance obligations are comprised of: (a) original contract amounts, (b) change orders for which we have received written confirmations from our customers, (c) pending change orders for which we expect to receive confirmations in the ordinary course of business, (d) claim amounts that we have made against customers for which we have determined we have a legal basis under existing contractual arrangements and as to which the variable consideration constraint does not apply, and (e) other forms of variable consideration to the extent that such variable consideration has been included within the transaction price of our contracts. Such claim and other variable consideration amounts were immaterial for all periods presented.

Our remaining performance obligations at December 31, 2018 were $3.96 billion compared to $3.97 billion at September 30, 2018. The slight decrease in remaining performance obligations at December 31, 2018 was attributable to a decrease in remaining performance obligations from our United States electrical construction and facilities services segment and our United States industrial services segment, partially offset by an increase in remaining performance obligations from our United States mechanical construction and facilities services segment.

2017 versus 2016

Overview

The following table presents selected financial data for the fiscal years ended December 31, 2017 and 2016 (in thousands, except percentages and per share data):

	2017	2016
Revenues	$ 7,686,999	$ 7,551,524
Revenues increase from prior year	1.8%	12.4%
Restructuring expenses	$ 1,577	$ 1,438
Impairment loss on goodwill and identifiable intangible assets	$ 57,819	$ 2,428
Operating income	$ 328,902	$ 306,929
Operating income as a percentage of revenues	4.3%	4.1%
Income from continuing operations	$ 228,050	$ 185,295
Net income attributable to EMCOR Group, Inc.	$ 227,196	$ 181,935
Diluted earnings per common share from continuing operations	$ 3.83	$ 3.02

The increase in revenues for 2017 was primarily attributable to incremental revenues of $192.4 million generated by companies acquired in 2017 and 2016, which are reported in our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment and our United States building services segment. Excluding the effect of these acquisitions, revenues for 2017 decreased due to lower revenues from: (a) our United States industrial services segment, due to: (i) a decrease in large project activity from our specialty services offerings within our field services operations, (ii) the negative impact of Hurricane Harvey, which resulted in the deferral and cancellation of previously scheduled turnaround projects, and (iii) our industrial shop services operations and (b) our United States building services segment, primarily attributable to: (i) the loss of certain contracts not renewed pursuant to rebid within our commercial and government site-based services operations and (ii) a reduction in large project activity within their energy services operations. These decreases in revenues were partially offset by an increase in revenues from both of our domestic construction segments and our United Kingdom building services segment.

During 2017, as a result of continued adverse market conditions, we experienced a decrease in demand for the offerings within our United States industrial services segment. Consequently, we recorded a non-cash goodwill impairment charge of $57.5 million during the fourth quarter of 2017.

Operating income and operating margin increased within all of our reportable segments, except for our United States industrial services segment. The overall increase in operating income and operating margin was mainly attributable to the results of our domestic construction segments, which were favorably impacted by an increase in gross profit within the majority of the market sectors in which we operate. In addition, our 2016 operating results were negatively impacted by: (a) $27.9 million of aggregate losses incurred on two construction projects reported within our United States mechanical construction and facilities services segment and (b) $19.4 million of losses incurred on a transportation construction project in the Northeastern region of the United States reported within our United States electrical construction and facilities services segment

Impact of Acquisitions

We acquired three companies during 2017. One company provides fire protection and alarm services primarily in the Southern region of the United States. The second company provides millwright services for manufacturing companies throughout the United States. Both of their results have been included in our United States mechanical construction and facilities services segment. The third company provides mobile mechanical services within the Western region of the United States, and its results have been included in our United States building services segment.

We completed the acquisition of Ardent Services, L.L.C. and Rabalais Constructors, LLC (collectively, "Ardent") during 2016. This acquisition has been included in our United States electrical construction and facilities services segment. Ardent provides electrical and instrumentation services to the energy infrastructure market in North America, and this acquisition further strengthens our position in electrical construction and services and broadens our capabilities across the industrial and energy sectors, especially in the Gulf Coast, Midwest and Western regions of the United States. Additionally during 2016, we acquired another company for an immaterial amount. This company provides mobile mechanical services within the Southeastern region of the United States, and its results have been included in our United States building services segment.

Companies acquired in 2017 and 2016 generated incremental revenues of $192.4 million and incremental operating income of $3.5 million, inclusive of $10.7 million of amortization expense associated with identifiable intangible assets, for the year ended December 31, 2017.

Discussion and Analysis of Results of Operations

Revenues

The following table presents our revenues for each of our operating segments and the approximate percentages that each segment's revenues were of total revenues for the years ended December 31, 2017 and 2016 (in thousands, except for percentages):

	2017	% of Total	2016	% of Total
Revenues from unrelated entities:				
United States electrical construction and facilities services	$ 1,829,567	24%	$ 1,704,403	23%
United States mechanical construction and facilities services	2,963,815	39%	2,643,321	35%
United States building services	1,753,703	23%	1,810,229	24%
United States industrial services	799,169	10%	1,067,315	14%
Total United States operations	7,346,254	96%	7,225,268	96%
United Kingdom building services	340,745	4%	326,256	4%
Total worldwide operations	$ 7,686,999	100%	$ 7,551,524	100%

As described in more detail below, revenues for 2017 were $7.7 billion compared to $7.6 billion for 2016. Increases in revenues within both of our domestic construction segments and our United Kingdom building services segment were partially offset by decreases within our United States industrial services segment and our United States building services segment. The increase in revenues for 2017 was primarily attributable to incremental revenues of $192.4 million generated by companies acquired in 2017 and 2016, which are reported in our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment and our United States building services segment.

Revenues of our United States electrical construction and facilities services segment were $1,829.6 million for the year ended December 31, 2017 compared to revenues of $1,704.4 million for the year ended December 31, 2016. The increase in revenues was primarily attributable to an increase in revenues from commercial, institutional and healthcare construction projects. The increase in revenues within the commercial market sector was primarily a result of work performed on numerous telecommunication construction projects. The results for the year ended December 31, 2017 included $50.4 million of incremental revenues generated by the acquisition of Ardent.

Our United States mechanical construction and facilities services segment revenues for the year ended December 31, 2017 were $2,963.8 million, a $320.5 million increase compared to revenues of $2,643.3 million for the year ended December 31, 2016. The increase in revenues was primarily attributable to an increase in revenues from healthcare, commercial and hospitality construction projects. The results for the year ended December 31, 2017 included $76.2 million of incremental revenues generated by companies acquired in 2017.

Revenues of our United States building services segment were $1,753.7 million and $1,810.2 million in 2017 and 2016, respectively. The decrease in revenues was primarily attributable to: (a) the loss of certain contracts not renewed pursuant to rebid within our commercial and government site-based services operations, (b) a reduction in large project activity within our energy services operations and (c) a reduction in snow removal activities within our commercial site-based services operations. These decreases were partially offset by an increase in revenues from our mobile mechanical services operations as a result of greater project, service and controls activities. The results for the year ended December 31, 2017 included $65.8 million of incremental revenues generated by companies acquired in 2017 and 2016.

Revenues of our United States industrial services segment for the year ended December 31, 2017 decreased by $268.1 million compared to the year ended December 31, 2016. The decrease in revenues was attributable to decreased large project activity from our specialty services offerings within our field services operations, as well as a continued decrease in demand for new build heat exchangers from our shop services operations. In addition, this segment's revenues were negatively impacted by Hurricane Harvey, which resulted in the deferral and cancellation of previously scheduled turnaround projects. Such decrease in turnaround projects also led to reduced repair work within our shop services operations.

Our United Kingdom building services segment revenues were $340.7 million in 2017 compared to $326.3 million in 2016. The increase in revenues was the result of new contract awards within the commercial and institutional market sectors, partially offset by a decrease in project activity with existing customers. This segment's revenues were negatively impacted by $15.9 million related to the effect of unfavorable exchange rates for the British pound versus the United States dollar. The unfavorable exchange rates for the year ended December 31, 2017 resulted, in part, from the 2016 decision by the United Kingdom to exit the European Union.

Cost of sales and Gross profit

The following table presents cost of sales, gross profit, and gross profit margin for the years ended December 31, 2017 and 2016 (in thousands, except for percentages):

	2017	2016
Cost of sales	$ 6,539,987	$ 6,513,662
Gross profit	$ 1,147,012	$ 1,037,862
Gross profit margin	14.9%	13.7%

Our gross profit for the year ended December 31, 2017 was $1,147.0 million, a $109.2 million increase compared to gross profit of $1,037.9 million for the year ended December 31, 2016. Our gross profit margin was 14.9% and 13.7% for 2017 and 2016, respectively. Gross profit and gross profit margin were favorably impacted by improved operating performance within all of our reportable segments, except for our United States industrial services segment. Gross profit and gross profit margin within our United States mechanical construction and facilities services segment for the year ended December 31, 2017 were favorably impacted by the recovery of certain contract costs previously disputed on a project that was completed in 2016, resulting in $18.1 million of gross profit and a 0.2% favorable impact on the Company's gross profit margin. In addition, the Company's gross profit and gross profit margin for the year ended December 31, 2016 were negatively impacted by $47.3 million of losses incurred on the three construction projects previously referenced, which resulted in a 0.8% negative impact on the Company's gross profit margin for the prior year.

Selling, general and administrative expenses

The following table presents selling, general and administrative expenses and SG&A margin, for the years ended December 31, 2017 and 2016 (in thousands, except for percentages):

	2017	2016
Selling, general and administrative expenses	$ 758,714	$ 727,067
Selling, general and administrative expenses as a percentage of revenues	9.9%	9.6%

Our selling, general and administrative expenses for the year ended December 31, 2017 were $758.7 million, a $31.6 million increase compared to selling, general and administrative expenses of $727.1 million for the year ended December 31, 2016. Selling, general and administrative expenses as a percentage of revenues were 9.9% and 9.6% for 2017 and 2016, respectively. The increase in selling, general and administrative expenses for the year ended December 31, 2017 included $24.4 million of incremental expenses directly related to companies acquired in 2017 and 2016, including amortization expense attributable to identifiable intangible assets of $3.9 million. In addition to the impact of acquisitions, selling, general and administrative expenses increased due to: (a) an increase in salaries, primarily within our United States mechanical construction and facilities segment, partially as a result of an increase in headcount due to higher revenues compared to the prior year, (b) an increase in incentive compensation expense due to higher annual operating results than in the same prior year period, which resulted in increased accruals for certain of our incentive compensation plans, and (c) an increase in employee healthcare costs. Our selling, general and administrative expenses for the year ended December 31, 2016 included $3.8 million of transaction costs associated with the acquisition of Ardent. The increase in SG&A margin for the year ended December 31, 2017 was due to: (a) unabsorbed overhead costs within our United States industrial services segment due to the deferral and cancellation of certain turnaround activity as a result of Hurricane Harvey and (b) an increase in both the provision for doubtful accounts and employee healthcare costs.

Restructuring expenses

Restructuring expenses, primarily relating to severance obligations, were $1.6 million and $1.4 million for 2017 and 2016, respectively. As of December 31, 2017 and 2016, the balance of restructuring related obligations yet to be paid was $0.5 million and $0.2 million, respectively. The majority of obligations outstanding as of December 31, 2017 and 2016 were paid during 2018 and 2017, respectively.

Impairment loss on goodwill and identifiable intangible assets

In conjunction with our 2017 annual impairment test, we recognized $57.8 million of non-cash impairment charges. Of this amount, $57.5 million related to goodwill within our United States industrial services segment and $0.3 million related to a subsidiary trade name within our United States building services segment. The goodwill impairment primarily resulted from both lower forecasted revenues and operating margins from our United States industrial services segment, which had been adversely affected by poor market conditions, predominately within its shop services operations due to: (a) a prolonged curtailment in capital spending from customers, (b) increased foreign competition and (c) economic uncertainty within certain South American markets which caused us to limit our pursuit of opportunities within such countries.

In conjunction with our 2016 annual impairment test, we recognized a $2.4 million non-cash impairment charge related to a subsidiary trade name within the United States mechanical construction and facilities services segment. The 2016 impairment resulted from a decrease in the hypothetical royalty rate and lower forecasted revenues from a company within this segment. No impairment of our goodwill was recognized for the year ended December 31, 2016.

Operating income (loss)

The following table presents by segment our operating income (loss) and each segment's operating income (loss) as a percentage of such segment's revenues from unrelated entities for the years ended December 31, 2017 and 2016 (in thousands, except for percentages):

	2017	% of Segment Revenues	2016	% of Segment Revenues
Operating income (loss):				
United States electrical construction and facilities services	$ 150,001	8.2%	$ 101,761	6.0%
United States mechanical construction and facilities services	212,396	7.2%	132,743	5.0%
United States building services	81,720	4.7%	77,100	4.3%
United States industrial services	19,084	2.4%	77,845	7.3%
Total United States operations	463,201	6.3%	389,449	5.4%
United Kingdom building services	12,905	3.8%	10,086	3.1%
Corporate administration	(87,808)	—	(88,740)	—
Restructuring expenses	(1,577)	—	(1,438)	—
Impairment loss on goodwill and identifiable intangible assets	(57,819)	—	(2,428)	—
Total worldwide operations	328,902	4.3%	306,929	4.1%
Other corporate items:				
Net periodic pension (cost) income	1,652		1,529	
Interest expense	(12,770)		(12,627)	
Interest income	965		663	
Income from continuing operations before income taxes	$ 318,749		$ 296,494	

As described in more detail below, we had operating income of $328.9 million for 2017 compared to operating income of $306.9 million for 2016. Operating margin was 4.3% and 4.1% for 2017 and 2016, respectively. Operating income for the year ended December 31, 2017 included $57.8 million of non-cash impairment charges, which resulted in a 0.8% negative impact on the Company's operating margin. Operating income and operating margin for the year ended December 31, 2017 benefited from the recovery of certain contract costs previously disputed on a project completed in 2016 within our United States mechanical construction and facilities services segment, which resulted in a 0.2% favorable impact on the Company's operating margin.

The Company's operating income and operating margin for the year ended December 31, 2016 were negatively impacted by $47.3 million of losses incurred on the three construction projects previously referenced, which resulted in a 0.7% negative impact on the Company's operating margin for 2016.

Operating income of our United States electrical construction and facilities services segment for the year ended December 31, 2017 was $150.0 million compared to operating income of $101.8 million for the year ended December 31, 2016. The increase in operating income was attributable to an increase in gross profit from: (a) the commercial market sector, primarily as a result of work performed on numerous telecommunication construction projects, (b) the transportation market sector, due to large project activity, and (c) construction projects within the institutional market sector. In addition, the results for the year ended December 31, 2016 included losses of $19.4 million incurred on a construction project in the Northeastern United States. The increase in operating margin for the year ended December 31, 2017 was attributable to improved operating performance, partially as a result of increased gross profit margin from numerous construction projects within the commercial and transportation market sectors.

Operating margin for the year ended December 31, 2016 was negatively impacted by 1.2% as a result of the losses incurred on the construction project previously referenced.

Our United States mechanical construction and facilities services segment operating income for the year ended December 31, 2017 was $212.4 million, a $79.7 million increase compared to operating income of $132.7 million for the year ended December 31, 2016. The increase in operating income for the year ended December 31, 2017 was attributable to an increase in gross profit from the majority of the market sectors in which we operate. Additionally, this segment's operating income benefited from the recovery of certain contract costs previously disputed on a project completed in 2016, which resulted in $18.1 million of gross profit. Companies acquired in 2017 contributed incremental operating income of $2.7 million, inclusive of $8.3 million of amortization expense associated with identifiable intangible assets. The increase in operating margin for the year ended December 31, 2017 was attributable to an increase in gross profit margin. The recovery of the previously disputed contract costs discussed above favorably impacted this segment's operating margin by 0.6% for the year ended December 31, 2017.

Operating income of our United States building services segment was $81.7 million and $77.1 million in 2017 and 2016, respectively. The increase in operating income for the year ended December 31, 2017 was due to increases in operating income from: (a) our mobile mechanical services operations, as a result of increases in gross profit from project, service and control activities, and (b) our energy services operations. The increase in operating income for our energy services operations primarily resulted from improved project execution, as the results for the year ended December 31, 2016 included a loss incurred on a large project. Additionally, companies acquired in 2017 and 2016 within our mobile mechanical services operations, contributed incremental operating income of $2.6 million, inclusive of $1.5 million of amortization expense associated with identifiable intangible assets, for the year ended December 31, 2017. The increase in operating income for the year ended December 31, 2017 was partially offset by a decrease in gross profit from our commercial site-based services operations partially due to: (a) the loss of certain contracts not renewed pursuant to rebid and (b) a reduction in snow removal activities. The increase in operating margin for the year ended December 31, 2017 was attributable to an increase in gross profit margin.

Operating income of our United States industrial services segment for the year ended December 31, 2017 was $19.1 million, a $58.8 million decrease compared to operating income of $77.8 million for the year ended December 31, 2016. The decrease in operating income for the year ended December 31, 2017 was attributable to a decrease in gross profit from: (a) our specialty services offerings within our field services operations, as a result of reduced large project activity, (b) a decrease in turnaround activity from our field services operations, partially due to Hurricane Harvey, which resulted in the deferral and cancellation of previously scheduled turnaround projects, and (c) the mix of work in our industrial shop services operations, which included fewer repair projects that generate higher gross profit margins. The decrease in operating margin was attributable to a decrease in gross profit margin and an increase in the ratio of selling, general and administrative expenses to revenues. The increase in SG&A margin for the year ended December 31, 2017 was partially the result of unabsorbed overhead costs as a result of project deferrals and cancellations due to Hurricane Harvey and lower specialty services revenues.

Our United Kingdom building services segment's operating income for the year ended December 31, 2017 was $12.9 million compared to operating income of $10.1 million for the year ended December 31, 2016. Operating income increased primarily due to an increase in gross profit from new contract awards, partially offset by a decrease in gross profit from project activity. This segment's results included a decrease in operating income of $0.3 million relating to the effect of unfavorable exchange rates for the British pound versus the United States dollar. The increase in operating margin for the year ended December 31, 2017 was attributable to an increase in gross profit margin and a decrease in SG&A margin.

Our corporate administration operating loss was $87.8 million for 2017 compared to $88.7 million in 2016. The decrease in corporate administration expenses for the year ended December 31, 2017 was primarily due to a decrease in professional fees, as the results for 2016 included $3.8 million of transaction costs associated with the acquisition of Ardent. The decrease was partially offset by an increase in software licensing costs and incentive compensation expense.

Non-operating items

Interest expense was $12.8 million and $12.6 million for 2017 and 2016, respectively. The increase in interest expense was primarily due to increased average outstanding borrowings in 2017 and a higher United States dollar LIBOR rate. Interest income was $1.0 million and $0.7 million for 2017 and 2016, respectively.

Our 2017 income tax provision from continuing operations was $90.7 million compared to $111.2 million for 2016. The actual income tax rates on income from continuing operations before income taxes, less amounts attributable to noncontrolling interests, for the years ended December 31, 2017 and 2016, were 28.5% and 37.5%, respectively. The decrease in the 2017 income tax provision compared to 2016 was predominantly due to the revaluation of the Company's net deferred tax liability balances as a result of the Tax Act, partially offset by increased income before income taxes.

Liquidity and Capital Resources

The following table presents net cash provided by (used in) operating activities, investing activities and financing activities for the years ended December 31, 2018, 2017 and 2016 (in thousands):

	2018	2017	2016
Net cash provided by operating activities	$ 271,011	$ 366,049	$ 262,372
Net cash used in investing activities	$ (117,722)	$ (138,093)	$ (270,671)
Net cash used in financing activities	$ (253,042)	$ (228,470)	$ (9,429)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	$ (3,421)	$ 3,242	$ (6,675)

Our consolidated cash balance, including cash equivalents and restricted cash, decreased by approximately $103.2 million from $469.4 million at December 31, 2017 to $366.2 million at December 31, 2018. Net cash provided by operating activities for 2018 was $271.0 million compared to $366.0 million of net cash provided by operating activities for 2017. The reduction in cash flows from operating activities was primarily due to organic revenue growth, which resulted in increased working capital levels. Net cash used in investing activities was $117.7 million for 2018 compared to net cash used in investing activities of $138.1 million for 2017. The decrease in net cash used in investing activities was primarily due to a reduction in payments for acquisitions of businesses. Net cash used in financing activities for 2018 increased by approximately $24.6 million compared to 2017 primarily due to an increase in funds used for the repurchase of common stock, partially offset by reduced debt repayments compared to the prior year. Cash flows from discontinued operations were immaterial and are not expected to significantly affect future liquidity.

Our consolidated cash balance, including cash equivalents and restricted cash, increased by approximately $2.7 million from $466.7 million at December 31, 2016 to $469.4 million at December 31, 2017. Net cash provided by operating activities for 2017 was $366.0 million compared to $262.4 million of net cash provided by operating activities for 2016. The increase in cash provided by operating activities was primarily due to a $45.0 million increase in net income and improved cash flows from accounts payable. Net cash used in investing activities was $138.1 million for 2017 compared to net cash used in investing activities of $270.7 million for 2016. The decrease in net cash used in investing activities was primarily due to a reduction in payments for acquisitions of businesses. Net cash flows from financing activities for 2017 decreased by approximately $219.0 million compared to 2016 primarily as a result of net borrowings made under our credit agreements in 2016.

The following is a summary of material contractual obligations and other commercial commitments (in millions):

	Payments Due by Period				
Contractual Obligations	Total	Less than 1 year	1-3 years	3-5 years	After 5 years
Revolving credit facility (including interest at 3.52%) (1)	$ 27.3	$ 0.9	$ 26.4	$ —	$ —
Term Loan (including interest at 3.52%) (1)	292.9	24.6	268.3	—	—
Capital lease obligations	4.4	2.1	2.0	0.3	—
Operating leases	270.1	55.8	85.9	55.9	72.5
Open purchase obligations (2)	1,200.0	1,008.9	190.4	0.7	—
Other long-term obligations, including current portion (3)	382.4	65.5	307.4	9.5	—
Total Contractual Obligations	$ 2,177.1	$ 1,157.8	$ 880.4	$ 66.4	$ 72.5

Other Commercial Commitments	Total Amounts Committed	Less than 1 year	1-3 years	3-5 years	After 5 years
	Amount of Commitment Expirations by Period				
Letters of credit	$ 109.0	$ 109.0	$ —	$ —	$ —

(1) On August 3, 2016, we entered into a $900.0 million revolving credit facility (the "2016 Revolving Credit Facility") and a $400.0 million term loan (the "2016 Term Loan") (collectively referred to as the "2016 Credit Agreement"). As of December 31, 2018, the amount outstanding under the 2016 Term Loan was $269.6 million. As of December 31, 2018, there were borrowings outstanding of $25.0 million under the 2016 Revolving Credit Facility.

(2) Represents open purchase orders for material and subcontracting costs related to construction and service contracts. These purchase orders are not reflected in the Consolidated Balance Sheets and should not impact future cash flows, as amounts should be recovered through customer billings.

(3) Represents primarily insurance related liabilities, and liabilities for deferred income taxes, incentive compensation and deferred compensation, classified as other long-term liabilities in the Consolidated Balance Sheets. Cash payments for insurance and deferred compensation related liabilities may be payable beyond three years, but it is not practical to estimate these payments; therefore, these liabilities are reflected in the 1-3 years payment period. We provide funding to our post retirement plans based on at least the minimum funding required by applicable regulations. In determining the minimum required funding, we utilize current actuarial assumptions and exchange rates to forecast estimates of amounts that may be payable for up to five years in the future. In our judgment, minimum funding estimates beyond a five year time horizon cannot be reliably estimated, and therefore, have not been included in the table.

We have a credit agreement dated as of August 3, 2016, which provides for a $900.0 million revolving credit facility (the "2016 Revolving Credit Facility") and a $400.0 million term loan (the "2016 Term Loan") (collectively referred to as the "2016 Credit Agreement") expiring August 3, 2021. We may increase the 2016 Revolving Credit Facility to $1.3 billion if additional lenders are identified and/or existing lenders are willing to increase their current commitments. We may allocate up to $300.0 million of available capacity under the 2016 Revolving Credit Facility to letters of credit for our account or for the account of any of our subsidiaries. Obligations under the 2016 Credit Agreement are guaranteed by most of our direct and indirect subsidiaries and are secured by substantially all of our assets. The 2016 Credit Agreement contains various covenants providing for, among other things, maintenance of certain financial ratios and certain limitations on payment of dividends, common stock repurchases, investments, acquisitions, indebtedness and capital expenditures. We were in compliance with all such covenants as of December 31, 2018 and 2017. A commitment fee is payable on the average daily unused amount of the 2016 Revolving Credit Facility, which ranges from 0.15% to 0.30%, based on certain financial tests. The fee was 0.15% of the unused amount as of December 31, 2018. Borrowings under the 2016 Credit Agreement bear interest at (1) a base rate plus a margin of 0.00% to 0.75%, based on certain financial tests, or (2) United States dollar LIBOR (2.52% at December 31, 2018) plus 1.00% to 1.75%, based on certain financial tests. The base rate is determined by the greater of (a) the prime commercial lending rate announced by Bank of Montreal from time to time (5.50% at December 31, 2018), (b) the federal funds effective rate, plus ½ of 1.00%, (c) the daily one month LIBOR rate, plus 1.00%, or (d) 0.00%. The interest rate in effect at December 31, 2018 was 3.52% . Fees for letters of credit issued under the 2016 Revolving Credit Facility range from 1.00% to 1.75% of the respective face amounts of outstanding letters of credit and are computed based on certain financial tests. Debt issuance costs are amortized over the life of the agreement and are included as part of interest expense. The 2016 Term Loan previously required us to make principal payments of $5.0 million on the last day of March, June, September and December of each year, which commenced with the calendar quarter ended December 31, 2016. On December 30, 2016, we made a payment of $100.0 million, of which $5.0 million represented our required quarterly payment and $95.0 million represented a prepayment of outstanding principal. Such prepayment was applied against the remaining mandatory quarterly payments on a ratable basis. As a result, commencing with the calendar quarter ended March 31, 2017, our required quarterly payment has been reduced to $3.8 million. All unpaid principal and interest is due on August 3, 2021. As of December 31, 2018 and 2017, the balance of the 2016 Term Loan was $269.6 million and $284.8 million, respectively. As of December 31, 2018 and 2017, we had approximately $109.0 million and $110.1 million of letters of credit outstanding, respectively. There were $25.0 million in borrowings outstanding under the 2016 Revolving Credit Facility as of December 31, 2018 and 2017.

The terms of our construction contracts frequently require that we obtain from surety companies ("Surety Companies") and provide to our customers payment and performance bonds ("Surety Bonds") as a condition to the award of such contracts. The Surety Bonds secure our payment and performance obligations under such contracts, and we have agreed to indemnify the Surety Companies for amounts, if any, paid by them in respect of Surety Bonds issued on our behalf. In addition, at the request of labor unions representing certain of our employees, Surety Bonds are sometimes provided to secure obligations for wages and benefits payable to or for such employees. Public sector contracts require Surety Bonds more frequently than private sector contracts and, accordingly, our bonding requirements typically increase as the amount of public sector work increases. As of December 31, 2018, based on the percentage-of-completion of our projects covered by Surety Bonds, our aggregate estimated exposure, assuming defaults on all our then existing contractual obligations, was approximately $1.1 billion, which represents approximately 28% of our total remaining performance obligations. The Surety Bonds are issued by Surety Companies in return for premiums, which vary depending on the size and type of bond.

From time to time, we discuss with our current and other Surety Bond providers the amounts of Surety Bonds that may be available to us based on our financial strength and the absence of any default by us on any Surety Bond issued on our behalf and believe those amounts are currently adequate for our needs. However, if we experience changes in our bonding relationships or if there are adverse changes in the surety industry, we may (i) seek to satisfy certain customer requests for Surety Bonds by posting other forms of collateral in lieu of Surety Bonds, such as letters of credit, parent company guarantees or cash, in order to convince customers to forego the requirement for Surety Bonds, (ii) increase our activities in our business segments that rarely require Surety Bonds, such as our building and industrial services segments, and/or (iii) refrain from bidding for certain projects that require Surety Bonds. There can be no assurance that we would be able to effectuate alternatives to providing Surety Bonds to our customers or to obtain, on favorable terms, sufficient additional work that does not require Surety Bonds. Accordingly, if we were to experience a reduction in the availability of Surety Bonds, we could experience a material adverse effect on our financial position, results of operations and/or cash flows.

In the ordinary course of business, we, at times, guarantee obligations of our subsidiaries under certain contracts. Generally, we are liable under such an arrangement only if our subsidiary fails to perform its obligations under the contract. Historically, we have not incurred any substantial liabilities as a consequence of these guarantees.

We do not have any other material financial guarantees or off-balance sheet arrangements other than those disclosed herein.

We are a party to lawsuits and other proceedings in which other parties seek to recover from us amounts ranging from a few thousand dollars to over $10.0 million. We do not believe that any such matters will have a material adverse effect on our financial position, results of operations or liquidity.

On September 26, 2011, our Board of Directors authorized us to repurchase up to $100.0 million of our outstanding common stock. On December 5, 2013, October 23, 2014, October 28, 2015, October 25, 2017 and October 23, 2018, our Board of Directors authorized us to repurchase up to an additional $100.0 million, $250.0 million, $200.0 million, $100.0 million and $200.0 million of our outstanding common stock, respectively. During 2018, we repurchased approximately 3.1 million shares of our common stock for approximately $216.2 million. Since the inception of the repurchase programs through December 31, 2018 we have repurchased approximately 15.9 million shares of our common stock for approximately $791.5 million. As of December 31, 2018, there remained authorization for us to repurchase approximately $158.5 million of our shares. The repurchase programs have no expiration date and do not obligate the Company to acquire any particular amount of common stock and may be suspended, recommenced or discontinued at any time or from time to time without prior notice. We may repurchase our shares from time to time to the extent permitted by securities laws and other legal requirements, including provisions in our 2016 Credit Agreement, placing limitations on such repurchases. The repurchase programs have been and will be funded from our operations.

We have paid quarterly dividends since October 25, 2011. We currently pay a regular quarterly dividend of $0.08 per share. Our 2016 Credit Agreement places limitations on the payment of dividends on our common stock. However, we do not believe that the terms of such agreement currently materially limit our ability to pay a quarterly dividend of $0.08 per share for the foreseeable future. The payment of dividends has been and will be funded from our operations.

Our primary source of liquidity has been, and is expected to continue to be, cash generated by operating activities. We also maintain our 2016 Revolving Credit Facility that may be utilized, among other things, to meet short-term liquidity needs in the event cash generated by operating activities is insufficient or to enable us to participate in joint ventures or to make acquisitions that may require access to cash on short notice or for any other reason. Negative macroeconomic trends may have an adverse effect on liquidity. During economic downturns, there have typically been fewer small discretionary projects from the private sector, and our competitors have aggressively bid larger long-term infrastructure and public sector contracts. Short-term liquidity is also impacted by the type and length of construction contracts in place and large turnaround activities in our United States industrial services segment that are billed in arrears pursuant to contractual terms that are standard within the industry. Performance of long duration contracts typically requires greater amounts of working capital. While we strive to negotiate favorable billing terms which allow us to invoice in advance of costs incurred on certain of our contracts, there can be no assurance that such terms will be agreed to by our customers.

Long-term liquidity requirements can be expected to be met initially through cash generated from operating activities and our 2016 Revolving Credit Facility. Based upon our current credit ratings and financial position, we can reasonably expect to be able to incur long-term debt to fund acquisitions. Over the long term, our primary revenue risk factor continues to be the level of demand for non-residential construction services and for building and industrial services, which is influenced by macroeconomic trends including interest rates and governmental economic policy. In addition, our ability to perform work is critical to meeting long-term liquidity requirements.

We believe that our current cash balances and our borrowing capacity available under our 2016 Revolving Credit Facility or other forms of financing available to us through borrowings, combined with cash expected to be generated from operations, will be sufficient to provide short-term and foreseeable long-term liquidity and meet our expected capital expenditure requirements.

Certain Insurance Matters

As of December 31, 2018 and 2017, we utilized approximately $108.9 million and $109.7 million, respectively, of letters of credit obtained under our 2016 Revolving Credit Facility as collateral for insurance obligations.

New Accounting Pronouncements

We review new accounting standards to determine the expected impact, if any, that the adoption of such standards will have on our financial position and/or results of operations. See Note 2 - Summary of Significant Accounting Policies of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for further information regarding new accounting standards, including the anticipated dates of adoption and the effects on our consolidated financial position, results of operations or liquidity.

Application of Critical Accounting Policies

Our consolidated financial statements are based on the application of significant accounting policies, which require management to make significant estimates and assumptions. Our significant accounting policies are described in Note 2 - Summary of Significant Accounting Policies of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data of this Form 10-K. We believe that some of the more critical judgment areas in the application of accounting policies that affect our financial condition and results of operations are the impact of changes in the estimates and judgments pertaining to: (a) revenue recognition from contracts with customers; (b) collectibility or valuation of accounts receivable; (c) insurance liabilities; (d) income taxes; and (e) goodwill and identifiable intangible assets.

Revenue Recognition from Contracts with Customers

We believe our most critical accounting policy is revenue recognition in accordance with ASC 606. ASC 606 aligns revenue recognition with the timing of when promised goods or services are transferred to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. This core principle is achieved through the application of the following five step model: (1) identify the contract with a customer, (2) identify the performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price to performance obligations in the contract, and (5) recognize revenue as performance obligations are satisfied.

The Company recognizes revenue at the time the related performance obligation is satisfied by transferring a promised good or service to its customers. A good or service is considered to be transferred when the customer obtains control. The Company can transfer control of a good or service and satisfy its performance obligations either over time or at a point in time. The Company transfers control of a good or service over time and, therefore, satisfies a performance obligation and recognizes revenue over time if one of the following three criteria are met: (a) the customer simultaneously receives and consumes the benefits provided by the Company's performance as we perform, (b) the Company's performance creates or enhances an asset that the customer controls as the asset is created or enhanced, or (c) the Company's performance does not create an asset with an alternative use to us, and we have an enforceable right to payment for performance completed to date.

For our performance obligations satisfied over time, we recognize revenue by measuring the progress toward complete satisfaction of that performance obligation. The selection of the method to measure progress towards completion can be either an input method or an output method and requires judgment based on the nature of the goods or services to be provided.

For our construction contracts, revenue is generally recognized over time as our performance creates or enhances an asset that the customer controls as it is created or enhanced. Our fixed price construction projects generally use a cost-to-cost input method to measure our progress towards complete satisfaction of the performance obligation as we believe it best depicts the transfer of control to the customer which occurs as we incur costs on our contracts. Under the cost-to-cost measure of progress, the extent of progress towards completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the performance obligation. For our unit price construction contracts, progress towards complete satisfaction is measured through an output method, such as the amount of units produced or delivered, when our performance does not produce significant amounts of work in process or finished goods prior to complete satisfaction of such performance obligations.

For our services contracts, revenue is also generally recognized over time as the customer simultaneously receives and consumes the benefits of our performance as we perform the service. For our fixed price service contracts with specified service periods, revenue is generally recognized on a straight-line basis over such service period when our inputs are expended evenly, and the customer receives and consumes the benefits of our performance throughout the contract term.

The timing of revenue recognition for the manufacturing of new build heat exchangers within our United States industrial services segment depends on the payment terms of the contract, as our performance does not create an asset with an alternative use to us. For those contracts for which we have a right to payment for performance completed to date at all times throughout our performance, inclusive of a cancellation, we recognize revenue over time. These performance obligations use a cost-to-cost input method to measure our progress towards complete satisfaction of the performance obligation as we believe it best depicts the transfer of control to the customer which occurs as we incur costs on our contracts. However, for those contracts for which we do not have a right, at all times, to payment for performance completed to date, we recognize revenue at the point in time when control is transferred to the customer. For bill-and-hold arrangements, revenue is recognized when the customer obtains control of the heat exchanger, which may be prior to shipping, if the criteria of ASC 606 are met.

For certain of our revenue streams, such as call-out repair and service work, outage services, refinery turnarounds and specialty welding services that are performed under time and materials contracts, our progress towards complete satisfaction of such performance obligations is measured using an output method as the customer receives and consumes the benefits of our performance completed to date.

Due to uncertainties inherent in the estimation process, it is possible that estimates of costs to complete a performance obligation will be revised in the near-term. For those performance obligations for which revenue is recognized using a cost-to-cost input method, changes in total estimated costs, and related progress towards complete satisfaction of the performance obligation, are recognized on a cumulative catch-up basis in the period in which the revisions to the estimates are made. When the current estimate of total costs for a performance obligation indicate a loss, a provision for the entire estimated loss on the unsatisfied performance obligation is made in the period in which the loss becomes evident. During the year ended December 31, 2018, we recognized losses of $10.0 million related to a change in total estimated costs on a transportation project within our United States electrical construction and facilities services segment, resulting in part from contract scope issues. There were no other changes in total estimated costs that resulted in a significant impact to our operating results for the years ended December 31, 2018 and 2017.

The timing of revenue recognition may differ from the timing of invoicing to customers. Contract assets include unbilled amounts from our long-term construction projects when revenues recognized under the cost-to-cost measure of progress exceed the amounts invoiced to our customers, as the amounts cannot be billed under the terms of our contracts. Such amounts are recoverable from our customers based upon various measures of performance, including achievement of certain milestones, completion of specified units or completion of a contract. In addition, many of our time and materials arrangements, as well as our contracts to perform turnaround services within the United States industrial services segment, are billed in arrears pursuant to contract terms that are standard within the industry, resulting in contract assets and/or unbilled receivables being recorded, as revenue is recognized in advance of billings. Also included in contract assets are amounts we seek or will seek to collect from customers or others for errors or changes in contract specifications or design, contract change orders or modifications in dispute or unapproved as to both scope and/or price, or other customer-related causes of unanticipated additional contract costs (claims and unapproved change orders). Our contract assets do not include capitalized costs to obtain and fulfill a contract. Contract assets are generally classified as current within the Consolidated Balance Sheets.

As of December 31, 2018 and 2017, contract assets included unbilled revenues for unapproved change orders of approximately $25.2 million and $17.4 million, respectively. As of December 31, 2018 and 2017, there were no claim amounts included within contract assets or accounts receivable. There were contractually billed amounts and retention related to contracts with unapproved change orders and claims of approximately $96.1 million and $57.6 million as of December 31, 2018 and 2017, respectively. For contracts in claim status, contractually billed amounts will generally not be paid by the customer to us until final resolution of related claims.

Contract liabilities from our long-term construction contracts arise when amounts invoiced to our customers exceed revenues recognized under the cost-to-cost measure of progress. Contract liabilities additionally include advanced payments from our customers on certain contracts. Contract liabilities decrease as we recognize revenue from the satisfaction of the related performance obligation and are recorded as either current or long-term, depending upon when we expect to recognize such revenue. The long-term portion of contract liabilities is included in “Other long-term obligations” in the Consolidated Balance Sheets.

See Note 3 - Revenue from Contracts with Customers of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for further disclosure regarding revenue recognition.

Accounts Receivable

Accounts receivable are recognized in the period we deliver goods or provide services to our customers or when our right to consideration is unconditional. We are required to estimate the collectibility of accounts receivable. A considerable amount of judgment is required in assessing the likelihood of realization of receivables. Relevant assessment factors include the creditworthiness of the customer, our prior collection history with the customer and related aging of the past due balances. The provision for doubtful accounts during 2018, 2017 and 2016 amounted to approximately $2.1 million, $7.3 million and $6.2 million, respectively. At December 31, 2018 and 2017, our accounts receivable of $1,773.6 million and $1,607.9 million, respectively, were recorded net of allowances for doubtful accounts of $15.4 million and $17.2 million, respectively. The decrease in our allowance for doubtful accounts was primarily due to the write-off of previously reserved accounts receivable. Specific accounts receivable are evaluated when we believe a customer may not be able to meet its financial obligations due to deterioration of its financial condition or its credit ratings. The allowance for doubtful accounts requirements are based on the best facts available and are re-evaluated and adjusted on a regular basis as additional information is received.

Insurance Liabilities

We have loss payment deductibles for certain workers' compensation, automobile liability, general liability and property claims, have self-insured retentions for certain other casualty claims and are self-insured for employee-related healthcare claims. In addition, we maintain a wholly-owned captive insurance subsidiary to manage certain of our insurance liabilities. Losses are recorded based upon estimates of our liability for claims incurred and for claims incurred but not reported. The liabilities are derived from known facts, historical trends and industry averages utilizing the assistance of an actuary to determine the best estimate for the majority of these obligations. We believe the liabilities recognized on the Consolidated Balance Sheets for these obligations are adequate. However, such obligations are difficult to assess and estimate due to numerous factors, including severity of injury, determination of liability in proportion to other parties, timely reporting of occurrences and effectiveness of safety and risk management programs. Therefore, if our actual experience differs from the assumptions and estimates used for recording the liabilities, adjustments may be required and will be recorded in the period that the experience becomes known. Our estimated net insurance liabilities for workers' compensation, automobile liability, general liability and property claims increased by $4.7 million for the year ended December 31, 2018 compared to the year ended December 31, 2017, primarily due to a change in the actuarial assumptions for the most recent policy year. If our estimated insurance liabilities for workers' compensation, automobile liability, general liability and property claims were to increase by 10%, it would have resulted in $16.2 million of additional expense for the year ended December 31, 2018.

Income Taxes

We had net deferred income tax liabilities at December 31, 2018 and 2017 of $70.8 million and $64.7 million, respectively, primarily resulting from differences between the carrying value and income tax basis of certain identifiable intangible assets and depreciable fixed assets, which will impact our taxable income in future periods. Included within these net deferred income tax liabilities are $104.1 million and $105.6 million of deferred income tax assets as of December 31, 2018 and 2017, respectively. A valuation allowance is required when it is more likely than not that all or a portion of a deferred income tax asset will not be realized. As of December 31, 2018 and 2017, the total valuation allowance on deferred income tax assets, related to state net operating loss carryforwards, was approximately $3.9 million and $3.8 million, respectively. The ultimate realization of deferred income tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Based on our taxable income, which has generally exceeded the amount of our net deferred tax asset balance and projections of future taxable income, we have determined that it is more likely than not that the net deferred income tax assets will be realized.

Goodwill and Identifiable Intangible Assets

As of December 31, 2018, we had $990.9 million and $488.3 million, respectively, of goodwill and net identifiable intangible assets (primarily consisting of our contract backlog, developed technology/vendor network, customer relationships, non-competition agreements and trade names) arising out of the acquisition of companies. As of December 31, 2017, goodwill and net identifiable intangible assets were $964.9 million and $495.0 million, respectively. As of December 31, 2018, approximately 13.4% of our goodwill related to our United States electrical construction and facilities services segment, approximately 25.9% of our goodwill related to our United States mechanical construction and facilities services segment, approximately 27.7% of our goodwill related to our United States building services segment and approximately 33.0% of our goodwill related to our United States industrial services segment. The changes to goodwill since December 31, 2017 were related to four acquisitions in 2018 and a purchase price adjustment related to an acquisition completed in 2017. The determination of related estimated useful lives for identifiable intangible assets and whether those assets are impaired involves significant judgments based upon short and long-term projections of future performance. These forecasts reflect assumptions regarding the ability to successfully integrate acquired companies, as well as macroeconomic conditions. ASC Topic 350, "Intangibles-Goodwill and Other" ("ASC 350") requires that goodwill and other identifiable intangible assets with indefinite useful lives not be amortized, but instead tested at least annually for impairment (which we test each October 1, absent any impairment indicators), and be written down if impaired. ASC 350 requires that goodwill be allocated to its respective reporting unit and that identifiable intangible assets with finite lives be amortized over their useful lives.

We test for impairment of our goodwill at the reporting unit level. Our reporting units are consistent with the reportable segments identified in Note 18, "Segment Information", of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data. In assessing whether our goodwill is impaired, we compare the fair value of the reporting unit to the carrying amount, including goodwill. If the fair value exceeds the carrying amount, no impairment loss is recognized. However, if the carrying amount of the reporting unit exceeds the fair value, the goodwill of the reporting unit is impaired and an impairment loss in the amount of the excess is recognized and charged to operations. The fair value of each of our reporting units is generally determined using discounted estimated future cash flows; however, in certain circumstances, consideration is given to a market approach whereby fair value is measured based on a multiple of earnings.

As of the date of our latest impairment test (October 1, 2018), the carrying values of our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment, our United States building services segment and our United States industrial services segment were approximately $251.2 million, $398.8 million, $499.5 million and $657.5 million, respectively. The fair values of our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment, our United States building services segment and our United States industrial services segment exceeded their carrying values by approximately $1,203.0 million, $1,710.9 million, $628.2 million and $81.2 million, respectively.

During our annual impairment testing procedures as of October 1, 2017, and as a result of continued adverse market conditions, we tempered our expectations regarding the strength of a near-term recovery within our United States industrial services segment. As a result of our revised projections, the fair value of this segment fell short of its carrying value resulting in the recognition of a non-cash impairment charge of $57.5 million for the year ended December 31, 2017. For the years ended December 31, 2018 and 2016, no impairment of our goodwill was recognized.

The weighted average cost of capital used in our annual testing for impairment as of October 1, 2018 was 9.8%, 9.7% and 10.5% for our domestic construction segments, our United States building services segment and our United States industrial services segment, respectively. The perpetual growth rate used for our annual testing was 2.7% for all of our domestic segments. Unfavorable changes in these key assumptions may affect future testing results. For example, keeping all other assumptions constant, a 50 basis point increase in the weighted average costs of capital would cause the estimated fair values of our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment, our United States building services segment and our United States industrial services segment to decrease by approximately $91.7 million, $132.4 million, $71.2 million, and $46.4 million, respectively. In addition, keeping all other assumptions constant, a 50 basis point reduction in the perpetual growth rate would cause the estimated fair values of our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment, our United States building services segment and our United States industrial services segment to decrease by approximately $52.5 million, $74.1 million, $38.3 million, and $23.3 million, respectively.

We also test for the impairment of trade names that are not subject to amortization by calculating the fair value using the "relief from royalty payments" methodology. This approach involves two steps: (a) estimating reasonable royalty rates for each trade name and (b) applying these royalty rates to a net revenue stream and discounting the resulting cash flows to determine fair value. This fair value is then compared with the carrying value of each trade name. If the carrying amount of the trade name is greater than the implied fair value of the trade name, an impairment in the amount of the excess is recognized and charged to operations. For the year ended December 31, 2018, no impairment of our indefinite-lived trade names was recognized. The annual impairment review of our indefinite-lived trade names for the years ended December 31, 2017 and 2016 resulted in $0.3 million and $2.4 million, respectively, of non-cash impairment charges as a result of a change in the fair value of subsidiary trade names associated with certain prior acquisitions reported within our United States building services segment and our United States mechanical construction and facilities services segment, respectively.

In addition, we review for the impairment of other identifiable intangible assets that are being amortized whenever facts and circumstances indicate that their carrying values may not be fully recoverable. This test compares their carrying values to the undiscounted pre-tax cash flows expected to result from the use of the assets. If the assets are impaired, the assets are written down to their fair values, generally determined based on their future discounted cash flows. For the year ended December 31, 2018, we recorded a $0.9 million non-cash impairment charge associated with a finite-lived trade name within our United States industrial services segment. For the years ended December 31, 2017 and 2016, no impairment of our other identifiable intangible assets was recognized.

As referenced above, we have certain businesses, particularly within our United States industrial services segment, whose results are highly impacted by the demand for some of our offerings within the industrial and oil and gas markets. Future performance of this segment, along with a continued evaluation of the conditions of its end user markets, will be important to ongoing impairment assessments. Should this segment's actual results suffer a decline or expected future results be revised downward, the risk of goodwill impairment or impairment of other identifiable intangible assets would increase.

Our development of the present value of future cash flow projections used in impairment testing is based upon assumptions and estimates by management from a review of our operating results, business plans, anticipated growth rates and margins, and weighted average cost of capital, among other considerations. Those assumptions and estimates can change in future periods, and other factors used in assessing fair value are outside the control of management, such as interest rates. There can be no assurance that estimates and assumptions made for purposes of our goodwill and identifiable intangible asset impairment testing will prove to be accurate predictions of the future. If our assumptions regarding future business performance or anticipated growth rates and/or margins are not achieved, or there is a rise in interest rates, we may be required to record goodwill and/or identifiable intangible asset impairment charges in future periods.

It is not possible at this time to determine if any future impairment charge will result or, if it does, whether such a charge would be material.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We have not used any derivative financial instruments during the years ended December 31, 2018 and 2017, including trading or speculating on changes in interest rates or commodity prices of materials used in our business.

We are exposed to market risk for changes in interest rates for borrowings under the 2016 Credit Agreement, which provides for a revolving credit facility and a term loan. Borrowings under the 2016 Credit Agreement bear interest at variable rates. For further information on borrowing rates and interest rate sensitivity, refer to the Liquidity and Capital Resources discussion in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations. As of December 31, 2018, there were borrowings of $25.0 million outstanding under the 2016 Revolving Credit Facility and the balance of the 2016 Term Loan was $269.6 million. Based on the $294.6 million borrowings outstanding under the 2016 Credit Agreement, if overall interest rates were to increase by 100 basis points, interest expense, net of income taxes, would increase by approximately $2.2 million for the next twelve months. Conversely, if overall interest rates were to decrease by 100 basis points, interest expense, net of income taxes, would decrease by approximately $2.2 million for the next twelve months.

We are also exposed to construction market risk and its potential related impact on accounts receivable or contract assets on uncompleted contracts. The amounts recorded may be at risk if our customers' ability to pay these obligations is negatively impacted by economic conditions. We continually monitor the creditworthiness of our customers and maintain ongoing discussions with customers regarding contract status with respect to change orders and billing terms. Therefore, we believe we take appropriate action to manage market and other risks, but there is no assurance that we will be able to reasonably identify all risks with respect to the collectibility of these assets. See also the previous discussions of Revenue Recognition from Contracts with Customers and Accounts Receivable under Application of Critical Accounting Policies in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Amounts invested in our foreign operations are translated into U.S. dollars at the exchange rates in effect at year end. The resulting translation adjustments are recorded as accumulated other comprehensive income (loss), a component of equity, in the Consolidated Balance Sheets. We believe the exposure to the effects that fluctuating foreign currencies may have on our consolidated results of operations is limited because our foreign operations primarily invoice customers and collect obligations in their respective local currencies. Additionally, expenses associated with these transactions are generally contracted and paid for in their same local currencies.

In addition, we are exposed to market risk of fluctuations in certain commodity prices of materials, such as copper and steel, which are used as components of supplies or materials utilized in our construction, building services and industrial services operations. We are also exposed to increases in energy prices, particularly as they relate to gasoline prices for our fleet of approximately 11,000 vehicles. While we believe we can increase our contract prices to adjust for some price increases in commodities, there can be no assurance that such price increases, if they were to occur, would be recoverable. Additionally, our fixed price contracts do not allow us to adjust our prices and, as a result, increases in material costs could reduce our profitability with respect to projects in progress.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

EMCOR Group, Inc. and Subsidiaries

CONSOLIDATED BALANCE SHEETS

(In thousands, except share and per share data)

	December 31, 2018	December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	$ 363,907	$ 467,430
Accounts receivable, less allowance for doubtful accounts of $15,361 and $17,230, respectively	1,773,620	1,607,922
Contract assets	158,243	122,621
Inventories	42,321	42,724
Prepaid expenses and other	48,116	43,812
Total current assets	2,386,207	2,284,509
Investments, notes and other long-term receivables	2,899	2,309
Property, plant and equipment, net	134,351	127,156
Goodwill	990,887	964,893
Identifiable intangible assets, net	488,286	495,036
Other assets	86,177	92,001
Total assets	$ 4,088,807	$ 3,965,904
LIABILITIES AND EQUITY		
Current liabilities:		
Current maturities of long-term debt and capital lease obligations	$ 16,013	$ 15,364
Accounts payable	652,091	567,840
Contract liabilities	552,290	524,156
Accrued payroll and benefits	343,069	322,865
Other accrued expenses and liabilities	170,935	220,727
Total current liabilities	1,734,398	1,650,952
Borrowings under revolving credit facility	25,000	25,000
Long-term debt and capital lease obligations	254,764	269,786
Other long-term obligations	333,204	346,049
Total liabilities	2,347,366	2,291,787
Equity:		
EMCOR Group, Inc. stockholders' equity:		
Preferred stock, $0.10 par value, 1,000,000 shares authorized, zero issued and outstanding	—	—
Common stock, $0.01 par value, 200,000,000 shares authorized, 60,123,184 and 59,870,980 shares issued, respectively	601	599
Capital surplus	21,103	8,005
Accumulated other comprehensive loss	(87,662)	(94,200)
Retained earnings	2,060,440	1,796,556
Treasury stock, at cost 4,139,421 and 1,072,552 shares, respectively	(253,937)	(37,693)
Total EMCOR Group, Inc. stockholders' equity	1,740,545	1,673,267
Noncontrolling interests	896	850
Total equity	1,741,441	1,674,117
Total liabilities and equity	$ 4,088,807	$ 3,965,904

The accompanying notes to consolidated financial statements are an integral part of these statements.

EMCOR Group, Inc. and Subsidiaries

CONSOLIDATED STATEMENTS OF OPERATIONS
For The Years Ended December 31,
(In thousands, except per share data)

	2018	2017	2016
Revenues	$ 8,130,631	$ 7,686,999	$ 7,551,524
Cost of sales	6,925,178	6,539,987	6,513,662
Gross profit	1,205,453	1,147,012	1,037,862
Selling, general and administrative expenses	799,157	758,714	727,067
Restructuring expenses	2,306	1,577	1,438
Impairment loss on goodwill and identifiable intangible assets	907	57,819	2,428
Operating income	403,083	328,902	306,929
Net periodic pension (cost) income	2,743	1,652	1,529
Interest expense	(13,544)	(12,770)	(12,627)
Interest income	2,746	965	663
Income from continuing operations before income taxes	395,028	318,749	296,494
Income tax provision	109,106	90,699	111,199
Income from continuing operations	285,922	228,050	185,295
Loss from discontinued operation, net of income taxes	(2,345)	(857)	(3,142)
Net income including noncontrolling interests	283,577	227,193	182,153
Less: Net (income) loss attributable to noncontrolling interests	(46)	3	(218)
Net income attributable to EMCOR Group, Inc.	$ 283,531	$ 227,196	$ 181,935
Basic earnings (loss) per common share:			
From continuing operations attributable to EMCOR Group, Inc. common stockholders	$ 4.92	$ 3.85	$ 3.05
From discontinued operation	(0.04)	(0.01)	(0.05)
Net income attributable to EMCOR Group, Inc. common stockholders	$ 4.88	$ 3.84	$ 3.00
Diluted earnings (loss) per common share:			
From continuing operations attributable to EMCOR Group, Inc. common stockholders	$ 4.89	$ 3.83	$ 3.02
From discontinued operation	(0.04)	(0.01)	(0.05)
Net income attributable to EMCOR Group, Inc. common stockholders	$ 4.85	$ 3.82	$ 2.97
Dividends declared per common share	$ 0.32	$ 0.32	$ 0.32

The accompanying notes to consolidated financial statements are an integral part of these statements.

EMCOR Group, Inc. and Subsidiaries

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
For The Years Ended December 31,
(In thousands)

	2018	2017	2016
Net income including noncontrolling interests	$ 283,577	$ 227,193	$ 182,153
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustments	(1,322)	(1,384)	(1,434)
Changes in post retirement plans [(1)]	7,860	8,887	(23,316)
Other comprehensive income (loss)	6,538	7,503	(24,750)
Comprehensive income	290,115	234,696	157,403
Less: Comprehensive (income) loss attributable to noncontrolling interests	(46)	3	(218)
Comprehensive income attributable to EMCOR Group, Inc.	$ 290,069	$ 234,699	$ 157,185

(1) Net of tax (provision) benefit of $(2.1) million, $(1.8) million and $5.1 million for the years ended December 31, 2018, 2017 and 2016, respectively.

The accompanying notes to consolidated financial statements are an integral part of these statements.

EMCOR Group, Inc. and Subsidiaries

CONSOLIDATED STATEMENTS OF CASH FLOWS
For The Years Ended December 31,
(In thousands)

	2018	2017	2016
Cash flows - operating activities:			
Net income including noncontrolling interests	$ 283,577	$ 227,193	$ 182,153
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	38,472	39,915	38,881
Amortization of identifiable intangible assets	42,443	48,594	40,908
Provision for doubtful accounts	2,123	7,264	6,194
Deferred income taxes	4,249	(53,358)	(8,108)
Gain on sale of property, plant and equipment	(517)	(1,846)	(330)
Excess tax benefits from share-based compensation	(1,646)	(1,616)	(2,546)
Equity income from unconsolidated entities	(347)	(864)	(1,569)
Non-cash expense for amortization of debt issuance costs	1,186	1,186	1,354
Non-cash expense from contingent consideration arrangements	186	317	—
Non-cash expense for impairment of goodwill and identifiable intangible assets	907	57,819	2,428
Non-cash share-based compensation expense	11,030	9,939	8,902
Non-cash income from changes in unrecognized tax benefits	(72)	(5,641)	(759)
Distributions from unconsolidated entities	3,110	5,506	1,247
Changes in operating assets and liabilities, excluding the effect of businesses acquired:			
Increase in accounts receivable	(146,101)	(80,514)	(98,773)
(Increase) decrease in inventories	(3,915)	(4,936)	954
(Increase) decrease in contract assets	(30,935)	12,433	(7,851)
Increase in accounts payable	78,554	54,910	13,141
Increase in contract liabilities	20,726	24,695	57,244
(Decrease) increase in accrued payroll and benefits and other accrued expenses and liabilities	(24,715)	24,017	22,659
Changes in other assets and liabilities, net	(7,304)	1,036	6,243
Net cash provided by operating activities	271,011	366,049	262,372
Cash flows - investing activities:			
Payments for acquisitions of businesses, net of cash acquired	(72,080)	(107,223)	(232,947)
Proceeds from sale of property, plant and equipment	1,237	4,014	2,023
Purchase of property, plant and equipment	(43,479)	(34,684)	(39,648)
Investments in and advances to unconsolidated entities	(3,484)	(675)	(99)
Distributions from unconsolidated entities	84	475	—
Net cash used in investing activities	(117,722)	(138,093)	(270,671)
Cash flows - financing activities:			
Proceeds from revolving credit facility	—	—	220,000
Repayments of revolving credit facility	—	(100,000)	(95,000)
Borrowings from long-term debt	—	—	400,000
Repayments of long-term debt and debt issuance costs	(15,235)	(15,202)	(417,990)
Repayments of capital lease obligations	(1,501)	(1,445)	(1,384)
Dividends paid to stockholders	(18,640)	(18,971)	(19,454)
Repurchase of common stock	(216,244)	(93,166)	(94,221)
Proceeds from exercise of stock options	—	—	741
Taxes paid related to net share settlements of equity awards	(3,848)	(3,462)	(4,225)
Issuance of common stock under employee stock purchase plan	5,765	4,793	4,814
Payments for contingent consideration arrangements	(3,339)	(1,017)	—
Distributions to noncontrolling interests	—	—	(2,710)
Net cash used in financing activities	(253,042)	(228,470)	(9,429)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(3,421)	3,242	(6,675)
(Decrease) increase in cash, cash equivalents and restricted cash	(103,174)	2,728	(24,403)
Cash, cash equivalents and restricted cash at beginning of year [(1)]	469,388	466,660	491,063
Cash, cash equivalents and restricted cash at end of period [(1)]	$ 366,214	$ 469,388	$ 466,660

(1) Includes $2.3 million, $2.0 million, $2.0 million and $4.2 million of restricted cash classified as "Prepaid expenses and other" in the Consolidated Balance Sheet as of December 31, 2018, 2017, 2016 and 2015, respectively.

The accompanying notes to consolidated financial statements are an integral part of these statements.

EMCOR Group, Inc. and Subsidiaries

CONSOLIDATED STATEMENTS OF EQUITY
For The Years Ended December 31,
(In thousands)

		EMCOR Group, Inc. Stockholders					
	Total	Common stock	Capital surplus	Accumulated other comprehensive (loss) income (1)	Retained earnings	Treasury stock	Noncontrolling interests
Balance, December 31, 2015	$ 1,480,056	$ 617	$ 130,369	$ (76,953)	$ 1,432,980	$ (10,302)	$ 3,345
Net income including noncontrolling interests	182,153	—	—	—	181,935	—	218
Other comprehensive loss	(24,750)	—	—	(24,750)	—	—	—
Common stock issued under share-based compensation plans (2)	1,724	4	729	—	991	—	—
Tax withholding for common stock issued under share-based compensation plans	(4,225)	—	(4,225)	—	—	—	—
Common stock issued under employee stock purchase plan	4,814	—	4,814	—	—	—	—
Common stock dividends	(19,454)	—	183	—	(19,637)	—	—
Repurchase of common stock	(88,568)	(15)	(88,553)	—	—	—	—
Distributions to noncontrolling interests	(2,710)	—	—	—	—	—	(2,710)
Share-based compensation expense	8,902	—	8,902	—	—	—	—
Balance, December 31, 2016	$ 1,537,942	$ 606	$ 52,219	$ (101,703)	$ 1,596,269	$ (10,302)	$ 853
Net income including noncontrolling interests	227,193	—	—	—	227,196	—	(3)
Other comprehensive income	7,503	—	—	7,503	—	—	—
Common stock issued under share-based compensation plans	1	2	(1)	—	—	—	—
Tax withholding for common stock issued under share-based compensation plans	(3,462)	—	(3,462)	—	—	—	—
Common stock issued under employee stock purchase plan	4,793	1	4,792	—	—	—	—
Common stock dividends	(18,971)	—	164	—	(19,135)	—	—
Repurchase of common stock (3)	(90,821)	(10)	(55,646)	—	(7,774)	(27,391)	—
Distributions to noncontrolling interests	—	—	—	—	—	—	—
Share-based compensation expense	9,939	—	9,939	—	—	—	—
Balance, December 31, 2017	$ 1,674,117	$ 599	$ 8,005	$ (94,200)	$ 1,796,556	$ (37,693)	$ 850
Net income including noncontrolling interests	283,577	—	—	—	283,531	—	46
Other comprehensive income	6,538	—	—	6,538	—	—	—
Cumulative-effect adjustment (4)	(854)	—	—	—	(854)	—	—
Common stock issued under share-based compensation plans	—	1	(1)	—	—	—	—
Tax withholding for common stock issued under share-based compensation plans	(3,848)	—	(3,848)	—	—	—	—
Common stock issued under employee stock purchase plan	5,765	1	5,764	—	—	—	—
Common stock dividends	(18,640)	—	153	—	(18,793)	—	—
Repurchase of common stock (3)	(216,244)	—	—	—	—	(216,244)	—
Distributions to noncontrolling interests	—	—	—	—	—	—	—
Share-based compensation expense	11,030	—	11,030	—	—	—	—
Balance, December 31, 2018	$ 1,741,441	$ 601	$ 21,103	$ (87,662)	$ 2,060,440	$ (253,937)	$ 896

(1) Represents cumulative foreign currency translation and post retirement liability adjustments of $(0.9) million and $(86.8) million, respectively, as of December 31, 2018, $0.5 million and $(94.7) million, respectively, as of December 31, 2017, and $2.1 million and $(103.8) million, respectively, as of December 31, 2016.

(2) Includes a $1.0 million adjustment to retained earnings to recognize net operating loss carryforwards attributable to excess tax benefits on stock compensation upon the adoption of Accounting Standards Update No. 2016-09.

(3) Beginning June 1, 2017, shares of common stock repurchased are held as treasury stock by the Company.

(4) Represents adjustment to retained earnings upon the adoption of Accounting Standards Codification Topic 606.

The accompanying notes to consolidated financial statements are an integral part of these statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 - NATURE OF OPERATIONS

References to the "Company," "EMCOR," "we," "us," "our" and similar words refer to EMCOR Group, Inc. and its consolidated subsidiaries unless the context indicates otherwise.

We are one of the largest electrical and mechanical construction and facilities services firms in the United States. In addition, we provide a number of building services and industrial services. We specialize principally in providing construction services relating to electrical and mechanical systems in all types of facilities and in providing various services relating to the operation, maintenance and management of facilities, including refineries and petrochemical plants.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its majority-owned subsidiaries and joint ventures. Significant intercompany accounts and transactions have been eliminated. All investments over which we exercise significant influence, but do not control (a 20% to 50% ownership interest), are accounted for using the equity method of accounting. For joint ventures that have been accounted for using the consolidation method of accounting, noncontrolling interests represent the allocation of earnings to our joint venture partners who either have a minority-ownership interest in the joint venture or are not at risk for the majority of losses of the joint venture.

The results of operations of companies acquired have been included in the results of operations from the date of the respective acquisition.

Principles of Preparation

The preparation of the consolidated financial statements, in conformity with accounting principles generally accepted in the United States, requires us to make estimates and assumptions that affect the reported amounts of 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 materially differ from those estimates.

Our reportable segments reflect certain reclassifications of prior year amounts from our United States mechanical construction and facilities services segment to our United States building services segment due to changes in our internal reporting structure.

During the third quarter of 2014, we ceased construction operations in the United Kingdom. The results of the construction operations of our United Kingdom segment for all periods are presented as discontinued operations.

Revenue Recognition

The Company adopted Accounting Standards Codification Topic 606, "Revenue from Contracts with Customers" ("ASC 606") on January 1, 2018. In accordance with ASC 606, revenue is recognized when promised goods or services are transferred to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. Refer to Note 3 - Revenue from Contracts with Customers of the notes to consolidated financial statements for additional information.

For the periods presented prior to the adoption of ASC 606, revenues from long-term construction contracts were recognized in accordance with ASC Topic 605-35, "Revenue Recognition-Construction-Type and Production-Type Contracts". Revenues from the performance of services for maintenance, repair and retrofit work were recognized consistent with the performance of the services, generally on a pro-rata basis over the life of the contractual arrangement. Revenues related to the engineering, manufacturing and repairing of shell and tube heat exchangers were recognized when the product was shipped and all other revenue recognition criteria were met.

Cash and cash equivalents

For purposes of the consolidated financial statements, we consider all highly liquid instruments with original maturities of three months or less to be cash equivalents. We maintain a centralized cash management system whereby our excess cash balances are invested in high quality, short-term money market instruments, which are considered cash equivalents. We have cash balances in certain of our domestic bank accounts that exceed federally insured limits.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - (Continued)

Allowance for Doubtful Accounts

Accounts receivable are recorded at the invoiced amount and do not bear interest. The Company maintains an allowance for doubtful accounts. This allowance is based upon the best estimate of the probable losses in existing accounts receivable. The Company determines the allowances based upon individual accounts when information indicates the customers may have an inability to meet their financial obligations, as well as historical collection and write-off experience. These amounts are re-evaluated and adjusted on a regular basis as additional information is received. Actual write-offs are charged against the allowance when collection efforts have been unsuccessful. At December 31, 2018 and 2017, our accounts receivable of $1,773.6 million and $1,607.9 million, respectively, were recorded net of allowances for doubtful accounts of $15.4 million and $17.2 million, respectively. The provision for doubtful accounts during 2018, 2017 and 2016 amounted to approximately $2.1 million, $7.3 million and $6.2 million, respectively.

Inventories

Inventories are stated at the lower of cost or net realizable value. Cost is determined principally using the average cost method.

Property, plant and equipment

Property, plant and equipment is stated at cost. Depreciation, including amortization of assets under capital leases, is recorded principally using the straight-line method over estimated useful lives of 3 to 10 years for machinery and equipment, 3 to 7 years for vehicles, furniture and fixtures and computer hardware/software, and 25 years for buildings. Leasehold improvements are amortized over the shorter of the remaining life of the lease term or the expected service life of the improvement.

The carrying values of property, plant and equipment are reviewed for impairment whenever facts and circumstances indicate that the carrying amount may not be fully recoverable. In performing this review for recoverability, property, plant and equipment is assessed for possible impairment by comparing their carrying values to their undiscounted net pre-tax cash flows expected to result from the use of the asset. Impaired assets are written down to their fair values, generally determined based on their estimated future discounted cash flows. Based on the results of our testing for the years ended December 31, 2018, 2017 and 2016, no impairment of property, plant and equipment was recognized.

Goodwill and Identifiable Intangible Assets

Goodwill and other identifiable intangible assets with indefinite lives that are not being amortized, such as trade names, are tested at least annually for impairment (which we test each October 1, absent any impairment indicators) and are written down if impaired. Identifiable intangible assets with finite lives are amortized over their useful lives and are reviewed for impairment whenever facts and circumstances indicate that their carrying values may not be fully recoverable. See Note 9 - Goodwill and Identifiable Intangible Assets of the notes to consolidated financial statements for additional information.

Insurance Liabilities

Insurance liabilities for automobile liability, workers' compensation and general liability claims are determined actuarially based on claims filed and an estimate of claims incurred but not yet reported. At December 31, 2018 and 2017, the estimated current portion of such undiscounted insurance liabilities of $44.6 million and $47.3 million, respectively, were included in "Other accrued expenses and liabilities" in the accompanying Consolidated Balance Sheets. The estimated non-current portion of such undiscounted insurance liabilities included in "Other long-term obligations" at December 31, 2018 and 2017 were $179.1 million and $173.2 million, respectively. The current portion of anticipated insurance recoveries of $12.6 million and $14.9 million at December 31, 2018 and 2017, respectively, were included in "Prepaid expenses and other" and the non-current portion of anticipated insurance recoveries of $49.3 million and $48.6 million at December 31, 2018 and 2017, respectively, were included in "Other assets" in the accompanying Consolidated Balance Sheets.

Foreign Operations

The financial statements and transactions of our foreign subsidiaries are maintained in their functional currency and translated into U.S. dollars in accordance with ASC Topic 830, "Foreign Currency Matters". Translation adjustments have been recorded as "Accumulated other comprehensive loss", a separate component of "Equity".

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - (Continued)

Income Taxes

We account for income taxes in accordance with the provisions of ASC Topic 740, “Income Taxes” (“ASC 740”). ASC 740 requires an asset and liability approach which requires the recognition of deferred income tax assets and deferred income tax liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Valuation allowances are established when necessary to reduce deferred income tax assets when it is more likely than not that a tax benefit will not be realized.

We account for uncertain tax positions in accordance with the provisions of ASC 740. We recognize accruals of interest related to unrecognized tax benefits as a component of the income tax provision.

Valuation of Share-Based Compensation Plans

We have various types of share-based compensation plans and programs, which are administered by our Board of Directors or its Compensation and Personnel Committee. See Note 14 - Share-Based Compensation Plans of the notes to consolidated financial statements for additional information regarding the share-based compensation plans and programs.

We account for share-based payments in accordance with the provisions of ASC Topic 718, “Compensation-Stock Compensation” (“ASC 718”). ASC 718 requires that all share-based payments issued to acquire goods or services, including grants of employee stock options, be recognized in the statement of operations based on their fair values. Compensation expense related to share-based awards is recognized over the requisite service period, which is generally the vesting period. For shares subject to graded vesting, our policy is to apply the straight-line method in recognizing compensation expense. ASC 718 requires the benefits of tax deductions in excess of recognized compensation expense to be recognized in the Consolidated Statements of Operations when the underlying awards vest or are settled.

New Accounting Pronouncements

On January 1, 2018, we adopted the accounting pronouncement issued by the Financial Accounting Standards Board (“FASB”) to clarify existing guidance on revenue recognition. This guidance includes the required steps to achieve the core principle that a company should recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. We adopted this pronouncement on a modified retrospective basis, and its impact on our financial position and results of operations, as well as required additional disclosures, are included in Note 3 - Revenue from Contracts with Customers. As a result of the adoption of this standard, certain changes have been made to the Consolidated Balance Sheets. The accounts previously named “Costs and estimated earnings in excess of billings on uncompleted contracts” and “Billings in excess of costs and estimated earnings on uncompleted contracts” have been renamed “Contract assets” and “Contract liabilities”, respectively. In addition, for periods beginning after December 31, 2017, amounts representing deferred revenues on services contracts, which were previously included in “Other accrued expenses and liabilities” within the Consolidated Balance Sheets, have been reclassified as “Contract liabilities.”

On January 1, 2018, we adopted the accounting pronouncement issued by the FASB to clarify how entities should present restricted cash and restricted cash equivalents in the statement of cash flows. This guidance requires entities to show changes in the total of cash, cash equivalents and restricted cash in the statement of cash flows. This guidance was adopted on a retrospective basis, and such adoption did not have a material impact on our financial position and/or results of operations.

During 2018, we adopted the accounting pronouncement issued by the FASB that modifies the presentation of net periodic pension and post retirement benefit costs within the statement of operations. This guidance requires the components of the net periodic pension and post retirement benefit costs, other than service costs, to be recognized below operating income. This change was applied on a retrospective basis, and such adoption did not have a material impact on our financial position and/or results of operations.

In February 2016, an accounting pronouncement was issued by the FASB to replace existing lease accounting guidance. This pronouncement is intended to provide enhanced transparency and comparability by requiring lessees to record right-of-use assets and corresponding lease liabilities on the balance sheet for most leases. Expenses associated with leases will continue to be recognized in a manner similar to current accounting guidance. This pronouncement is effective for annual and interim periods beginning after December 15, 2018, with early adoption permitted. In preparation for adoption, we have performed a process to identify a complete population of our leases, including the review of various contracts to identify whether such arrangements convey the right to control the use of an identified asset. We have additionally implemented new accounting systems, processes,

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - (Continued)

and controls and have drafted revised accounting policies to assist with the adoption of this pronouncement, including the enhanced disclosure requirements. We will adopt this pronouncement on January 1, 2019 utilizing the transition practical expedient added by the FASB which eliminates the requirement that entities apply the new lease standard to the comparative periods presented in the year of adoption. We will additionally utilize the package of practical expedients permitted under the new standard which, among other things, allows us to not reassess the lease classification for any existing leases. Further, as permitted by the standard, we will make an accounting policy election not to record right-of-use assets or lease liabilities for leases with an initial term of 12 months or less. Instead, consistent with current accounting guidance, we will recognize payments for such leases in the statement of operations on a straight-line basis over the lease term. Upon adoption on January 1, 2019, we estimate this accounting pronouncement will result in the recognition of additional assets and liabilities on our balance sheet of between $200.0 million and $225.0 million. We do not believe the new standard will have an impact on our liquidity or results of operations, and such adoption will not impact our compliance with the various covenants contained within our 2016 Credit Agreement as described in further detail within Note 10 - Debt of the notes to consolidated financial statements.

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS

In accordance with ASC 606, the Company recognizes revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. To achieve this core principle, the Company applies the following five steps:

(1) Identify the contract with a customer

A contract with a customer exists when: (a) the parties have approved the contract and are committed to perform their respective obligations, (b) the rights of the parties can be identified, (c) payment terms can be identified, (d) the arrangement has commercial substance, and (e) collectibility of consideration is probable. Judgment is required when determining if the contractual criteria are met, specifically in the earlier stages of a project when a formally executed contract may not yet exist. In these situations, the Company evaluates all relevant facts and circumstances, including the existence of other forms of documentation or historical experience with our customers that may indicate a contractual agreement is in place and revenue should be recognized. In determining if the collectibility of consideration is probable, the Company considers the customer's ability and intention to pay such consideration through an evaluation of several factors, including an assessment of the creditworthiness of the customer and our prior collection history with such customer.

(2) Identify the performance obligations in the contract

At contract inception, the Company assesses the goods or services promised in a contract and identifies, as a separate performance obligation, each distinct promise to transfer goods or services to the customer. The identified performance obligations represent the "unit of account" for purposes of determining revenue recognition. In order to properly identify separate performance obligations, the Company applies judgment in determining whether each good or service provided is: (a) capable of being distinct, whereby the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer, and (b) distinct within the context of the contract, whereby the transfer of the good or service to the customer is separately identifiable from other promises in the contract.

In addition, when assessing performance obligations within a contract, the Company considers the warranty provisions included within such contract. To the extent the warranty terms provide the customer with an additional service, other than assurance that the promised good or service complies with agreed upon specifications, such warranty is accounted for as a separate performance obligation. In determining whether a warranty provides an additional service, the Company considers each warranty provision in comparison to warranty terms which are standard in the industry.

Our contracts are often modified through change orders to account for changes in the scope and price of the goods or services we are providing. Although the Company evaluates each change order to determine whether such modification creates a separate performance obligation, the majority of our change orders are for goods or services that are not distinct within the context of our original contract, and therefore, are not treated as separate performance obligations.

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

(3) Determine the transaction price

The transaction price represents the amount of consideration to which the Company expects to be entitled in exchange for transferring promised goods or services to our customers. The consideration promised within a contract may include fixed amounts, variable amounts, or both. To the extent the performance obligation includes variable consideration, including contract bonuses and penalties that can either increase or decrease the transaction price, the Company estimates the amount of variable consideration to be included in the transaction price utilizing one of two prescribed methods, depending on which method better predicts the amount of consideration to which the entity will be entitled. Such methods include: (a) the expected value method, whereby the amount of variable consideration to be recognized represents the sum of probability weighted amounts in a range of possible consideration amounts, and (b) the most likely amount method, whereby the amount of variable consideration to be recognized represents the single most likely amount in a range of possible consideration amounts. When applying these methods, the Company considers all information that is reasonably available, including historical, current and estimates of future performance. The expected value method is typically utilized in situations where a contract contains a large number of possible outcomes while the most likely amount method is typically utilized in situations where a contract has only two possible outcomes.

Variable consideration is included in the transaction price only to the extent it is probable, in the Company's judgment, that a significant future reversal in the amount of cumulative revenue recognized under the contract will not occur when the uncertainty associated with the variable consideration is subsequently resolved. This threshold is referred to as the variable consideration constraint. In assessing whether to apply the variable consideration constraint, the Company considers if factors exist that could increase the likelihood or the magnitude of a potential reversal of revenue, including, but not limited to, whether: (a) the amount of consideration is highly susceptible to factors outside of the Company's influence, such as the actions of third parties, (b) the uncertainty surrounding the amount of consideration is not expected to be resolved for a long period of time, (c) the Company's experience with similar types of contracts is limited or that experience has limited predictive value, (d) the Company has a practice of either offering a broad range of price concessions or changing the payment terms and conditions of similar contracts in similar circumstances, and (e) the contract has a large number and broad range of possible consideration amounts.

Pending change orders represent one of the most common forms of variable consideration included within contract value and typically represent contract modifications for which a change in scope has been authorized or acknowledged by our customer, but the final adjustment to contract price is yet to be negotiated. In estimating the transaction price for pending change orders, the Company considers all relevant facts, including documented correspondence with the customer regarding acknowledgment and/or agreement with the modification, as well as historical experience with the customer or similar contractual circumstances. Based upon this assessment, the Company estimates the transaction price, including whether the variable consideration constraint should be applied.

Contract claims are another form of variable consideration which is common within our industry. Claim amounts represent revenue that has been recognized for contract modifications that are not submitted or are in dispute as to both scope and price. In estimating the transaction price for claims, the Company considers all relevant facts available. However, given the uncertainty surrounding claims, including the potential long-term nature of dispute resolution and the broad range of possible consideration amounts, there is an increased likelihood that any additional contract revenue associated with contract claims is constrained. The resolution of claims involves negotiations and, in certain cases, litigation. In the event litigation costs are incurred by us in connection with claims, such litigation costs are expensed as incurred, although we may seek to recover these costs.

For some transactions, the receipt of consideration does not match the timing of the transfer of goods or services to the customer. For such contracts, the Company evaluates whether this timing difference represents a financing arrangement within the contract. Although rare, if a contract is determined to contain a significant financing component, the Company adjusts the promised amount of consideration for the effects of the time value of money when determining the transaction price of such contract. Although our customers may retain a portion of the contract price until completion of the project and final contract settlement, these retainage amounts are not considered a significant financing component as the intent of the withheld amounts is to provide the customer with assurance that we will complete our obligations under the contract rather than to provide financing to the customer. In addition, although we may be entitled to advanced payments from our customers on certain contracts, these advanced payments generally do not represent a significant financing component as the payments are used to meet working capital demands that can be higher in the early stages of a contract, as well as to protect us from our customer failing to meet its obligations under the contract.

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

Changes in the estimates of transaction prices are recognized on a cumulative catch-up basis in the period in which the revisions to the estimates are made. Such changes in estimates can result in the recognition of revenue in a current period for performance obligations which were satisfied or partially satisfied in prior periods. Such changes in estimates may also result in the reversal of previously recognized revenue if the ultimate outcome differs from the Company's previous estimate. For the year ended December 31, 2018, we recognized revenue of $7.3 million associated with the final settlement of contract value for three projects which were completed in prior periods. For the year ended December 31, 2017, we recognized $18.1 million of gross profit associated with the recovery of certain contract costs previously disputed on a project completed in 2016. In addition, for the years ended December 31, 2018 and 2017, there were no significant reversals of revenue recognized associated with the revision of transaction prices.

(4) Allocate the transaction price to performance obligations in the contract

For contracts that contain multiple performance obligations, the Company allocates the transaction price to each performance obligation based on a relative standalone selling price. The Company determines the standalone selling price based on the price at which the performance obligation would have been sold separately in similar circumstances to similar customers. If the standalone selling price is not observable, the Company estimates the standalone selling price taking into account all available information such as market conditions and internal pricing guidelines. In certain circumstances, the standalone selling price is determined using an expected profit margin on anticipated costs related to the performance obligation.

(5) Recognize revenue as performance obligations are satisfied

The Company recognizes revenue at the time the related performance obligation is satisfied by transferring a promised good or service to its customers. A good or service is considered to be transferred when the customer obtains control. The Company can transfer control of a good or service and satisfy its performance obligations either over time or at a point in time. The Company transfers control of a good or service over time and, therefore, satisfies a performance obligation and recognizes revenue over time if one of the following three criteria are met: (a) the customer simultaneously receives and consumes the benefits provided by the Company's performance as we perform, (b) the Company's performance creates or enhances an asset that the customer controls as the asset is created or enhanced, or (c) the Company's performance does not create an asset with an alternative use to us, and we have an enforceable right to payment for performance completed to date.

For our performance obligations satisfied over time, we recognize revenue by measuring the progress toward complete satisfaction of that performance obligation. The selection of the method to measure progress towards completion can be either an input method or an output method and requires judgment based on the nature of the goods or services to be provided.

For our construction contracts, revenue is generally recognized over time as our performance creates or enhances an asset that the customer controls as it is created or enhanced. Our fixed price construction projects generally use a cost-to-cost input method to measure our progress towards complete satisfaction of the performance obligation as we believe it best depicts the transfer of control to the customer which occurs as we incur costs on our contracts. Under the cost-to-cost measure of progress, the extent of progress towards completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the performance obligation. For our unit price construction contracts, progress towards complete satisfaction is measured through an output method, such as the amount of units produced or delivered, when our performance does not produce significant amounts of work in process or finished goods prior to complete satisfaction of such performance obligations.

For our services contracts, revenue is also generally recognized over time as the customer simultaneously receives and consumes the benefits of our performance as we perform the service. For our fixed price service contracts with specified service periods, revenue is generally recognized on a straight-line basis over such service period when our inputs are expended evenly, and the customer receives and consumes the benefits of our performance throughout the contract term.

The timing of revenue recognition for the manufacturing of new build heat exchangers within our United States industrial services segment depends on the payment terms of the contract, as our performance does not create an asset with an alternative use to us. For those contracts for which we have a right to payment for performance completed to date at all times throughout our performance, inclusive of a cancellation, we recognize revenue over time. These performance obligations use a cost-to-cost input method to measure our progress towards complete satisfaction of the performance obligation as we believe it best depicts the transfer of control to the customer which occurs as we incur costs on our contracts. However, for those contracts for which we do not have a right, at all times, to payment for performance completed to date, we recognize revenue at the point in time when control is

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

transferred to the customer. For bill-and-hold arrangements, revenue is recognized when the customer obtains control of the heat exchanger, which may be prior to shipping, if the criteria of ASC 606 are met.

For certain of our revenue streams, such as call-out repair and service work, outage services, refinery turnarounds and specialty welding services that are performed under time and materials contracts, our progress towards complete satisfaction of such performance obligations is measured using an output method as the customer receives and consumes the benefits of our performance completed to date.

Due to uncertainties inherent in the estimation process, it is possible that estimates of costs to complete a performance obligation will be revised in the near-term. For those performance obligations for which revenue is recognized using a cost-to-cost input method, changes in total estimated costs, and related progress towards complete satisfaction of the performance obligation, are recognized on a cumulative catch-up basis in the period in which the revisions to the estimates are made. When the current estimate of total costs for a performance obligation indicate a loss, a provision for the entire estimated loss on the unsatisfied performance obligation is made in the period in which the loss becomes evident. During 2018, we recognized losses of $10.0 million related to a change in total estimated costs on a transportation project within our United States electrical construction and facilities services segment, resulting in part from contract scope issues. There were no other changes in total estimated costs that resulted in a significant impact to our operating results for the years ended December 31, 2018 and 2017.

Disaggregation of Revenues

Our revenues are principally derived from contracts to provide construction services relating to electrical and mechanical systems, as well as to provide a number of building services and industrial services to our customers. Our contracts are with many different customers in numerous industries. Refer to Note 18 - Segment Information of the notes to the consolidated financial statements for additional information on how we disaggregate our revenues by reportable segment, as well as a more complete description of our business.

The following tables provide further disaggregation of our revenues by categories we use to evaluate our financial performance within each of our reportable segments (in thousands):

	2018	% of Total
United States electrical construction and facilities services:		
Commercial market sector	$ 839,045	43%
Institutional market sector	110,046	6%
Hospitality market sector	32,338	2%
Manufacturing market sector	388,157	20%
Healthcare market sector	126,218	6%
Transportation market sector	284,464	14%
Water and wastewater market sector	23,337	1%
Short duration projects (1)	120,109	6%
Service work	34,105	2%
	1,957,819	
Less intersegment revenues	(3,496)	
Total segment revenues	$ 1,954,323	

(1) Represents those projects which generally are completed within three months or less.

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

	2018	% of Total
United States mechanical construction and facilities services:		
Commercial market sector	$ 1,063,571	35%
Institutional market sector	292,255	9%
Hospitality market sector	93,827	3%
Manufacturing market sector	430,286	14%
Healthcare market sector	241,113	8%
Transportation market sector	19,415	1%
Water and wastewater market sector	176,574	6%
Short duration projects [1]	335,953	11%
Service work	385,671	13%
	3,038,665	
Less intersegment revenues	(18,358)	
Total segment revenues	$ 3,020,307	

(1) Represents those projects which generally are completed within three months or less.

	2018	% of Total
United States building services:		
Commercial site-based services	$ 519,641	28%
Government site-based services	213,677	11%
Mechanical services	1,032,082	55%
Energy services	110,085	6%
Total segment revenues	$ 1,875,485	
United States industrial services:		
Field services	$ 694,994	80%
Shop services	170,651	20%
Total segment revenues	$ 865,645	
Total United States operations	$ 7,715,760	
United Kingdom building services:		
Service work	$ 216,880	52%
Projects & extras	197,991	48%
Total segment revenues	$ 414,871	
Total worldwide operations	$ 8,130,631	

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

Contract Assets and Contract Liabilities

Accounts receivable are recognized in the period when our right to consideration is unconditional. Accounts receivable are recognized net of an allowance for doubtful accounts. A considerable amount of judgment is required in assessing the likelihood of realization of receivables.

The timing of revenue recognition may differ from the timing of invoicing to customers. Contract assets include unbilled amounts from our long-term construction projects when revenues recognized under the cost-to-cost measure of progress exceed the amounts invoiced to our customers, as the amounts cannot be billed under the terms of our contracts. Such amounts are recoverable from our customers based upon various measures of performance, including achievement of certain milestones, completion of specified units or completion of a contract. In addition, many of our time and materials arrangements, as well as our contracts to perform turnaround services within the United States industrial services segment, are billed in arrears pursuant to contract terms that are standard within the industry, resulting in contract assets and/or unbilled receivables being recorded, as revenue is recognized in advance of billings. Also included in contract assets are amounts we seek or will seek to collect from customers or others for errors or changes in contract specifications or design, contract change orders or modifications in dispute or unapproved as to both scope and/or price, or other customer-related causes of unanticipated additional contract costs (claims and unapproved change orders). Our contract assets do not include capitalized costs to obtain and fulfill a contract. Contract assets are generally classified as current within the Consolidated Balance Sheets.

As of December 31, 2018 and 2017, contract assets included unbilled revenues for unapproved change orders of approximately \$25.2 million and \$17.4 million, respectively. As of December 31, 2018 and 2017, there were no claim amounts included within contract assets or accounts receivable. There were contractually billed amounts and retention related to contracts with unapproved change orders and claims of approximately \$96.1 million and \$57.6 million as of December 31, 2018 and 2017, respectively. For contracts in claim status, contractually billed amounts will generally not be paid by the customer to us until final resolution of related claims.

Contract liabilities from our long-term construction contracts arise when amounts invoiced to our customers exceed revenues recognized under the cost-to-cost measure of progress. Contract liabilities additionally include advanced payments from our customers on certain contracts. Contract liabilities decrease as we recognize revenue from the satisfaction of the related performance obligation and are recorded as either current or long-term, depending upon when we expect to recognize such revenue. The long-term portion of contract liabilities is included in “Other long-term obligations” in the Consolidated Balance Sheets.

Net contract liabilities consisted of the following (in thousands):

	2018	2017
Contract assets, current	$ 158,243	$ 122,621
Contract assets, non-current	—	—
Contract liabilities, current	(552,290)	(524,156)
Contract liabilities, non-current	(2,069)	—
Deferred revenue [1]	—	(47,328)
Net contract liabilities	$ (396,116)	$ (448,863)

(1) Represents deferred revenue on service contracts, which was included in “Accrued expenses and other” and “Other long-term liabilities” in the Consolidated Balance Sheet as of December 31 2017. For the periods after December 31, 2017, these amounts are included within “Contract liabilities.”

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

Included within net contract liabilities were $359.2 million and $401.5 million of net contract liabilities on uncompleted construction projects as of December 31, 2018 and 2017, respectively, as follows:

	2018	2017
Costs incurred on uncompleted construction contracts	$ 8,656,642	$ 8,258,802
Estimated earnings, thereon	1,172,224	1,081,509
	9,828,866	9,340,311
Less: billings to date	10,188,023	9,741,846
	$ (359,157)	$ (401,535)

The $52.7 million decrease in net contract liabilities for the year ended December 31, 2018 was primarily attributable to the $42.4 million decrease in the net contract liabilities on our uncompleted long-term construction contracts as a result of the completion or substantial completion of certain large projects which were previously billed in advance pursuant to contract terms. Contract assets and contract liabilities increased by approximately $3.8 million and $9.4 million, respectively, as a result of acquisitions made in 2018. There was no significant impairment of contract assets recognized during the period.

Contract Retentions

As of December 31, 2018 and 2017, accounts receivable included $254.6 million and $243.5 million, respectively, of retainage billed under terms of our contracts. These retainage amounts represent amounts which have been contractually invoiced to customers where payments have been partially withheld pending the achievement of certain milestones, satisfaction of other contractual conditions or completion of the project. We estimate that approximately 86% of this retainage will be collected during 2019.

As of December 31, 2018 and 2017, accounts payable included $43.3 million and $41.0 million, respectively, of retainage withheld under terms of our subcontracts. These retainage amounts represent amounts invoiced to the Company by our subcontractors where payments have been partially withheld pending the achievement of certain milestones, satisfaction of other contractual conditions or upon completion of the project. We estimate that approximately 83% of this retainage will be paid during 2019.

Transaction Price Allocated to Remaining Unsatisfied Performance Obligations

The following table presents the transaction price allocated to remaining unsatisfied performance obligations (“remaining performance obligations”) for each of our reportable segments and their respective percentages of total remaining performance obligations (in thousands, except for percentages):

	2018	% of Total
Remaining performance obligations:		
United States electrical construction and facilities services	$ 1,085,571	27%
United States mechanical construction and facilities services	2,245,584	57%
United States building services	435,074	11%
United States industrial services	67,529	2%
Total United States operations	3,833,758	97%
United Kingdom building services	130,524	3%
Total worldwide operations	$ 3,964,282	100%

Our remaining performance obligations at December 31, 2018 were $3.96 billion. Remaining performance obligations increase with awards of new contracts and decrease as we perform work and recognize revenue on existing contracts. We include a project within our remaining performance obligations at such time the project is awarded and agreement on contract terms has been reached. Our remaining performance obligations include amounts related to contracts for which a fixed price contract value is not assigned when a reasonable estimate of total transaction price can be made.

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

Remaining performance obligations include unrecognized revenues to be realized from uncompleted construction contracts. Although many of our construction contracts are subject to cancellation at the election of our customers, in accordance with industry practice, we do not limit the amount of unrecognized revenue included within remaining performance obligations due to the inherent substantial economic penalty that would be incurred by our customers upon cancellation. We believe our reported remaining performance obligations for our construction contracts are firm and contract cancellations have not had a material adverse effect on us.

Remaining performance obligations also include unrecognized revenues expected to be realized over the remaining term of service contracts. However, to the extent a service contract includes a cancellation clause which allows for the termination of such contract by either party without a substantive penalty, the remaining contract term, and therefore, the amount of unrecognized revenues included within remaining performance obligations, is limited to the notice period required for the termination.

Our remaining performance obligations are comprised of: (a) original contract amounts, (b) change orders for which we have received written confirmations from our customers, (c) pending change orders for which we expect to receive confirmations in the ordinary course of business, (d) claim amounts that we have made against customers for which we have determined we have a legal basis under existing contractual arrangements and as to which the variable consideration constraint does not apply, and (e) other forms of variable consideration to the extent that such variable consideration has been included within the transaction price of our contracts. Such claim and other variable consideration amounts were immaterial for all periods presented.

Refer to the table below for additional information regarding our remaining performance obligations, including an estimate of when we expect to recognize such remaining performance obligations as revenue (in thousands):

	Within one year	Greater than one year
Remaining performance obligations:		
United States electrical construction and facilities services	$ 996,524	$ 89,047
United States mechanical construction and facilities services	1,742,587	502,997
United States building services	424,462	10,612
United States industrial services	67,529	—
Total United States operations	3,231,102	602,656
United Kingdom building services	77,884	52,640
Total worldwide operations	$ 3,308,986	$ 655,296

Impact of the Adoption of ASC 606 on our Financial Statements

The Company adopted ASC 606 on a modified retrospective basis. As part of such adoption, the new standard was applied only to those contracts which were not completed as of the date of adoption. Additionally, the Company has not retrospectively restated contract positions for contract modifications made prior to the adoption of ASC 606. The cumulative effect of applying the new guidance was recorded on January 1, 2018 as a reduction to retained earnings in the amount of $0.9 million, net of tax. The majority of this adjustment related to: (a) a change in the measurement of our progress towards complete satisfaction of performance obligations for certain of our contracts within the United States electrical construction and facilities services segment, (b) a change in the timing of revenue recognition from a point in time to over time for certain repair projects within the United Kingdom building services segment, (c) the recognition of revenue for certain bill-and-hold arrangements within our United States industrial services segment that was not allowed under previous revenue recognition guidance, (d) the recognition of variable consideration for contract bonuses within certain of our construction contracts, and (e) a change in the timing of revenue recognition from a point in time to over time for certain of our contracts within our United States industrial services segment to manufacture or repair heat exchangers. These adjustments were not material to our financial position either individually or in the aggregate.

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

The impact of our adoption of ASC 606 on the Consolidated Balance Sheet and Consolidated Statement of Operations, as of and for the year ended December 31, 2018 was as follows (in thousands):

	As reported	As adjusted
	December 31, 2018	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 363,907	$ 363,907
Accounts receivable	1,773,620	1,778,930
Contract assets	158,243	145,583
Inventories	42,321	54,173
Prepaid expenses and other	48,116	46,687
Total current assets	2,386,207	2,389,280
Investments, notes and other long-term receivables	2,899	2,899
Property, plant and equipment, net	134,351	134,351
Goodwill	990,887	990,887
Identifiable intangible assets, net	488,286	488,286
Other assets	86,177	86,177
Total assets	$ 4,088,807	$ 4,091,880
LIABILITIES AND EQUITY		
Current liabilities:		
Current maturities of long-term debt and capital lease obligations	$ 16,013	$ 16,013
Accounts payable	652,091	652,091
Contract liabilities	552,290	511,089
Accrued payroll and benefits	343,069	343,069
Other accrued expenses and liabilities	170,935	219,166
Total current liabilities	1,734,398	1,741,428
Borrowings under revolving credit facility	25,000	25,000
Long-term debt and capital lease obligations	254,764	254,764
Other long-term obligations	333,204	333,204
Total liabilities	2,347,366	2,354,396
Total equity	1,741,441	1,737,484
Total liabilities and equity	$ 4,088,807	$ 4,091,880

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

	As reported	As adjusted
	2018	
Revenues	$ 8,130,631	$ 8,117,087
Cost of sales	6,925,178	6,918,281
Gross profit	1,205,453	1,198,806
Selling, general and administrative expenses	799,157	799,157
Restructuring expenses	2,306	2,306
Impairment loss on identifiable intangible assets	907	907
Operating income	403,083	396,436
Net periodic pension (cost) income	2,743	2,743
Interest expense	(13,544)	(13,544)
Interest income	2,746	2,746
Income from continuing operations before income taxes	395,028	388,381
Income tax provision	109,106	107,270
Income from continuing operations	285,922	281,111
Loss from discontinued operation, net of income taxes	(2,345)	(2,345)
Net income including noncontrolling interests	283,577	278,766
Less: Net income attributable to noncontrolling interests	(46)	(46)
Net income attributable to EMCOR Group, Inc.	$ 283,531	$ 278,720
Basic earnings per common share:		
From continuing operations attributable to EMCOR Group, Inc. common stockholders	$ 4.92	$ 4.84
Diluted earnings per common share:		
From continuing operations attributable to EMCOR Group, Inc. common stockholders	$ 4.89	$ 4.81

The adoption of ASC 606 had no impact on the Company's cash flows from operations.

The differences between our reported operating results and the pro forma operating results presented in the above tables for the year ended December 31, 2018 primarily related to the previously referenced items identified upon adoption of ASC 606.

NOTE 4 - ACQUISITIONS OF BUSINESSES

Acquisitions are accounted for utilizing the acquisition method of accounting and the prices paid for them are allocated to their respective assets and liabilities based upon the estimated fair value of such assets and liabilities at the dates of their respective acquisition by us.

During 2018, we acquired four companies for a total consideration of $71.3 million. Two companies provide mobile mechanical services, one within the Eastern region and the other within the Western region of the United States. The third company is a full service provider of mechanical services within the Southern region of the United States. The results of these three companies have been included in our United States building services segment. The fourth company provides electrical construction and maintenance services for industrial and commercial buildings in North Texas, and its results have been included in our United States electrical construction and facilities services segment. In connection with these acquisitions, we acquired working capital of $8.6 million and other net assets of $0.2 million and have preliminarily ascribed $25.9 million to goodwill and $36.6 million to identifiable intangible assets. We expect that all of the acquired goodwill will be deductible for tax purposes. The purchase price allocations for the businesses acquired in 2018 are still preliminary and subject to change during their respective measurement periods.

During 2017, we acquired three companies for a total consideration of $111.9 million. One company provides fire protection and alarm services primarily in the Southern region of the United States. The second company provides millwright services for

NOTE 4 - ACQUISITIONS OF BUSINESSES - (Continued)

manufacturing companies throughout the United States. Both of their results have been included in our United States mechanical construction and facilities services segment. The third company provides mobile mechanical services within the Western region of the United States, and its results have been included in our United States building services segment. In connection with these acquisitions, we acquired working capital of $12.3 million and other net assets of $2.3 million and have ascribed $40.7 million to goodwill and $56.6 million to identifiable intangible assets. We expect that all of the acquired goodwill will be deductible for tax purposes. The purchase price allocations for the businesses acquired in 2017 have been finalized with an insignificant impact.

On April 15, 2016, we completed the acquisition of Ardent Services, L.L.C. and Rabalais Constructors, LLC (collectively, "Ardent"). This acquisition has been included in our United States electrical construction and facilities services segment. Ardent provides electrical and instrumentation services to the energy infrastructure market in North America, and this acquisition further strengthens our position in electrical construction and services and broadens our capabilities across the industrial and energy sectors, especially in the Gulf Coast, Midwest and Western regions of the United States. Under the terms of the transaction, we acquired 100% of Ardent's equity interests for total consideration of $201.4 million. In connection with the acquisition of Ardent, we acquired working capital of $34.1 million and other net assets of $3.9 million and have ascribed $121.9 million to goodwill and $41.5 million to identifiable intangible assets. We expect that $99.7 million of the acquired goodwill will be deductible for tax purposes. The weighted average amortization period for the identifiable intangible assets is approximately 13.5 years. We completed the final allocation of Ardent's purchase price during the first quarter of 2017 with an insignificant impact.

Additionally in 2016, we acquired a company for an immaterial amount. This company provides mobile mechanical services within the Southeastern region of the United States, and its results have been included in our United States building services segment. The purchase price for this acquisition was finalized in 2016.

NOTE 5 - DISPOSITION OF ASSETS

Due to a historical pattern of losses in the construction operations of our United Kingdom segment and our negative assessment of construction market conditions in the United Kingdom for the foreseeable future, we ceased construction operations in the United Kingdom during the third quarter 2014. The results of the construction operations of our United Kingdom segment for all periods are presented in the Consolidated Financial Statements as discontinued operations.

The results of discontinued operations are as follows (in thousands):

	For the twelve months ended December 31,		
	2018	2017	2016
Revenues	$ —	$ 863	$ 345
Loss from discontinued operation, net of income taxes	$ (2,345)	$ (857)	$ (3,142)
Diluted loss per share from discontinued operation	$ (0.04)	$ (0.01)	$ (0.05)

The loss from discontinued operations in 2018 was primarily due to the settlement of a previously outstanding legal matter. The loss from discontinued operations in 2017 and 2016 was primarily due to legal costs, as well as the settlement of final contract balances on certain construction projects completed in prior years. The loss from discontinued operations in 2017 was partially offset by revenues recognized upon the settlement of a previously outstanding contract claim.

Included in the Consolidated Balance Sheets at December 31, 2018 and 2017 are the following major classes of assets and liabilities associated with the discontinued operation (in thousands):

	December 31, 2018	December 31, 2017
Assets of discontinued operation:		
Current assets	$ —	$ 242
Liabilities of discontinued operation:		
Current liabilities	$ 3,724	$ 2,811

At December 31, 2018, the liabilities of the discontinued operation consisted of contract retentions, contract warranty obligations and other accrued liabilities that are expected to be fulfilled in the ordinary course of business.

NOTE 6 - EARNINGS PER SHARE

The following tables summarize our calculation of Basic and Diluted Earnings (Loss) per Common Share ("EPS") for the years ended December 31, 2018, 2017 and 2016 (in thousands, except share and per share data):

	2018	2017	2016
Numerator:			
Income from continuing operations attributable to EMCOR Group, Inc. common stockholders	$ 285,876	$ 228,053	$ 185,077
Loss from discontinued operation, net of income taxes	(2,345)	(857)	(3,142)
Net income attributable to EMCOR Group, Inc. common stockholders	$ 283,531	$ 227,196	$ 181,935
Denominator:			
Weighted average shares outstanding used to compute basic earnings (loss) per common share	58,112,838	59,254,256	60,769,808
Effect of dilutive securities—Share-based awards	330,629	364,713	436,984
Shares used to compute diluted earnings (loss) per common share	58,443,467	59,618,969	61,206,792
Basic earnings (loss) per common share:			
From continuing operations attributable to EMCOR Group, Inc. common stockholders	$ 4.92	$ 3.85	$ 3.05
From discontinued operation	(0.04)	(0.01)	(0.05)
Net income attributable to EMCOR Group, Inc. common stockholders	$ 4.88	$ 3.84	$ 3.00
Diluted earnings (loss) per common share:			
From continuing operations attributable to EMCOR Group, Inc. common stockholders	$ 4.89	$ 3.83	$ 3.02
From discontinued operation	(0.04)	(0.01)	(0.05)
Net income attributable to EMCOR Group, Inc. common stockholders	$ 4.85	$ 3.82	$ 2.97

The number of outstanding share-based awards that were excluded from the computation of diluted EPS for the years ended December 31, 2018, 2017 and 2016 because they would be anti-dilutive were 550, 2,700 and 3,800, respectively.

NOTE 7 - INVENTORIES

Inventories as of December 31, 2018 and 2017 consist of the following amounts (in thousands):

	2018	2017
Raw materials and construction materials	$ 30,006	$ 23,924
Work in process	12,315	18,800
Inventories	$ 42,321	$ 42,724

NOTE 8 - PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment in the accompanying Consolidated Balance Sheets consisted of the following amounts as of December 31, 2018 and 2017 (in thousands):

	2018	2017
Machinery and equipment	$ 151,339	$ 138,592
Vehicles	58,205	55,648
Furniture and fixtures	20,655	20,195
Computer hardware/software	98,415	95,716
Land, buildings and leasehold improvements	97,937	92,145
Construction in progress	14,443	6,779
	440,994	409,075
Accumulated depreciation and amortization	(306,643)	(281,919)
	$ 134,351	$ 127,156

Depreciation and amortization expense related to property, plant and equipment, including capital leases, was $38.5 million, $39.9 million and $38.9 million for the years ended December 31, 2018, 2017 and 2016, respectively.

NOTE 9 - GOODWILL AND IDENTIFIABLE INTANGIBLE ASSETS

Goodwill at December 31, 2018 and 2017 was approximately $990.9 million and $964.9 million, respectively, and reflects the excess of cost over fair market value of net identifiable assets of companies acquired. Goodwill attributable to companies acquired in 2018 and 2017 has been valued at $25.9 million and $40.7 million, respectively. ASC Topic 805, "Business Combinations" ("ASC 805") requires that all business combinations be accounted for using the acquisition method and that certain identifiable intangible assets acquired in a business combination be recognized as assets apart from goodwill. ASC Topic 350, "Intangibles-Goodwill and Other" ("ASC 350") requires goodwill and other identifiable intangible assets with indefinite useful lives, such as trade names, not be amortized, but instead tested at least annually for impairment (which we test each October 1, absent any impairment indicators), and be written down if impaired. ASC 350 requires that goodwill be allocated to its respective reporting unit and that identifiable intangible assets with finite lives be amortized over their useful lives. As of December 31, 2018, approximately 13.4% of our goodwill related to our United States electrical construction and facilities services segment, approximately 25.9% of our goodwill related to our United States mechanical construction and facilities services segment, approximately 27.7% of our goodwill related to our United States building services segment and approximately 33.0% of our goodwill related to our United States industrial services segment.

We test for impairment of our goodwill at the reporting unit level. Our reporting units are consistent with the reportable segments identified in Note 18, "Segment Information", of the notes to consolidated financial statements. In assessing whether our goodwill is impaired, we compare the fair value of the reporting unit to the carrying amount, including goodwill. If the fair value exceeds the carrying amount, no impairment loss is recognized. However, if the carrying amount of the reporting unit exceeds the fair value, the goodwill of the reporting unit is impaired and an impairment loss in the amount of the excess is recognized and charged to operations. The fair value of each of our reporting units is generally determined using discounted estimated future cash flows; however, in certain circumstances, consideration is given to a market approach whereby fair value is measured based on a multiple of earnings.

During our annual impairment testing procedures as of October 1, 2017, we recorded a non-cash impairment charge of $57.5 million for the year ended December 31, 2017 within our United States industrial services segment. For the years ended December 31, 2018 and 2016, no impairment of our goodwill was recognized.

The weighted average cost of capital used in our annual testing for impairment as of October 1, 2018 was 9.8%, 9.7% and 10.5% for our domestic construction segments, our United States building services segment and our United States industrial services segment, respectively. The perpetual growth rate used for our annual testing was 2.7% for all of our domestic segments. Unfavorable changes in these key assumptions may affect future testing results. For example, keeping all other assumptions constant, a 50 basis point increase in the weighted average costs of capital would cause the estimated fair values of our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment, our United States building services segment and our United States industrial services segment to decrease by approximately $91.7 million, $132.4 million, $71.2 million and $46.4 million, respectively. In addition, keeping all other assumptions constant, a 50 basis point reduction in the perpetual growth rate would cause the estimated fair values of our United States electrical construction and facilities

NOTE 9 - GOODWILL AND IDENTIFIABLE INTANGIBLE ASSETS - (Continued)

services segment, our United States mechanical construction and facilities services segment, our United States building services segment and our United States industrial services segment to decrease by approximately $52.5 million, $74.1 million, $38.3 million and $23.3 million, respectively. Given the amounts by which the fair value exceeds the carrying value for each of our domestic segments, the decreases in estimated fair values described above would not have significantly impacted our 2018 impairment test.

We also test for the impairment of trade names that are not subject to amortization by calculating the fair value using the "relief from royalty payments" methodology. This approach involves two steps: (a) estimating reasonable royalty rates for each trade name and (b) applying these royalty rates to a net revenue stream and discounting the resulting cash flows to determine fair value. This fair value is then compared with the carrying value of each trade name. If the carrying amount of the trade name is greater than the implied fair value of the trade name, an impairment in the amount of the excess is recognized and charged to operations. For the year ended December 31, 2018, no impairment of our indefinite-lived trade names was recognized. The annual impairment review of our indefinite-lived trade names for the years ended December 31, 2017 and 2016 resulted in $0.3 million and $2.4 million, respectively, of non-cash impairment charges as a result of a change in the fair value of subsidiary trade names associated with certain prior acquisitions reported within our United States building services segment and our United States mechanical construction and facilities services segment, respectively.

In addition, we review for the impairment of other identifiable intangible assets that are being amortized whenever facts and circumstances indicate that their carrying values may not be fully recoverable. This test compares their carrying values to the undiscounted pre-tax cash flows expected to result from the use of the assets. If the assets are impaired, the assets are written down to their fair values, generally determined based on their future discounted cash flows. For the year ended December 31, 2018, we recorded a $0.9 million non-cash impairment charge associated with a finite-lived trade name within our United States industrial services segment. For the years ended December 31, 2017 and 2016, no impairment of our other identifiable intangible assets was recognized.

Our development of the present value of future cash flow projections used in impairment testing is based upon assumptions and estimates by management from a review of our operating results, business plans, anticipated growth rates and margins and weighted average cost of capital, among other considerations. Those assumptions and estimates can change in future periods, and other factors used in assessing fair value are outside the control of management, such as interest rates. There can be no assurance that estimates and assumptions made for purposes of our goodwill and identifiable intangible asset impairment testing will prove to be accurate predictions of the future. If our assumptions regarding future business performance or anticipated growth rates and/or margins are not achieved, or there is a rise in interest rates, we may be required to record goodwill and/or identifiable intangible asset impairment charges in future periods. It is not possible at this time to determine if any future impairment charge will result or, if it does, whether such a charge would be material.

The changes in the carrying amount of goodwill by reportable segments during the years ended December 31, 2018 and 2017 were as follows (in thousands):

	United States electrical construction and facilities services segment	United States mechanical construction and facilities services segment	United States building services segment	United States industrial services segment	Total
Balance at December 31, 2016	$ 123,600	$ 226,596	$ 244,793	$ 384,639	$ 979,628
Acquisitions, sales and purchase price adjustments	2,107	30,969	9,640	—	42,716
Intersegment transfers	—	(1,300)	1,300	—	—
Impairment	—	—	—	(57,451)	(57,451)
Balance at December 31, 2017	125,707	256,265	255,733	327,188	964,893
Acquisitions, sales and purchase price adjustments	7,500	56	18,438	—	25,994
Balance at December 31, 2018	$ 133,207	$ 256,321	$ 274,171	$ 327,188	$ 990,887

The aggregate goodwill balance as of December 31, 2016 included $210.6 million of accumulated impairment charges, which were comprised of $139.5 million within the United States building services segment and $71.1 million within the United States industrial services segment.

NOTE 9 - GOODWILL AND IDENTIFIABLE INTANGIBLE ASSETS - (Continued)

Identifiable intangible assets as of December 31, 2018 and 2017 consist of the following (in thousands):

	December 31, 2018			
	Gross Carrying Amount	Accumulated Amortization	Accumulated Impairment Charge	Total
Contract backlog	$ 58,945	$ (56,812)	$ —	$ 2,133
Developed technology/Vendor network	95,661	(55,318)	—	40,343
Customer relationships	522,855	(240,073)	(4,834)	277,948
Non-competition agreements	10,220	(10,220)	—	—
Trade names (amortized)	31,148	(20,893)	—	10,255
Trade names (unamortized)	209,840	—	(52,233)	157,607
Total	$ 928,669	$ (383,316)	$ (57,067)	$ 488,286

	December 31, 2017			
	Gross Carrying Amount	Accumulated Amortization	Accumulated Impairment Charge	Total
Contract backlog	$ 55,545	$ (55,229)	$ —	$ 316
Developed technology/Vendor network	95,661	(50,479)	—	45,182
Customer relationships	500,756	(206,319)	(4,834)	289,603
Non-competition agreements	10,220	(10,178)	—	42
Trade names (amortized)	32,848	(19,461)	—	13,387
Trade names (unamortized)	198,739	—	(52,233)	146,506
Total	$ 893,769	$ (341,666)	$ (57,067)	$ 495,036

Identifiable intangible assets attributable to companies acquired in 2018 and 2017 have been valued at $36.6 million and $56.6 million, respectively. See Note 4 - Acquisitions of Businesses of the notes to consolidated financial statements for additional information. The identifiable intangible amounts are amortized on a straight-line basis, as it approximates the pattern in which the economic benefits of the identifiable intangible assets are consumed. The weighted average amortization periods for the unamortized balances remaining are, in the aggregate, approximately 8.75 years, which are comprised of the following: 0.5 years for contract backlog, 8.5 years for developed technology/vendor network, 8.75 years for customer relationships and 11.75 years for trade names.

Amortization expense related to identifiable intangible assets with finite lives was $42.4 million, $48.6 million and $40.9 million for the years ended December 31, 2018, 2017 and 2016, respectively. The following table presents the estimated future amortization expense of identifiable intangible assets in the following years (in thousands):

2019	$ 42,315
2020	40,000
2021	39,207
2022	37,003
2023	36,065
Thereafter	136,089
	$ 330,679

NOTE 10 - DEBT

Credit Agreement

We have a credit agreement dated as of August 3, 2016, which provides for a $900.0 million revolving credit facility (the "2016 Revolving Credit Facility") and a $400.0 million term loan (the "2016 Term Loan") (collectively referred to as the "2016 Credit Agreement") expiring August 3, 2021. We may increase the 2016 Revolving Credit Facility to $1.3 billion if additional lenders are identified and/or existing lenders are willing to increase their current commitments. We may allocate up to $300.0 million of available capacity under the 2016 Revolving Credit Facility to letters of credit for our account or for the account of any of our subsidiaries. Obligations under the 2016 Credit Agreement are guaranteed by most of our direct and indirect subsidiaries and are secured by substantially all of our assets. The 2016 Credit Agreement contains various covenants providing for, among other things, maintenance of certain financial ratios and certain limitations on payment of dividends, common stock repurchases, investments, acquisitions, indebtedness and capital expenditures. We were in compliance with all such covenants as of December 31, 2018 and 2017. A commitment fee is payable on the average daily unused amount of the 2016 Revolving Credit Facility, which ranges from 0.15% to 0.30%, based on certain financial tests. The fee was 0.15% of the unused amount as of December 31, 2018. Borrowings under the 2016 Credit Agreement bear interest at (1) a base rate plus a margin of 0.00% to 0.75%, based on certain financial tests, or (2) United States dollar LIBOR (2.52% at December 31, 2018) plus 1.00% to 1.75%, based on certain financial tests. The base rate is determined by the greater of (a) the prime commercial lending rate announced by Bank of Montreal from time to time (5.50% at December 31, 2018), (b) the federal funds effective rate, plus ½ of 1.00%, (c) the daily one month LIBOR rate, plus 1.00%, or (d) 0.00%.The interest rate in effect at December 31, 2018 was 3.52%. Fees for letters of credit issued under the 2016 Revolving Credit Facility range from 1.00% to 1.75% of the respective face amounts of outstanding letters of credit and are computed based on certain financial tests. Debt issuance costs are amortized over the life of the agreement and are included as part of interest expense. The 2016 Term Loan previously required us to make principal payments of $5.0 million on the last day of March, June, September and December of each year, which commenced with the calendar quarter ended December 31, 2016. On December 30, 2016, we made a payment of $100.0 million, of which $5.0 million represented our required quarterly payment and $95.0 million represented a prepayment of outstanding principal. Such prepayment was applied against the remaining mandatory quarterly payments on a ratable basis. As a result, commencing with the calendar quarter ended March 31, 2017, our required quarterly payment has been reduced to $3.8 million. All unpaid principal and interest is due on August 3, 2021. As of December 31, 2018 and 2017, the balance of the 2016 Term Loan was $269.6 million and $284.8 million, respectively. As of December 31, 2018 and 2017, we had approximately $109.0 million and $110.1 million of letters of credit outstanding, respectively. There were $25.0 million in borrowings outstanding under the 2016 Revolving Credit Facility as of December 31, 2018 and 2017.

Long-term debt in the accompanying Consolidated Balance Sheets consisted of the following amounts as of December 31, 2018 and 2017 (in thousands):

	2018	2017
Revolving credit facility	$ 25,000	$ 25,000
Term loan, interest payable at varying amounts through 2021	269,620	284,810
Unamortized debt issuance costs	(3,065)	(4,251)
Capitalized lease obligations, at weighted average interest rates from 2.5% to 5.0% payable in varying amounts through 2022	4,213	4,571
Other, payable through 2019	9	20
Total debt	295,777	310,150
Less: current maturities	16,013	15,364
Total long-term debt	$ 279,764	$ 294,786

Capitalized Lease Obligations

See Note 16 - Commitments and Contingencies of the notes to consolidated financial statements for additional information.

NOTE 11 - FAIR VALUE MEASUREMENTS

We use a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy, which gives the highest priority to quoted prices in active markets, is comprised of the following three levels:

Level 1 – Unadjusted quoted market prices in active markets for identical assets and liabilities.

Level 2 – Observable inputs, other than Level 1 inputs. Level 2 inputs would typically include quoted prices in markets that are not active or financial instruments for which all significant inputs are observable, either directly or indirectly.

Level 3 – Prices or valuations that require inputs that are both significant to the measurement and unobservable.

The following tables provide the assets and liabilities carried at fair value measured on a recurring basis as of December 31, 2018 and 2017 (in thousands):

	Assets at Fair Value as of December 31, 2018			
Asset Category	**Level 1**	**Level 2**	**Level 3**	**Total**
Cash and cash equivalents (1)	$ 363,907	$ —	$ —	$ 363,907
Restricted cash (2)	2,307	—	—	2,307
Deferred compensation plan assets (3)	23,124	—	—	23,124
Total	$ 389,338	$ —	$ —	$ 389,338

	Assets at Fair Value as of December 31, 2017			
Asset Category	**Level 1**	**Level 2**	**Level 3**	**Total**
Cash and cash equivalents (1)	$ 467,430	$ —	$ —	$ 467,430
Restricted cash (2)	1,958	—	—	1,958
Deferred compensation plan assets (3)	22,054	—	—	22,054
Total	$ 491,442	$ —	$ —	$ 491,442

(1) Cash and cash equivalents consist primarily of money market funds with original maturity dates of three months or less, which are Level 1 assets. At December 31, 2018 and 2017, we had $161.3 million and $194.2 million, respectively, in money market funds.

(2) Restricted cash is classified as "Prepaid expenses and other" in the Consolidated Balance Sheets. Restricted cash primarily represents cash held in account for use on customer contracts.

(3) Deferred compensation plan assets are classified as "Other assets" in the Consolidated Balance Sheets.

We believe that the carrying values of our financial instruments, which include accounts receivable and other financing commitments, approximate their fair values due primarily to their short-term maturities and low risk of counterparty default. The carrying value of our debt associated with the 2016 Credit Agreement approximates its fair value due to the variable rate on such debt.

NOTE 12 - INCOME TAXES

On December 22, 2017, the U.S. government enacted comprehensive tax legislation, commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act makes broad and complex changes to the U.S. tax code, including, among other things, reducing the U.S. federal corporate tax rate from 35% to 21%, eliminating certain deductions including the domestic manufacturing deduction, providing additional limitations on deductions for executive compensation, imposing a mandatory one-time transition tax on accumulated earnings from certain foreign subsidiaries and creating new taxes on certain foreign sourced earnings. The Tax Act also extended the option to claim accelerated depreciation deductions by allowing companies to fully deduct qualified property in the year such property is placed in service.

We estimated the enactment date effects of the Tax Act and recorded provisional amounts in our 2017 consolidated financial statements in accordance with Staff Accounting Bulletin No. 118. As a result of the reduction of the U.S. corporate tax rate to 21%, U.S. generally accepted accounting principles required a re-measurement of our deferred tax assets and liabilities as of the date of enactment. As such, the Company's net federal and state deferred tax liability balances were reduced by approximately $39.3 million, which was recorded as a reduction of income tax expense in the Company's Consolidated Statements of Operations for the year ended December 31, 2017. We finalized our accounting for the income tax effects of the Tax Act during 2018 with an insignificant impact. As part of such analysis, the Company has concluded that it is not subject to the one-time transition tax

NOTE 12 - INCOME TAXES - (Continued)

referenced above. We will continue to monitor for potential future changes in certain state and local tax regulations resulting from the Tax Act which may have an impact on our consolidated income tax provision.

For the years ended December 31, 2018, 2017 and 2016, our income tax provision was calculated based on income from continuing operations before income taxes as follows: (in thousands):

	2018	2017	2016
United States	$ 375,408	$ 303,854	$ 283,904
Foreign	19,620	14,895	12,590
	$ 395,028	$ 318,749	$ 296,494

The income tax provision in the accompanying Consolidated Statements of Operations for the years ended December 31, 2018, 2017 and 2016 consisted of the following (in thousands):

	2018	2017	2016
Current:			
Federal provision	$ 75,405	$ 120,317	$ 95,171
State and local provisions	28,063	23,496	23,387
Foreign provision	1,389	244	749
	104,857	144,057	119,307
Deferred	4,249	(53,358)	(8,108)
	$ 109,106	$ 90,699	$ 111,199

Our 2018 income tax provision from continuing operations was $109.1 million compared to $90.7 million for 2017 and $111.2 million for 2016. The increase in the 2018 income tax provision compared to 2017 was primarily due to increased income before income taxes. The decrease in the 2017 income tax provision compared to 2016 was predominantly due to the revaluation of the Company's net deferred tax liability balances as discussed above, partially offset by increased income before income taxes.

The actual income tax rates on income from continuing operations before income taxes, less amounts attributable to noncontrolling interests, for the years ended December 31, 2018, 2017 and 2016, were 27.6%, 28.5% and 37.5%, respectively. The decrease in the 2018 actual income tax rate compared to 2017 and the decrease in the 2017 actual income tax rate compared to 2016 were due to the net impact of the Tax Act on each period, including the reduction of the U.S. federal corporate tax rate from 35% to 21% in 2018 and the reduction in income tax expense associated with the re-measurement of our net deferred tax liability balance in 2017.

Items accounting for the differences between income taxes computed at the federal statutory rate and the income tax provision for the years ended December 31, 2018, 2017 and 2016 were as follows (in thousands):

	2018	2017	2016
Federal income taxes at the statutory rate	$ 82,946	$ 111,562	$ 103,773
State and local income taxes, net of federal tax benefits	21,827	15,736	14,801
State tax reserves	(7)	(2,543)	74
Permanent differences	6,584	4,916	3,698
Domestic manufacturing deduction	—	(10,387)	(6,830)
Excess tax benefit from share-based compensation	(1,227)	(1,341)	(2,114)
Goodwill impairment	—	17,055	—
Foreign income taxes (including UK statutory rate changes)	70	(2,586)	(1,290)
Impact of federal rate change on net deferred tax liabilities	—	(39,343)	—
Federal tax reserves	(67)	(1,247)	(893)
Other	(1,020)	(1,123)	(20)
	$ 109,106	$ 90,699	$ 111,199

NOTE 12 - INCOME TAXES - (Continued)

Our income tax provision for the year ended December 31, 2018 included $0.6 million for the minimum tax on global intangible low-taxed income for certain earnings of our foreign subsidiaries, as required under the Tax Act. The Company has elected to recognize such tax as an expense in the period incurred.

As of December 31, 2018, we had undistributed foreign earnings from certain foreign subsidiaries of approximately $54.6 million. Based on our evaluation, and given that a significant portion of such earnings were subject to tax in prior periods or are indefinitely reinvested, we have concluded that any taxes associated with the repatriation of such foreign earnings would be immaterial. As of December 31, 2018, the amount of cash held by these foreign subsidiaries was approximately $60.6 million which, if repatriated, should not result in any federal or state income taxes.

Tax benefits are recognized only if it is “more likely than not” that the tax position would be sustained on its technical merits. The amount recognized is the largest amount of the tax benefit that is greater than 50% likely of being realized on examination, with a tax examination being presumed to occur. For positions not meeting the “more likely than not” test, no tax benefit is recognized. As of December 31, 2018 and 2017, the amount of unrecognized income tax benefits was zero and $0.8 million, respectively.

A reconciliation of unrecognized income tax benefits at the beginning and at the end of the year is as follows (in thousands):

	2018	2017
Balance at beginning of year	$ 841	$ 3,982
Additions based on tax positions related to the current year	—	1,158
Additions based on tax positions related to prior years	—	1,244
Adjustments for tax positions of prior years	184	(5,543)
Reductions for expired statute of limitations	(1,025)	—
Balance at end of year	$ —	$ 841

We report interest expense and/or interest income related to unrecognized tax benefits in the income tax provision. As of December 31, 2018 and 2017, respectively, we had approximately zero and $0.1 million of accrued interest expense related to unrecognized income tax benefits included as a liability in the Consolidated Balance Sheets. For the years ended December 31, 2018 and 2017, less than $0.1 million of interest expense was recognized in the income tax provision. In addition, for the years ended December 31, 2018 and 2017, respectively, approximately $0.1 million and $0.5 million of interest income was recognized in the income tax provision. We do not anticipate any significant changes to our reserves for uncertain tax positions in the next twelve months.

We file income tax returns with the Internal Revenue Service and various state, local and foreign tax agencies. The Company is currently under examination by various taxing authorities for the years 2014 through 2017. During the first quarter of 2017, the Company settled an examination with a taxing authority which resulted in a $3.3 million reversal of reserves for previously uncertain tax positions.

NOTE 12 - INCOME TAXES - (Continued)

Deferred income tax assets and liabilities are recognized in the Consolidated Balance Sheets for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. The deferred income tax assets and deferred income tax liabilities recorded for the years ended December 31, 2018 and 2017 were as follows (in thousands):

	2018	2017
Deferred income tax assets:		
Excess of amounts expensed for financial statement purposes over amounts deducted for income tax purposes:		
Insurance liabilities	$ 44,192	$ 42,425
Pension liability	3,204	6,900
Deferred compensation	29,300	27,742
Other (including liabilities and reserves)	27,400	28,534
Total deferred income tax assets	104,096	105,601
Valuation allowance for deferred tax assets	(3,855)	(3,825)
Net deferred income tax assets	100,241	101,776
Deferred income tax liabilities:		
Costs capitalized for financial statement purposes and deducted for income tax purposes:		
Goodwill and identifiable intangible assets	(152,761)	(150,900)
Depreciation of property, plant and equipment	(14,904)	(11,781)
Other	(3,424)	(3,792)
Total deferred income tax liabilities	(171,089)	(166,473)
Net deferred income tax liabilities	$ (70,848)	$ (64,697)

The components of the net deferred income tax liabilities in the accompanying Consolidated Balance Sheets are included in "Other assets" of $4.7 million and $10.0 million and "Other long-term obligations" of $75.5 million and $74.7 million, at December 31, 2018 and 2017, respectively.

Valuation allowances are established when necessary to reduce deferred income tax assets when it is more likely than not that a tax benefit will not be realized. We file a consolidated federal income tax return including all of our U.S. subsidiaries. As of December 31, 2018 and 2017, the total valuation allowance on deferred income tax assets was approximately $3.9 million and $3.8 million, respectively, related to state and local net operating losses. Although realization is not assured, we believe it is more likely than not that the deferred income tax assets, net of the valuation allowance discussed above, will be realized. The amount of the deferred income tax assets considered realizable, however, could be reduced if estimates of future income are reduced.

At December 31, 2018, we had trading losses for United Kingdom income tax purposes of approximately $4.2 million, which have no expiration date. Such losses are subject to review by the United Kingdom taxing authority. Realization of the deferred income tax assets is dependent on our generating sufficient taxable income. We believe that the deferred income tax assets will be realized through projected future income.

NOTE 13 - COMMON STOCK

As of December 31, 2018 and 2017, there were 55,983,763 and 58,798,428 shares of our common stock outstanding, respectively.

We have paid quarterly dividends since October 25, 2011. We currently pay a regular quarterly dividend of $0.08 per share.

On September 26, 2011, our Board of Directors authorized us to repurchase up to $100.0 million of our outstanding common stock. On December 5, 2013, October 23, 2014, October 28, 2015, October 25, 2017 and October 23, 2018, our Board of Directors authorized us to repurchase up to an additional $100.0 million, $250.0 million, $200.0 million, $100.0 million and $200.0 million of our outstanding common stock, respectively. During 2018, we have repurchased 3,066,869 shares of our common stock for approximately $216.2 million. Since the inception of the repurchase programs through December 31, 2018, we have repurchased approximately 15.9 million shares of our common stock for approximately $791.5 million. As of December 31, 2018, there remained authorization for us to repurchase approximately $158.5 million of our shares. The repurchase programs have no expiration date and do not obligate the Company to acquire any particular amount of common stock and may be suspended, recommenced or discontinued at any time or from time to time without prior notice. We may repurchase our shares from time to time to the extent permitted by securities laws and other legal requirements, including provisions in our 2016 Credit Agreement placing limitations on such repurchases. The repurchase programs have been and will be funded from our operations.

NOTE 14 - SHARE-BASED COMPENSATION PLANS

We have an incentive plan under which stock options, stock awards, stock units and other share-based compensation may be granted to officers, non-employee directors and key employees of the Company. Under the terms of this plan, 3,250,000 shares were authorized, and 1,327,307 shares are available for grant or issuance as of December 31, 2018. Any issuances under this plan are valued at the fair market value of the common stock on the grant date. The vesting and expiration of any stock option grants and the vesting schedule of any stock awards or stock units are determined by the Compensation and Personnel Committee of our Board of Directors at the time of the grant. Forfeitures are recognized as they occur.

The following table summarizes activity regarding our stock options and awards of shares and stock units since December 31, 2015:

Stock Options			Restricted Stock Units		
	Shares	Weighted Average Price		Shares	Weighted Average Price
Balance, December 31, 2015	306,726	$ 23.42	Balance, December 31, 2015	605,488	$ 39.47
Granted	—	—	Granted	191,936	$ 46.86
Expired	—	—	Forfeited	(965)	$ 43.13
Exercised	(163,726)	$ 23.73	Vested	(304,171)	$ 35.29
Balance, December 31, 2016	143,000	$ 23.06	Balance, December 31, 2016	492,288	$ 44.93
Granted	—	—	Granted	198,179	$ 68.33
Expired	—	—	Forfeited	(1,200)	$ 60.68
Exercised	(50,000)	$ 20.42	Vested	(180,395)	$ 44.57
Balance, December 31, 2017	93,000	$ 24.48	Balance, December 31, 2017	508,872	$ 54.13
Granted	—	—	Granted	135,259	$ 80.37
Expired	—	—	Forfeited	(1,250)	$ 71.27
Exercised	(53,000)	$ 24.48	Vested	(166,295)	$ 48.44
Balance, December 31, 2018	40,000	$ 24.48	Balance, December 31, 2018	476,586	$ 63.52

We recognized approximately $11.0 million, $9.9 million and $8.9 million of compensation expense for stock units awarded to non-employee directors and employees pursuant to incentive plans for the years ended December 31, 2018, 2017 and 2016, respectively. We have approximately $9.2 million of compensation expense, net of income taxes, which will be recognized over the remaining vesting periods of up to approximately four years. In addition, an aggregate of 72,771 restricted stock units granted to employees and non-employee directors vested as of December 31, 2018, but issuance has been deferred up to five years.

All outstanding stock options were fully vested; therefore, no compensation expense was recognized for the years ended December 31, 2018, 2017 and 2016.

NOTE 14 - SHARE-BASED COMPENSATION PLANS - (Continued)

The Company received less than $0.1 million, less than $0.1 million and approximately $0.7 million as a result of stock option exercises during the years ended December 31, 2018, 2017 and 2016, respectively. The income tax benefit derived in 2018, 2017 and 2016 as a result of such exercises and share-based compensation was approximately $3.6 million, $3.9 million and $6.2 million, respectively, of which approximately $1.6 million, $1.6 million and $2.5 million, respectively, represented excess tax benefits. The total intrinsic value of options (the amounts by which the stock price exceeded the exercise price of the option on the date of exercise) that were exercised during 2018, 2017 and 2016 was approximately $2.7 million, $2.3 million and $4.6 million, respectively.

At December 31, 2018, 2017 and 2016, 40,000 options, 93,000 options and 143,000 options were exercisable, respectively. The weighted average exercise price of exercisable options at December 31, 2018, 2017 and 2016 was approximately $24.48, $24.48 and $23.06, respectively. The total aggregate intrinsic value of options outstanding and exercisable as of December 31, 2018, 2017 and 2016 were approximately $1.4 million, $5.3 million and $6.8 million, respectively.

The following table summarizes information about our outstanding stock options as of December 31, 2018:

Stock Options Outstanding and Exercisable

Range of Exercise Prices	Number	Weighted Average Remaining Life	Weighted Average Exercise Price
$24.48	40,000	1.45 Years	$24.48

We have an employee stock purchase plan. Under the terms of this plan, the maximum number of shares of our common stock that may be purchased is 3,000,000 shares. Generally, our corporate employees and non-union employees of our United States subsidiaries are eligible to participate in this plan. Employees covered by collective bargaining agreements generally are not eligible to participate in this plan.

NOTE 15 - RETIREMENT PLANS

Defined Benefit Plans

Our United Kingdom subsidiary has a defined benefit pension plan covering all eligible employees (the “UK Plan”); however, no individual joining the company after October 31, 2001 may participate in the plan. On May 31, 2010, we curtailed the future accrual of benefits for active employees under this plan.

We account for our UK Plan and other defined benefit plans in accordance with ASC 715, “Compensation-Retirement Benefits” (“ASC 715”). ASC 715 requires that (a) the funded status, which is measured as the difference between the fair value of plan assets and the projected benefit obligations, be recorded in our balance sheet with a corresponding adjustment to accumulated other comprehensive income (loss) and (b) gains and losses for the differences between actuarial assumptions and actual results, and unrecognized service costs, be recognized through accumulated other comprehensive income (loss). These amounts will be subsequently recognized as net periodic pension cost.

NOTE 15 - RETIREMENT PLANS - (Continued)

The change in benefit obligations and assets of the UK Plan for the years ended December 31, 2018 and 2017 consisted of the following components (in thousands):

	2018	2017
Change in pension benefit obligation		
Benefit obligation at beginning of year	$ 332,618	$ 306,731
Interest cost	8,085	8,622
Actuarial (gain) loss	(27,755)	2,058
Benefits paid	(14,318)	(13,709)
Foreign currency exchange rate changes	(16,854)	28,916
Benefit obligation at end of year	281,776	332,618
Change in pension plan assets		
Fair value of plan assets at beginning of year	295,968	257,236
Actual return on plan assets	(6,489)	22,899
Employer contributions	4,742	4,727
Benefits paid	(14,318)	(13,709)
Foreign currency exchange rate changes	(15,709)	24,815
Fair value of plan assets at end of year	264,194	295,968
Funded status at end of year	$ (17,582)	$ (36,650)

Amounts not yet reflected in net periodic pension cost and included in accumulated other comprehensive loss were as follows (in thousands):

	2018	2017
Unrecognized losses	$ 86,768	$ 102,054

The underfunded status of the UK Plan of $17.6 million and $36.7 million at December 31, 2018 and 2017, respectively, is included in “Other long-term obligations” in the accompanying Consolidated Balance Sheets. No plan assets are expected to be returned to us during the year ending December 31, 2019.

The weighted average assumptions used to determine benefit obligations as of December 31, 2018 and 2017 were as follows:

	2018	2017
Discount rate	2.9%	2.5%

The weighted average assumptions used to determine net periodic pension cost for the years ended December 31, 2018, 2017 and 2016 were as follows:

	2018	2017	2016
Discount rate	2.5%	2.7%	3.8%
Annual rate of return on plan assets	5.0%	5.3%	6.2%

The annual rate of return on plan assets has been determined by modeling possible returns using the actuary’s portfolio return calculator and the fair value of plan assets. This models the long term expected returns of the various asset classes held in the portfolio and takes into account the additional benefits of holding a diversified portfolio. For measurement purposes of the liability, the annual rate of inflation of covered pension benefits assumed for 2018 and 2017 was 2.1%.

NOTE 15 - RETIREMENT PLANS - (Continued)

The components of net periodic pension cost of the UK Plan for the years ended December 31, 2018, 2017 and 2016 were as follows (in thousands):

	2018	2017	2016
Interest cost	$ 8,085	$ 8,622	$ 10,320
Expected return on plan assets	(13,797)	(13,508)	(14,227)
Amortization of unrecognized loss	2,630	2,942	2,047
Net periodic pension cost (income)	$ (3,082)	$ (1,944)	$ (1,860)

Actuarial gains and losses are amortized using a corridor approach whereby cumulative gains and losses in excess of the greater of 10% of the pension benefit obligation or the fair value of plan assets are amortized over the average life expectancy of plan participants. The amortization period for 2018 was 25 years.

The reclassification adjustment, net of income taxes, for the UK Plan from accumulated other comprehensive loss into net periodic pension cost for the years ended December 31, 2018, 2017 and 2016 was approximately $2.1 million, $2.3 million and $1.7 million, respectively. The estimated unrecognized loss for the UK Plan that will be amortized from accumulated other comprehensive loss into net periodic pension cost over the next year is approximately $1.9 million, net of income taxes.

UK Plan Assets

The weighted average asset allocations and weighted average target allocations at December 31, 2018 and 2017 were as follows:

Asset Category	Target Asset Allocation	December 31, 2018	December 31, 2017
Equity securities	15.0%	13.4%	14.1%
Debt securities	65.0%	71.2%	77.3%
Cash	10.0%	6.1%	8.6%
Real estate	10.0%	9.3%	—%
Total	100.0%	100.0%	100.0%

Plan assets of our UK Plan are invested through fund managers. Debt securities include United Kingdom government debt and United States, United Kingdom, European and emerging market corporate debt. Equity securities include marketable equity and equity like instruments across developed global equity markets. Real estate assets represent investments in trusts which invest directly or indirectly in various properties throughout the United Kingdom.

The following tables set forth by level, within the fair value hierarchy discussed in Note 11 - Fair Value Measurements, the fair value of assets of the UK Plan as of December 31, 2018 and 2017 (in thousands):

	Assets at Fair Value as of December 31, 2018			
Asset Category	Level 1	Level 2	Level 3	Total
Equity and equity like investments	$ —	$ 35,425	$ —	$ 35,425
Corporate debt securities	—	37,703	98,077	135,780
Government bonds	—	52,445	—	52,445
Cash	16,097	—	—	16,097
Real estate	—	—	24,447	24,447
Total	$ 16,097	$ 125,573	$ 122,524	$ 264,194

NOTE 15 - RETIREMENT PLANS - (Continued)

	Assets at Fair Value as of December 31, 2017			
Asset Category	**Level 1**	**Level 2**	**Level 3**	**Total**
Equity and equity like investments	$ —	$ 41,684	$ —	$ 41,684
Corporate debt securities	—	69,630	103,945	173,575
Government bonds	—	55,207	—	55,207
Cash	25,502	—	—	25,502
Total	$ 25,502	$ 166,521	$ 103,945	$ 295,968

In regards to the plan assets of our UK Plan, investment amounts have been allocated within the fair value hierarchy based on the nature of the investment. The characteristics of the assets that sit within each level are summarized as follows:

Level 1-This asset represents cash.

Level 2-These assets are a combination of the following:

(a) Assets that are not exchange traded but have a unit price that is based on the net asset value of the fund. The unit prices are not quoted but the underlying assets held by the fund are either:

(i) held in a variety of listed investments; or

(ii) held in UK treasury bonds or corporate bonds with the asset value being based on fixed income streams. Some of the underlying bonds are also listed on regulated markets.

It is the value of the underlying assets that have been used to calculate the unit price of the fund.

(b) Assets that are not exchange traded but have a unit price that is based on the net asset value of the fund. The unit prices are quoted. The underlying assets within these funds comprise cash or assets that are listed on a regulated market (i.e., the values are based on observable market data) and it is these values that are used to calculate the unit price of the fund.

Level 3-Assets that are not exchange traded but have a unit price that is based on the net asset value of the investment or for which fair value is determined by third party appraisals or valuations. Such fair values are not quoted or available on any market.

The table below sets forth a summary of changes in the fair value of the UK Plan's Level 3 assets for the year ended December 31, 2018 (in thousands):

Level 3 Assets	**2018**	**2017**
Start of year balance	$ 103,945	$ —
Actual return on plan assets, relating to assets still held at reporting date	(71)	1,858
Actual return on plan assets, relating to assets sold during the period	216	—
Purchases, sales and settlements, net	25,523	98,633
Change due to exchange rate changes	(7,089)	3,454
End of year balance	$ 122,524	$ 103,945

Level 3 debt securities are valued based on the credit rating and performance of the underlying debt portfolio, which includes benchmarking of risk and return relative to the investment plan. Level 3 real estate investments are valued at fair market value based on third party appraisals or valuations.

The investment policies and strategies for the plan assets are established by the plan trustees (who are independent of the Company) to achieve a reasonable balance between risk, likely return and administration expense, as well as to maintain funds at a level to meet minimum funding requirements. In order to ensure that an appropriate investment strategy is in place, an analysis of the UK Plan's assets and liabilities is completed periodically.

NOTE 15 - RETIREMENT PLANS - (Continued)

Cash Flows:

Contributions

Our United Kingdom subsidiary expects to contribute approximately $4.5 million to the UK Plan in 2019.

Estimated Future Benefit Payments

The following estimated benefit payments are expected to be paid in the following years (in thousands):

	Pension Benefits
2019	$ 14,007
2020	$ 14,425
2021	$ 14,857
2022	$ 15,301
2023	$ 15,757
Succeeding five years	$ 86,141

The following table shows certain information for the UK Plan where the accumulated benefit obligation is in excess of plan assets as of December 31, 2018 and 2017 (in thousands):

	2018	2017
Projected benefit obligation	$ 281,776	$ 332,618
Accumulated benefit obligation	$ 281,776	$ 332,618
Fair value of plan assets	$ 264,194	$ 295,968

We also sponsor three domestic retirement plans in which participation by new individuals is frozen. The benefit obligation associated with these plans as of December 31, 2018 and 2017 was approximately $8.5 million and $9.3 million, respectively. The estimated fair value of the plan assets as of December 31, 2018 and 2017 was approximately $4.9 million and $5.5 million, respectively. The plan assets are considered Level 1 assets within the fair value hierarchy and are predominantly invested in cash, equities, and equity and bond funds. The liability balances as of December 31, 2018 and 2017 are classified as "Other long-term obligations" in the accompanying Consolidated Balance Sheets. The measurement date for these plans is December 31 of each year. The major assumptions used in the actuarial valuations to determine benefit obligations as of December 31, 2018 and 2017 included discount rates of 4.00% to 4.25% for 2018 and 3.50% to 4.00% for 2017. Also, included was an expected rate of return of 7.00% for both 2018 and 2017. The reclassification adjustment, net of income taxes, from accumulated other comprehensive loss into net periodic pension cost was approximately $0.2 million for each of the years ended December 31, 2018, 2017 and 2016. The estimated loss for these plans that will be amortized from accumulated other comprehensive loss into net periodic pension cost over the next year is approximately $0.2 million, net of income taxes. The future estimated benefit payments expected to be paid from the plans for the next ten years is approximately $0.5 million per year.

Multiemployer Plans

We participate in approximately 200 multiemployer pension plans ("MEPPs") that provide retirement benefits to certain union employees in accordance with various collective bargaining agreements ("CBAs"). As one of many participating employers in an MEPP, we are potentially liable with the other participating employers for such plan's underfunding either through an increase in our required contributions, or in the case of our withdrawal from the plan, a payment based upon our proportionate share of the plan's unfunded benefits, in each case, as described below. Our contributions to a particular MEPP are established by the applicable CBAs; however, our required contributions may increase based on the funded status of an MEPP and legal requirements of the Pension Protection Act of 2006 (the "PPA"), which requires substantially underfunded MEPPs to implement a funding improvement plan ("FIP") or a rehabilitation plan ("RP") to improve their funded status. Factors that could impact the funded status of an MEPP include, without limitation, investment performance, changes in the participant demographics, decline in the number of contributing employers, changes in actuarial assumptions and the utilization of extended amortization provisions.

An FIP or RP requires a particular MEPP to adopt measures to correct its underfunding status. These measures may include, but are not limited to: (a) an increase in our contribution rate as a signatory to the applicable CBA, (b) a reallocation of the contributions

NOTE 15 - RETIREMENT PLANS - (Continued)

already being made by participating employers for various benefits to individuals participating in the MEPP and/or (c) a reduction in the benefits to be paid to future and/or current retirees. In addition, the PPA requires that a 5% surcharge be levied on employer contributions for the first year commencing after the date the employer receives notice that the MEPP is in critical status and a 10% surcharge on each succeeding year until a CBA is in place with terms and conditions consistent with the RP.

We could also be obligated to make payments to MEPPs if we either cease to have an obligation to contribute to the MEPP or significantly reduce our contributions to the MEPP because we reduce our number of employees who are covered by the relevant MEPP for various reasons, including, but not limited to, layoffs or closure of a subsidiary assuming the MEPP has unfunded vested benefits. The amount of such payments (known as a complete or partial withdrawal liability) would equal our proportionate share of the MEPPs' unfunded vested benefits. We believe that certain of the MEPPs in which we participate may have unfunded vested benefits. Due to uncertainty regarding future factors that could trigger withdrawal liability, as well as the absence of specific information regarding the MEPP's current financial situation, we are unable to determine (a) the amount and timing of any future withdrawal liability, if any, and (b) whether our participation in these MEPPs could have a material adverse impact on our financial position, results of operations or liquidity. We did not record any withdrawal liability for the years ended December 31, 2018, 2017 and 2016.

The following table lists all domestic MEPPs to which our contributions exceeded $2.0 million in 2018. Additionally, this table also lists all domestic MEPPs to which we contributed in 2018 in excess of $0.5 million for MEPPs in the critical status, "red zone", and $1.0 million for MEPPs in the endangered status, "orange or yellow zones", as defined by the PPA (in thousands):

Pension Fund	EIN/ Pension Plan Number		PPA Zone Status [(1)] 2018	PPA Zone Status [(1)] 2017	FIP/RP Status	Contributions 2018	Contributions 2017	Contributions 2016	Contributions greater than 5% of total plan contributions [(2)]	Expiration date of CBA
National Automatic Sprinkler Industry Pension Fund	52-6054620	001	Red	Red	Implemented	$ 14,888	$ 14,228	$ 11,075	No	March 2019 to June 2022
Plumbers & Pipefitters National Pension Fund	52-6152779	001	Yellow	Yellow	Implemented	11,868	12,550	12,034	No	January 2019 to August 2026
Sheet Metal Workers National Pension Fund	52-6112463	001	Yellow	Yellow	Implemented	10,895	12,895	11,280	No	April 2019 to May 2023
National Electrical Benefit Fund	53-0181657	001	Green	Green	N/A	10,700	11,572	10,328	No	February 2019 to May 2022
Pension, Hospitalization & Benefit Plan of the Electrical Industry-Pension Trust Account	13-6123601	001	Green	Green	N/A	10,469	9,489	9,687	No	April 2019 to November 2021
Central Pension Fund of the IUOE & Participating Employers	36-6052390	001	Green	Green	N/A	6,384	6,070	6,211	No	January 2019 to September 2023
Plumbers Pipefitters & Mechanical Equipment Service Local Union 392 Pension Plan	31-0655223	001	Red	Red	Implemented	6,047	6,084	5,202	Yes	June 2019
Pipefitters Union Local 537 Pension Fund	51-6030859	001	Green	Green	N/A	6,038	4,057	3,970	No	September 2020 to August 2021
Southern California IBEW-NECA Pension Trust Fund	95-6392774	001	Yellow	Red	Implemented	5,754	3,669	3,289	No	June 2019 to May 2020
Sheet Metal Workers Pension Plan of Northern California	51-6115939	001	Red	Red	Implemented	5,488	6,023	5,164	No	June 2019 to June 2021
Electrical Workers Local No. 26 Pension Trust Fund	52-6117919	001	Green	Green	N/A	5,485	4,441	3,390	Yes	May 2019 to July 2021
Electrical Contractors Association of the City of Chicago Local Union 134, IBEW Joint Pension Trust of Chicago Pension Plan 2	51-6030753	002	Green	Green	N/A	4,308	5,537	5,518	No	June 2019

NOTE 15 - RETIREMENT PLANS - (Continued)

Pension Fund	EIN/ Pension Plan Number	PPA Zone Status [(1)]		FIP/RP Status	Contributions			Contributions greater than 5% of total plan contributions [(2)]	Expiration date of CBA
		2018	2017		2018	2017	2016		
U.A. Local 393 Pension Trust Fund Defined Benefit	94-6359772 002	Green	Green	N/A	4,298	1,540	2,490	Yes	June 2019 to June 2021
Eighth District Electrical Pension Fund	84-6100393 001	Green	Green	N/A	3,486	3,786	3,444	Yes	February 2019 to May 2022
U.A. Plumbers Local 24 Pension Fund	22-6042823 001	Green	Green	N/A	3,461	3,092	3,147	Yes	April 2020
Edison Pension Plan	93-6061681 001	Green	Green	N/A	3,140	1,628	1,400	No	December 2020
Northern California Pipe Trades Pension Plan	94-3190386 001	Green	Green	N/A	3,104	2,963	6,495	No	June 2019 to June 2021
Southern California Pipe Trades Retirement Fund	51-6108443 001	Green	Green	N/A	3,095	3,907	4,371	No	June 2019 to August 2026
San Diego Electrical Pension Plan	95-6101801 001	Green	Green	N/A	3,008	2,862	2,216	Yes	May 2019 to May 2020
Plumbers & Steamfitters Local 486 Pension Fund	52-6124449 001	Green	Green	N/A	2,720	1,830	1,155	Yes	March 2019 to December 2019
NECA-IBEW Pension Trust Fund	51-6029903 001	Green	Green	N/A	2,650	3,060	3,752	Yes	March 2019 to May 2020
Arizona Pipe Trades Pension Trust Fund	86-6025734 001	Green	Green	N/A	2,640	1,662	681	No	June 2020
Heating, Piping & Refrigeration Pension Fund	52-1058013 001	Green	Green	N/A	2,619	2,437	2,402	No	July 2019
Plumbing & Pipe Fitting Local 219 Pension Fund	34-6682376 001	Red	Red	Implemented	2,197	1,335	838	Yes	May 2019
Connecticut Plumbers & Pipefitters Pension Fund	06-6050353 001	Green	Green	N/A	2,104	1,988	1,631	Yes	June 2021
Sheet Metal Workers Pension Plan of Southern California, Arizona & Nevada	95-6052257 001	Yellow	Yellow	Implemented	1,934	3,268	2,946	No	June 2019 to June 2021
Boilermaker-Blacksmith National Pension Trust	48-6168020 001	Red	Red	Implemented	1,446	1,083	1,710	No	April 2019 to September 2021
Plumbers & Pipefitters Local 162 Pension Fund	31-6125999 001	Yellow	Yellow	Implemented	1,273	801	781	Yes	May 2019
Plumbers & Pipefitters Local Union No. 502 & 633 Pension Fund	61-6078145 001	Yellow	Yellow	Implemented	1,167	801	713	No	July 2019
South Florida Electrical Workers Pension Plan and Trust	59-6230530 001	Red	Red	Implemented	821	503	263	Yes	February 2019 to August 2021
Steamfitters Local Union No. 420 Pension Plan	23-2004424 001	Red	Red	Implemented	706	687	709	No	May 2020
Other Multiemployer Pension Plans					46,036	43,368	39,005		Various
Total Contributions					$190,229	$179,216	$167,297		

(1) The zone status represents the most recent available information for the respective MEPP, which may be 2017 or earlier for the 2018 year and 2016 or earlier for the 2017 year.

(2) This information was obtained from the respective plan's Form 5500 ("Forms") for the most current available filing. These dates may not correspond with our fiscal year contributions. The above noted percentages of contributions are based upon disclosures contained in the plans' Forms. Those Forms, among other things, disclose the names of individual participating employers whose annual contributions account for more than 5% of the aggregate annual amount contributed by all participating employers for a plan year. Accordingly, if the annual contribution of two or more of our subsidiaries each accounted for less than 5% of such contributions, but in the aggregate accounted for in excess of 5% of such contributions, that greater percentage is not available and accordingly is not disclosed.

NOTE 15 - RETIREMENT PLANS - (Continued)

The nature and diversity of our business may result in volatility in the amount of our contributions to a particular MEPP for any given period. That is because, in any given market, we could be working on a significant project and/or projects, which could result in an increase in our direct labor force and a corresponding increase in our contributions to the MEPP(s) dictated by the applicable CBA. When that particular project(s) finishes and is not replaced, the number of participants in the MEPP(s) who are employed by us would also decrease, as would our level of contributions to the particular MEPP(s). Additionally, the amount of contributions to a particular MEPP could also be affected by the terms of the CBA, which could require at a particular time, an increase in the contribution rate and/or surcharges. Our contributions to various MEPPs did not significantly increase as a result of acquisitions made since 2016.

We also participated in two MEPPs that are located within the United Kingdom for which we have contributed less than $0.1 million for the year ended December 31, 2018, less than $0.1 million for the year ended December 31, 2017 and approximately $0.2 million for the year ended December 31, 2016. The decrease in contributions since 2016 was due to the closure of one of these plans. The information that we have obtained relating to these plans is not as readily available and/or as comparable as the information that has been ascertained in the United States. Based upon the most recently available information, the remaining plan is 100% funded.

Additionally, we contribute to certain multiemployer plans that provide post retirement benefits such as health and welfare benefits and/or defined contribution/annuity plans, among others. Our contributions to these plans approximated $135.9 million, $130.9 million and $130.5 million for the years ended December 31, 2018, 2017 and 2016, respectively. Our contributions to other post retirement benefit plans did not significantly increase as a result of acquisitions made since 2016. The amount of contributions to these plans is also subject for the most part to the factors discussed above in conjunction with the MEPPs.

Defined Contribution Plans

We have defined contribution retirement and savings plans that cover eligible employees in the United States. Contributions to these plans are based on a percentage of the employee's base compensation. The expenses recognized for the years ended December 31, 2018, 2017 and 2016 for these plans were approximately $29.8 million, $28.1 million and $26.8 million, respectively. At our discretion and subject to applicable plan documents, we may make additional supplemental matching contributions to one of our defined contribution retirement and savings plans. The expenses recognized related to additional supplemental matching for the years ended December 31, 2018, 2017 and 2016 were approximately $6.1 million, $5.5 million and $5.4 million, respectively.

Our United Kingdom subsidiary has defined contribution retirement plans. The expense recognized for the years ended December 31, 2018, 2017 and 2016 was approximately $4.9 million, $3.9 million and $3.6 million, respectively.

NOTE 16 - COMMITMENTS AND CONTINGENCIES

Commitments

We lease land, buildings and equipment under various leases. The leases frequently include renewal options and escalation clauses and require us to pay for utilities, taxes, insurance and maintenance expenses.

Future minimum payments, by year and in the aggregate, under capital leases, non-cancelable operating leases and related subleases with initial terms of more than one year at December 31, 2018, were as follows (in thousands):

	Capital Leases	Operating Leases	Sublease Income
2019	$ 2,075	$ 55,789	$ 471
2020	1,365	46,817	321
2021	664	39,094	193
2022	297	30,975	97
2023	—	24,971	5
Thereafter	—	72,450	—
Total minimum lease payments	4,401	$ 270,096	$ 1,087
Amounts representing interest	(188)		
Present value of net minimum lease payments	$ 4,213		

NOTE 16 - COMMITMENTS AND CONTINGENCIES - (Continued)

Rent expense for operating leases and other rental items, including short-term equipment rentals charged to cost of sales, for the years ended December 31, 2018, 2017 and 2016 was approximately $191.8 million, $166.5 million and $149.0 million, respectively. Rent expense for each of the years ended December 31, 2018, 2017 and 2016 was reported net of sublease rental income of approximately $0.6 million.

Contractual Guarantees

We have agreements with our executive officers and certain other key management personnel providing for severance benefits for such employees upon termination of their employment under certain circumstances.

In the ordinary course of business, we, at times, guarantee obligations of our subsidiaries under certain contracts. Generally, we are liable under such an arrangement only if our subsidiary fails to perform its obligations under the contract. Historically, we have not incurred any substantial liabilities as a consequence of these guarantees.

The terms of our construction contracts frequently require that we obtain from surety companies (“Surety Companies”) and provide to our customers payment and performance bonds (“Surety Bonds”) as a condition to the award of such contracts. The Surety Bonds secure our payment and performance obligations under such contracts, and we have agreed to indemnify the Surety Companies for amounts, if any, paid by them in respect of Surety Bonds issued on our behalf. In addition, at the request of labor unions representing certain of our employees, Surety Bonds are sometimes provided to secure obligations for wages and benefits payable to or for such employees. Public sector contracts require Surety Bonds more frequently than private sector contracts and, accordingly, our bonding requirements typically increase as the amount of public sector work increases. As of December 31, 2018, based on our percentage-of-completion of our projects covered by Surety Bonds, our aggregate estimated exposure, assuming defaults on all our then existing contractual obligations, was approximately $1.1 billion. Surety Bonds are issued by Surety Companies in return for premiums, which vary depending on the size and type of bond.

We are subject to regulation with respect to the handling of certain materials used in construction, which are classified as hazardous or toxic by federal, state and local agencies. Our practice is to avoid participation in projects principally involving the remediation or removal of such materials. However, when remediation is required as part of our contract performance, we believe we comply with all applicable regulations governing the discharge of material into the environment or otherwise relating to the protection of the environment.

At December 31, 2018, we employed approximately 33,000 people, approximately 57% of whom are represented by various unions pursuant to approximately 400 collective bargaining agreements between our individual subsidiaries and local unions. We believe that our employee relations are generally good. Only two of these collective bargaining agreements are national or regional in scope.

Restructuring expenses, primarily related to employee severance obligations, were $2.3 million, $1.6 million and $1.4 million for the years ended December 31, 2018, 2017 and 2016, respectively. As of December 31, 2018, 2017 and 2016, the balance of our restructuring related obligations yet to be paid was $1.6 million, $0.5 million and $0.2 million, respectively. The majority of obligations outstanding as of December 31, 2017 and 2016 were paid during 2018 and 2017, respectively. The majority of obligations outstanding as of December 31, 2018 will be paid throughout 2019. No material expenses in connection with restructuring from continuing operations are expected to be incurred during 2019.

NOTE 16 - COMMITMENTS AND CONTINGENCIES - (Continued)

The changes in restructuring activity by reportable segments during the years ended December 31, 2018 and 2017 were as follows (in thousands):

	United States electrical construction and facilities services segment	United States mechanical construction and facilities services segment	United States building services segment	Corporate administration	Total
Balance at December 31, 2016	$ —	$ 188	$ 13	$ —	$ 201
Charges	452	180	945	—	1,577
Payments	—	(368)	(918)	—	(1,286)
Balance at December 31, 2017	452	—	40	—	492
Charges	—	—	882	1,424	2,306
Payments	(422)	—	(746)	—	(1,168)
Balance at December 31, 2018	$ 30	$ —	$ 176	$ 1,424	$ 1,630

A summary of restructuring expenses by reportable segments recognized for the year ended December 31, 2018 was as follows (in thousands):

	United States building services segment	Corporate Administration	Total
Severance	$ 882	$ 1,424	$ 2,306

Government Contracts

As a government contractor, we are subject to U.S. government audits and investigations relating to our operations, fines, penalties and compensatory and treble damages, and possible suspension or debarment from doing business with the government. Based on currently available information, we believe the outcome of ongoing government disputes and investigations will not have a material impact on our financial position, results of operations or liquidity.

Legal Matters

One of our subsidiaries was a subcontractor to a mechanical contractor ("Mechanical Contractor") on a construction project where an explosion occurred in 2010. The Mechanical Contractor asserted claims, in the context of an arbitration proceeding against our subsidiary, alleging that our subsidiary was responsible for a portion of the damages for which the Mechanical Contractor may be liable as a result of: (a) personal injury suffered by individuals as a result of the explosion and (b) the Mechanical Contractor's legal fees and associated management costs in defending against any and all such claims. The general contractor (as assignee of the Mechanical Contractor) on the construction project, and for whom the Mechanical Contractor worked, had alleged that our subsidiary was responsible for losses asserted by the owner of the project and/or the general contractor because of delays in completion of the project and for damages to the owner's property. On January 4, 2019, a final decision was issued by the arbitrator in favor of our subsidiary. The decision denied all claims asserted against our subsidiary in that arbitration.

We are involved in several other proceedings in which damages and claims have been asserted against us. We believe that we have a number of valid defenses to such proceedings and claims and intend to vigorously defend ourselves. Other potential claims may exist that have not yet been asserted against us. We do not believe that any such matters will have a material adverse effect on our financial position, results of operations or liquidity. Litigation is subject to many uncertainties and the outcome of litigation is not predictable with assurance. It is possible that some litigation matters for which liabilities have not been recorded could be decided unfavorably to us, and that any such unfavorable decisions could have a material adverse effect on our financial position, results of operations or liquidity.

NOTE 17 - ADDITIONAL CASH FLOW INFORMATION

The following presents information about cash paid for interest, income taxes and other non-cash financing activities for the years ended December 31, 2018, 2017 and 2016 (in thousands):

	2018	2017	2016
Cash paid during the year for:			
Interest	$ 12,435	$ 11,456	$ 11,033
Income taxes	$ 123,651	$ 130,226	$ 129,540
Non-cash financing activities:			
Assets acquired under capital lease obligations	$ 1,063	$ 1,252	$ 1,914

NOTE 18 - SEGMENT INFORMATION

We have the following reportable segments: (a) United States electrical construction and facilities services (involving systems for electrical power transmission and distribution; premises electrical and lighting systems; process instrumentation in the refining, chemical processing, food processing and mining industries; low-voltage systems, such as fire alarm, security and process control; voice and data communication; roadway and transit lighting; and fiber optic lines); (b) United States mechanical construction and facilities services (involving systems for heating, ventilation, air conditioning, refrigeration and clean-room process ventilation; fire protection; plumbing, process and high-purity piping; controls and filtration; water and wastewater treatment and central plant heating and cooling; cranes and rigging; millwrighting; and steel fabrication, erection and welding); (c) United States building services; (d) United States industrial services; and (e) United Kingdom building services. The “United States building services” and “United Kingdom building services” segments principally consist of those operations which provide a portfolio of services needed to support the operation and maintenance of customers’ facilities, including commercial and government site-based operations and maintenance; facility maintenance and services, including reception, security and catering services; outage services to utilities and industrial plants; military base operations support services; mobile mechanical maintenance and services; floor care and janitorial services; landscaping, lot sweeping and snow removal; facilities management; vendor management; call center services; installation and support for building systems; program development, management and maintenance for energy systems; technical consulting and diagnostic services; infrastructure and building projects for federal, state and local governmental agencies and bodies; and small modification and retrofit projects, which services are not generally related to customers’ construction programs. The “United States industrial services” segment principally consists of those operations which provide industrial maintenance and services, including those for refineries and petrochemical plants, including on-site repairs, maintenance and service of heat exchangers, towers, vessels and piping; design, manufacturing, repair and hydro blast cleaning of shell and tube heat exchangers and related equipment; refinery turnaround planning and engineering services; specialty welding services; overhaul and maintenance of critical process units in refineries and petrochemical plants; and specialty technical services for refineries and petrochemical plants.

NOTE 18 - SEGMENT INFORMATION - (Continued)

The following tables present information about industry segments and geographic areas for the years ended December 31, 2018, 2017 and 2016 (in thousands):

	2018	2017	2016
Revenues from unrelated entities:			
United States electrical construction and facilities services	$ 1,954,323	$ 1,829,567	$ 1,704,403
United States mechanical construction and facilities services	3,020,307	2,963,815	2,643,321
United States building services	1,875,485	1,753,703	1,810,229
United States industrial services	865,645	799,169	1,067,315
Total United States operations	7,715,760	7,346,254	7,225,268
United Kingdom building services	414,871	340,745	326,256
Total worldwide operations	$ 8,130,631	$ 7,686,999	$ 7,551,524
Total revenues:			
United States electrical construction and facilities services	$ 1,959,978	$ 1,836,985	$ 1,728,920
United States mechanical construction and facilities services	3,061,832	2,994,700	2,662,100
United States building services	1,942,663	1,812,763	1,864,824
United States industrial services	867,810	801,531	1,068,662
Less intersegment revenues	(116,523)	(99,725)	(99,238)
Total United States operations	7,715,760	7,346,254	7,225,268
United Kingdom building services	414,871	340,745	326,256
Total worldwide operations	$ 8,130,631	$ 7,686,999	$ 7,551,524
Operating income (loss):			
United States electrical construction and facilities services	$ 139,430	$ 150,001	$ 101,761
United States mechanical construction and facilities services	219,352	212,396	132,743
United States building services	93,827	81,720	77,100
United States industrial services	28,172	19,084	77,845
Total United States operations	480,781	463,201	389,449
United Kingdom building services	15,930	12,905	10,086
Corporate administration	(90,415)	(87,808)	(88,740)
Restructuring expenses	(2,306)	(1,577)	(1,438)
Impairment loss on goodwill and identifiable intangible assets	(907)	(57,819)	(2,428)
Total worldwide operations	403,083	328,902	306,929
Other corporate items:			
Net periodic pension (cost) income	2,743	1,652	1,529
Interest expense	(13,544)	(12,770)	(12,627)
Interest income	2,746	965	663
Income from continuing operations before income taxes	$ 395,028	$ 318,749	$ 296,494

NOTE 18 - SEGMENT INFORMATION - (Continued)

	2018	2017	2016
Capital expenditures:			
United States electrical construction and facilities services	$ 5,993	$ 4,797	$ 5,294
United States mechanical construction and facilities services	7,613	6,778	7,672
United States building services	10,414	10,745	11,080
United States industrial services	18,277	9,583	10,065
Total United States operations	42,297	31,903	34,111
United Kingdom building services	870	2,166	4,523
Corporate administration	312	615	1,014
Total worldwide operations	$ 43,479	$ 34,684	$ 39,648
Depreciation and amortization of Property, plant and equipment:			
United States electrical construction and facilities services	$ 6,221	$ 6,545	$ 6,318
United States mechanical construction and facilities services	8,104	7,819	7,544
United States building services	10,324	11,051	10,241
United States industrial services	9,642	10,274	10,394
Total United States operations	34,291	35,689	34,497
United Kingdom building services	3,447	3,371	3,560
Corporate administration	734	855	824
Total worldwide operations	$ 38,472	$ 39,915	$ 38,881
Contract assets:			
United States electrical construction and facilities services	$ 38,412	$ 35,060	$ 46,193
United States mechanical construction and facilities services	50,463	52,381	46,703
United States building services	33,304	26,028	28,084
United States industrial services	12,956	1,636	2,572
Total United States operations	135,135	115,105	123,552
United Kingdom building services	23,108	7,516	7,145
Total worldwide operations	$ 158,243	$ 122,621	$ 130,697
Contract liabilities:			
United States electrical construction and facilities services	$ 163,951	$ 178,454	$ 163,794
United States mechanical construction and facilities services	285,103	290,216	271,811
United States building services	79,281	48,481	50,546
United States industrial services	8,050	3,098	1,823
Total United States operations	536,385	520,249	487,974
United Kingdom building services	15,905	3,907	1,268
Total worldwide operations	$ 552,290	$ 524,156	$ 489,242

NOTE 18 - SEGMENT INFORMATION - (Continued)

	2018	2017	2016
Long-lived assets:			
United States electrical construction and facilities services	$ 201,333	$ 180,990	$ 183,632
United States mechanical construction and facilities services	346,977	352,970	287,744
United States building services	436,887	409,718	401,154
United States industrial services	617,991	630,184	709,267
Total United States operations	1,603,188	1,573,862	1,581,797
United Kingdom building services	9,264	11,729	11,446
Corporate administration	1,072	1,494	1,734
Total worldwide operations	$ 1,613,524	$ 1,587,085	$ 1,594,977
Total assets:			
United States electrical construction and facilities services	$ 702,112	$ 617,471	$ 631,581
United States mechanical construction and facilities services	1,113,417	1,097,240	954,633
United States building services	846,221	764,085	753,434
United States industrial services	832,034	772,899	850,434
Total United States operations	3,493,784	3,251,695	3,190,082
United Kingdom building services	146,379	131,806	105,081
Corporate administration	448,644	582,403	557,275
Total worldwide operations	$ 4,088,807	$ 3,965,904	$ 3,852,438

During 2018, we recognized losses of $10.0 million on a transportation project within our United States electrical construction and facilities services segment, resulting in part from contract scope issues. During 2017, we recognized $18.1 million of gross profit associated with the recovery of certain contract costs previously disputed on a project completed in 2016 within our United States mechanical construction and facilities services segment. During 2016, we incurred $19.4 million of losses on a transportation project within our United States electrical construction and facilities services segment as a result of productivity issues attributable to unfavorable job-site conditions. Additionally during 2016, within the United States mechanical construction and facilities services segment, we incurred $18.3 million of losses on a project at a process facility as a result of a contract dispute with our customer and $9.6 million of losses on an institutional project due to project delays and unfavorable job-site conditions.

NOTE 19 - SELECTED UNAUDITED QUARTERLY INFORMATION

(In thousands, except per share data)

Quarterly and year-to-date computations of per share amounts are made independently; therefore, the sum of per share amounts for the quarters may not equal per share amounts for the year. The results of the construction operations of our United Kingdom segment for all periods are presented as discontinued operations.

2018 Quarterly Results	March 31	June 30	Sept. 30	Dec. 31
Revenues	$ 1,900,388	$ 1,953,886	$ 2,047,049	$ 2,229,308
Gross profit	$ 269,119	$ 290,844	$ 309,339	$ 336,151
Impairment loss on identifiable intangible assets	$ —	$ 907	$ —	$ —
Net income attributable to EMCOR Group, Inc.	$ 55,374	$ 70,816	$ 79,373	$ 77,968
Basic EPS from continuing operations	$ 0.95	$ 1.22	$ 1.37	$ 1.39
Basic EPS from discontinued operation	(0.00)	(0.00)	(0.01)	(0.02)
	$ 0.95	$ 1.22	$ 1.36	$ 1.37
Diluted EPS from continuing operations	$ 0.94	$ 1.21	$ 1.36	$ 1.38
Diluted EPS from discontinued operation	(0.00)	(0.00)	(0.01)	(0.02)
	$ 0.94	$ 1.21	$ 1.35	$ 1.36

2017 Quarterly Results	March 31	June 30	Sept. 30	Dec. 31
Revenues	$ 1,891,732	$ 1,895,937	$ 1,886,691	$ 2,012,639
Gross profit	$ 266,340	$ 274,501	$ 295,070	$ 311,101
Impairment loss on goodwill and identifiable intangible assets	$ —	$ —	$ —	$ 57,819
Net income attributable to EMCOR Group, Inc.	$ 52,640	$ 56,758	$ 64,597	$ 53,201
Basic EPS from continuing operations	$ 0.89	$ 0.96	$ 1.10	$ 0.91
Basic EPS from discontinued operation	(0.01)	(0.00)	(0.00)	(0.00)
	$ 0.88	$ 0.96	$ 1.10	$ 0.91
Diluted EPS from continuing operations	$ 0.88	$ 0.95	$ 1.09	$ 0.90
Diluted EPS from discontinued operation	(0.01)	(0.00)	(0.00)	(0.00)
	$ 0.87	$ 0.95	$ 1.09	$ 0.90

NOTE 20 - SUBSEQUENT EVENT

In January 2019, we acquired a company for an immaterial amount. This company provides mobile mechanical services within the Southern region of the United States, and its results will be included in our United States building services segment. The acquisition of this business will be accounted for by the acquisition method, and the price paid will be allocated to its respective assets and liabilities, based upon the estimated fair value of such assets and liabilities at the date of acquisition by us.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors of EMCOR Group, Inc. and subsidiaries:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of EMCOR Group, Inc. and subsidiaries (the Company) as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income, equity and cash flows for each of the three years in the period ended December 31, 2018, and the related notes and financial statement schedule listed in the Index at Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, 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, 2018, 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 21, 2019 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 the Company's 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 2002.

Stamford, Connecticut
February 21, 2019

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors of EMCOR Group, Inc. and subsidiaries:

Opinion on Internal Control over Financial Reporting

We have audited EMCOR Group, Inc. and subsidiaries' internal control over financial reporting as of December 31, 2018, 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, EMCOR Group, Inc. and subsidiaries (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, 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 2018 consolidated financial statements of the Company and our report dated February 21, 2019 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

Stamford, Connecticut
February 21, 2019

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Based on an evaluation of our disclosure controls and procedures (as required by Rules 13a-15(b) of the Securities Exchange Act of 1934), our Chairman, President and Chief Executive Officer, Anthony J. Guzzi, and our Executive Vice President and Chief Financial Officer, Mark A. Pompa, have concluded that our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934) are effective as of the end of the period covered by this report.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities and Exchange Act of 1934). Our internal control over financial reporting is a process designed with the participation of our principal executive officer and principal financial officer or persons performing similar functions to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles.

Our internal control over financial reporting includes policies and procedures that: (a) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect our transactions and dispositions of assets, (b) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and Board of Directors and (c) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Because of its inherent limitations, our disclosure controls and procedures may not prevent or detect misstatements. A control system, no matter how well conceived and operated, can only provide reasonable, not absolute, assurance that the objectives of the control system are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. 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.

As of December 31, 2018, our management conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework established in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management has determined that EMCOR's internal control over financial reporting is effective as of December 31, 2018.

The effectiveness of our internal control over financial reporting as of December 31, 2018 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in its report appearing in this Annual Report on Form 10-K, which such report expressed an unqualified opinion on the effectiveness of our internal control over financial reporting as of December 31, 2018.

Changes in Internal Control over Financial Reporting

In addition, our management with the participation of our principal executive officer and principal financial officer or persons performing similar functions has determined that no change in our internal control over financial reporting (as that term is defined in Rules 13(a)-15(f) and 15(d)-15(f) of the Securities Exchange Act of 1934) occurred during the fourth quarter of our fiscal year ended December 31, 2018 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item 10 with respect to directors is incorporated herein by reference to the Section of our definitive Proxy Statement for the 2019 Annual Meeting of Stockholders entitled “Election of Directors”, which Proxy Statement is to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year to which this Form 10-K relates (the “Proxy Statement”). The information required by this Item 10 concerning compliance with Section 16(a) of the Securities Exchange Act of 1934 is incorporated herein by reference to the section of the Proxy Statement entitled “Section 16(a) Beneficial Ownership Reporting Compliance”. The information required by this Item 10 concerning the Audit Committee of our Board of Directors and Audit Committee financial experts is incorporated by reference to the section of the Proxy Statement entitled “Meetings and Committees of the Board of Directors” and “Corporate Governance”. The information required by this Item 10 regarding stockholder recommendations for director candidates is incorporated by reference to the section of the Proxy Statement entitled “Recommendations for Director Candidates”. Information regarding our executive officers is contained in Part I of this Form 10-K following Item 4 under the heading “Executive Officers of the Registrant”. We have adopted a Code of Ethics that applies to our Chief Executive Officer and our Senior Financial Officers, which is listed on the Exhibit Index.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item 11 is incorporated herein by reference to the sections of the Proxy Statement entitled “Compensation Discussion and Analysis”, “Executive Compensation and Related Information”, “Potential Post Employment Payments”, “Director Compensation”, “Compensation Committee Interlocks and Insider Participation” and “Compensation Committee Report”.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item 12 (other than the information required by Section 201(d) of Regulation S-K, which is set forth in Part II, Item 5 of this Form 10-K) is incorporated herein by reference to the sections of the Proxy Statement entitled “Security Ownership of Certain Beneficial Owners” and “Security Ownership of Management”.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by this Item 13 is incorporated herein by reference to the sections of the Proxy Statement entitled “Compensation Committee Interlocks and Insider Participation” and “Corporate Governance”.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item 14 is incorporated herein by reference to the section of the Proxy Statement entitled “Ratification of Appointment of Independent Auditors”.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) The following consolidated financial statements of EMCOR Group, Inc. and Subsidiaries are filed as part of this report under Part II, Item 8. Financial Statements and Supplementary Data:

Financial Statements:

Consolidated Balance Sheets - December 31, 2018 and 2017

Consolidated Statements of Operations - Years Ended December 31, 2018, 2017 and 2016

Consolidated Statements Comprehensive Income - Years Ended December 31, 2018, 2017 and 2016

Consolidated Statements of Cash Flows - Years Ended December 31, 2018, 2017 and 2016

Consolidated Statements of Equity - Years Ended December 31, 2018, 2017 and 2016

Notes to Consolidated Financial Statements

Reports of Independent Registered Public Accounting Firm

(a)(2) The following financial statement schedule is included in this Form 10-K report: Schedule II - Valuation and Qualifying Accounts

All other schedules are omitted because they are not required, are inapplicable, or the information is otherwise shown in the consolidated financial statements or notes thereto.

(a)(3) For the list of exhibits, see the Exhibit Index immediately following the signature page hereof, which Exhibit Index is incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

Date: February 21, 2019

EMCOR GROUP, INC.
(Registrant)

BY: /s/ ANTHONY J. GUZZI
Anthony J. Guzzi
Chairman, President and Chief 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 indicated on February 21, 2019.

/s/ ANTHONY J. GUZZI **Anthony J. Guzzi**	Chairman, President and Chief Executive Officer (Principal Executive Officer)
/s/ MARK A. POMPA **Mark A. Pompa**	Executive Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)
/s/ JOHN W. ALTMEYER **John W. Altmeyer**	Director
/s/ DAVID A. B. BROWN **David A. B. Brown**	Director
/s/ RICHARD F. HAMM, JR. **Richard F. Hamm, Jr.**	Director
/s/ DAVID H. LAIDLEY **David H. Laidley**	Director
/s/ CAROL P. LOWE **Carol P. Lowe**	Director
/s/ M. KEVIN MCEVOY **M. Kevin McEvoy**	Director
/s/ WILLIAM P. REID **William P. Reid**	Director
/s/ JERRY E. RYAN **Jerry E. Ryan**	Director
/s/ STEVEN B. SCHWARZWAELDER **Steven B. Schwarzwaelder**	Director
/s/ ROBIN WALKER-LEE **Robin Walker-Lee**	Director
/s/ MICHAEL T. YONKER **Michael T. Yonker**	Director

SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS
(In thousands)

Description	Balance at Beginning of Year	Costs and Expenses	Deductions [1]	Balance at End of Year
Allowance for doubtful accounts				
Year Ended December 31, 2018	$ 17,230	2,123	(3,992)	$ 15,361
Year Ended December 31, 2017	$ 12,252	7,264	(2,286)	$ 17,230
Year Ended December 31, 2016	$ 11,175	6,194	(5,117)	$ 12,252

(1) Deductions primarily represent uncollectible balances of accounts receivable written off, net of recoveries.

EXHIBIT INDEX

Exhibit No.	Description	Incorporated By Reference to or Filed Herewith, as Indicated Below
2(a)	Purchase and Sale Agreement, dated as of June 17, 2013 by and among Texas Turnaround LLC, a Delaware limited liability company, Altair Strickland Group, Inc., a Texas corporation, Rep Holdings LLC, a Texas limited liability company, ASG Key Employee LLC, a Texas limited liability company, Repcon Key Employee LLC, a Texas limited liability company, Gulfstar MBII, Ltd., a Texas limited partnership, The Trustee of the James T. Robinson and Diana J. Robinson 2010 Irrevocable Trust, The Trustee of the Steven Rothbauer 2012 Descendant's Trust, The Co-Trustees of the Patia Strickland 2012 Descendant's Trust, The Co-Trustees of the Carter Strickland 2012 Descendant's Trust, and The Co-Trustees of the Walton 2012 Grandchildren's Trust (collectively, "Sellers") and EMCOR Group, Inc.	Exhibit 2.1 to EMCOR's Report on Form 8-K (Date of Report June 17, 2013)
3(a-1)	Restated Certificate of Incorporation of EMCOR filed December 15, 1994	Exhibit 3(a-5) to EMCOR's Registration Statement on Form 10 as originally filed March 17, 1995 ("Form 10")
3(a-2)	Amendment dated November 28, 1995 to the Restated Certificate of Incorporation of EMCOR	Exhibit 3(a-2) to EMCOR's Annual Report on Form 10-K for the year ended December 31, 1995 ("1995 Form 10-K")
3(a-3)	Amendment dated February 12, 1998 to the Restated Certificate of Incorporation of EMCOR	Exhibit 3(a-3) to EMCOR's Annual Report on Form 10-K for the year ended December 31, 1997 ("1997 Form 10-K")
3(a-4)	Amendment dated January 27, 2006 to the Restated Certificate of Incorporation of EMCOR	Exhibit 3(a-4) to EMCOR's Annual Report on Form 10-K for the year ended December 31, 2005 ("2005 Form 10-K")
3(a-5)	Amendment dated September 18, 2007 to the Restated Certificate of Incorporation of EMCOR	Exhibit A to EMCOR's Proxy Statement dated August 17, 2007 for Special Meeting of Stockholders held September 18, 2007
3(b)	Amended and Restated By-Laws and Amendments thereto	Exhibit 3(b) to EMCOR's Annual Report on Form 10-K for the year ended December 31, 2016 ("2016 Form 10-K")
4(a)	Fifth Amended and Restated Credit Agreement dated as of August 3, 2016 by and among EMCOR Group, Inc. and a subsidiary and Bank of Montreal, as Agent and the lenders listed on the signature pages thereof (the "Credit Agreement")	Exhibit 4(a) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016 ("September 2016 Form 10-Q")
4(b)	Fifth Amended and Restated Security Agreement dated as of August 3, 2016 among EMCOR, certain of its U.S. subsidiaries, and Bank of Montreal, as Agent	Exhibit 4(b) to the September 2016 Form 10-Q
4(c)	Fifth Amended and Restated Pledge Agreement dated as of August 3, 2016 among EMCOR, certain of its U.S. subsidiaries, and Bank of Montreal, as Agent	Exhibit 4(c) to the September 2016 Form 10-Q
4(d)	Fourth Amended and Restated Guaranty Agreement dated as of August 3, 2016 by certain of EMCOR's U.S. subsidiaries in favor of Bank of Montreal, as Agent	Exhibit 4(d) to the September 2016 Form 10-Q

EXHIBIT INDEX

Exhibit No.	Description	Incorporated By Reference to or Filed Herewith, as Indicated Below
10(a)	Form of Severance Agreement ("Severance Agreement") between EMCOR and each of Sheldon I. Cammaker, R. Kevin Matz and Mark A. Pompa	Exhibit 10.1 to the April 2005 Form 8-K
10(b)	Form of Amendment to Severance Agreement between EMCOR and each of Sheldon I. Cammaker, R. Kevin Matz and Mark A. Pompa	Exhibit 10(c) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended March 31, 2007 ("March 2007 Form 10-Q")
10(c)	Letter Agreement dated October 12, 2004 between Anthony Guzzi and EMCOR (the "Guzzi Letter Agreement")	Exhibit 10.1 to EMCOR's Report on Form 8-K (Date of Report October 12, 2004)
10(d)	Form of Confidentiality Agreement between Anthony Guzzi and EMCOR	Exhibit C to the Guzzi Letter Agreement
10(e)	Form of Indemnification Agreement between EMCOR and each of its officers and directors	Exhibit F to the Guzzi Letter Agreement
10(f-1)	Severance Agreement ("Guzzi Severance Agreement") dated October 25, 2004 between Anthony Guzzi and EMCOR	Exhibit D to the Guzzi Letter Agreement
10(f-2)	Amendment to Guzzi Severance Agreement	Exhibit 10(g-2) to the March 2007 Form 10-Q
10(g-1)	Continuity Agreement dated as of June 22, 1998 between R. Kevin Matz and EMCOR ("Matz Continuity Agreement")	Exhibit 10(f) to the June 1998 Form 10-Q
10(g-2)	Amendment dated as of May 4, 1999 to Matz Continuity Agreement	Exhibit 10(m) to the June 1999 Form 10-Q
10(g-3)	Amendment dated as of January 1, 2002 to Matz Continuity Agreement	Exhibit 10(o-3) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended March 31, 2002 ("March 2002 Form 10-Q")
10(g-4)	Amendment dated as of March 1, 2007 to Matz Continuity Agreement	Exhibit 10(n-4) to the March 2007 Form 10-Q
10(h-1)	Continuity Agreement dated as of June 22, 1998 between Mark A. Pompa and EMCOR ("Pompa Continuity Agreement")	Exhibit 10(g) to the June 1998 Form 10-Q
10(h-2)	Amendment dated as of May 4, 1999 to Pompa Continuity Agreement	Exhibit 10(n) to the June 1999 Form 10-Q
10(h-3)	Amendment dated as of January 1, 2002 to Pompa Continuity Agreement	Exhibit 10(p-3) to the March 2002 Form 10-Q
10(h-4)	Amendment dated as of March 1, 2007 to Pompa Continuity Agreement	Exhibit 10(o-4) to the March 2007 Form 10-Q
10(i-1)	Change of Control Agreement dated as of October 25, 2004 between Anthony Guzzi ("Guzzi") and EMCOR ("Guzzi Continuity Agreement")	Exhibit E to the Guzzi Letter Agreement
10(i-2)	Amendment dated as of March 1, 2007 to Guzzi Continuity Agreement	Exhibit 10(p-2) to the March 2007 Form 10-Q
10(i-3)	Amendment to Continuity Agreements and Severance Agreements with Sheldon I. Cammaker, Anthony J. Guzzi, R. Kevin Matz and Mark A. Pompa	Exhibit 10(q) to EMCOR's Annual Report on Form 10-K for the year ended December 31, 2008 ("2008 Form 10-K")

EXHIBIT INDEX

Exhibit No.	Description	Incorporated By Reference to or Filed Herewith, as Indicated Below
10(j-1)	Amendment dated as of March 29, 2010 to Severance Agreement with Sheldon I. Cammaker, Anthony J. Guzzi, R. Kevin Matz and Mark A. Pompa	Exhibit 10.1 to Form 8-K (Date of Report March 29, 2010) (“March 2010 Form 8-K”)
10(j-2)	Third Amendment to Severance Agreement dated June 4, 2015 between EMCOR and Sheldon I. Cammaker	Exhibit 10(k-2) to EMCOR’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2015 (“June 2015 Form 10-Q”)
10(k-1)	Severance Agreement dated as of October 26, 2016 between EMCOR and Maxine L. Mauricio	Exhibit 10(l-1) to the September 2016 Form 10-Q
10(k-2)	Continuity Agreement dated as of October 26, 2016 between EMCOR and Maxine L. Mauricio (“Mauricio Continuity Agreement”)	Exhibit 10(l-2) to the September 2016 Form 10-Q
10(k-3)	Amendment dated April 10, 2017 to Mauricio Continuity Agreement	Exhibit 10(l-3) to EMCOR’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2017
10(l-1)	EMCOR Group, Inc. Long-Term Incentive Plan (“LTIP”)	Exhibit 10 to Form 8-K (Date of Report December 15, 2005)
10(l-2)	First Amendment to LTIP and updated Schedule A to LTIP	Exhibit 10(s-2) to 2008 Form 10-K
10(l-3)	Second Amendment to LTIP	Exhibit 10.2 to March 2010 Form 8-K
10(l-4)	Third Amendment to LTIP	Exhibit 10(q-4) to EMCOR’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2012 (“March 2012 Form 10-Q”)
10(l-5)	Fourth Amendment to LTIP	Exhibit 10(l-5) to EMCOR’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2013
10(l-6)	Form of Certificate Representing Stock Units issued under LTIP	Exhibit 10(t-2) to EMCOR’s Annual Report on Form 10-K for the year ended December 31, 2007 (“2007 Form 10-K”)
10(l-7)	Fifth Amendment to LTIP	Exhibit 10(l-7) to EMCOR’s Annual Report on Form 10-K for the year ended December 31, 2015 (“2015 Form 10-K”)
10(l-8)	Sixth Amendment to LTIP	Exhibit 10(l-8) to 2015 Form 10-K
10(m)	Key Executive Incentive Bonus Plan, as amended and restated	Exhibit B to EMCOR’s Proxy Statement for its Annual Meeting held June 13, 2013
10(n-1)	Amended and Restated 2010 Incentive Plan	Exhibit 10(q-1) to EMCOR’s Quarterly Report on Form 10-Q for the quarter ended September 30, 2015
10(n-2)	Form of Option Agreement under 2010 Incentive Plan between EMCOR and each non-employee director with respect to grant of options upon re-election at June 11, 2010 Annual Meeting of Stockholders	Exhibit 10(i)(i-2) to EMCOR’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2010
10(n-3)	Form of Option Agreement under 2010 Incentive Plan, as amended, between EMCOR and each non-employee director electing to receive options as part of annual retainer	Exhibit 10(q)(q) to 2011 Form 10-K
10(o)	EMCOR Group, Inc. Employee Stock Purchase Plan	Exhibit C to EMCOR’s Proxy Statement for its Annual Meeting held June 18, 2008
10(p)	Director Award Program Adopted May 13, 2011, as amended and restated December 14, 2011	Exhibit 10(n)(n) to 2011 Form 10-K
10(q)	Amendment to Option Agreements	Exhibit 10(r)(r) to 2011 Form 10-K
10(r)	Form of Non-LTIP Stock Unit Certificate	Exhibit 10(p)(p) to the March 31, 2012 Form 10-Q
10(s)	Form of Director Restricted Stock Unit Agreement	Exhibit 10(k)(k) to EMCOR’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2012 (“June 2012 Form 10-Q”)

EXHIBIT INDEX

Exhibit No.	Description	Incorporated By Reference to or Filed Herewith, as Indicated Below
10(t)	Director Award Program, as Amended and Restated December 16, 2014	Exhibit 10(z) to EMCOR's Annual Report on Form 10-K for the year ended December 31, 2014
10(u)	EMCOR Group, Inc. Voluntary Deferral Plan	Exhibit 10(e)(e) to 2012 Form 10-K
10(v)	First Amendment to EMCOR Group, Inc. Voluntary Deferral Plan	Exhibit 10(e)(e) to 2013 Form 10-K
10(w)	Form of Executive Restricted Stock Unit Agreement	Exhibit 10(f)(f) to 2012 Form 10-K
10(x)	Restricted Stock Unit Award Agreement dated June 11, 2014 between EMCOR and Stephen W. Bershad	Exhibit 10(g)(g) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended June 30, 2014
10(y)	Restricted Stock Unit Award Agreement dated June 11, 2015 between EMCOR and Stephen W. Bershad	Exhibit 10(f)(f) to the June 2015 Form 10-Q
10(z)	Restricted Stock Unit Award Agreement dated October 29, 2015 between EMCOR and Steven B. Schwarzwaelder	Exhibit 10.1 to Form 8-K (Date of Report October 30, 2015)
10(a)(a)	Restricted Stock Unit Award Agreement dated June 2, 2016 between EMCOR and Stephen W. Bershad	Exhibit 10(c)(c) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016
10(b)(b)	Executive Compensation Recoupment Policy	Exhibit 10(h)(h) to 2015 Form 10-K
10(c)(c)	Restricted Stock Unit Award Agreement dated June 30, 2017 between EMCOR and Mark A. Pompa	Exhibit 10(f)(f) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017
11	Computation of Basic EPS and Diluted EPS for the years ended December 31, 2018 and 2017	Note 6 of the Notes to the Consolidated Financial Statements
14	Code of Ethics of EMCOR for Chief Executive Officer and Senior Financial Officers	Exhibit 14 to 2003 Form 10-K
21	List of Significant Subsidiaries	Filed herewith
23.1	Consent of Ernst & Young LLP	Filed herewith
31.1	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 by Anthony J. Guzzi, the President and Chief Executive Officer	Filed herewith
31.2	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 by Mark A. Pompa, the Executive Vice President and Chief Financial Officer	Filed herewith
32.1	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 by the President and Chief Executive Officer	Furnished
32.2	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 by the Executive Vice President and Chief Financial Officer	Furnished
95	Information concerning mine safety violations or other regulatory matters	Filed herewith
101	The following materials from EMCOR Group, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2018, formatted in XBRL (Extensible Business Reporting Language): (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Operations, (iii) the Consolidated Statements of Comprehensive Income, (iv) the Consolidated Statements of Cash Flows, (v) the Consolidated Statements of Equity and (vi) the Notes to Consolidated Financial Statements.	Filed

Pursuant to Item 601(b)(4)(iii) of Regulation S-K, upon request of the Securities and Exchange Commission, the Registrant hereby undertakes to furnish a copy of any unfiled instrument which defines the rights of holders of long-term debt of the Registrant's subsidiaries.

EXHIBIT 11

SEE NOTE 6 TO THE ACCOMPANYING CONSOLIDATED FINANCIAL STATEMENTS FOR INFORMATION RELATING TO THE CALCULATION OF BASIC EPS AND DILUTED EPS.

EXHIBIT 21

LIST OF SIGNIFICANT SUBSIDIARIES	JURISDICTION OF INCORPORATION
Dyn Specialty Contracting, Inc.	Virginia
MES Holdings Corporation	Delaware
EMCOR Construction Services, Inc.	Delaware
EMCOR International, Inc.	Delaware
EMCOR Mechanical/Electrical Services (East), Inc.	Delaware
EMCOR (UK) Limited	England
EMCOR Group (UK) plc	England
EMCOR Facilities Services, Inc.	Ohio
EMCOR-CSI Holding Co.	Delaware
FR X Ohmstede Acquisitions Co.	Delaware
RepconStrickland, Inc.	Delaware

EXHIBIT 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

(1) Registration Statement (Form S-8 No. 333-168503) pertaining to the 2010 Incentive Plan of EMCOR Group, Inc.,

(2) Registration Statement (Form S-8 No. 333-152764) pertaining to the EMCOR Group, Inc. Employee Stock Purchase Plan,

(3) Registration Statement (Form S-8 No. 333-147015) pertaining to the 2007 Incentive Plan of EMCOR Group, Inc.,

(4) Registration Statement (Form S-8 No. 333-112940) pertaining to the EMCOR Group, Inc. Stock Option Agreements dated as of January 4, 1999, May 5, 1999, January 3, 2000, January 2, 2001, December 14, 2001, January 2, 2002, June 19, 2002, October 25, 2002, January 2, 2003, February 27, 2003, and January 2, 2004, the EMCOR Group, Inc. 2003 Non-Employee Directors' Stock Option Plan and the EMCOR Group, Inc. 2003 Management Stock Incentive Plan, and

(5) Registration Statement (Form S-8 No. 333-186926) pertaining to the EMCOR Group, Inc Voluntary Deferral Plan;

of our reports dated February 21, 2019, with respect to the consolidated financial statements and schedule of EMCOR Group, Inc. and subsidiaries, and the effectiveness of internal control over financial reporting of EMCOR Group, Inc. and subsidiaries, included in this Annual Report (Form 10-K) of EMCOR Group Inc. for the year ended December 31, 2018.

/s/ Ernst & Young LLP

Stamford, Connecticut
February 21, 2019

EXHIBIT 31.1

CERTIFICATION

I, Anthony J. Guzzi, certify that:

1. I have reviewed this annual report on Form 10-K of EMCOR Group, 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 21, 2019

/s/ ANTHONY J. GUZZI

Anthony J. Guzzi
Chairman, President and
Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION

I, Mark A. Pompa, certify that:

1. I have reviewed this annual report on Form 10-K of EMCOR Group, 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 21, 2019

/s/ MARK A. POMPA

Mark A. Pompa
Executive Vice President
and Chief Financial Officer

EXHIBIT 32.1

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of EMCOR Group, Inc. (the "Company") on Form 10-K for the period ended December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Anthony J. Guzzi, Chairman, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 21, 2019

/s/ ANTHONY J. GUZZI

Anthony J. Guzzi
Chairman, President and
Chief Executive Officer

EXHIBIT 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of EMCOR Group, Inc. (the “Company”) on Form 10-K for the period ended December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Mark A. Pompa, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 21, 2019

/s/ MARK A. POMPA

Mark A. Pompa
Executive Vice President
and Chief Financial Officer

Welsbach
Electric of Long Island
An EMCOR Company

Welsbach Electric Corp. of L.I.
300 Newtown Road
Plainview, NY 11803
Phone: 516.454.0280

CERTIFICATE OF ASSISTANT SECRETARY OF WELSBACH ELECTRIC CORP. OF L.I.

The undersigned, Michele Valenti, certifies that she is the duly elected, qualified and acting Assistant Secretary of Welsbach Electric Corp. of L. I., a corporation duly organized and existing under the laws of the State of New York, and that as such Assistant Secretary, she is the keeper of the corporate records and seal of said Corporation.

The undersigned further certifies:

1. Attached hereto as Exhibit A is a true, correct and complete copy of a resolution adopted upon written consent of the sole director of this Corporation dated as May 20, 2015; and said resolution does not contravene any provision of the certificate of incorporation or by-laws of said Corporation, and has not been rescinded or modified in any respect but still remains in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand this 20th day of May, 2015.

Michele Valenti, Assistant Secretary

EXHIBIT A

RESOLVED, that the following persons be, and hereby are, elected to hold the office of the Corporation set forth opposite his/her name until such time as his/her successor is elected and shall have qualified:

Joseph Florio	President, Chief Executive Officer and and Treasurer
Daniel Piquette	Assistant Vice President
Michele Valenti	Asst. Secretary, Asst. Treas. and Controller

DEPARTMENT OF BUILDINGS
SAFETY INSPECTION AND ENFORCEMENT
TOWN OF NORTH HEMPSTEAD, MANHASSET, NY
JOHN NIEWENDER, BUILDING COMMISSIONER

DANIEL T PIQUETTE
WELSBACH ELECTRIC CORP OF LI
300 NEWTOWN RD
PLAINVIEW, NY 11803

License Type.....	**ToNH Electrician**
License Number.	**2326 E**
Date Issued........	**10/31/2019**
Renewal Date....	**12/31/2022**

Having given satisfactory evidence of competency, the above licensee is hereby licensed in accordance with Chapter 2 of the Code of the Town of North Hempstead, subject to the provisions of said code and all laws or ordinances applicable thereto.

Member, Examining Board of Electricians

TOWN OF HEMPSTEAD
DEPARTMENT OF
BUILDINGS

One Washington Street, Hempstead, NY 11550
Office: 516.489.5000 Fax: 516.483.1573

JOHN E. ROTTKAMP
COMMISSIONER

JOHN G. NOVELLO
DEPUTY COMMISSIONER

DANIEL V. CASELLA
DEPUTY COMMISSIONER

Master Electrician's License

Renewal No. **T052**

License No. **2744** **Account No.** **9987** **Date of Issue** **11/25/2019**

TRI-TOWN

PIQUETTE, DANIEL
WELSBACH ELECT. CORP. OF L.I.
300 NEWTOWN ROAD
PLAINVIEW, NY 11803

Renewal License Expiration Date **12/31/2020** **Fee Paid** **$150.00**

Having given satisfactory evidence of competency, is hereby licensed as a Master Electrician in accordance with the Electrical Code of the Town of Hempstead subject to the said provisions of said Electrical Code and Laws and Ordinances applicable thereto.

John E. Rottkamp
Commissioner of Buildings

C. J. Samuel Iacolucci
Chairman Electrician's Examining Board

License No. 1222

Electrician's License
Town of Oyster Bay

Department of Planning and Development

Town Hall

Oyster Bay, New York 11771

Date Expires 12/31/2020

Date Issued 10/31/2017

IS A DULY LICENSED ELECTRICIAN AND IS AUTHORIZED TO DO ELECTRIC WORK IN THE TOWN OF OYSTER BAY

Name DANIEL T. PIQUETTE

Address 7 BOSTON AVENUE MEDFORD, NY 11763

Fee Paid $150.00

TOBDPD – Electrician's License – Electrician's Copy

Elizabeth L. Maccarone

Commissioner

Department of Planning and Development

COUNTY OF NASSAU

CONSULTANT'S, CONTRACTOR'S AND VENDOR'S DISCLOSURE FORM

1. Name of the Entity: Welsbach Electric Corp. of L.I.

Address: 300 Newtown Rd

City: Plainview State/Province/Territory: NY Zip/Postal Code: 11803

Country: US

2. Entity's Vendor Identification Number: [redacted]

3. Type of Business: Public Corp (specify)

4. List names and addresses of all principals; that is, all individuals serving on the Board of Directors or comparable body, all partners and limited partners, all corporate officers, all parties of Joint Ventures, and all members and officers of limited liability companies (attach additional sheets if necessary):

1 File(s) uploaded WEC LI Officer Affidavit.pdf

No principals have been attached to this form.

5. List names and addresses of all shareholders, members, or partners of the firm. If the shareholder is not an individual, list the individual shareholders/partners/members. If a Publicly held Corporation, include a copy of the 10K in lieu of completing this section.
If none, explain.

See Emcor Group, Inc. 2019 Annual Report (10k), Page 6 for officers of Emcor Group, Inc. and Board of Directors.

2 File(s) uploaded EME_AR_10K_2018.pdf, EME_AR_10K_2019.pdf

No shareholders, members, or partners have been attached to this form.

6. List all affiliated and related companies and their relationship to the firm entered on line 1. above (if none, enter "None"). Attach a separate disclosure form for each affiliated or subsidiary company that may take part in the performance of this contract. Such disclosure shall be updated to include affiliated or subsidiary companies not previously disclosed that participate in the performance of the contract.

See Emcor Group, Inc. 2019 Annual Report page 100 for affiliated companies. (Annual Report attached under Question 5). Welsbach Electric Corp. of L.I. is the only Emcor subsidiary that will be taking part in the performance of any Nassau County contracts.

7. List all lobbyists whose services were utilized at any stage in this matter (i.e., pre-bid, bid, post-bid, etc.). If none, enter "None." The term "lobbyist" means any and every person or organization retained, employed or designated by any client to influence - or promote a matter before - Nassau County, its agencies, boards, commissions, department heads, legislators or committees, including but not limited to the Open Space and Parks Advisory Committee and Planning Commission. Such matters include, but are not limited to, requests for proposals, development or improvement of real property subject to County regulation, procurements. The term "lobbyist" does not include any officer, director, trustee, employee, counsel or agent of the County of Nassau, or State of New York, when discharging his or her official duties.

Are there lobbyists involved in this matter?
YES [ ] NO [X]

(a) Name, title, business address and telephone number of lobbyist(s):

None.

(b) Describe lobbying activity of each lobbyist. See below for a complete description of lobbying activities.

None.

(c) List whether and where the person/organization is registered as a lobbyist (e.g., Nassau County, New York State):

None.

8. VERIFICATION: This section must be signed by a principal of the consultant, contractor or Vendor authorized as a signatory of the firm for the purpose of executing Contracts.

The undersigned affirms and so swears that he/she has read and understood the foregoing statements and they are, to his/her knowledge, true and accurate.

Electronically signed and certified at the date and time indicated by:
Joseph P Florio [JOE_FLORIO@EMCORGROUP.COM]

Dated: 05/02/2020 03:43:34 PM

Title: President / C.E.O.

The term lobbying shall mean any attempt to influence: any determination made by the Nassau County Legislature, or any member thereof, with respect to the introduction, passage, defeat, or substance of any local legislation or resolution; any determination by the County Executive to support, oppose, approve or disapprove any local legislation or resolution, whether or not such legislation has been introduced in the County Legislature; any determination by an elected County official or an officer or employee of the County with respect to the procurement of goods, services or construction, including the preparation of contract specifications, including by not limited to the preparation of requests for proposals, or solicitation, award or administration of a contract or with respect to the solicitation, award or administration of a grant, loan, or agreement involving the disbursement of public monies; any determination made by the County Executive, County Legislature, or by the County of Nassau, its agencies, boards, commissions, department heads or committees, including but not limited to the Open Space and Parks Advisory Committee, the Planning Commission, with respect to the zoning, use, development or improvement of real property subject to County regulation, or any agencies, boards, commissions, department heads or committees with respect to requests for proposals, bidding, procurement or contracting for services for the County; any determination made by an elected county official or an officer or employee of the county with respect to the terms of the acquisition or disposition by the county of any interest in real property, with respect to a license or permit for the use of real property of or by the county, or with respect to a franchise, concession or revocable consent; the proposal, adoption, amendment or rejection by an agency of any rule having the force and effect of law; the decision to hold, timing or outcome of any rate making proceeding before an agency; the agenda or any determination of a board or commission; any determination regarding the calendaring or scope of any legislature oversight hearing; the issuance, repeal, modification or substance of a County Executive Order; or any determination made by an elected county official or an officer or employee of the county to support or oppose any state or federal legislation, rule or regulation, including any determination made to support or oppose that is contingent on any amendment of such legislation, rule or regulation, whether or not such legislation has been formally introduced and whether or not such rule or regulation has been formally proposed.

Welsbach
Electric of Long Island
An EMCOR Company

Welsbach Electric Corp. of L.I.
300 Newtown Road
Plainview, NY 11803
Phone: 516.454.0280

CERTIFICATE OF
ASSISTANT SECRETARY
OF
WELSBACH ELECTRIC CORP. OF L.I.

The undersigned, Michele Valenti, certifies that she is the duly elected, qualified and acting Assistant Secretary of Welsbach Electric Corp. of L. I., a corporation duly organized and existing under the laws of the State of New York, and that as such Assistant Secretary, she is the keeper of the corporate records and seal of said Corporation.

The undersigned further certifies:

1. Attached hereto as Exhibit A is a true, correct and complete copy of a resolution adopted upon written consent of the sole director of this Corporation dated as May 20, 2015; and said resolution does not contravene any provision of the certificate of incorporation or by-laws of said Corporation, and has not been rescinded or modified in any respect but still remains in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand this 20th day of May, 2015.

Michele Valenti, Assistant Secretary

EXHIBIT A

RESOLVED, that the following persons be, and hereby are, elected to hold the office of the Corporation set forth opposite his/her name until such time as his/her successor is elected and shall have qualified:

Joseph Florio	President, Chief Executive Officer and and Treasurer
Daniel Piquette	Assistant Vice President
Michele Valenti	Asst. Secretary, Asst. Treas. and Controller

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended December 31, 2018

☐ 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 1-8267

EMCOR Group, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**11-2125338**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
301 Merritt Seven Norwalk, Connecticut	**06851-1092**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: (203) 849-7800
Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock	**New York Stock Exchange**

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 Securities Exchange 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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (Section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (Section 229.405) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

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

Large accelerated filer	☒	Accelerated filer	☐	Non-accelerated filer	☐	(Do not check if a smaller reporting company)	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 by Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the common stock held by non-affiliates of the registrant was approximately $3,270,000,000 as of the last business day of the registrant's most recently completed second fiscal quarter, based upon the closing sale price on the New York Stock Exchange reported for such date. Shares of common stock held by each executive officer and director and by each person who owns 5% or more of the outstanding common stock (based solely on filings of such 5% holders) have been excluded from such calculation as such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

Number of shares of the registrant's common stock outstanding as of the close of business on February 15, 2019: 55,997,627 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Part III. Portions of the definitive proxy statement for the 2019 Annual Meeting of Stockholders, which document will be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year to which this Form 10-K relates, are incorporated by reference into Items 10 through 14 of Part III of this Form 10-K.

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FORWARD-LOOKING STATEMENTS

Certain information included in this report, or in other materials we have filed or will file with the Securities and Exchange Commission (the "SEC") (as well as information included in oral statements or other written statements made or to be made by us) contains or may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 (the "1995 Act"). Such statements are being made pursuant to the 1995 Act and with the intention of obtaining the benefit of the "Safe Harbor" provisions of the 1995 Act. Forward-looking statements are based on information available to us and our perception of such information as of the date of this report and our current expectations, estimates, forecasts and projections about the industries in which we operate and the beliefs and assumptions of our management. You can identify these statements by the fact that they do not relate strictly to historical or current facts. They contain words such as "anticipate," "estimate," "expect," "project," "intend," "plan," "believe," "may," "can," "could," "might," variations of such wording and other words or phrases of similar meaning in connection with a discussion of our future operating or financial performance, and other aspects of our business, including market share growth, gross profit, project mix, projects with varying profit margins, selling, general and administrative expenses, and trends in our business and other characterizations of future events or circumstances. From time to time, forward-looking statements are also included in our other periodic reports on Forms 10-Q and 8-K, in press releases, in our presentations, on our website and in other material released to the public. Any or all of the forward-looking statements included in this report and in any other reports or public statements made by us are only predictions and are subject to risks, uncertainties and assumptions, including those identified below in the "Risk Factors" section, the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section, and other sections of this report, and in our Forms 10-Q for the three months ended March 31, 2018, June 30, 2018 and September 30, 2018 and in other reports filed by us from time to time with the SEC as well as in press releases, in our presentations, on our website and in other material released to the public. Such risks, uncertainties and assumptions are difficult to predict, beyond our control and may turn out to be inaccurate, causing actual results to differ materially from those that might be anticipated from our forward-looking statements. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise. However, any further disclosures made on related subjects in our subsequent reports on Forms 10-K, 10-Q and 8-K should be consulted.

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PART I

ITEM 1. BUSINESS

References to the "Company," "EMCOR," "we," "us," "our" and similar words refer to EMCOR Group, Inc. and its consolidated subsidiaries unless the context indicates otherwise.

General

We are one of the largest electrical and mechanical construction and facilities services firms in the United States. In addition, we provide a number of building services and industrial services. In 2018, we had revenues of approximately $8.1 billion. Our services are provided to a broad range of commercial, industrial, utility and institutional customers through approximately 80 operating subsidiaries and joint venture entities. Our executive offices are located at 301 Merritt Seven, Norwalk, Connecticut 06851-1092, and our telephone number at those offices is (203) 849-7800.

We specialize principally in providing construction services relating to electrical and mechanical systems in all types of facilities and in providing various services relating to the operation, maintenance and management of facilities, including refineries and petrochemical plants.

Our electrical and mechanical construction services primarily involve the design, integration, installation, start-up, operation and maintenance, and provision of services relating to:

- Electric power transmission and distribution systems;
- Premises electrical and lighting systems;
- Process instrumentation in the refining, chemical processing, food processing and mining industries;
- Low-voltage systems, such as fire alarm, security and process control systems;
- Voice and data communications systems;
- Roadway and transit lighting and fiber optic lines;
- Heating, ventilation, air conditioning, refrigeration and clean-room process ventilation systems;
- Fire protection systems;
- Plumbing, process and high-purity piping systems;
- Controls and filtration systems;
- Water and wastewater treatment systems;
- Central plant heating and cooling systems;
- Crane and rigging services;
- Millwright services; and
- Steel fabrication, erection, and welding services.

Our building services operations, which are provided to a wide range of facilities, including commercial, utility, institutional and governmental facilities, include:

- Commercial and government site-based operations and maintenance;
- Facility maintenance and services, including reception, security and catering services;
- Outage services to utilities and industrial plants;
- Military base operations support services;
- Mobile mechanical maintenance and services;

- Floor care and janitorial services;
- Landscaping, lot sweeping and snow removal;
- Facilities management;
- Vendor management;
- Call center services;
- Installation and support for building systems;
- Program development, management and maintenance for energy systems;
- Technical consulting and diagnostic services;
- Infrastructure and building projects for federal, state and local governmental agencies and bodies; and
- Small modification and retrofit projects.

Our industrial services are provided to refineries and petrochemical plants and include:

- On-site repairs, maintenance and service of heat exchangers, towers, vessels and piping;
- Design, manufacturing, repair and hydro blast cleaning of shell and tube heat exchangers and related equipment;
- Refinery turnaround planning and engineering services;
- Specialty welding services;
- Overhaul and maintenance of critical process units in refineries and petrochemical plants; and
- Specialty technical services for refineries and petrochemical plants.

We provide construction services and building services directly to corporations, municipalities and federal and state governmental entities, owners/developers, and tenants of buildings. We also provide our construction services indirectly by acting as a subcontractor to general contractors, systems suppliers, construction managers, developers, property managers and other subcontractors. Our industrial services are generally provided directly to refineries and petrochemical plants. Worldwide, as of December 31, 2018, we had approximately 33,000 employees.

Our revenues are derived from many different customers in numerous industries, which have operations in several different geographical areas. Of our 2018 revenues, approximately 95% were generated in the United States and approximately 5% were generated in foreign countries, substantially all in the United Kingdom. In 2018, approximately 61% of revenues were derived from our construction operations, approximately 28% of revenues were derived from our building services operations and approximately 11% of revenues were derived from our industrial services operations.

During the third quarter of 2014, we ceased construction operations in the United Kingdom. The results of the construction operations of our United Kingdom segment for all periods are presented as discontinued operations.

The broad scope of our operations is more particularly described below. For information regarding the revenues, operating income and total assets of each of our segments with respect to each of the last three years, and our revenues and assets attributable to the United States and the United Kingdom for the last three years, see Note 18 - Segment Information of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data.

Operations

The electrical and mechanical construction services industry has grown over the years due principally to the increased content, complexity and sophistication of electrical and mechanical systems, as well as the installation of more technologically advanced voice and data communications, lighting, and environmental control systems in all types of facilities, in large part due to the integration of digital processing and information technology. For these reasons, buildings need extensive electrical distribution systems. In addition, advanced voice and data communication systems require sophisticated power supplies and extensive low-voltage and fiber-optic communications cabling. Moreover, the need for substantial environmental controls within a building, due to the heightened need for climate control to maintain extensive computer systems at optimal temperatures, and the demand for energy savings and environmental controls in individual spaces have over the years expanded opportunities for our electrical and mechanical services businesses. The demand for these services is typically driven by non-residential construction and renovation activity.

Our electrical and mechanical construction services primarily involve the design, integration, installation and start-up of, and provision of services relating to: (a) electric power transmission and distribution systems, including power cables, conduits, distribution panels, transformers, generators, uninterruptible power supply systems and related switch gear and controls; (b) premises electrical and lighting systems, including fixtures and controls; (c) process instrumentation in the refining, chemical processing, food processing and mining industries; (d) low-voltage systems, such as fire alarm, security and process control systems; (e) voice and data communications systems, including fiber-optic and low-voltage cabling; (f) roadway and transit lighting and fiber-optic lines; (g) heating, ventilation, air conditioning, refrigeration and clean-room process ventilation systems; (h) fire protection systems; (i) plumbing, process and high-purity piping systems; (j) controls and filtration systems; (k) water and wastewater treatment systems; (l) central plant heating and cooling systems; (m) cranes and rigging; (n) millwrighting; and (o) steel fabrication, erection and welding.

Our electrical and mechanical construction services generally fall into one of three categories: (a) large installation projects with contracts often in the multi-million dollar range that involve construction of manufacturing and commercial buildings and institutional and public works projects or the fit-out of large blocks of space within commercial buildings, (b) large and medium sized capital and maintenance projects for manufacturing, petrochemical, oil, industrial and commercial clients and (c) smaller installation projects typically involving fit-out, renovation and retrofit work.

Our United States electrical and mechanical construction operations accounted for about 61% of our 2018 worldwide revenues. Of such revenues, approximately 39% were generated by our electrical construction operations and approximately 61% were generated by our mechanical construction operations.

We provide electrical and mechanical construction services for both large and small installation and renovation projects. Our largest projects have included those: (a) for institutional purposes (such as educational and correctional facilities and research laboratories); (b) for manufacturing purposes (such as pharmaceutical plants, steel, pulp and paper mills, chemical, food, automotive and semiconductor manufacturing facilities and power generation); (c) for transportation purposes (such as highways, bridges, airports and transit systems); (d) for commercial purposes (such as office buildings, data centers, convention centers, sports stadiums and shopping malls); (e) for hospitality purposes (such as resorts, hotels and gaming facilities); (f) for water and wastewater purposes; (g) for healthcare purposes; (h) for process facilities (such as oil and gas refineries and chemical processing plants); and (i) for oil and gas pipeline compressor stations and terminal and metering facilities. Our largest projects, which typically range in size from $10.0 million up to and occasionally exceeding $150.0 million and are frequently multi-year projects, represented approximately 30% of our worldwide construction services revenues in 2018.

Our projects of less than $10.0 million accounted for approximately 70% of our worldwide construction services revenues in 2018. These projects are typically completed in less than one year. They usually involve electrical and mechanical construction services when an end-user or owner undertakes construction or modification of a facility to accommodate a specific use. These projects frequently require electrical and mechanical systems to meet special needs such as critical systems power supply, fire protection systems, special environmental controls and high-purity air systems, sophisticated electrical and mechanical systems for data centers, new production lines in manufacturing plants, and office arrangements in existing office buildings. They are not usually dependent upon the new construction market. Demand for these projects and types of services is often prompted by the expiration of leases, changes in technology, or changes in the customer’s plant or office layout in the normal course of a customer’s business.

We have a broad customer base with many long-standing relationships. We perform construction services pursuant to contracts with owners (such as corporations, municipalities and other governmental entities), general contractors, systems suppliers, construction managers, developers, other subcontractors and tenants of commercial properties. Institutional and public works projects are frequently long-term complex projects that require significant technical and management skills and the financial strength to obtain bid and performance bonds, which are often a condition to bidding for and winning these projects.

We also install and maintain lighting for streets, highways, bridges and tunnels, traffic signals, computerized traffic control systems, and signal and communication systems for mass transit systems in several metropolitan areas. In addition, in the United States, we manufacture and install sheet metal air handling systems for both our own mechanical construction operations and for unrelated mechanical contractors. We also maintain welding and pipe fabrication shops in support of some of our mechanical operations.

Our United States building services segment offers a broad range of services, including operation, maintenance and service of electrical and mechanical systems; commercial and government site-based operations and maintenance; facility maintenance and services, including outage services to utilities and manufacturing facilities; military base operations support services; mobile mechanical maintenance and services; floor care and janitorial services; landscaping, lot sweeping and snow removal; facilities management; vendor management; call center services; installation and support for building systems; program development, management and maintenance with respect to energy systems; technical consulting and diagnostic services; infrastructure and building projects for federal, state and local governmental agencies and bodies; and small modification and retrofit projects.

Our building services operations, which generated approximately 28% of our 2018 worldwide revenues, provide services to owners, operators, tenants and managers of all types of facilities both on a contractual basis for a specified period of time and on an individual task order basis. Of our 2018 building services revenues, approximately 82% were generated in the United States and approximately 18% were generated in the United Kingdom.

Our building services operations have built upon our traditional electrical and mechanical services operations and our client relationships to expand the scope of services being offered and to develop packages of services for customers on a regional and national basis.

Demand for our building services is often driven by customers' decisions to focus on their core competencies, customers' programs to reduce costs, the increasing technical complexity of their facilities and their mechanical, electrical, voice and data and other systems, and the need for increased reliability, especially in electrical and mechanical systems. These trends have led to outsourcing and privatization programs whereby customers in both the private and public sectors seek to contract out those activities that support, but are not directly associated with, the customer's core business. Clients of our building services business include federal and state governments, institutional organizations, utilities, independent power producers, healthcare providers, and major corporations engaged in information technology, telecommunications, pharmaceuticals, financial services, and manufacturing, as well as large retailers and other businesses with geographically dispersed portfolios throughout the United States.

We currently provide building services in a majority of the states in the United States to commercial, industrial, institutional and governmental customers and as part of our operations are responsible for: (a) the oversight of all or most of the facilities operations, including repair and maintenance; (b) servicing, upgrade and retrofit of HVAC, electrical, plumbing and industrial piping and sheet metal systems in existing facilities; (c) interior and exterior services, including floor care and janitorial services, landscaping, lot sweeping and snow removal; (d) diagnostic and solution engineering for building systems and their components; and (e) maintenance and support services to manufacturers and power producers.

We provide building services at a number of preeminent buildings, including those that house the Secret Service, the Federal Deposit Insurance Corporation, the National Foreign Affairs Training Center, and the Department of Health and Human Services, as well as other government facilities, including the NASA Jet Propulsion Laboratory. We also provide building services to a number of military bases, including base operations support services to the Navy National Capital Region and the Army's Fort Huachuca in Arizona, and are involved in a joint venture providing building services to NASA's Armstrong Flight Research Center in Edwards, California. The agreements pursuant to which this division provides services to the federal government are frequently for a base period and a number of option years exercisable at the sole discretion of the government, are often subject to renegotiation by the government in terms of scope of services, and are subject to termination by the government prior to the expiration of the applicable term.

Our United Kingdom subsidiary primarily focuses on building services and currently provides a broad range of services under multi-year agreements to public and private sector customers, including utilities, airlines, airports, real estate property managers, manufacturers, governmental agencies and the finance sector.

Our industrial services business, which generated approximately 11% of our 2018 worldwide revenues, is a recognized leader in the refinery turnaround market and has a growing presence in the petrochemical market. Our industrial services business: (a) provides maintenance, repair and cleaning services for highly engineered shell and tube heat exchangers for refineries and petrochemical plants both in the field and at our own shops, including tube and shell repairs, bundle repairs, and extraction services, and (b) designs and manufactures new highly engineered shell and tube heat exchangers. We also perform a broad range of turnaround and maintenance services for critical units of refineries so as to upgrade, repair and maintain them. Such services include turnaround and maintenance services relating to: (i) engineering and planning services in advance of complex refinery turnarounds; (ii) overhaul and maintenance of critical process units (including hydrofluoric alkylation units, fluid catalytic cracking units, coking units, heaters, heat exchangers and related mechanical equipment) during refinery and petrochemical plant shut downs; (iii) replacement and new construction capital projects for refineries and petrochemical plants; and (iv) other related specialty services such as (a) welding (including pipe welding) and fabrication; (b) heater, boiler, and reformer repairs and replacements; converter repair and revamps; and vessel, exchanger and tower services; (c) tower and column repairs in refineries and petrochemical facilities; (d) installation and repair of refractory materials for critical units in process plants so as to protect equipment from corrosion, erosion, and extreme temperatures; and (e) acid-proofing services to protect critical components at refineries from chemical exposure.

Competition

In our construction services, building services and industrial services businesses, we compete with national, regional and local companies, many of which are small, owner-operated entities that carry on their businesses in a limited geographic area, as well as with certain foreign companies.

We believe that the electrical and mechanical construction services industry is highly fragmented and our competition includes thousands of small companies across the United States. In the United States, there are a few public companies focused on providing either electrical and/or mechanical construction services, such as Integrated Electrical Services, Inc., Comfort Systems USA, Inc. and Tutor Perini Corporation. A majority of our revenues are derived from projects requiring competitive bids; however, an invitation to bid is often conditioned upon prior experience, technical capability and financial strength. Because we have total assets, annual revenues, access to bank credit and surety bonding, and expertise significantly greater than most of our competitors, we believe we have a significant competitive advantage over our competitors in providing electrical and mechanical construction services. Competitive factors in the electrical and mechanical construction services business include: (a) the availability of qualified and/or licensed personnel; (b) reputation for integrity and quality; (c) safety record; (d) cost structure; (e) relationships with customers; (f) geographic diversity; (g) the ability to control project costs; (h) experience in specialized markets; (i) the ability to obtain surety bonding; (j) adequate working capital; (k) access to bank credit; and (l) price. However, there are relatively few significant barriers to entry to several types of our construction services business.

While the building services industry is also highly fragmented, with most competitors operating in a specific geographic region, a number of large United States based corporations such as AECOM Technology Corporation, Johnson Controls, Inc., Fluor Corp., J&J Worldwide Services, Cushman & Wakefield Inc., CB Richard Ellis, Inc., Jones Lang LaSalle Incorporated, Sodexo, Inc., Aramark Corporation and ABM Industries Incorporated are engaged in this field, as are large original equipment manufacturers such as Carrier Corp. and Trane Inc. In addition, we compete with several regional firms serving all or portions of the markets we target, such as Brickman Valley Crest, Inc., Kellermeyer Bergensons Services, Inc., SMS Assist, LLC and Ferandino & Sons, Inc. Our principal services competitors in the United Kingdom include ISS UK Ltd. and MITIE Group plc. The key competitive factors in the building services business include price, service, quality, technical expertise, geographic scope and the availability of qualified personnel and managers. Due to our size, both financial and geographic, and our technical capability and management experience, we believe we are in a strong competitive position in the building services business. However, there are relatively few barriers to entry to most of our building services businesses.

In our industrial services business, we are one of the leading North American providers of maintenance and repair services for, and manufacturing of, highly engineered shell and tube heat exchangers and related equipment and a leader in providing specialized services to refineries and petrochemical plants. The market for providing these services and products to refineries and petrochemical plants is highly fragmented and includes large national industrial services providers, as well as numerous regional companies, including JV Industrial Companies Ltd., Matrix Service Company, Starcon, Turner Industries, Team, Inc., Cust-O-Fab, Dunn Heat, and Wyatt Field Service Company, among others. In the manufacture of heat exchangers, we compete with both U.S. and foreign manufacturers. The key competitive factors in the industrial services market include service, quality, ability to respond quickly, technical expertise, price, safety record and availability of qualified personnel. Due to our technical capabilities, safety record and skilled workforce, we believe that we are in a strong competitive position in the industrial services markets that we serve. Because of the complex tasks associated with turnarounds and the precision required in manufacturing heat exchangers, we believe that the barriers to entry in this business are significant.

Employees

At December 31, 2018, we employed approximately 33,000 people, approximately 57% of whom are represented by various unions pursuant to approximately 400 collective bargaining agreements between our individual subsidiaries and local unions. We believe that our employee relations are generally good. Only two of these collective bargaining agreements are national or regional in scope.

Remaining Unsatisfied Performance Obligations

Our remaining unsatisfied performance obligations (“remaining performance obligations”) at December 31, 2018 were $3.96 billion. Remaining performance obligations increase with awards of new contracts and decrease as we perform work and recognize revenue on existing contracts. We include a project within our remaining performance obligations at such time as the project is awarded and agreement on contract terms has been reached. Our remaining performance obligations include amounts related to contracts for which a fixed price contract value is not assigned when a reasonable estimate of total transaction price can be made.

Remaining performance obligations include unrecognized revenues to be realized from uncompleted construction contracts. Although many of our construction contracts are subject to cancellation at the election of our customers, in accordance with industry practice, we do not limit the amount of unrecognized revenue included within remaining performance obligations due to the inherent substantial economic penalty that would be incurred by our customers upon cancellation. We believe our reported remaining performance obligations for our construction contracts are firm and contract cancellations have not had a material adverse effect on us.

Remaining performance obligations also include unrecognized revenues expected to be realized over the remaining term of service contracts. However, to the extent a service contract includes a cancellation clause which allows for the termination of such contract by either party without a substantive penalty, the remaining contract term, and therefore, the amount of unrecognized revenues included within remaining performance obligations, is limited to the notice period required for the termination.

Our remaining performance obligations are comprised of: (a) original contract amounts, (b) change orders for which we have received written confirmations from our customers, (c) pending change orders for which we expect to receive confirmations in the ordinary course of business, (d) claim amounts that we have made against customers for which we have determined we have a legal basis under existing contractual arrangements and as to which the variable consideration constraint does not apply, and (e) other forms of variable consideration to the extent that such variable consideration has been included within the transaction price of our contracts. Such claim and other variable consideration amounts were immaterial for all periods presented.

We estimate that 83% of our remaining performance obligations as of December 31, 2018 will be recognized as revenues during 2019.

Available Information

We file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission, which we refer to as the “SEC”. These filings are available to the public over the internet at the SEC’s website at http://www.sec.gov. You may also read and copy any document we file at the SEC’s Public Reference Room located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room.

Our Internet address is www.emcorgroup.com. We make available free of charge through www.emcorgroup.com our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. References to our website addressed in this report are provided as a convenience and do not constitute, and should not be viewed as, an incorporation by reference of the information contained on, or available through, the website. Therefore, such information should not be considered part of this report.

Our Board of Directors has an audit committee, a compensation and personnel committee and a nominating and corporate governance committee. Each of these committees has a formal charter. We also have Corporate Governance Guidelines, which include guidelines regarding related party transactions, a Code of Ethics for our Chief Executive Officer and Senior Financial Officers, and a Code of Ethics and Business Conduct for Directors, Officers and Employees. Copies of these charters, guidelines and codes, and any waivers or amendments to such codes which are applicable to our executive officers, senior financial officers or directors, can be obtained free of charge on our website, www.emcorgroup.com.

You may request a copy of the foregoing filings (excluding exhibits), charters, guidelines and codes and any waivers or amendments to such codes which are applicable to our executive officers, senior financial officers or directors, at no cost by writing to us at EMCOR Group, Inc., 301 Merritt Seven, Norwalk, CT 06851-1092, Attention: Corporate Secretary, or by telephoning us at (203) 849-7800.

ITEM 1A. RISK FACTORS

Our business is subject to a variety of risks, including the risks described below as well as adverse business and market conditions and risks associated with foreign operations. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties not known to us or not described below which we have not determined to be material may also impair our business operations. You should carefully consider the risks described below, together with all other information in this report, including information contained in the “Business,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Quantitative and Qualitative Disclosures about Market Risk” sections. If any of the following risks actually occur, our business, financial position, results of operations and/or cash flows could be adversely affected, and we may not be able to achieve our goals. Such events may cause actual results to differ materially from expected and historical results, and the trading price of our common stock could decline.

Economic downturns have led to reductions in demand for our services. Negative conditions in the credit markets may adversely impact our ability to operate our business. The level of demand from our clients for our services has been, in the past, adversely impacted by slowdowns in the industries we service, as well as in the economy in general. When the general level of economic activity has been reduced from historical levels, certain of our ultimate customers have delayed or cancelled projects or capital spending, especially with respect to more profitable private sector work, and such slowdowns adversely affect our ability to grow, reducing our revenues and profitability. A number of economic factors, including financing conditions for the industries we serve, have, in the past, adversely affected our ultimate customers and their ability or willingness to fund expenditures. General concerns about the fundamental soundness of domestic and foreign economies may cause ultimate customers to defer projects even if they have credit available to them. Worsening of financial and macroeconomic conditions could have a significant adverse effect on our revenues and profitability.

Many of our clients depend on the availability of credit to help finance their capital and maintenance projects. At times, tightened availability of credit has negatively impacted the ability of existing and prospective ultimate customers to fund projects we might otherwise perform, particularly those in the more profitable private sector. As a result, our ultimate customers may defer such projects for an unknown, and perhaps lengthy, period. Any such deferrals would inhibit our growth and would adversely affect our results of operations.

In a weak economic environment, particularly in a period of restrictive credit markets, we may experience greater difficulties in collecting payments from, and negotiating change orders and/or claims with, our clients due to, among other reasons, a diminution in our ultimate customers' access to the credit markets. If clients delay in paying or fail to pay a significant amount of our outstanding receivables, or we fail to successfully negotiate a significant portion of our change orders and/or claims with clients, it could have an adverse effect on our liquidity, results of operations and financial position.

Our business has traditionally lagged recoveries in the general economy and, therefore, after an economic downtown we may not recover as quickly as the economy at large.

The loss of one or a few customers could have an adverse effect on us. A few clients have in the past and may in the future account for a significant portion of our revenues in any one year or over a period of several consecutive years. Although we have long-standing relationships with many of our significant clients, our clients may unilaterally reduce, fail to renew or terminate their contracts with us at any time. A loss of business from a significant client could have a material adverse effect on our business, financial position and results of operations.

Our business is vulnerable to the cyclical nature of the markets in which our clients operate and is dependent upon the timing and funding of new awards. We provide construction and maintenance services to ultimate customers operating in a number of markets which have been, and we expect will continue to be, cyclical and subject to significant fluctuations due to a variety of factors beyond our control, including economic conditions and changes in client spending.

Regardless of economic or market conditions, investment decisions by our ultimate customers may vary by location or as a result of other factors like the availability of labor, relative construction costs or competitive conditions in their industries. Because we are dependent on the timing and funding of new awards, we are therefore vulnerable to changes in our clients' markets and investment decisions.

Our business may be adversely affected by significant reductions in government spending or delays or disruptions in the government appropriations process. Some of our businesses derive a significant portion of their revenues from federal, state and local governmental agencies. As a result, reduced or delayed spending by the federal government and/or state and local governments may have a material and adverse impact on our business, financial condition, results of operations and cash flows. Significant reductions in spending aimed at reducing federal, state or local budget deficits, the absence of a bipartisan agreement on the federal government's budget, the impact of sequestration or other changes in budget priorities could result in the deferral, delay, disruption or cancellation of projects or contracts that we might otherwise have sought to perform, personnel reductions or the closure of government facilities and offices. These potential events could impact the level of demand for our services and our ability to execute, complete and receive compensation for our current contracts, or bid for and enter into new contracts with governmental agencies.

An increase in the prices of certain materials used in our businesses and protectionist trade measures could adversely affect our businesses. We are exposed to market risk of increases in certain commodity prices of materials, such as copper and steel, which are used as components of supplies or materials utilized in all of our operations. We are also exposed to increases in energy prices, particularly as they relate to gasoline prices for our fleet of approximately 11,000 vehicles. While we believe we can increase our prices to adjust for some price increases in commodities, there can be no assurance that price increases of commodities, if they were to occur, would be recoverable. Additionally, our fixed price contracts do not allow us to adjust our prices and, as a result, increases in material or fuel costs could reduce our profitability with respect to such projects. Fluctuations in energy prices as well as in commodity prices of materials, whether resulting from fluctuations in market supply or demand or geopolitical conditions, including an increase in trade protection measures such as tariffs and the disruption, modification or cancellation of multilateral trade agreements, may adversely affect our customers and as a result cause them to curtail the use of our services. Prolonged volatility in the price of oil has caused some of our refinery customers to curtail or delay maintenance or capital projects. Continued volatility in the price of oil may adversely affect some of our refinery customers causing them to defer maintenance and/or capital projects performed by companies in our United States industrial services segment or delay purchases or repairs of heat exchangers that are manufactured and repaired by some of our companies.

Our industry is highly competitive. Our industry is served by numerous small, owner-operated private companies, a few public companies and several large regional companies. In addition, relatively few barriers prevent entry into most of our businesses. As a result, any organization that has adequate financial resources and access to technical expertise may become a competitor. Competition in our industry depends on numerous factors, including price. Certain of our competitors have lower overhead cost structures and, therefore, are able to provide their services at lower rates than we are currently able to provide. In addition, some of our competitors have greater resources than we do. We cannot be certain that our competitors will not develop the expertise, experience and resources necessary to provide services that are superior in quality and lower in price to ours. Similarly, we cannot be certain that we will be able to maintain or enhance our competitive position within our industries or maintain a customer base at current levels. We may also face competition from the in-house service organizations of existing or prospective customers, particularly with respect to building services. Many of our customers employ personnel who perform some of the same types of building services that we do. We cannot be certain that our existing or prospective customers will continue to outsource building services in the future.

We are subject to many laws and regulations in the jurisdictions in which we operate; changes to such laws and regulations may result in additional costs and impact our operations. We are committed to upholding the highest standards of corporate governance and legal and ethical compliance. We are subject to many laws and regulations, including various laws and regulations that apply specifically to U.S. public companies. These include the rules and regulations of the New York Stock Exchange, the Sarbanes-Oxley Act of 2002 and the Dodd-Frank Wall Street Reform and Consumer Protection Act, as well as the various regulations, standards and guidance put forth by the SEC and other governmental agencies to implement those laws. New laws, rules and regulations, or changes to existing laws or their interpretations, could create added legal and financial costs and uncertainty for us. In addition, our United Kingdom operations are subject to laws and regulations that are in some cases different from those of the United Sates, including labor laws such as the U.K. Modern Slavery Act and laws and regulations governing information collected from employees, customers and others, specifically the European Union's General Data Protection Regulation, which went into effect in May 2018. These laws and regulations, and the economic, financial, political and regulatory impact of the United Kingdom's decision to leave the European Union, could increase the cost and complexity of doing business in the U.K. and negatively impact our financial position and results of operations. Our efforts to comply with evolving laws, regulations and reporting standards may increase our general and administrative expenses, divert management time and attention or limit our operational flexibility, all of which could have a material adverse effect on our financial position and results of operations. Many of our non-public competitors and competitors operating solely in the U.S. are not subject to these laws and regulations and the related costs and expenses of compliance.

The Tax Cuts and Jobs Act of 2017 could have negative or unexpected consequences for our customers; reduced government spending may adversely affect our own business. The long-term impact of the Tax Cuts and Jobs Act of 2017 on the general economy cannot be reliably predicted at this time and will require rule-making and interpretation in a number of areas. To the extent that certain of our customers are negatively affected by the new tax law and/or any uncertainty around the changes in the law or how it will be enforced, they may reduce spending and defer, delay or cancel projects or contracts. Reduced government revenues resulting from the new tax law may also lead to reduced government spending, which may negatively impact our government contracting business.

We are a decentralized company, which presents certain risks. While we believe decentralization has enhanced our growth and enabled us to remain responsive to opportunities and to our customers' needs, it necessarily places significant control and decision-making powers in the hands of local management. This presents various risks, including the risk that we may be slower or less able to identify or react to problems affecting a key business than we would in a more centralized environment.

Our business may be affected by weather conditions. Adverse weather conditions, particularly during the winter season, could impact our construction services operations as those conditions affect our ability to perform efficient work outdoors in certain regions of the United States, adversely affecting the revenues and profitability of those operations. However, the absence of snow in certain regions of the United States during the winter could also cause us to experience reduced revenues and profitability in our United States building services segment, which has meaningful snow removal operations. In addition, cooler than normal temperatures during the summer months could reduce the need for our services, particularly in our businesses that install or service air conditioning units, and result in reduced revenues and profitability during the period such unseasonal weather conditions persist. Hurricanes and other severe weather may cause our projects to be delayed or canceled by our customers. The increased incidence of severe weather and its related impacts, such as hurricanes, flooding and wildfires, could adversely impact our operations.

Natural disasters, terrorist attacks and other catastrophic events could disrupt our operations and services. Natural disasters, acts of terrorism and other catastrophic events, and the actions taken by the United States and/or other governments or actors in response to such events, may result in property damage, supply disruption or economic dislocations throughout the country. Although it is not possible to predict such events or their consequences, these events could increase the volatility of our financial results due to decreased demand and unforeseen costs, with partial or no corresponding compensation from clients.

Our business may be affected by the work environment. We perform our work under a variety of conditions, including but not limited to, difficult terrain, difficult site conditions and busy urban centers where delivery of materials and availability of labor may be impacted, clean-room environments where strict procedures must be followed, and sites which contain harsh or hazardous conditions, especially at chemical plants, refineries and other process facilities. Performing work under these conditions can negatively affect efficiency and, therefore, our profitability.

Our dependence upon fixed price contracts could adversely affect our business. We currently generate, and expect to continue to generate, a significant portion of our revenues from fixed price contracts. We must estimate the total costs of a particular project to bid for fixed price contracts. The actual cost of labor and materials, however, may vary from the costs we originally estimated. These variations, along with other risks, inherent in performing fixed price contracts, may cause actual gross profits from projects to differ from those we originally estimated and could result in reduced profitability or losses on projects. Depending upon the size of a particular project, variations from the estimated contract costs can have a significant impact on our operating results for any fiscal quarter or year.

We could incur additional costs to cover certain guarantees. In some instances, we guarantee completion of a project by a specific date or price, cost savings, achievement of certain performance standards or performance of our services at a certain standard of quality. If we subsequently fail to meet such guarantees, we may be held responsible for costs resulting from such failures. Such a failure could result in our payment of liquidated or other damages. To the extent that any of these events occur, the total costs of a project could exceed the original estimated costs, and we would experience reduced profits or, in some cases, a loss.

Many of our contracts, especially our building services contracts for governmental and non-governmental entities, may be canceled on short notice, and we may be unsuccessful in replacing such contracts if they are canceled or as they are completed or expire. We could experience a decrease in revenues, net income and liquidity if any of the following occur:

- customers cancel a significant number of contracts;
- we fail to win a significant number of our existing contracts upon re-bid;
- we complete a significant number of non-recurring projects and cannot replace them with similar projects; or
- we fail to reduce operating and overhead expenses consistent with any decrease in our revenues.

We may be unsuccessful in generating internal growth. Our ability to generate internal growth will be affected by, among other factors, our ability to:

- expand the range of services offered to customers to address their evolving needs;
- attract new customers; and
- retain and/or increase the number of projects performed for existing customers.

In addition, existing and potential customers in the past have reduced, and may continue to reduce, the number or size of projects available to us because of general economic conditions or due to their inability to obtain capital or pay for services we provide. Many of the factors affecting our ability to generate internal growth are beyond our control, and we cannot be certain that our strategies will be successful or that we will be able to generate cash flow sufficient to fund our operations and to support internal growth. If we are not successful, we may not be able to achieve internal growth, expand operations or grow our business.

The departure of key personnel could disrupt our business. We depend on the continued efforts of our senior management. The loss of key personnel, or the inability to hire and retain qualified executives, could negatively impact our ability to manage our business.

We may be unable to attract and retain skilled employees. Our ability to grow and maintain productivity and profitability will be limited by our ability to employ, train and retain skilled personnel necessary to meet our requirements. We are dependent upon our project managers and field supervisors who are responsible for managing our projects, and there can be no assurance that any individual will continue in his or her capacity for any particular period of time. The loss of such qualified employees could have an adverse effect on our business. We cannot be certain that we will be able to maintain an adequate skilled labor force necessary to operate efficiently and to support our business strategy or that labor expenses will not increase as a result of a shortage in the supply of these skilled personnel. The availability and cost of a skilled labor force could be impacted by factors we cannot control, including changes in the unemployment rate, prevailing wage rates, benefit costs and competition for labor from our competitors in the markets we serve. Labor shortages or increased labor costs could impair our ability to maintain our business or grow our revenues.

Our unionized workforce could adversely affect our operations, and we participate in many multiemployer union pension plans which could result in substantial liabilities being incurred. As of December 31, 2018, approximately 57% of our employees were covered by collective bargaining agreements. Although the majority of these agreements prohibit strikes and work stoppages, we cannot be certain that strikes or work stoppages will not occur in the future. However, only two of our collective bargaining agreements are national or regional in scope, and not all of our collective bargaining agreements expire at the same time. Strikes or work stoppages would adversely impact our relationships with our customers and could have a material adverse effect on our financial position, results of operations and cash flows. We contribute to approximately 200 multiemployer union pension plans based upon wages paid to our union employees that could result in our being responsible for a portion of the unfunded liabilities under such plans. Our potential liability for unfunded liabilities could be material. Under the Employee Retirement Income Security Act, we may become liable for our proportionate share of a multiemployer pension plan's underfunding if we cease to contribute to that pension plan or significantly reduce the employees in respect of which we make contributions to that pension plan. See Note 15 - Retirement Plans of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for additional information regarding multiemployer plans.

Fluctuating foreign currency exchange rates impact our financial results. We have operations in the United Kingdom, which in 2018 accounted for approximately 5% of our revenues. Our reported financial position and results of operations are exposed to the effects (both positive and negative) that fluctuating exchange rates have on the process of translating the financial statements of our United Kingdom operations, which are denominated in local currencies, into the U.S. dollar. It is unclear at this time what effect, if any, the United Kingdom's potential exit from the European Union may have on such exchange rates.

Our failure to comply with environmental laws could result in significant liabilities. Our operations are subject to various laws, including environmental laws and regulations, among which many deal with the handling and disposal of asbestos and other hazardous or universal waste products, PCBs and fuel storage. A violation of such laws and regulations may expose us to various claims, including claims by third parties, as well as remediation costs and fines. We own and lease many facilities. Some of these facilities contain hazardous materials, such as lead and asbestos, and fuel storage tanks, which may be above or below ground. If these tanks were to leak, we could be responsible for the cost of remediation as well as potential fines. As a part of our business, we also install fuel storage tanks and are sometimes required to deal with hazardous materials, all of which may expose us to environmental liability.

In addition, new laws and regulations, stricter enforcement of existing laws and regulations, the discovery of previously unknown contamination or leaks, the imposition of new clean-up requirements, or the exposure of our employees or other contractors to hazardous materials, could require us to incur significant costs or become the basis for new or increased liabilities that could harm our financial position and results of operations, although certain of these costs might be covered by insurance. In some instances, we have obtained indemnification or covenants from third parties (including predecessors or lessors) for such clean-up and other obligations and liabilities, and we believe such indemnities and covenants are adequate to cover such obligations and liabilities. However, such third-party indemnities or covenants may not cover all of such costs or third-party indemnitors may default on their obligations. In addition, unanticipated obligations or liabilities, or future obligations and liabilities, may have a material adverse effect on our business operations. Further, we cannot be certain that we will be able to identify, or be indemnified for, all potential environmental liabilities relating to any acquired business.

Adverse resolution of litigation and other legal and regulatory proceedings may harm our operating results or financial position. From time to time, we are a party to lawsuits and other legal proceedings, most of which occur in the normal course of our business. These actions and proceedings may involve actual or threatened claims by customers, employees or other third parties for, among other things, compensation for alleged personal injury, workers' compensation, employment discrimination, breach of contract, property damage or other general commercial disputes. In addition, we may be subject to class action claims alleging violations of the Fair Labor Standards Act and state wage and hour laws. Litigation and other legal proceedings can be expensive, lengthy and disruptive to normal business operations, and their outcome is inherently uncertain and difficult to accurately predict or quantify. In addition, plaintiffs in many types of actions may seek punitive damages, civil penalties, consequential damages or other losses, or injunctive or declaratory relief. An unfavorable resolution of a particular legal proceeding or claim, whether through a settlement, mediation, court judgment or otherwise, could have a material adverse effect on our business, operating results, financial position and cash flows, and in some cases, on our reputation or our ability to obtain projects from customers, including governmental entities. See Item 3. Legal Proceedings and Note 16 - Commitments and Contingencies of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data, for more information regarding legal proceedings in which we are involved.

Opportunities within the government sector could lead to increased governmental rules and regulations applicable to us. As a government contractor we are subject to a number of procurement rules and other regulations, any deemed violation of which could lead to fines or penalties or a loss of business. Government agencies routinely audit and investigate government contractors. Government agencies may review a contractor's performance under its contracts, cost structure and compliance with applicable laws, regulations and standards. If government agencies determine through these audits or reviews that costs are improperly allocated to specific contracts, they will not reimburse the contractor for those costs or may require the contractor to refund previously reimbursed costs. If government agencies determine that we are engaged in improper activity, we may be subject to civil and criminal penalties and debarment or suspension from doing business with the government. Government contracts are also subject to renegotiation of terms by the government, termination by the government prior to the expiration of the term, and non-renewal by the government.

A material portion of our business depends on our ability to provide surety bonds. We may be unable to compete for or work on certain projects if we are not able to obtain the necessary surety bonds. Our construction contracts frequently require that we obtain from surety companies and provide to our customers payment and performance bonds as a condition to the award of such contracts. Such surety bonds secure our payment and performance obligations. Under standard terms in the surety market, surety companies issue bonds on a project-by-project basis and can decline to issue bonds at any time or require the posting of collateral as a condition to issuing any bonds. Current or future market conditions, as well as changes in our sureties' assessment of our or their own operating and financial risk, could cause our surety companies to decline to issue, or substantially reduce the amount of, bonds for our work or to increase our bonding costs. These actions can be taken on short notice. If our surety companies were to limit or eliminate our access to bonding, our alternatives would include seeking bonding capacity from other surety companies, increasing business with clients that do not require bonds and posting other forms of collateral for project performance, such as letters of credit, parent company guarantees or cash. We may be unable to secure these alternatives in a timely manner, on acceptable terms, or at all. Accordingly, if we were to experience an interruption or reduction in the availability of bonding, we may be unable to compete for or work on certain projects. Increases in the costs of surety bonds could also adversely impact our profitability.

We are effectively self-insured against many potential liabilities. Although we maintain insurance policies with respect to a broad range of risks, including automobile liability, general liability, workers' compensation and employee group health, these policies do not cover all possible claims and certain of the policies are subject to large deductibles. Accordingly, we are effectively self-insured for a substantial number of actual and potential claims. In addition, if any of our insurance carriers defaulted on its obligations to provide insurance coverage by reason of its insolvency or for other reasons, our exposure to claims would increase and our profits would be adversely affected. Our estimates for unpaid claims and expenses are based on known facts, historical trends and industry averages, utilizing the assistance of an actuary. The determination of such estimated liabilities and their appropriateness are reviewed and updated at least quarterly. However, these liabilities are difficult to assess and estimate due to many relevant factors, the effects of which are often unknown, including the severity of an injury or damage, the determination of liability in proportion to other parties, the timeliness of reported claims, the effectiveness of our risk management and safety programs and the terms and conditions of our insurance policies. Our accruals are based upon known facts, historical trends and our reasonable estimate of future expenses, and we believe such accruals are adequate. However, unknown or changing trends, risks or circumstances, such as increases in claims, a weakening economy, increases in medical costs, changes in case law or legislation, or changes in the nature of the work we perform, could render our current estimates and accruals inadequate. In such case, adjustments to our balance sheet may be required and these increased liabilities would be recorded in the period that the experience becomes known. Insurance carriers may be unwilling, in the future, to provide our current levels of coverage without a significant increase in insurance premiums and/or collateral requirements to cover our obligations to them. Increased collateral requirements may be in the form of additional letters of credit and/or cash, and an increase in collateral requirements could significantly reduce our liquidity. If insurance premiums increase, and/or if insurance claims are higher than our estimates, our profitability could be adversely affected.

We may incur liabilities or suffer negative financial impacts relating to occupational, health and safety matters. Our operations are subject to extensive laws and regulations relating to the maintenance of safe conditions in the workplace. While we have invested, and will continue to invest, substantial resources in our robust occupational, health and safety programs, many of our businesses involve a high degree of operational risk, and there can be no assurance that we will avoid significant exposure. These hazards can cause personal injury and loss of life, severe damage to or destruction of property and equipment and other consequential damages and could lead to suspension of operations, large damage claims and, in extreme cases, criminal liability.

Our customers seek to minimize safety risks on their sites and they frequently review the safety records of contractors during the bidding process. If our safety record were to substantially deteriorate over time, we might become ineligible to bid on certain work and our customers could cancel our contracts and/or not award us future business.

Acquisitions could adversely affect our business and results of operations. As part of our growth strategy, we acquire companies that expand, complement and/or diversify our businesses. Realization of the anticipated benefits of an acquisition will depend, among other things, upon our ability to: (a) effectively conduct due diligence on companies we propose to acquire to identify problems at these companies and (b) recognize incompatibilities or other obstacles to successful integration of the acquired business with our other operations and gain greater efficiencies and scale that will translate into reduced costs in a timely manner. However, there can be no assurance that an acquisition we may make in the future will provide the benefits anticipated when entering into the transaction. Acquisitions we have made and future acquisitions may expose us to operational challenges and risks, including the diversion of management's attention from our existing businesses, the failure to retain key personnel or customers of the acquired business and the assumption of unknown liabilities of the acquired business for which there are inadequate reserves. Our ability to sustain our growth and maintain our competitive position may be affected by our ability to identify and acquire desirable businesses and successfully integrate any business acquired.

Our results of operations could be adversely affected as a result of goodwill and other identifiable intangible asset impairments. When we acquire a business, we record an asset called "goodwill" equal to the excess amount paid for the business, including liabilities assumed, over the fair value of the tangible and identifiable intangible assets of the business acquired. The Financial Accounting Standards Board ("FASB") requires that all business combinations be accounted for using the acquisition method of accounting and that certain identifiable intangible assets acquired in a business combination be recognized as assets apart from goodwill. FASB Accounting Standard Codification ("ASC") Topic 350, "Intangibles-Goodwill and Other" ("ASC 350"), provides that goodwill and other identifiable intangible assets that have indefinite useful lives not be amortized, but instead be tested at least annually for impairment, and identifiable intangible assets that have finite useful lives should continue to be amortized over their useful lives and be tested for impairment whenever facts and circumstances indicate that the carrying values may not be fully recoverable. ASC 350 also provides specific guidance for testing goodwill and other non-amortized identifiable intangible assets for impairment, which we test annually each October 1. ASC 350 requires management to make certain estimates and assumptions to allocate goodwill to reporting units and to determine the fair value of reporting unit net assets and liabilities. Such fair value is determined using discounted estimated future cash flows. Our development of the present value of future cash flow projections is based upon assumptions and estimates by management from a review of our operating results, business plans, anticipated growth rates and margins and the weighted average cost of capital, among others. Much of the information used in assessing fair value is outside the control of management, such as interest rates, and these assumptions and estimates can change in future periods. There can be no assurance that our estimates and assumptions made for purposes of our goodwill and identifiable intangible asset impairment testing will prove to be accurate predictions of the future. If our assumptions regarding business plans or anticipated growth rates and/or margins are not achieved, or there is a rise in interest rates, we may be required to record goodwill and/or identifiable intangible asset impairment charges in future periods, whether in connection with our next annual impairment testing on October 1, 2019 or earlier, if an indicator of an impairment is present prior to the quarter in which the annual goodwill impairment test is to be performed. It is not possible at this time to determine if any such impairment charge would result or, if it does, whether such a charge would be material to our results of operations.

Amounts included in our remaining performance obligations may not result in actual revenues or translate into profits. Many contracts are subject to cancellation or suspension on short notice at the discretion of the client, and the contracts in our remaining performance obligations are subject to changes in the scope of services to be provided as well as adjustments to the costs relating to the contract. Accordingly, there is no assurance that revenue from remaining performance obligations will actually be realized. If our remaining performance obligations fail to materialize, we could experience a decline in profitability, which could result in a deterioration of our financial position and liquidity.

We recognize revenue for the majority of our construction projects based on estimates; therefore, variations of actual results from our assumptions may reduce our profitability. In accordance with United States generally accepted accounting principles, we record revenue as work on the contract progresses. The cumulative amount of revenues recorded on a contract at a specified point in time is that percentage of total estimated revenues that costs incurred to date bear to estimated total costs. Accordingly, contract revenues and total cost estimates are reviewed and revised as the work progresses. Adjustments are reflected in contract revenues in the period when such estimates are revised. Estimates are based on management's reasonable assumptions and experience, but are only estimates. Variations of actual results from assumptions on an unusually large project or on a number of average size projects could be material. We are also required to immediately recognize the full amount of the estimated loss on a contract when estimates indicate such a loss. Such adjustments and accrued losses could result in reduced profitability, which could negatively impact our cash flow from operations.

We are increasingly dependent on sophisticated information technology systems; disruption, failure or cyber-security breaches of these systems could adversely affect our business and results of operations. We and our customers and third party providers rely on information technology systems, hardware and software to run critical accounting, project management and financial information systems. We rely upon security measures, products and services to secure our information technology systems and the confidential, proprietary and sensitive information they contain. However, our information technology systems and those of our customers and third-party providers could become subject to cyber-attacks, hacking, or other intrusions, failure or damage, which could result in operational disruptions or information misappropriation, such as theft of intellectual property or inappropriate disclosure of customer data or confidential or personal information. In addition, the proper functioning of these systems may be impacted by other causes and circumstances beyond our control, including the decision by software vendors to discontinue further development, integration or long-term software maintenance support for our information systems, or hardware interruption, damage or disruption as a result of power outages, natural disasters, or computer network failures. To the extent that our information technology systems, or those of our customers or third party providers, are disabled for a long period of time, certain key business processes could be interrupted. Any such operational disruptions and/or misappropriation or inappropriate disclosure of information could result in lost or reduced revenues, negative publicity, or business delays that could have a material adverse effect on our business, financial position and results of operations. We may also be required to expend significant resources to protect against the threat of such system disruptions and security breaches or to alleviate problems caused by such disruptions and breaches.

Our failure to comply with anti-bribery statutes such as the Foreign Corrupt Practices Act and the U.K. Bribery Act of 2010 could result in fines, criminal penalties and other sanctions that could have an adverse effect on our business. The U.S. Foreign Corrupt Practices Act (the "FCPA"), the U.K. Bribery Act of 2010 (the "Bribery Act") and similar anti-bribery laws in other jurisdictions generally prohibit companies and their intermediaries from making improper payments to foreign officials for the purpose of obtaining or retaining business or securing an improper advantage. We conduct a modest amount of business in a few countries that have experienced corruption to some degree. Our policies require that all of our employees, subcontractors, vendors and agents worldwide must comply with applicable anti-bribery laws. However, there is no assurance that our policies and procedures to ensure compliance with the FCPA, the Bribery Act and similar anti-bribery laws will eliminate the possibility of liability under such laws for actions taken by our employees, agents and intermediaries. If we were found to be liable for violations under the FCPA, the Bribery Act or similar anti-bribery laws, either due to our own acts or omissions or due to the acts or omissions of others, we could incur substantial legal expenses and suffer civil and criminal penalties or other sanctions, which could have a material adverse effect on our business, financial condition and results of operations, as well as our reputation. In addition, whether or not such expenses, penalties or sanctions are actually incurred, the actual or alleged violation of the FCPA, Bribery Act or similar anti-bribery laws could have a negative impact on our reputation.

Certain provisions of our corporate governance documents could make an acquisition of us, or a substantial interest in us, more difficult. The following provisions of our certificate of incorporation and by-laws, as currently in effect, as well as Delaware law, could discourage potential proposals to acquire us, delay or prevent a change in control of us, or limit the price that investors may be willing to pay in the future for shares of our common stock:

- our certificate of incorporation permits our board of directors to issue "blank check" preferred stock and to adopt amendments to our by-laws;
- our by-laws contain restrictions regarding the right of our stockholders to nominate directors and to submit proposals to be considered at stockholder meetings;
- our certificate of incorporation and by-laws limit the right of our stockholders to call a special meeting of stockholders and to act by written consent; and
- we are subject to provisions of Delaware law, which prohibit us from engaging in any of a broad range of business transactions with an "interested stockholder" for a period of three years following the date such stockholder becomes classified as an interested stockholder.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our operations are conducted primarily at leased properties. The following table lists facilities over 50,000 square feet, both leased and owned, and identifies the business segment that is the principal user of each such facility.

	Approximate Square Feet	Lease Expiration Date, Unless Owned
17905 and 18101 S. Broadway Carson, California (b)	68,160	7/31/2020
1168 Fesler Street El Cajon, California (b)	67,560	8/31/2025
22302 Hathaway Avenue Hayward, California (b)	105,000	7/31/2021
4462 Corporate Center Drive Los Alamitos, California (a)	57,863	12/31/2019
3535 Medford Street Los Angeles, California (a)	60,000	5/31/2021
940 Remillard Court San Jose, California (c)	119,560	7/31/2029
55 Gerber Road South Windsor, Connecticut (c)	60,047	12/31/2028
3100 Woodcreek Drive Downers Grove, Illinois (a)	56,551	7/31/2027
2219 Contractors Drive Fort Wayne, Indiana (b)	175,000	7/31/2023
5210 Investment Drive Fort Wayne, Indiana (b)	99,579	10/31/2023
7614 and 7720 Opportunity Drive Fort Wayne, Indiana (b)	144,695	7/31/2026
2655 Garfield Avenue Highland, Indiana (a)	57,765	6/30/2019
4250 Highway 30 St. Gabriel, Louisiana (d)	90,000	Owned
1750 Swisco Road Sulphur, Louisiana (d)	112,000	Owned
111-01 and 111-21 14th Avenue College Point, New York (a)	73,013	2/28/2024
70 Schmitt Boulevard Farmingdale, New York (b)	76,380	7/31/2026
3000 Comfort Court Raleigh, North Carolina (c)	70,000	12/31/2023
6101 and 6025 Triangle Drive Raleigh, North Carolina (b)	53,394	12/31/2024
2900 Newpark Drive Barberton, Ohio (b)	113,663	10/31/2027
16251 SE 98th Avenue Clackamas, Oregon (a)	98,860	12/31/2020
1700 Markley Street Norristown, Pennsylvania (c)	90,767	9/30/2021
6045 East Shelby Drive Memphis, Tennessee (c)	53,618	5/31/2023
937 Pine Street Beaumont, Texas (d)	78,962	Owned

	Approximate Square Feet	Lease Expiration Date, Unless Owned
895 North Main Street Beaumont, Texas (d)	75,000	Owned
410 Flato Road Corpus Christi, Texas (d)	57,000	Owned
5550 Airline Drive and 25 Tidwell Road Houston, Texas (b)	97,936	12/31/2024
12415 Highway 225 La Porte, Texas (d)	78,000	Owned
2455 West 1500 South Salt Lake City, Utah (a)	59,677	4/30/2025
2345 South CCI Way West Valley City, Utah (c)	69,229	8/31/2032

We believe that our property, plant and equipment are well maintained, in good operating condition and suitable for the purposes for which they are used.

See Note 16 - Commitments and Contingencies of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for additional information regarding lease costs. We utilize substantially all of our leased or owned facilities and believe there will be no difficulty either in negotiating the renewal of our real property leases as they expire or in finding alternative space, if necessary.

(a) Principally used by a company engaged in the “United States electrical construction and facilities services” segment.

(b) Principally used by a company engaged in the “United States mechanical construction and facilities services” segment.

(c) Principally used by a company engaged in the “United States building services” segment.

(d) Principally used by a company engaged in the “United States industrial services” segment.

ITEM 3. LEGAL PROCEEDINGS

We are involved in several proceedings in which damages and claims have been asserted against us. We believe that we have a number of valid defenses to such proceedings and claims and intend to vigorously defend ourselves. Other potential claims may exist that have not yet been asserted against us. We do not believe that any such matters will have a material adverse effect on our financial position, results of operations or liquidity. Litigation is subject to many uncertainties and the outcome of litigation is not predictable with assurance. It is possible that some litigation matters for which liabilities have not been recorded could be decided unfavorably to us, and that any such unfavorable decisions could have a material adverse effect on our financial position, results of operations or liquidity. See Note 16 - Commitments and Contingencies of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for a discussion regarding certain legal proceedings.

ITEM 4. MINE SAFETY DISCLOSURES

Information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K (17 CFR 229.104) is included in Exhibit 95 to this Form 10-K.

EXECUTIVE OFFICERS OF THE REGISTRANT

Anthony J. Guzzi, Age 54; President since October 2004, Chief Executive Officer since January 2011 and Chairman of the Board since June 2018. From October 2004 to January 2011, Mr. Guzzi served as Chief Operating Officer of the Company. From August 2001 until he joined the Company, Mr. Guzzi was President of the North American Distribution and Aftermarket Division of Carrier Corporation ("Carrier"). Carrier is a manufacturer and distributor of commercial and residential HVAC and refrigeration systems and equipment and a provider of aftermarket services and components of its own products and those of other manufacturers in both the HVAC and refrigeration industries.

Mark A. Pompa, Age 54; Executive Vice President and Chief Financial Officer of the Company since April 2006. From June 2003 to April 2006, Mr. Pompa was Senior Vice President-Chief Accounting Officer of the Company, and from June 2003 to January 2007, Mr. Pompa was also Treasurer of the Company. From September 1994 to June 2003, Mr. Pompa was Vice President and Controller of the Company.

R. Kevin Matz, Age 60; Executive Vice President-Shared Services of the Company since December 2007 and Senior Vice President-Shared Services from June 2003 to December 2007. From April 1996 to June 2003, Mr. Matz served as Vice President and Treasurer of the Company and Staff Vice President-Financial Services of the Company from March 1993 to April 1996.

Maxine L. Mauricio, Age 47; Senior Vice President, General Counsel and Secretary of the Company since January 2016. From January 2012 to December 2015, Ms. Mauricio was Vice President and Deputy General Counsel of the Company, and from May 2002 to December 2011, she served as Assistant General Counsel of the Company. Prior to joining the Company, Ms. Mauricio was an associate at Ropes & Gray LLP.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information. Our common stock trades on the New York Stock Exchange under the symbol "EME".

The following table sets forth high and low sales prices for our common stock for the periods indicated as reported by the New York Stock Exchange:

2018	High	Low
First Quarter	$ 85.08	$ 73.26
Second Quarter	$ 82.04	$ 72.26
Third Quarter	$ 81.37	$ 73.73
Fourth Quarter	$ 76.18	$ 57.29

2017	High	Low
First Quarter	$ 72.88	$ 59.76
Second Quarter	$ 69.14	$ 60.30
Third Quarter	$ 70.26	$ 62.15
Fourth Quarter	$ 84.11	$ 68.77

Holders. As of February 15, 2019, there were approximately 288 stockholders of record and, as of that date, we estimate there were approximately 41,791 beneficial owners holding our common stock in nominee or "street" name.

Dividends. We have paid quarterly dividends since October 25, 2011. We expect that such quarterly dividends will be paid in the foreseeable future. Prior to October 25, 2011, no cash dividends had been paid on the Company's common stock. We currently pay a regular quarterly dividend of $0.08 per share. Our 2016 Credit Agreement places limitations on the payment of dividends on our common stock. However, we do not believe that the terms of such agreement currently materially limit our ability to pay a quarterly dividend of $0.08 per share for the foreseeable future. See Note 10 - Debt of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for further information regarding our 2016 Credit Agreement.

Securities Authorized for Issuance Under Equity Compensation Plans. The following table summarizes, as of December 31, 2018, certain information regarding equity compensation plans that were approved by stockholders and equity compensation plans that were not approved by stockholders. The information in the table and in the notes thereto has been adjusted for stock splits.

Equity Compensation Plan Information

	A	B	C
Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans (Excluding Securities Reflected in Column A)
Equity Compensation Plans Approved by Security Holders	589,357 (1)	$ 1.66 (1)	1,327,307 (2)
Equity Compensation Plans Not Approved by Security Holders	—	—	—
Total	589,357	$ 1.66	1,327,307

(1) Included within this amount are 549,357 restricted stock units awarded to our non-employee directors and employees. The weighted average exercise price would have been $24.48 had the weighted average exercise price calculation excluded such restricted stock units.

(2) Represents shares of our common stock available for future issuance under our 2010 Incentive Plan (the "2010 Plan"), which may be issuable in respect of options and/or stock appreciation rights granted under the 2010 Plan and/or may also be issued pursuant to the award of restricted stock, unrestricted stock and/or awards that are valued in whole or in part by reference to, or are otherwise based on the fair market value of, our common stock.

Purchase of Equity Securities by the Issuer and Affiliated Purchasers

The following table summarizes repurchases of our common stock made by us during the quarter ended December 31, 2018:

Period	Total Number of Shares Purchased(1)(2)	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number (or Approximate Dollar Value) of Shares That May Yet be Purchased Under the Plan or Programs
October 1, 2018 to October 31, 2018	425,947	$72.48	425,947	$248,237,181
November 1, 2018 to November 30, 2018	279,856	$71.90	279,856	$228,115,562
December 1, 2018 to December 31, 2018	1,096,213	$63.50	1,096,213	$158,506,898
Total	1,802,016	$66.93	1,802,016	

(1) On September 26, 2011, our Board of Directors authorized us to repurchase up to $100.0 million of our outstanding common stock. On December 5, 2013, October 23, 2014, October 28, 2015, October 25, 2017 and October 23, 2018, our Board of Directors authorized us to repurchase up to an additional $100.0 million, $250.0 million, $200.0 million, $100.0 million and $200.0 million of our outstanding common stock, respectively. As of December 31, 2018, there remained authorization for us to repurchase approximately $158.5 million of our shares. No shares have been repurchased by us since the programs have been announced other than pursuant to these publicly announced programs. The repurchase programs have no expiration date and do not obligate the Company to acquire any particular amount of common stock and may be suspended, recommenced or discontinued at any time or from time to time without prior notice. We may repurchase our shares from time to time to the extent permitted by securities laws and other legal requirements, including provisions in our credit agreement, placing limitations on such repurchases.

(2) Excludes 1,416 shares surrendered to the Company by participants in our share-based compensation plans to satisfy minimum tax withholdings for common stock issued under such plans.

ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data has been derived from our audited financial statements and should be read in conjunction with the consolidated financial statements, the related notes thereto and the report of our independent registered public accounting firm thereon included elsewhere in this and our previously filed annual reports on Form 10-K.

See Note 4 - Acquisitions of Businesses and Note 5 - Disposition of Assets of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for a discussion regarding acquisitions and dispositions. During the third quarter of 2014, we ceased construction operations in the United Kingdom. The results of the construction operations of our United Kingdom segment for all periods are presented as discontinued operations.

Income Statement Data
(In thousands, except per share data)

	Years Ended December 31,				
	2018	2017	2016	2015	2014
Revenues	$8,130,631	$7,686,999	$7,551,524	$6,718,726	$6,424,965
Gross profit	$1,205,453	$1,147,012	$1,037,862	$ 944,479	$ 907,246
Impairment loss on goodwill and identifiable intangible assets	$ 907	$ 57,819	$ 2,428	$ —	$ 1,471
Gain on sale of building	$ —	$ —	$ —	$ —	$ 11,749
Operating income	$ 403,083	$ 328,902	$ 306,929	$ 285,336	$ 289,342
Net income attributable to EMCOR Group, Inc.	$ 283,531	$ 227,196	$ 181,935	$ 172,286	$ 168,664
Basic earnings (loss) per common share:					
From continuing operations	$ 4.92	$ 3.85	$ 3.05	$ 2.74	$ 2.61
From discontinued operations	(0.04)	(0.01)	(0.05)	(0.00)	(0.07)
	$ 4.88	$ 3.84	$ 3.00	$ 2.74	$ 2.54
Diluted earnings (loss) per common share:					
From continuing operations	$ 4.89	$ 3.83	$ 3.02	$ 2.72	$ 2.59
From discontinued operations	(0.04)	(0.01)	(0.05)	(0.00)	(0.07)
	$ 4.85	$ 3.82	$ 2.97	$ 2.72	$ 2.52

Balance Sheet Data
(In thousands)

	As of December 31,				
	2018	2017	2016	2015	2014
Equity (1)	$1,741,441	$1,674,117	$1,537,942	$1,480,056	$1,429,387
Total assets	$4,088,807	$3,965,904	$3,852,438	$3,506,706	$3,354,558
Goodwill	$ 990,887	$ 964,893	$ 979,628	$ 843,170	$ 834,102
Borrowings under revolving credit facility	$ 25,000	$ 25,000	$ 125,000	$ —	$ —
Term loan, including current maturities	$ 269,620	$ 284,810	$ 300,000	$ 315,000	$ 332,500
Other long-term debt, including current maturities	$ 9	$ 20	$ 31	$ 44	$ 57
Capital lease obligations, including current maturities	$ 4,213	$ 4,571	$ 3,732	$ 3,869	$ 2,883

(1) During 2018, we repurchased approximately 3.1 million shares of our common stock for approximately $216.2 million. Since the inception of the repurchase programs in 2011 through December 31, 2018, we have repurchased approximately 15.9 million shares of our common stock for approximately $791.5 million. We have paid quarterly dividends since October 25, 2011. We currently pay a regular quarterly dividend of $0.08 per share, and we expect that quarterly dividends will be paid in the foreseeable future. These transactions result in a reduction of our equity.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

We are one of the largest electrical and mechanical construction and facilities services firms in the United States. In addition, we provide a number of building services and industrial services. Our services are provided to a broad range of commercial, industrial, utility and institutional customers through approximately 80 operating subsidiaries and joint venture entities. Our offices are located in the United States and the United Kingdom.

Operating Segments

Our reportable segments reflect certain reclassifications of prior year amounts from our United States mechanical construction and facilities services segment to our United States building services segment due to changes in our internal reporting structure.

We have the following reportable segments, which provide services associated with the design, integration, installation, start-up, operation and maintenance of various systems: (a) United States electrical construction and facilities services (involving systems for electrical power transmission and distribution; premises electrical and lighting systems; process instrumentation in the refining, chemical processing, food processing and mining industries; low-voltage systems, such as fire alarm, security and process control; voice and data communication; roadway and transit lighting; and fiber optic lines); (b) United States mechanical construction and facilities services (involving systems for heating, ventilation, air conditioning, refrigeration and clean-room process ventilation; fire protection; plumbing, process and high-purity piping; controls and filtration; water and wastewater treatment; central plant heating and cooling; cranes and rigging; millwrighting; and steel fabrication, erection and welding); (c) United States building services; (d) United States industrial services; and (e) United Kingdom building services. The "United States building services" and "United Kingdom building services" segments principally consist of those operations which provide a portfolio of services needed to support the operation and maintenance of customers' facilities, including commercial and government site-based operations and maintenance; facility maintenance and services, including reception, security and catering services; outage services to utilities and industrial plants; military base operations support services; mobile mechanical maintenance and services; floor care and janitorial services; landscaping, lot sweeping and snow removal; facilities management; vendor management; call center services; installation and support for building systems; program development, management and maintenance for energy systems; technical consulting and diagnostic services; infrastructure and building projects for federal, state and local governmental agencies and bodies; and small modification and retrofit projects, which services are not generally related to customers' construction programs. The "United States industrial services" segment principally consists of those operations which provide industrial maintenance and services, including those for refineries and petrochemical plants, including on-site repairs, maintenance and service of heat exchangers, towers, vessels and piping; design, manufacturing, repair and hydro blast cleaning of shell and tube heat exchangers and related equipment; refinery turnaround planning and engineering services; specialty welding services; overhaul and maintenance of critical process units in refineries and petrochemical plants; and specialty technical services for refineries and petrochemical plants.

2018 versus 2017

Overview

The following table presents selected financial data for the fiscal years ended December 31, 2018 and 2017 (in thousands, except percentages and per share data):

	2018	2017
Revenues	$ 8,130,631	$ 7,686,999
Revenues increase from prior year	5.8%	1.8%
Restructuring expenses	$ 2,306	$ 1,577
Impairment loss on goodwill and identifiable intangible assets	$ 907	$ 57,819
Operating income	$ 403,083	$ 328,902
Operating income as a percentage of revenues	5.0%	4.3%
Income from continuing operations	$ 285,922	$ 228,050
Net income attributable to EMCOR Group, Inc.	$ 283,531	$ 227,196
Diluted earnings per common share from continuing operations	$ 4.89	$ 3.83

The results of our operations for 2018 set new company records in terms of revenues, operating income, operating margin (operating income as a percentage of revenues), net income attributable to EMCOR Group, Inc. and diluted earnings per common share from continuing operations. The strong operating results were due to revenue growth within all of our reportable segments and an increase in operating income within the majority of our reportable segments.

Operating income and operating margin increased within all of our domestic reportable segments, except for our United States electrical construction and facilities services segment. The improved operating results were primarily attributable to: (a) our United States industrial services segment, as this segment's results were negatively impacted by Hurricane Harvey during the second half of 2017, and (b) improved operating performance within all divisions of our United States building services segment. The decrease in operating income and operating margin within our United States electrical construction and facilities services segment was attributable to $10.0 million of losses incurred on a transportation construction project in the Western region of the United States, which negatively impacted our consolidated operating margin by 0.1%.

Operating income for 2017 included $57.8 million of non-cash impairment charges, which resulted in a 0.8% negative impact on the Company's operating margin. The results for 2017 also included the recovery of certain contract costs previously disputed on a project that was completed in 2016 within our United States mechanical construction and facilities services segment, which resulted in $18.1 million of gross profit and favorably impacted consolidated operating margin by 0.2%.

The increase in net income attributable to EMCOR Group, Inc. and diluted earnings per common share from continuing operations in 2018 was due to an increase in operating income and the reduction in the U.S federal corporate tax rate due to the enactment of the Tax Cuts and Jobs Act (the "Tax Act"). Our diluted earnings per common share from continuing operations for 2018 additionally benefited from a decrease in the weighted average number of shares outstanding as a result of the continued repurchase of our common stock.

Impact of Acquisitions

In order to provide a more meaningful period-over-period discussion of our operating results, we may discuss amounts generated or incurred (revenues, gross profit, selling, general and administrative expenses and operating income) from companies acquired. The amounts discussed reflect the acquired companies' operating results in the current reported period only for the time period these entities were not owned by EMCOR in the comparable prior reported period.

We acquired four companies in 2018. Two companies provide mobile mechanical services, one within the Eastern region and the other within the Western region of the United States. The third company is a full service provider of mechanical services within the Southern region of the United States. The results of these three companies have been included in our United States building services segment. The fourth company provides electrical construction and maintenance services for industrial and commercial buildings in North Texas, and its results have been included in our United States electrical construction and facilities services segment.

We acquired three companies during 2017. One company provides fire protection and alarm services primarily in the Southern region of the United States. The second company provides millwright services for manufacturing companies throughout the United States. Both of their results have been included in our United States mechanical construction and facilities services segment. The third company provides mobile mechanical services within the Western region of the United States, and its results have been included in our United States building services segment.

Companies acquired in 2018 and 2017 generated incremental revenues of $90.1 million and incremental operating income of $5.8 million, inclusive of $2.9 million of amortization expense associated with identifiable intangible assets, for the year ended December 31, 2018.

Discussion and Analysis of Results of Operations

Revenues

The following table presents our revenues for each of our operating segments and the approximate percentages that each segment's revenues were of total revenues for the years ended December 31, 2018 and 2017 (in thousands, except for percentages):

	2018	% of Total	2017	% of Total
Revenues from unrelated entities:				
United States electrical construction and facilities services	$ 1,954,323	24%	$ 1,829,567	24%
United States mechanical construction and facilities services	3,020,307	37%	2,963,815	39%
United States building services	1,875,485	23%	1,753,703	23%
United States industrial services	865,645	11%	799,169	10%
Total United States operations	7,715,760	95%	7,346,254	96%
United Kingdom building services	414,871	5%	340,745	4%
Total worldwide operations	$ 8,130,631	100%	$ 7,686,999	100%

As described in more detail below, revenues for 2018 were $8.1 billion compared to $7.7 billion for 2017. The increase in revenues was attributable to increased revenues from all of our reportable segments. Companies acquired in 2018 and 2017, which are reported in our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment and our United States building services segment, generated incremental revenues of $90.1 million in 2018.

Revenues of our United States electrical construction and facilities services segment were $1,954.3 million for the year ended December 31, 2018 compared to revenues of $1,829.6 million for the year ended December 31, 2017. The increase in revenues was attributable to an increase in activity within all of the market sectors in which we operate, except for the transportation market sector, as we approached substantial completion on several large multi-year transportation construction projects in 2018. In addition, the results for the year ended December 31, 2018 included $20.2 million of incremental revenues generated by a company acquired in 2018.

Our United States mechanical construction and facilities services segment revenues for the year ended December 31, 2018 were $3,020.3 million, a $56.5 million increase compared to revenues of $2,963.8 million for the year ended December 31, 2017. The increase in revenues was primarily attributable to an increase in revenues from commercial and institutional construction projects, partially offset by a decrease in revenues from large projects within the manufacturing market sector. In addition, the results for the year ended December 31, 2018 included $35.3 million of incremental revenues generated by a company acquired in 2017.

Revenues of our United States building services segment were $1,875.5 million and $1,753.7 million in 2018 and 2017, respectively. The increase in revenues was due to: (a) greater project and repair service activities within our mobile mechanical services operations, (b) large project activity within our energy services operations, (c) increased revenues from government site-based operations, partially as a result of additional indefinite-delivery, indefinite-quantity project activity, and (d) an increase in snow removal activity within our commercial site-based services operations. These increases were partially offset by a decrease in revenues due to the loss of certain contracts not renewed pursuant to rebid within our commercial site-based services operations. In addition, the results for the year ended December 31, 2018 included $34.6 million of incremental revenues generated by companies acquired in 2018 and 2017.

Revenues of our United States industrial services segment for the year ended December 31, 2018 increased by $66.5 million compared to the year ended December 31, 2017. The increase in revenues was due to an increase in revenues from both our field and shop services operations. The increase in revenues from our field services operations was due to an increase in turnaround project activity during the second half of 2018 as this division began to recover from the negative impact of Hurricane Harvey, which resulted in the cancellation of previously scheduled turnarounds during 2017 and early 2018. The increase in revenues from our shop services operations was due to increases in demand for new build heat exchangers, as well as our cleaning, repair and maintenance services.

Our United Kingdom building services segment revenues were $414.9 million in 2018 compared to $340.7 million in 2017. The increase in revenues was the result of increased project activity with existing customers and new contract awards within the commercial, institutional and water and wastewater market sectors. This segment's revenues were positively impacted by $15.2 million related to the effect of favorable exchange rates for the British pound versus the United States dollar.

Cost of sales and Gross profit

The following table presents cost of sales, gross profit (revenues less cost of sales), and gross profit margin (gross profit as a percentage of revenues) for the years ended December 31, 2018 and 2017 (in thousands, except for percentages):

	2018	2017
Cost of sales	$ 6,925,178	$ 6,539,987
Gross profit	$ 1,205,453	$ 1,147,012
Gross profit margin	14.8%	14.9%

Our gross profit for the year ended December 31, 2018 was $1,205.5 million, a $58.4 million increase compared to gross profit of $1,147.0 million for the year ended December 31, 2017. Our gross profit margin was 14.8% and 14.9% for 2018 and 2017, respectively. The increase in gross profit was attributable to improved operating performance within all of our reportable segments, except for the United States electrical construction and facilities services segment. Gross profit and gross profit margin for the year ended December 31, 2017 were favorably impacted by the recovery of certain contract costs previously disputed on a project that was completed in 2016 within our United States mechanical construction and facilities services segment, resulting in $18.1 million of gross profit and a 0.2% favorable impact on the Company's 2017 gross profit margin.

Selling, general and administrative expenses

The following table presents selling, general and administrative expenses and SG&A margin (selling, general and administrative expenses as a percentage of revenues) for the years ended December 31, 2018 and 2017 (in thousands, except for percentages):

	2018	2017
Selling, general and administrative expenses	$ 799,157	$ 758,714
Selling, general and administrative expenses as a percentage of revenues	9.8%	9.9%

Our selling, general and administrative expenses for the year ended December 31, 2018 were $799.2 million, a $40.4 million increase compared to selling, general and administrative expenses of $758.7 million for the year ended December 31, 2017. Selling, general and administrative expenses as a percentage of revenues were 9.8% and 9.9% for 2018 and 2017, respectively. The increase in selling, general and administrative expenses for the year ended December 31, 2018 included $12.5 million of incremental expenses directly related to companies acquired in 2018 and 2017, including amortization expense attributable to identifiable intangible assets of $1.3 million. In addition to the impact of acquisitions, selling, general and administrative expenses increased due to: (a) an increase in salaries, partially as a result of an increase in headcount due to higher revenues than in the prior year, (b) an increase in incentive compensation expense, due to higher annual operating results than in the prior year , and (c) increases in other selling, general and administrative expenses, such as information technology, consulting and other professional fees. The decrease in SG&A margin for the year ended December 31, 2018 was partially due to a reduction in the provision for doubtful accounts, primarily within our United States electrical construction and facilities services segment and our United States building services segment, as well as an increase in revenues without commensurate increases in our overhead cost structure.

Restructuring expenses

Restructuring expenses, primarily relating to severance obligations, were $2.3 million and $1.6 million for the years ended December 31, 2018 and 2017, respectively. As of December 31, 2018 and 2017, the balance of restructuring related obligations yet to be paid was $1.6 million and $0.5 million, respectively. The majority of obligations outstanding as of December 31, 2017 were paid during 2018. The majority of obligations outstanding as of December 31, 2018 will be paid throughout 2019 and 2020. No material expenses in connection with restructuring from continuing operations are expected to be incurred during 2019.

Impairment loss on goodwill and identifiable intangible assets

During the second quarter of 2018 and prior to our 2018 annual impairment test on October 1, we recorded a $0.9 million non-cash impairment charge associated with a finite-lived subsidiary trade name within our United States industrial services segment. No additional impairment of our identifiable intangible assets was recognized for the year ended December 31, 2018. Additionally, no impairment of our goodwill was recognized for the year ended December 31, 2018.

In conjunction with our 2017 annual impairment test, we recognized $57.8 million of non-cash impairment charges. Of this amount, $57.5 million related to goodwill within our United States industrial services segment and $0.3 million related to a subsidiary trade name within our United States building services segment. The goodwill impairment primarily resulted from both lower forecasted revenues and operating margins from our United States industrial services segment, which had been adversely affected by poor market conditions, predominately within its shop services operations due to: (a) a prolonged curtailment in capital spending from customers, (b) increased foreign competition and (c) economic uncertainty within certain South American markets which caused us to limit our pursuit of opportunities within such countries.

Operating income (loss)

The following table presents by segment our operating income (loss) and each segment's operating income (loss) as a percentage of such segment's revenues from unrelated entities for the years ended December 31, 2018 and 2017 (in thousands, except for percentages):

	2018	% of Segment Revenues	2017	% of Segment Revenues
Operating income (loss):				
United States electrical construction and facilities services	$ 139,430	7.1%	$ 150,001	8.2%
United States mechanical construction and facilities services	219,352	7.3%	212,396	7.2%
United States building services	93,827	5.0%	81,720	4.7%
United States industrial services	28,172	3.3%	19,084	2.4%
Total United States operations	480,781	6.2%	463,201	6.3%
United Kingdom building services	15,930	3.8%	12,905	3.8%
Corporate administration	(90,415)	—	(87,808)	—
Restructuring expenses	(2,306)	—	(1,577)	—
Impairment loss on goodwill and identifiable intangible assets	(907)	—	(57,819)	—
Total worldwide operations	403,083	5.0%	328,902	4.3%
Other corporate items:				
Net periodic pension (cost) income	2,743		1,652	
Interest expense	(13,544)		(12,770)	
Interest income	2,746		965	
Income from continuing operations before income taxes	$ 395,028		$ 318,749	

As described in more detail below, we had operating income of $403.1 million for 2018 compared to operating income of $328.9 million for 2017. Operating margin was 5.0% and 4.3% for 2018 and 2017, respectively. Operating income and operating margin increased within all of our domestic reportable segments, except for our United States electrical construction and facilities services segment. In addition, operating income increased within our United Kingdom building services segment, while operating margin remained flat.

The Company's operating income and operating margin for the year ended December 31, 2017 included $57.8 million of non-cash impairment charges, which resulted in a 0.8% negative impact on the Company's operating margin. Operating income and operating margin for the year ended December 31, 2017 benefited from the recovery of certain contract costs previously disputed on a project completed in 2016 within our United States mechanical construction and facilities services segment, which resulted in a 0.2% favorable impact on the Company's operating margin.

Operating income of our United States electrical construction and facilities services segment for the year ended December 31, 2018 was $139.4 million compared to operating income of $150.0 million for the year ended December 31, 2017. The decrease in operating income was attributable to a decrease in gross profit from institutional and healthcare construction projects, partially offset by an increase in gross profit from manufacturing, hospitality and commercial construction projects. In addition, otherwise strong performance by this segment within the transportation market sector in 2018 was negatively impacted by $10.0 million of losses incurred on a construction project in the Western region of the United States, resulting in part from contract scope issues. The decrease in operating margin was primarily due to the loss discussed above, which negatively impacted this segment's operating margin by 0.6% for the year ended December 31, 2018.

Our United States mechanical construction and facilities services segment operating income for the year ended December 31, 2018 was $219.4 million, a $7.0 million increase compared to operating income of $212.4 million for the year ended December 31, 2017. The increase in operating income for the year ended December 31, 2018 was attributable to an increase in gross profit from commercial, manufacturing and hospitality construction projects, partially offset by a decrease in gross profit from institutional and water and wastewater construction projects. A company acquired in 2017 contributed incremental operating income of $3.6 million, inclusive of $0.8 million of amortization expense associated with identifiable intangible assets. The increase in operating margin for the year ended December 31, 2018 was attributable to an increase in gross profit margin. This segment's operating income in 2017 benefited from the recovery of certain contract costs previously disputed on a project completed in 2016, which resulted in $18.1 million of gross profit and favorably impacted this segment's operating margin by 0.6%.

Operating income of our United States building services segment was $93.8 million and $81.7 million in 2018 and 2017, respectively. The increase in operating income for the year ended December 31, 2018 was due to increases in operating income from: (a) our energy services operations, due to large project activity, (b) our government site-based services operations, partially as a result of an increase in indefinite-delivery, indefinite-quantity project activity, (c) our mobile mechanical services operations, as a result of increases in gross profit from project, service and control activities, and (d) our commercial site-based operations, partially as a result of (i) scope expansion on existing contracts and (ii) an increase in snow removal activities from contracts that are based on a per snow event basis. Additionally, companies acquired in 2018 and 2017 within our mobile mechanical services division, contributed incremental operating income of $2.4 million, inclusive of $1.7 million of amortization expense associated with identifiable intangible assets, for the year ended December 31, 2018. The increase in operating margin for the year ended December 31, 2018 was attributable to an increase in gross profit margin and a decrease in the ratio of selling, general and administrative expenses to revenues.

Operating income of our United States industrial services segment for the year ended December 31, 2018 was $28.2 million, a $9.1 million increase compared to operating income of $19.1 million for the year ended December 31, 2017. The increase in operating income for the year ended December 31, 2018 was attributable to an increase in demand and improved operating performance within both our shop and field services operations. The increase in operating income from our shop services operations was due to increases in demand for new build heat exchangers, as well as our cleaning, repair and maintenance services. The increase in operating income from our field services operations was due to an increase in turnaround project activity during the second half of 2018 as this division began to recover from the negative impact of Hurricane Harvey, which resulted in the cancellation of previously scheduled turnarounds during 2017 and early 2018. The increase in operating margin was attributable to a decrease in the ratio of selling, general and administrative expenses to revenues.

Our United Kingdom building services segment's operating income for the year ended December 31, 2018 was $15.9 million compared to operating income of $12.9 million for the year ended December 31, 2017. Operating income increased primarily due to an increase in gross profit from project activity with existing customers. In addition, the results for the year ended December 31, 2018 benefited from an increase in gross profit from new contract awards within the commercial, institutional and water and wastewater market sectors. This segment's results included an increase in operating income of $0.6 million relating to the effect of favorable exchange rates for the British pound versus the United States dollar.

Our corporate administration operating loss was $90.4 million for 2018 compared to $87.8 million in 2017. The increase in corporate administration expenses for the year ended December 31, 2018 was due to an increase in consulting and other professional fees, primarily related to certain information technology and cybersecurity initiatives currently in process.

Non-operating items

Interest expense was $13.5 million and $12.8 million for 2018 and 2017, respectively. Interest income was $2.7 million and $1.0 million for 2018 and 2017, respectively. The increase in interest expense and interest income resulted from higher interest rates. The increase in interest expense was partially offset by the impact of reduced average outstanding borrowings.

For joint ventures that have been accounted for using the consolidation method of accounting, noncontrolling interests represent the allocation of earnings to our joint venture partners who either have a minority-ownership interest in the joint venture or are not at risk for the majority of losses of the joint venture.

Our 2018 income tax provision from continuing operations was $109.1 million compared to $90.7 million for 2017. The actual income tax rates on income from continuing operations before income taxes, less amounts attributable to noncontrolling interests, for the years ended December 31, 2018 and 2017, were 27.6% and 28.5%, respectively. The increase in the 2018 income tax provision was primarily due to increased income before income taxes. The decrease in the 2018 actual income tax rate was due to the net impact of the Tax Act, including the reduction of the U.S. federal corporate tax rate from 35% to 21% in 2018, offset by the benefit associated with the re-measurement of our net deferred tax liability balance in 2017.

Discontinued operations

During the third quarter of 2014, we ceased construction operations in the United Kingdom. The results of the construction operations of our United Kingdom segment for all periods are presented in the Consolidated Financial Statements as discontinued operations.

Remaining Unsatisfied Performance Obligations

The following table presents the transaction price allocated to remaining unsatisfied performance obligations ("remaining performance obligations") in accordance with Accounting Standards Codification Topic 606, "Revenue from Contracts with Customers" ("ASC 606") for each of our reportable segments and their respective percentage total of remaining performance obligations (in thousands, except for percentages):

	December 31, 2018	% of Total	September 30, 2018	% of Total
Remaining performance obligations:				
United States electrical construction and facilities services	$ 1,085,571	27%	$ 1,181,620	30%
United States mechanical construction and facilities services	2,245,584	57%	2,152,271	54%
United States building services	435,074	11%	434,386	11%
United States industrial services	67,529	2%	74,659	2%
Total United States operations	3,833,758	97%	3,842,936	97%
United Kingdom building services	130,524	3%	126,732	3%
Total worldwide operations	$ 3,964,282	100%	$ 3,969,668	100%

Our remaining performance obligations at December 31, 2018 were $3.96 billion. Remaining performance obligations increase with awards of new contracts and decrease as we perform work and recognize revenue on existing contracts. We include a project within our remaining performance obligations at such time as the project is awarded and agreement on contract terms has been reached. Our remaining performance obligations include amounts related to contracts for which a fixed price contract value is not assigned when a reasonable estimate of total transaction price can be made.

Remaining performance obligations include unrecognized revenues to be realized from uncompleted construction contracts. Although many of our construction contracts are subject to cancellation at the election of our customers, in accordance with industry practice, we do not limit the amount of unrecognized revenue included within remaining performance obligations due to the inherent substantial economic penalty that would be incurred by our customers upon cancellation. We believe our reported remaining performance obligations for our construction contracts are firm and contract cancellations have not had a material adverse effect on us.

Remaining performance obligations also include unrecognized revenues expected to be realized over the remaining term of service contracts. However, to the extent a service contract includes a cancellation clause which allows for the termination of such contract by either party without a substantive penalty, the remaining contract term, and therefore, the amount of unrecognized revenues included within remaining performance obligations, is limited to the notice period required for the termination.

Our remaining performance obligations are comprised of: (a) original contract amounts, (b) change orders for which we have received written confirmations from our customers, (c) pending change orders for which we expect to receive confirmations in the ordinary course of business, (d) claim amounts that we have made against customers for which we have determined we have a legal basis under existing contractual arrangements and as to which the variable consideration constraint does not apply, and (e) other forms of variable consideration to the extent that such variable consideration has been included within the transaction price of our contracts. Such claim and other variable consideration amounts were immaterial for all periods presented.

Our remaining performance obligations at December 31, 2018 were $3.96 billion compared to $3.97 billion at September 30, 2018. The slight decrease in remaining performance obligations at December 31, 2018 was attributable to a decrease in remaining performance obligations from our United States electrical construction and facilities services segment and our United States industrial services segment, partially offset by an increase in remaining performance obligations from our United States mechanical construction and facilities services segment.

2017 versus 2016

Overview

The following table presents selected financial data for the fiscal years ended December 31, 2017 and 2016 (in thousands, except percentages and per share data):

	2017	2016
Revenues	$ 7,686,999	$ 7,551,524
Revenues increase from prior year	1.8%	12.4%
Restructuring expenses	$ 1,577	$ 1,438
Impairment loss on goodwill and identifiable intangible assets	$ 57,819	$ 2,428
Operating income	$ 328,902	$ 306,929
Operating income as a percentage of revenues	4.3%	4.1%
Income from continuing operations	$ 228,050	$ 185,295
Net income attributable to EMCOR Group, Inc.	$ 227,196	$ 181,935
Diluted earnings per common share from continuing operations	$ 3.83	$ 3.02

The increase in revenues for 2017 was primarily attributable to incremental revenues of $192.4 million generated by companies acquired in 2017 and 2016, which are reported in our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment and our United States building services segment. Excluding the effect of these acquisitions, revenues for 2017 decreased due to lower revenues from: (a) our United States industrial services segment, due to: (i) a decrease in large project activity from our specialty services offerings within our field services operations, (ii) the negative impact of Hurricane Harvey, which resulted in the deferral and cancellation of previously scheduled turnaround projects, and (iii) our industrial shop services operations and (b) our United States building services segment, primarily attributable to: (i) the loss of certain contracts not renewed pursuant to rebid within our commercial and government site-based services operations and (ii) a reduction in large project activity within their energy services operations. These decreases in revenues were partially offset by an increase in revenues from both of our domestic construction segments and our United Kingdom building services segment.

During 2017, as a result of continued adverse market conditions, we experienced a decrease in demand for the offerings within our United States industrial services segment. Consequently, we recorded a non-cash goodwill impairment charge of $57.5 million during the fourth quarter of 2017.

Operating income and operating margin increased within all of our reportable segments, except for our United States industrial services segment. The overall increase in operating income and operating margin was mainly attributable to the results of our domestic construction segments, which were favorably impacted by an increase in gross profit within the majority of the market sectors in which we operate. In addition, our 2016 operating results were negatively impacted by: (a) $27.9 million of aggregate losses incurred on two construction projects reported within our United States mechanical construction and facilities services segment and (b) $19.4 million of losses incurred on a transportation construction project in the Northeastern region of the United States reported within our United States electrical construction and facilities services segment

Impact of Acquisitions

We acquired three companies during 2017. One company provides fire protection and alarm services primarily in the Southern region of the United States. The second company provides millwright services for manufacturing companies throughout the United States. Both of their results have been included in our United States mechanical construction and facilities services segment. The third company provides mobile mechanical services within the Western region of the United States, and its results have been included in our United States building services segment.

We completed the acquisition of Ardent Services, L.L.C. and Rabalais Constructors, LLC (collectively, "Ardent") during 2016. This acquisition has been included in our United States electrical construction and facilities services segment. Ardent provides electrical and instrumentation services to the energy infrastructure market in North America, and this acquisition further strengthens our position in electrical construction and services and broadens our capabilities across the industrial and energy sectors, especially in the Gulf Coast, Midwest and Western regions of the United States. Additionally during 2016, we acquired another company for an immaterial amount. This company provides mobile mechanical services within the Southeastern region of the United States, and its results have been included in our United States building services segment.

Companies acquired in 2017 and 2016 generated incremental revenues of $192.4 million and incremental operating income of $3.5 million, inclusive of $10.7 million of amortization expense associated with identifiable intangible assets, for the year ended December 31, 2017.

Discussion and Analysis of Results of Operations

Revenues

The following table presents our revenues for each of our operating segments and the approximate percentages that each segment's revenues were of total revenues for the years ended December 31, 2017 and 2016 (in thousands, except for percentages):

	2017	% of Total	2016	% of Total
Revenues from unrelated entities:				
United States electrical construction and facilities services	$ 1,829,567	24%	$ 1,704,403	23%
United States mechanical construction and facilities services	2,963,815	39%	2,643,321	35%
United States building services	1,753,703	23%	1,810,229	24%
United States industrial services	799,169	10%	1,067,315	14%
Total United States operations	7,346,254	96%	7,225,268	96%
United Kingdom building services	340,745	4%	326,256	4%
Total worldwide operations	$ 7,686,999	100%	$ 7,551,524	100%

As described in more detail below, revenues for 2017 were $7.7 billion compared to $7.6 billion for 2016. Increases in revenues within both of our domestic construction segments and our United Kingdom building services segment were partially offset by decreases within our United States industrial services segment and our United States building services segment. The increase in revenues for 2017 was primarily attributable to incremental revenues of $192.4 million generated by companies acquired in 2017 and 2016, which are reported in our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment and our United States building services segment.

Revenues of our United States electrical construction and facilities services segment were $1,829.6 million for the year ended December 31, 2017 compared to revenues of $1,704.4 million for the year ended December 31, 2016. The increase in revenues was primarily attributable to an increase in revenues from commercial, institutional and healthcare construction projects. The increase in revenues within the commercial market sector was primarily a result of work performed on numerous telecommunication construction projects. The results for the year ended December 31, 2017 included $50.4 million of incremental revenues generated by the acquisition of Ardent.

Our United States mechanical construction and facilities services segment revenues for the year ended December 31, 2017 were $2,963.8 million, a $320.5 million increase compared to revenues of $2,643.3 million for the year ended December 31, 2016. The increase in revenues was primarily attributable to an increase in revenues from healthcare, commercial and hospitality construction projects. The results for the year ended December 31, 2017 included $76.2 million of incremental revenues generated by companies acquired in 2017.

Revenues of our United States building services segment were $1,753.7 million and $1,810.2 million in 2017 and 2016, respectively. The decrease in revenues was primarily attributable to: (a) the loss of certain contracts not renewed pursuant to rebid within our commercial and government site-based services operations, (b) a reduction in large project activity within our energy services operations and (c) a reduction in snow removal activities within our commercial site-based services operations. These decreases were partially offset by an increase in revenues from our mobile mechanical services operations as a result of greater project, service and controls activities. The results for the year ended December 31, 2017 included $65.8 million of incremental revenues generated by companies acquired in 2017 and 2016.

Revenues of our United States industrial services segment for the year ended December 31, 2017 decreased by $268.1 million compared to the year ended December 31, 2016. The decrease in revenues was attributable to decreased large project activity from our specialty services offerings within our field services operations, as well as a continued decrease in demand for new build heat exchangers from our shop services operations. In addition, this segment's revenues were negatively impacted by Hurricane Harvey, which resulted in the deferral and cancellation of previously scheduled turnaround projects. Such decrease in turnaround projects also led to reduced repair work within our shop services operations.

Our United Kingdom building services segment revenues were $340.7 million in 2017 compared to $326.3 million in 2016. The increase in revenues was the result of new contract awards within the commercial and institutional market sectors, partially offset by a decrease in project activity with existing customers. This segment's revenues were negatively impacted by $15.9 million related to the effect of unfavorable exchange rates for the British pound versus the United States dollar. The unfavorable exchange rates for the year ended December 31, 2017 resulted, in part, from the 2016 decision by the United Kingdom to exit the European Union.

Cost of sales and Gross profit

The following table presents cost of sales, gross profit, and gross profit margin for the years ended December 31, 2017 and 2016 (in thousands, except for percentages):

	2017	2016
Cost of sales	$ 6,539,987	$ 6,513,662
Gross profit	$ 1,147,012	$ 1,037,862
Gross profit margin	14.9%	13.7%

Our gross profit for the year ended December 31, 2017 was $1,147.0 million, a $109.2 million increase compared to gross profit of $1,037.9 million for the year ended December 31, 2016. Our gross profit margin was 14.9% and 13.7% for 2017 and 2016, respectively. Gross profit and gross profit margin were favorably impacted by improved operating performance within all of our reportable segments, except for our United States industrial services segment. Gross profit and gross profit margin within our United States mechanical construction and facilities services segment for the year ended December 31, 2017 were favorably impacted by the recovery of certain contract costs previously disputed on a project that was completed in 2016, resulting in $18.1 million of gross profit and a 0.2% favorable impact on the Company's gross profit margin. In addition, the Company's gross profit and gross profit margin for the year ended December 31, 2016 were negatively impacted by $47.3 million of losses incurred on the three construction projects previously referenced, which resulted in a 0.8% negative impact on the Company's gross profit margin for the prior year.

Selling, general and administrative expenses

The following table presents selling, general and administrative expenses and SG&A margin, for the years ended December 31, 2017 and 2016 (in thousands, except for percentages):

	2017	2016
Selling, general and administrative expenses	$ 758,714	$ 727,067
Selling, general and administrative expenses as a percentage of revenues	9.9%	9.6%

Our selling, general and administrative expenses for the year ended December 31, 2017 were $758.7 million, a $31.6 million increase compared to selling, general and administrative expenses of $727.1 million for the year ended December 31, 2016. Selling, general and administrative expenses as a percentage of revenues were 9.9% and 9.6% for 2017 and 2016, respectively. The increase in selling, general and administrative expenses for the year ended December 31, 2017 included $24.4 million of incremental expenses directly related to companies acquired in 2017 and 2016, including amortization expense attributable to identifiable intangible assets of $3.9 million. In addition to the impact of acquisitions, selling, general and administrative expenses increased due to: (a) an increase in salaries, primarily within our United States mechanical construction and facilities segment, partially as a result of an increase in headcount due to higher revenues compared to the prior year, (b) an increase in incentive compensation expense due to higher annual operating results than in the same prior year period, which resulted in increased accruals for certain of our incentive compensation plans, and (c) an increase in employee healthcare costs. Our selling, general and administrative expenses for the year ended December 31, 2016 included $3.8 million of transaction costs associated with the acquisition of Ardent. The increase in SG&A margin for the year ended December 31, 2017 was due to: (a) unabsorbed overhead costs within our United States industrial services segment due to the deferral and cancellation of certain turnaround activity as a result of Hurricane Harvey and (b) an increase in both the provision for doubtful accounts and employee healthcare costs.

Restructuring expenses

Restructuring expenses, primarily relating to severance obligations, were $1.6 million and $1.4 million for 2017 and 2016, respectively. As of December 31, 2017 and 2016, the balance of restructuring related obligations yet to be paid was $0.5 million and $0.2 million, respectively. The majority of obligations outstanding as of December 31, 2017 and 2016 were paid during 2018 and 2017, respectively.

Impairment loss on goodwill and identifiable intangible assets

In conjunction with our 2017 annual impairment test, we recognized $57.8 million of non-cash impairment charges. Of this amount, $57.5 million related to goodwill within our United States industrial services segment and $0.3 million related to a subsidiary trade name within our United States building services segment. The goodwill impairment primarily resulted from both lower forecasted revenues and operating margins from our United States industrial services segment, which had been adversely affected by poor market conditions, predominately within its shop services operations due to: (a) a prolonged curtailment in capital spending from customers, (b) increased foreign competition and (c) economic uncertainty within certain South American markets which caused us to limit our pursuit of opportunities within such countries.

In conjunction with our 2016 annual impairment test, we recognized a $2.4 million non-cash impairment charge related to a subsidiary trade name within the United States mechanical construction and facilities services segment. The 2016 impairment resulted from a decrease in the hypothetical royalty rate and lower forecasted revenues from a company within this segment. No impairment of our goodwill was recognized for the year ended December 31, 2016.

Operating income (loss)

The following table presents by segment our operating income (loss) and each segment's operating income (loss) as a percentage of such segment's revenues from unrelated entities for the years ended December 31, 2017 and 2016 (in thousands, except for percentages):

	2017	% of Segment Revenues	2016	% of Segment Revenues
Operating income (loss):				
United States electrical construction and facilities services	$ 150,001	8.2%	$ 101,761	6.0%
United States mechanical construction and facilities services	212,396	7.2%	132,743	5.0%
United States building services	81,720	4.7%	77,100	4.3%
United States industrial services	19,084	2.4%	77,845	7.3%
Total United States operations	463,201	6.3%	389,449	5.4%
United Kingdom building services	12,905	3.8%	10,086	3.1%
Corporate administration	(87,808)	—	(88,740)	—
Restructuring expenses	(1,577)	—	(1,438)	—
Impairment loss on goodwill and identifiable intangible assets	(57,819)	—	(2,428)	—
Total worldwide operations	328,902	4.3%	306,929	4.1%
Other corporate items:				
Net periodic pension (cost) income	1,652		1,529	
Interest expense	(12,770)		(12,627)	
Interest income	965		663	
Income from continuing operations before income taxes	$ 318,749		$ 296,494	

As described in more detail below, we had operating income of $328.9 million for 2017 compared to operating income of $306.9 million for 2016. Operating margin was 4.3% and 4.1% for 2017 and 2016, respectively. Operating income for the year ended December 31, 2017 included $57.8 million of non-cash impairment charges, which resulted in a 0.8% negative impact on the Company's operating margin. Operating income and operating margin for the year ended December 31, 2017 benefited from the recovery of certain contract costs previously disputed on a project completed in 2016 within our United States mechanical construction and facilities services segment, which resulted in a 0.2% favorable impact on the Company's operating margin.

The Company's operating income and operating margin for the year ended December 31, 2016 were negatively impacted by $47.3 million of losses incurred on the three construction projects previously referenced, which resulted in a 0.7% negative impact on the Company's operating margin for 2016.

Operating income of our United States electrical construction and facilities services segment for the year ended December 31, 2017 was $150.0 million compared to operating income of $101.8 million for the year ended December 31, 2016. The increase in operating income was attributable to an increase in gross profit from: (a) the commercial market sector, primarily as a result of work performed on numerous telecommunication construction projects, (b) the transportation market sector, due to large project activity, and (c) construction projects within the institutional market sector. In addition, the results for the year ended December 31, 2016 included losses of $19.4 million incurred on a construction project in the Northeastern United States. The increase in operating margin for the year ended December 31, 2017 was attributable to improved operating performance, partially as a result of increased gross profit margin from numerous construction projects within the commercial and transportation market sectors.

Operating margin for the year ended December 31, 2016 was negatively impacted by 1.2% as a result of the losses incurred on the construction project previously referenced.

Our United States mechanical construction and facilities services segment operating income for the year ended December 31, 2017 was $212.4 million, a $79.7 million increase compared to operating income of $132.7 million for the year ended December 31, 2016. The increase in operating income for the year ended December 31, 2017 was attributable to an increase in gross profit from the majority of the market sectors in which we operate. Additionally, this segment's operating income benefited from the recovery of certain contract costs previously disputed on a project completed in 2016, which resulted in $18.1 million of gross profit. Companies acquired in 2017 contributed incremental operating income of $2.7 million, inclusive of $8.3 million of amortization expense associated with identifiable intangible assets. The increase in operating margin for the year ended December 31, 2017 was attributable to an increase in gross profit margin. The recovery of the previously disputed contract costs discussed above favorably impacted this segment's operating margin by 0.6% for the year ended December 31, 2017.

Operating income of our United States building services segment was $81.7 million and $77.1 million in 2017 and 2016, respectively. The increase in operating income for the year ended December 31, 2017 was due to increases in operating income from: (a) our mobile mechanical services operations, as a result of increases in gross profit from project, service and control activities, and (b) our energy services operations. The increase in operating income for our energy services operations primarily resulted from improved project execution, as the results for the year ended December 31, 2016 included a loss incurred on a large project. Additionally, companies acquired in 2017 and 2016 within our mobile mechanical services operations, contributed incremental operating income of $2.6 million, inclusive of $1.5 million of amortization expense associated with identifiable intangible assets, for the year ended December 31, 2017. The increase in operating income for the year ended December 31, 2017 was partially offset by a decrease in gross profit from our commercial site-based services operations partially due to: (a) the loss of certain contracts not renewed pursuant to rebid and (b) a reduction in snow removal activities. The increase in operating margin for the year ended December 31, 2017 was attributable to an increase in gross profit margin.

Operating income of our United States industrial services segment for the year ended December 31, 2017 was $19.1 million, a $58.8 million decrease compared to operating income of $77.8 million for the year ended December 31, 2016. The decrease in operating income for the year ended December 31, 2017 was attributable to a decrease in gross profit from: (a) our specialty services offerings within our field services operations, as a result of reduced large project activity, (b) a decrease in turnaround activity from our field services operations, partially due to Hurricane Harvey, which resulted in the deferral and cancellation of previously scheduled turnaround projects, and (c) the mix of work in our industrial shop services operations, which included fewer repair projects that generate higher gross profit margins. The decrease in operating margin was attributable to a decrease in gross profit margin and an increase in the ratio of selling, general and administrative expenses to revenues. The increase in SG&A margin for the year ended December 31, 2017 was partially the result of unabsorbed overhead costs as a result of project deferrals and cancellations due to Hurricane Harvey and lower specialty services revenues.

Our United Kingdom building services segment's operating income for the year ended December 31, 2017 was $12.9 million compared to operating income of $10.1 million for the year ended December 31, 2016. Operating income increased primarily due to an increase in gross profit from new contract awards, partially offset by a decrease in gross profit from project activity. This segment's results included a decrease in operating income of $0.3 million relating to the effect of unfavorable exchange rates for the British pound versus the United States dollar. The increase in operating margin for the year ended December 31, 2017 was attributable to an increase in gross profit margin and a decrease in SG&A margin.

Our corporate administration operating loss was $87.8 million for 2017 compared to $88.7 million in 2016. The decrease in corporate administration expenses for the year ended December 31, 2017 was primarily due to a decrease in professional fees, as the results for 2016 included $3.8 million of transaction costs associated with the acquisition of Ardent. The decrease was partially offset by an increase in software licensing costs and incentive compensation expense.

Non-operating items

Interest expense was $12.8 million and $12.6 million for 2017 and 2016, respectively. The increase in interest expense was primarily due to increased average outstanding borrowings in 2017 and a higher United States dollar LIBOR rate. Interest income was $1.0 million and $0.7 million for 2017 and 2016, respectively.

Our 2017 income tax provision from continuing operations was $90.7 million compared to $111.2 million for 2016. The actual income tax rates on income from continuing operations before income taxes, less amounts attributable to noncontrolling interests, for the years ended December 31, 2017 and 2016, were 28.5% and 37.5%, respectively. The decrease in the 2017 income tax provision compared to 2016 was predominantly due to the revaluation of the Company's net deferred tax liability balances as a result of the Tax Act, partially offset by increased income before income taxes.

Liquidity and Capital Resources

The following table presents net cash provided by (used in) operating activities, investing activities and financing activities for the years ended December 31, 2018, 2017 and 2016 (in thousands):

	2018	2017	2016
Net cash provided by operating activities	$ 271,011	$ 366,049	$ 262,372
Net cash used in investing activities	$ (117,722)	$ (138,093)	$ (270,671)
Net cash used in financing activities	$ (253,042)	$ (228,470)	$ (9,429)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	$ (3,421)	$ 3,242	$ (6,675)

Our consolidated cash balance, including cash equivalents and restricted cash, decreased by approximately $103.2 million from $469.4 million at December 31, 2017 to $366.2 million at December 31, 2018. Net cash provided by operating activities for 2018 was $271.0 million compared to $366.0 million of net cash provided by operating activities for 2017. The reduction in cash flows from operating activities was primarily due to organic revenue growth, which resulted in increased working capital levels. Net cash used in investing activities was $117.7 million for 2018 compared to net cash used in investing activities of $138.1 million for 2017. The decrease in net cash used in investing activities was primarily due to a reduction in payments for acquisitions of businesses. Net cash used in financing activities for 2018 increased by approximately $24.6 million compared to 2017 primarily due to an increase in funds used for the repurchase of common stock, partially offset by reduced debt repayments compared to the prior year. Cash flows from discontinued operations were immaterial and are not expected to significantly affect future liquidity.

Our consolidated cash balance, including cash equivalents and restricted cash, increased by approximately $2.7 million from $466.7 million at December 31, 2016 to $469.4 million at December 31, 2017. Net cash provided by operating activities for 2017 was $366.0 million compared to $262.4 million of net cash provided by operating activities for 2016. The increase in cash provided by operating activities was primarily due to a $45.0 million increase in net income and improved cash flows from accounts payable. Net cash used in investing activities was $138.1 million for 2017 compared to net cash used in investing activities of $270.7 million for 2016. The decrease in net cash used in investing activities was primarily due to a reduction in payments for acquisitions of businesses. Net cash flows from financing activities for 2017 decreased by approximately $219.0 million compared to 2016 primarily as a result of net borrowings made under our credit agreements in 2016.

The following is a summary of material contractual obligations and other commercial commitments (in millions):

	Payments Due by Period				
Contractual Obligations	Total	Less than 1 year	1-3 years	3-5 years	After 5 years
Revolving credit facility (including interest at 3.52%) (1)	$ 27.3	$ 0.9	$ 26.4	$ —	$ —
Term Loan (including interest at 3.52%) (1)	292.9	24.6	268.3	—	—
Capital lease obligations	4.4	2.1	2.0	0.3	—
Operating leases	270.1	55.8	85.9	55.9	72.5
Open purchase obligations (2)	1,200.0	1,008.9	190.4	0.7	—
Other long-term obligations, including current portion (3)	382.4	65.5	307.4	9.5	—
Total Contractual Obligations	$ 2,177.1	$ 1,157.8	$ 880.4	$ 66.4	$ 72.5

Other Commercial Commitments	Amount of Commitment Expirations by Period Total Amounts Committed	Less than 1 year	1-3 years	3-5 years	After 5 years
Letters of credit	$ 109.0	$ 109.0	$ —	$ —	$ —

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(1) On August 3, 2016, we entered into a $900.0 million revolving credit facility (the "2016 Revolving Credit Facility") and a $400.0 million term loan (the "2016 Term Loan") (collectively referred to as the "2016 Credit Agreement"). As of December 31, 2018, the amount outstanding under the 2016 Term Loan was $269.6 million. As of December 31, 2018, there were borrowings outstanding of $25.0 million under the 2016 Revolving Credit Facility.

(2) Represents open purchase orders for material and subcontracting costs related to construction and service contracts. These purchase orders are not reflected in the Consolidated Balance Sheets and should not impact future cash flows, as amounts should be recovered through customer billings.

(3) Represents primarily insurance related liabilities, and liabilities for deferred income taxes, incentive compensation and deferred compensation, classified as other long-term liabilities in the Consolidated Balance Sheets. Cash payments for insurance and deferred compensation related liabilities may be payable beyond three years, but it is not practical to estimate these payments; therefore, these liabilities are reflected in the 1-3 years payment period. We provide funding to our post retirement plans based on at least the minimum funding required by applicable regulations. In determining the minimum required funding, we utilize current actuarial assumptions and exchange rates to forecast estimates of amounts that may be payable for up to five years in the future. In our judgment, minimum funding estimates beyond a five year time horizon cannot be reliably estimated, and therefore, have not been included in the table.

We have a credit agreement dated as of August 3, 2016, which provides for a $900.0 million revolving credit facility (the "2016 Revolving Credit Facility") and a $400.0 million term loan (the "2016 Term Loan") (collectively referred to as the "2016 Credit Agreement") expiring August 3, 2021. We may increase the 2016 Revolving Credit Facility to $1.3 billion if additional lenders are identified and/or existing lenders are willing to increase their current commitments. We may allocate up to $300.0 million of available capacity under the 2016 Revolving Credit Facility to letters of credit for our account or for the account of any of our subsidiaries. Obligations under the 2016 Credit Agreement are guaranteed by most of our direct and indirect subsidiaries and are secured by substantially all of our assets. The 2016 Credit Agreement contains various covenants providing for, among other things, maintenance of certain financial ratios and certain limitations on payment of dividends, common stock repurchases, investments, acquisitions, indebtedness and capital expenditures. We were in compliance with all such covenants as of December 31, 2018 and 2017. A commitment fee is payable on the average daily unused amount of the 2016 Revolving Credit Facility, which ranges from 0.15% to 0.30%, based on certain financial tests. The fee was 0.15% of the unused amount as of December 31, 2018. Borrowings under the 2016 Credit Agreement bear interest at (1) a base rate plus a margin of 0.00% to 0.75%, based on certain financial tests, or (2) United States dollar LIBOR (2.52% at December 31, 2018) plus 1.00% to 1.75%, based on certain financial tests. The base rate is determined by the greater of (a) the prime commercial lending rate announced by Bank of Montreal from time to time (5.50% at December 31, 2018), (b) the federal funds effective rate, plus ½ of 1.00%, (c) the daily one month LIBOR rate, plus 1.00%, or (d) 0.00%. The interest rate in effect at December 31, 2018 was 3.52% . Fees for letters of credit issued under the 2016 Revolving Credit Facility range from 1.00% to 1.75% of the respective face amounts of outstanding letters of credit and are computed based on certain financial tests. Debt issuance costs are amortized over the life of the agreement and are included as part of interest expense. The 2016 Term Loan previously required us to make principal payments of $5.0 million on the last day of March, June, September and December of each year, which commenced with the calendar quarter ended December 31, 2016. On December 30, 2016, we made a payment of $100.0 million, of which $5.0 million represented our required quarterly payment and $95.0 million represented a prepayment of outstanding principal. Such prepayment was applied against the remaining mandatory quarterly payments on a ratable basis. As a result, commencing with the calendar quarter ended March 31, 2017, our required quarterly payment has been reduced to $3.8 million. All unpaid principal and interest is due on August 3, 2021. As of December 31, 2018 and 2017, the balance of the 2016 Term Loan was $269.6 million and $284.8 million, respectively. As of December 31, 2018 and 2017, we had approximately $109.0 million and $110.1 million of letters of credit outstanding, respectively. There were $25.0 million in borrowings outstanding under the 2016 Revolving Credit Facility as of December 31, 2018 and 2017.

The terms of our construction contracts frequently require that we obtain from surety companies ("Surety Companies") and provide to our customers payment and performance bonds ("Surety Bonds") as a condition to the award of such contracts. The Surety Bonds secure our payment and performance obligations under such contracts, and we have agreed to indemnify the Surety Companies for amounts, if any, paid by them in respect of Surety Bonds issued on our behalf. In addition, at the request of labor unions representing certain of our employees, Surety Bonds are sometimes provided to secure obligations for wages and benefits payable to or for such employees. Public sector contracts require Surety Bonds more frequently than private sector contracts and, accordingly, our bonding requirements typically increase as the amount of public sector work increases. As of December 31, 2018, based on the percentage-of-completion of our projects covered by Surety Bonds, our aggregate estimated exposure, assuming defaults on all our then existing contractual obligations, was approximately $1.1 billion, which represents approximately 28% of our total remaining performance obligations. The Surety Bonds are issued by Surety Companies in return for premiums, which vary depending on the size and type of bond.

From time to time, we discuss with our current and other Surety Bond providers the amounts of Surety Bonds that may be available to us based on our financial strength and the absence of any default by us on any Surety Bond issued on our behalf and believe those amounts are currently adequate for our needs. However, if we experience changes in our bonding relationships or if there are adverse changes in the surety industry, we may (i) seek to satisfy certain customer requests for Surety Bonds by posting other forms of collateral in lieu of Surety Bonds, such as letters of credit, parent company guarantees or cash, in order to convince customers to forego the requirement for Surety Bonds, (ii) increase our activities in our business segments that rarely require Surety Bonds, such as our building and industrial services segments, and/or (iii) refrain from bidding for certain projects that require Surety Bonds. There can be no assurance that we would be able to effectuate alternatives to providing Surety Bonds to our customers or to obtain, on favorable terms, sufficient additional work that does not require Surety Bonds. Accordingly, if we were to experience a reduction in the availability of Surety Bonds, we could experience a material adverse effect on our financial position, results of operations and/or cash flows.

In the ordinary course of business, we, at times, guarantee obligations of our subsidiaries under certain contracts. Generally, we are liable under such an arrangement only if our subsidiary fails to perform its obligations under the contract. Historically, we have not incurred any substantial liabilities as a consequence of these guarantees.

We do not have any other material financial guarantees or off-balance sheet arrangements other than those disclosed herein.

We are a party to lawsuits and other proceedings in which other parties seek to recover from us amounts ranging from a few thousand dollars to over $10.0 million. We do not believe that any such matters will have a material adverse effect on our financial position, results of operations or liquidity.

On September 26, 2011, our Board of Directors authorized us to repurchase up to $100.0 million of our outstanding common stock. On December 5, 2013, October 23, 2014, October 28, 2015, October 25, 2017 and October 23, 2018, our Board of Directors authorized us to repurchase up to an additional $100.0 million, $250.0 million, $200.0 million, $100.0 million and $200.0 million of our outstanding common stock, respectively. During 2018, we repurchased approximately 3.1 million shares of our common stock for approximately $216.2 million. Since the inception of the repurchase programs through December 31, 2018 we have repurchased approximately 15.9 million shares of our common stock for approximately $791.5 million. As of December 31, 2018, there remained authorization for us to repurchase approximately $158.5 million of our shares. The repurchase programs have no expiration date and do not obligate the Company to acquire any particular amount of common stock and may be suspended, recommenced or discontinued at any time or from time to time without prior notice. We may repurchase our shares from time to time to the extent permitted by securities laws and other legal requirements, including provisions in our 2016 Credit Agreement, placing limitations on such repurchases. The repurchase programs have been and will be funded from our operations.

We have paid quarterly dividends since October 25, 2011. We currently pay a regular quarterly dividend of $0.08 per share. Our 2016 Credit Agreement places limitations on the payment of dividends on our common stock. However, we do not believe that the terms of such agreement currently materially limit our ability to pay a quarterly dividend of $0.08 per share for the foreseeable future. The payment of dividends has been and will be funded from our operations.

Our primary source of liquidity has been, and is expected to continue to be, cash generated by operating activities. We also maintain our 2016 Revolving Credit Facility that may be utilized, among other things, to meet short-term liquidity needs in the event cash generated by operating activities is insufficient or to enable us to participate in joint ventures or to make acquisitions that may require access to cash on short notice or for any other reason. Negative macroeconomic trends may have an adverse effect on liquidity. During economic downturns, there have typically been fewer small discretionary projects from the private sector, and our competitors have aggressively bid larger long-term infrastructure and public sector contracts. Short-term liquidity is also impacted by the type and length of construction contracts in place and large turnaround activities in our United States industrial services segment that are billed in arrears pursuant to contractual terms that are standard within the industry. Performance of long duration contracts typically requires greater amounts of working capital. While we strive to negotiate favorable billing terms which allow us to invoice in advance of costs incurred on certain of our contracts, there can be no assurance that such terms will be agreed to by our customers.

Long-term liquidity requirements can be expected to be met initially through cash generated from operating activities and our 2016 Revolving Credit Facility. Based upon our current credit ratings and financial position, we can reasonably expect to be able to incur long-term debt to fund acquisitions. Over the long term, our primary revenue risk factor continues to be the level of demand for non-residential construction services and for building and industrial services, which is influenced by macroeconomic trends including interest rates and governmental economic policy. In addition, our ability to perform work is critical to meeting long-term liquidity requirements.

We believe that our current cash balances and our borrowing capacity available under our 2016 Revolving Credit Facility or other forms of financing available to us through borrowings, combined with cash expected to be generated from operations, will be sufficient to provide short-term and foreseeable long-term liquidity and meet our expected capital expenditure requirements.

Certain Insurance Matters

As of December 31, 2018 and 2017, we utilized approximately $108.9 million and $109.7 million, respectively, of letters of credit obtained under our 2016 Revolving Credit Facility as collateral for insurance obligations.

New Accounting Pronouncements

We review new accounting standards to determine the expected impact, if any, that the adoption of such standards will have on our financial position and/or results of operations. See Note 2 - Summary of Significant Accounting Policies of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for further information regarding new accounting standards, including the anticipated dates of adoption and the effects on our consolidated financial position, results of operations or liquidity.

Application of Critical Accounting Policies

Our consolidated financial statements are based on the application of significant accounting policies, which require management to make significant estimates and assumptions. Our significant accounting policies are described in Note 2 - Summary of Significant Accounting Policies of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data of this Form 10-K. We believe that some of the more critical judgment areas in the application of accounting policies that affect our financial condition and results of operations are the impact of changes in the estimates and judgments pertaining to: (a) revenue recognition from contracts with customers; (b) collectibility or valuation of accounts receivable; (c) insurance liabilities; (d) income taxes; and (e) goodwill and identifiable intangible assets.

Revenue Recognition from Contracts with Customers

We believe our most critical accounting policy is revenue recognition in accordance with ASC 606. ASC 606 aligns revenue recognition with the timing of when promised goods or services are transferred to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. This core principle is achieved through the application of the following five step model: (1) identify the contract with a customer, (2) identify the performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price to performance obligations in the contract, and (5) recognize revenue as performance obligations are satisfied.

The Company recognizes revenue at the time the related performance obligation is satisfied by transferring a promised good or service to its customers. A good or service is considered to be transferred when the customer obtains control. The Company can transfer control of a good or service and satisfy its performance obligations either over time or at a point in time. The Company transfers control of a good or service over time and, therefore, satisfies a performance obligation and recognizes revenue over time if one of the following three criteria are met: (a) the customer simultaneously receives and consumes the benefits provided by the Company's performance as we perform, (b) the Company's performance creates or enhances an asset that the customer controls as the asset is created or enhanced, or (c) the Company's performance does not create an asset with an alternative use to us, and we have an enforceable right to payment for performance completed to date.

For our performance obligations satisfied over time, we recognize revenue by measuring the progress toward complete satisfaction of that performance obligation. The selection of the method to measure progress towards completion can be either an input method or an output method and requires judgment based on the nature of the goods or services to be provided.

For our construction contracts, revenue is generally recognized over time as our performance creates or enhances an asset that the customer controls as it is created or enhanced. Our fixed price construction projects generally use a cost-to-cost input method to measure our progress towards complete satisfaction of the performance obligation as we believe it best depicts the transfer of control to the customer which occurs as we incur costs on our contracts. Under the cost-to-cost measure of progress, the extent of progress towards completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the performance obligation. For our unit price construction contracts, progress towards complete satisfaction is measured through an output method, such as the amount of units produced or delivered, when our performance does not produce significant amounts of work in process or finished goods prior to complete satisfaction of such performance obligations.

For our services contracts, revenue is also generally recognized over time as the customer simultaneously receives and consumes the benefits of our performance as we perform the service. For our fixed price service contracts with specified service periods, revenue is generally recognized on a straight-line basis over such service period when our inputs are expended evenly, and the customer receives and consumes the benefits of our performance throughout the contract term.

The timing of revenue recognition for the manufacturing of new build heat exchangers within our United States industrial services segment depends on the payment terms of the contract, as our performance does not create an asset with an alternative use to us. For those contracts for which we have a right to payment for performance completed to date at all times throughout our performance, inclusive of a cancellation, we recognize revenue over time. These performance obligations use a cost-to-cost input method to measure our progress towards complete satisfaction of the performance obligation as we believe it best depicts the transfer of control to the customer which occurs as we incur costs on our contracts. However, for those contracts for which we do not have a right, at all times, to payment for performance completed to date, we recognize revenue at the point in time when control is transferred to the customer. For bill-and-hold arrangements, revenue is recognized when the customer obtains control of the heat exchanger, which may be prior to shipping, if the criteria of ASC 606 are met.

For certain of our revenue streams, such as call-out repair and service work, outage services, refinery turnarounds and specialty welding services that are performed under time and materials contracts, our progress towards complete satisfaction of such performance obligations is measured using an output method as the customer receives and consumes the benefits of our performance completed to date.

Due to uncertainties inherent in the estimation process, it is possible that estimates of costs to complete a performance obligation will be revised in the near-term. For those performance obligations for which revenue is recognized using a cost-to-cost input method, changes in total estimated costs, and related progress towards complete satisfaction of the performance obligation, are recognized on a cumulative catch-up basis in the period in which the revisions to the estimates are made. When the current estimate of total costs for a performance obligation indicate a loss, a provision for the entire estimated loss on the unsatisfied performance obligation is made in the period in which the loss becomes evident. During the year ended December 31, 2018, we recognized losses of $10.0 million related to a change in total estimated costs on a transportation project within our United States electrical construction and facilities services segment, resulting in part from contract scope issues. There were no other changes in total estimated costs that resulted in a significant impact to our operating results for the years ended December 31, 2018 and 2017.

The timing of revenue recognition may differ from the timing of invoicing to customers. Contract assets include unbilled amounts from our long-term construction projects when revenues recognized under the cost-to-cost measure of progress exceed the amounts invoiced to our customers, as the amounts cannot be billed under the terms of our contracts. Such amounts are recoverable from our customers based upon various measures of performance, including achievement of certain milestones, completion of specified units or completion of a contract. In addition, many of our time and materials arrangements, as well as our contracts to perform turnaround services within the United States industrial services segment, are billed in arrears pursuant to contract terms that are standard within the industry, resulting in contract assets and/or unbilled receivables being recorded, as revenue is recognized in advance of billings. Also included in contract assets are amounts we seek or will seek to collect from customers or others for errors or changes in contract specifications or design, contract change orders or modifications in dispute or unapproved as to both scope and/or price, or other customer-related causes of unanticipated additional contract costs (claims and unapproved change orders). Our contract assets do not include capitalized costs to obtain and fulfill a contract. Contract assets are generally classified as current within the Consolidated Balance Sheets.

As of December 31, 2018 and 2017, contract assets included unbilled revenues for unapproved change orders of approximately $25.2 million and $17.4 million, respectively. As of December 31, 2018 and 2017, there were no claim amounts included within contract assets or accounts receivable. There were contractually billed amounts and retention related to contracts with unapproved change orders and claims of approximately $96.1 million and $57.6 million as of December 31, 2018 and 2017, respectively. For contracts in claim status, contractually billed amounts will generally not be paid by the customer to us until final resolution of related claims.

Contract liabilities from our long-term construction contracts arise when amounts invoiced to our customers exceed revenues recognized under the cost-to-cost measure of progress. Contract liabilities additionally include advanced payments from our customers on certain contracts. Contract liabilities decrease as we recognize revenue from the satisfaction of the related performance obligation and are recorded as either current or long-term, depending upon when we expect to recognize such revenue. The long-term portion of contract liabilities is included in "Other long-term obligations" in the Consolidated Balance Sheets.

See Note 3 - Revenue from Contracts with Customers of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for further disclosure regarding revenue recognition.

Accounts Receivable

Accounts receivable are recognized in the period we deliver goods or provide services to our customers or when our right to consideration is unconditional. We are required to estimate the collectibility of accounts receivable. A considerable amount of judgment is required in assessing the likelihood of realization of receivables. Relevant assessment factors include the creditworthiness of the customer, our prior collection history with the customer and related aging of the past due balances. The provision for doubtful accounts during 2018, 2017 and 2016 amounted to approximately $2.1 million, $7.3 million and $6.2 million, respectively. At December 31, 2018 and 2017, our accounts receivable of $1,773.6 million and $1,607.9 million, respectively, were recorded net of allowances for doubtful accounts of $15.4 million and $17.2 million, respectively. The decrease in our allowance for doubtful accounts was primarily due to the write-off of previously reserved accounts receivable. Specific accounts receivable are evaluated when we believe a customer may not be able to meet its financial obligations due to deterioration of its financial condition or its credit ratings. The allowance for doubtful accounts requirements are based on the best facts available and are re-evaluated and adjusted on a regular basis as additional information is received.

Insurance Liabilities

We have loss payment deductibles for certain workers' compensation, automobile liability, general liability and property claims, have self-insured retentions for certain other casualty claims and are self-insured for employee-related healthcare claims. In addition, we maintain a wholly-owned captive insurance subsidiary to manage certain of our insurance liabilities. Losses are recorded based upon estimates of our liability for claims incurred and for claims incurred but not reported. The liabilities are derived from known facts, historical trends and industry averages utilizing the assistance of an actuary to determine the best estimate for the majority of these obligations. We believe the liabilities recognized on the Consolidated Balance Sheets for these obligations are adequate. However, such obligations are difficult to assess and estimate due to numerous factors, including severity of injury, determination of liability in proportion to other parties, timely reporting of occurrences and effectiveness of safety and risk management programs. Therefore, if our actual experience differs from the assumptions and estimates used for recording the liabilities, adjustments may be required and will be recorded in the period that the experience becomes known. Our estimated net insurance liabilities for workers' compensation, automobile liability, general liability and property claims increased by $4.7 million for the year ended December 31, 2018 compared to the year ended December 31, 2017, primarily due to a change in the actuarial assumptions for the most recent policy year. If our estimated insurance liabilities for workers' compensation, automobile liability, general liability and property claims were to increase by 10%, it would have resulted in $16.2 million of additional expense for the year ended December 31, 2018.

Income Taxes

We had net deferred income tax liabilities at December 31, 2018 and 2017 of $70.8 million and $64.7 million, respectively, primarily resulting from differences between the carrying value and income tax basis of certain identifiable intangible assets and depreciable fixed assets, which will impact our taxable income in future periods. Included within these net deferred income tax liabilities are $104.1 million and $105.6 million of deferred income tax assets as of December 31, 2018 and 2017, respectively. A valuation allowance is required when it is more likely than not that all or a portion of a deferred income tax asset will not be realized. As of December 31, 2018 and 2017, the total valuation allowance on deferred income tax assets, related to state net operating loss carryforwards, was approximately $3.9 million and $3.8 million, respectively. The ultimate realization of deferred income tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Based on our taxable income, which has generally exceeded the amount of our net deferred tax asset balance and projections of future taxable income, we have determined that it is more likely than not that the net deferred income tax assets will be realized.

Goodwill and Identifiable Intangible Assets

As of December 31, 2018, we had $990.9 million and $488.3 million, respectively, of goodwill and net identifiable intangible assets (primarily consisting of our contract backlog, developed technology/vendor network, customer relationships, non-competition agreements and trade names) arising out of the acquisition of companies. As of December 31, 2017, goodwill and net identifiable intangible assets were $964.9 million and $495.0 million, respectively. As of December 31, 2018, approximately 13.4% of our goodwill related to our United States electrical construction and facilities services segment, approximately 25.9% of our goodwill related to our United States mechanical construction and facilities services segment, approximately 27.7% of our goodwill related to our United States building services segment and approximately 33.0% of our goodwill related to our United States industrial services segment. The changes to goodwill since December 31, 2017 were related to four acquisitions in 2018 and a purchase price adjustment related to an acquisition completed in 2017. The determination of related estimated useful lives for identifiable intangible assets and whether those assets are impaired involves significant judgments based upon short and long-term projections of future performance. These forecasts reflect assumptions regarding the ability to successfully integrate acquired companies, as well as macroeconomic conditions. ASC Topic 350, "Intangibles-Goodwill and Other" ("ASC 350") requires that goodwill and other identifiable intangible assets with indefinite useful lives not be amortized, but instead tested at least annually for impairment (which we test each October 1, absent any impairment indicators), and be written down if impaired. ASC 350 requires that goodwill be allocated to its respective reporting unit and that identifiable intangible assets with finite lives be amortized over their useful lives.

We test for impairment of our goodwill at the reporting unit level. Our reporting units are consistent with the reportable segments identified in Note 18, "Segment Information", of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data. In assessing whether our goodwill is impaired, we compare the fair value of the reporting unit to the carrying amount, including goodwill. If the fair value exceeds the carrying amount, no impairment loss is recognized. However, if the carrying amount of the reporting unit exceeds the fair value, the goodwill of the reporting unit is impaired and an impairment loss in the amount of the excess is recognized and charged to operations. The fair value of each of our reporting units is generally determined using discounted estimated future cash flows; however, in certain circumstances, consideration is given to a market approach whereby fair value is measured based on a multiple of earnings.

As of the date of our latest impairment test (October 1, 2018), the carrying values of our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment, our United States building services segment and our United States industrial services segment were approximately $251.2 million, $398.8 million, $499.5 million and $657.5 million, respectively. The fair values of our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment, our United States building services segment and our United States industrial services segment exceeded their carrying values by approximately $1,203.0 million, $1,710.9 million, $628.2 million and $81.2 million, respectively.

During our annual impairment testing procedures as of October 1, 2017, and as a result of continued adverse market conditions, we tempered our expectations regarding the strength of a near-term recovery within our United States industrial services segment. As a result of our revised projections, the fair value of this segment fell short of its carrying value resulting in the recognition of a non-cash impairment charge of $57.5 million for the year ended December 31, 2017. For the years ended December 31, 2018 and 2016, no impairment of our goodwill was recognized.

The weighted average cost of capital used in our annual testing for impairment as of October 1, 2018 was 9.8%, 9.7% and 10.5% for our domestic construction segments, our United States building services segment and our United States industrial services segment, respectively. The perpetual growth rate used for our annual testing was 2.7% for all of our domestic segments. Unfavorable changes in these key assumptions may affect future testing results. For example, keeping all other assumptions constant, a 50 basis point increase in the weighted average costs of capital would cause the estimated fair values of our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment, our United States building services segment and our United States industrial services segment to decrease by approximately $91.7 million, $132.4 million, $71.2 million, and $46.4 million, respectively. In addition, keeping all other assumptions constant, a 50 basis point reduction in the perpetual growth rate would cause the estimated fair values of our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment, our United States building services segment and our United States industrial services segment to decrease by approximately $52.5 million, $74.1 million, $38.3 million, and $23.3 million, respectively.

We also test for the impairment of trade names that are not subject to amortization by calculating the fair value using the "relief from royalty payments" methodology. This approach involves two steps: (a) estimating reasonable royalty rates for each trade name and (b) applying these royalty rates to a net revenue stream and discounting the resulting cash flows to determine fair value. This fair value is then compared with the carrying value of each trade name. If the carrying amount of the trade name is greater than the implied fair value of the trade name, an impairment in the amount of the excess is recognized and charged to operations. For the year ended December 31, 2018, no impairment of our indefinite-lived trade names was recognized. The annual impairment review of our indefinite-lived trade names for the years ended December 31, 2017 and 2016 resulted in $0.3 million and $2.4 million, respectively, of non-cash impairment charges as a result of a change in the fair value of subsidiary trade names associated with certain prior acquisitions reported within our United States building services segment and our United States mechanical construction and facilities services segment, respectively.

In addition, we review for the impairment of other identifiable intangible assets that are being amortized whenever facts and circumstances indicate that their carrying values may not be fully recoverable. This test compares their carrying values to the undiscounted pre-tax cash flows expected to result from the use of the assets. If the assets are impaired, the assets are written down to their fair values, generally determined based on their future discounted cash flows. For the year ended December 31, 2018, we recorded a $0.9 million non-cash impairment charge associated with a finite-lived trade name within our United States industrial services segment. For the years ended December 31, 2017 and 2016, no impairment of our other identifiable intangible assets was recognized.

As referenced above, we have certain businesses, particularly within our United States industrial services segment, whose results are highly impacted by the demand for some of our offerings within the industrial and oil and gas markets. Future performance of this segment, along with a continued evaluation of the conditions of its end user markets, will be important to ongoing impairment assessments. Should this segment's actual results suffer a decline or expected future results be revised downward, the risk of goodwill impairment or impairment of other identifiable intangible assets would increase.

Our development of the present value of future cash flow projections used in impairment testing is based upon assumptions and estimates by management from a review of our operating results, business plans, anticipated growth rates and margins, and weighted average cost of capital, among other considerations. Those assumptions and estimates can change in future periods, and other factors used in assessing fair value are outside the control of management, such as interest rates. There can be no assurance that estimates and assumptions made for purposes of our goodwill and identifiable intangible asset impairment testing will prove to be accurate predictions of the future. If our assumptions regarding future business performance or anticipated growth rates and/or margins are not achieved, or there is a rise in interest rates, we may be required to record goodwill and/or identifiable intangible asset impairment charges in future periods.

It is not possible at this time to determine if any future impairment charge will result or, if it does, whether such a charge would be material.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We have not used any derivative financial instruments during the years ended December 31, 2018 and 2017, including trading or speculating on changes in interest rates or commodity prices of materials used in our business.

We are exposed to market risk for changes in interest rates for borrowings under the 2016 Credit Agreement, which provides for a revolving credit facility and a term loan. Borrowings under the 2016 Credit Agreement bear interest at variable rates. For further information on borrowing rates and interest rate sensitivity, refer to the Liquidity and Capital Resources discussion in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations. As of December 31, 2018, there were borrowings of $25.0 million outstanding under the 2016 Revolving Credit Facility and the balance of the 2016 Term Loan was $269.6 million. Based on the $294.6 million borrowings outstanding under the 2016 Credit Agreement, if overall interest rates were to increase by 100 basis points, interest expense, net of income taxes, would increase by approximately $2.2 million for the next twelve months. Conversely, if overall interest rates were to decrease by 100 basis points, interest expense, net of income taxes, would decrease by approximately $2.2 million for the next twelve months.

We are also exposed to construction market risk and its potential related impact on accounts receivable or contract assets on uncompleted contracts. The amounts recorded may be at risk if our customers' ability to pay these obligations is negatively impacted by economic conditions. We continually monitor the creditworthiness of our customers and maintain ongoing discussions with customers regarding contract status with respect to change orders and billing terms. Therefore, we believe we take appropriate action to manage market and other risks, but there is no assurance that we will be able to reasonably identify all risks with respect to the collectibility of these assets. See also the previous discussions of Revenue Recognition from Contracts with Customers and Accounts Receivable under Application of Critical Accounting Policies in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Amounts invested in our foreign operations are translated into U.S. dollars at the exchange rates in effect at year end. The resulting translation adjustments are recorded as accumulated other comprehensive income (loss), a component of equity, in the Consolidated Balance Sheets. We believe the exposure to the effects that fluctuating foreign currencies may have on our consolidated results of operations is limited because our foreign operations primarily invoice customers and collect obligations in their respective local currencies. Additionally, expenses associated with these transactions are generally contracted and paid for in their same local currencies.

In addition, we are exposed to market risk of fluctuations in certain commodity prices of materials, such as copper and steel, which are used as components of supplies or materials utilized in our construction, building services and industrial services operations. We are also exposed to increases in energy prices, particularly as they relate to gasoline prices for our fleet of approximately 11,000 vehicles. While we believe we can increase our contract prices to adjust for some price increases in commodities, there can be no assurance that such price increases, if they were to occur, would be recoverable. Additionally, our fixed price contracts do not allow us to adjust our prices and, as a result, increases in material costs could reduce our profitability with respect to projects in progress.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

EMCOR Group, Inc. and Subsidiaries

CONSOLIDATED BALANCE SHEETS

(In thousands, except share and per share data)

	December 31, 2018	December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	$ 363,907	$ 467,430
Accounts receivable, less allowance for doubtful accounts of $15,361 and $17,230, respectively	1,773,620	1,607,922
Contract assets	158,243	122,621
Inventories	42,321	42,724
Prepaid expenses and other	48,116	43,812
Total current assets	2,386,207	2,284,509
Investments, notes and other long-term receivables	2,899	2,309
Property, plant and equipment, net	134,351	127,156
Goodwill	990,887	964,893
Identifiable intangible assets, net	488,286	495,036
Other assets	86,177	92,001
Total assets	$ 4,088,807	$ 3,965,904
LIABILITIES AND EQUITY		
Current liabilities:		
Current maturities of long-term debt and capital lease obligations	$ 16,013	$ 15,364
Accounts payable	652,091	567,840
Contract liabilities	552,290	524,156
Accrued payroll and benefits	343,069	322,865
Other accrued expenses and liabilities	170,935	220,727
Total current liabilities	1,734,398	1,650,952
Borrowings under revolving credit facility	25,000	25,000
Long-term debt and capital lease obligations	254,764	269,786
Other long-term obligations	333,204	346,049
Total liabilities	2,347,366	2,291,787
Equity:		
EMCOR Group, Inc. stockholders' equity:		
Preferred stock, $0.10 par value, 1,000,000 shares authorized, zero issued and outstanding	—	—
Common stock, $0.01 par value, 200,000,000 shares authorized, 60,123,184 and 59,870,980 shares issued, respectively	601	599
Capital surplus	21,103	8,005
Accumulated other comprehensive loss	(87,662)	(94,200)
Retained earnings	2,060,440	1,796,556
Treasury stock, at cost 4,139,421 and 1,072,552 shares, respectively	(253,937)	(37,693)
Total EMCOR Group, Inc. stockholders' equity	1,740,545	1,673,267
Noncontrolling interests	896	850
Total equity	1,741,441	1,674,117
Total liabilities and equity	$ 4,088,807	$ 3,965,904

The accompanying notes to consolidated financial statements are an integral part of these statements.

EMCOR Group, Inc. and Subsidiaries

CONSOLIDATED STATEMENTS OF OPERATIONS
For The Years Ended December 31,
(In thousands, except per share data)

	2018	2017	2016
Revenues	$ 8,130,631	$ 7,686,999	$ 7,551,524
Cost of sales	6,925,178	6,539,987	6,513,662
Gross profit	1,205,453	1,147,012	1,037,862
Selling, general and administrative expenses	799,157	758,714	727,067
Restructuring expenses	2,306	1,577	1,438
Impairment loss on goodwill and identifiable intangible assets	907	57,819	2,428
Operating income	403,083	328,902	306,929
Net periodic pension (cost) income	2,743	1,652	1,529
Interest expense	(13,544)	(12,770)	(12,627)
Interest income	2,746	965	663
Income from continuing operations before income taxes	395,028	318,749	296,494
Income tax provision	109,106	90,699	111,199
Income from continuing operations	285,922	228,050	185,295
Loss from discontinued operation, net of income taxes	(2,345)	(857)	(3,142)
Net income including noncontrolling interests	283,577	227,193	182,153
Less: Net (income) loss attributable to noncontrolling interests	(46)	3	(218)
Net income attributable to EMCOR Group, Inc.	$ 283,531	$ 227,196	$ 181,935
Basic earnings (loss) per common share:			
From continuing operations attributable to EMCOR Group, Inc. common stockholders	$ 4.92	$ 3.85	$ 3.05
From discontinued operation	(0.04)	(0.01)	(0.05)
Net income attributable to EMCOR Group, Inc. common stockholders	$ 4.88	$ 3.84	$ 3.00
Diluted earnings (loss) per common share:			
From continuing operations attributable to EMCOR Group, Inc. common stockholders	$ 4.89	$ 3.83	$ 3.02
From discontinued operation	(0.04)	(0.01)	(0.05)
Net income attributable to EMCOR Group, Inc. common stockholders	$ 4.85	$ 3.82	$ 2.97
Dividends declared per common share	$ 0.32	$ 0.32	$ 0.32

The accompanying notes to consolidated financial statements are an integral part of these statements.

EMCOR Group, Inc. and Subsidiaries

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
For The Years Ended December 31,
(In thousands)

	2018	2017	2016
Net income including noncontrolling interests	$ 283,577	$ 227,193	$ 182,153
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustments	(1,322)	(1,384)	(1,434)
Changes in post retirement plans [1]	7,860	8,887	(23,316)
Other comprehensive income (loss)	6,538	7,503	(24,750)
Comprehensive income	290,115	234,696	157,403
Less: Comprehensive (income) loss attributable to noncontrolling interests	(46)	3	(218)
Comprehensive income attributable to EMCOR Group, Inc.	$ 290,069	$ 234,699	$ 157,185

(1) Net of tax (provision) benefit of $(2.1) million, $(1.8) million and $5.1 million for the years ended December 31, 2018, 2017 and 2016, respectively.

The accompanying notes to consolidated financial statements are an integral part of these statements.

EMCOR Group, Inc. and Subsidiaries

CONSOLIDATED STATEMENTS OF CASH FLOWS
For The Years Ended December 31,
(In thousands)

	2018	2017	2016
Cash flows - operating activities:			
Net income including noncontrolling interests	$ 283,577	$ 227,193	$ 182,153
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	38,472	39,915	38,881
Amortization of identifiable intangible assets	42,443	48,594	40,908
Provision for doubtful accounts	2,123	7,264	6,194
Deferred income taxes	4,249	(53,358)	(8,108)
Gain on sale of property, plant and equipment	(517)	(1,846)	(330)
Excess tax benefits from share-based compensation	(1,646)	(1,616)	(2,546)
Equity income from unconsolidated entities	(347)	(864)	(1,569)
Non-cash expense for amortization of debt issuance costs	1,186	1,186	1,354
Non-cash expense from contingent consideration arrangements	186	317	—
Non-cash expense for impairment of goodwill and identifiable intangible assets	907	57,819	2,428
Non-cash share-based compensation expense	11,030	9,939	8,902
Non-cash income from changes in unrecognized tax benefits	(72)	(5,641)	(759)
Distributions from unconsolidated entities	3,110	5,506	1,247
Changes in operating assets and liabilities, excluding the effect of businesses acquired:			
Increase in accounts receivable	(146,101)	(80,514)	(98,773)
(Increase) decrease in inventories	(3,915)	(4,936)	954
(Increase) decrease in contract assets	(30,935)	12,433	(7,851)
Increase in accounts payable	78,554	54,910	13,141
Increase in contract liabilities	20,726	24,695	57,244
(Decrease) increase in accrued payroll and benefits and other accrued expenses and liabilities	(24,715)	24,017	22,659
Changes in other assets and liabilities, net	(7,304)	1,036	6,243
Net cash provided by operating activities	271,011	366,049	262,372
Cash flows - investing activities:			
Payments for acquisitions of businesses, net of cash acquired	(72,080)	(107,223)	(232,947)
Proceeds from sale of property, plant and equipment	1,237	4,014	2,023
Purchase of property, plant and equipment	(43,479)	(34,684)	(39,648)
Investments in and advances to unconsolidated entities	(3,484)	(675)	(99)
Distributions from unconsolidated entities	84	475	—
Net cash used in investing activities	(117,722)	(138,093)	(270,671)
Cash flows - financing activities:			
Proceeds from revolving credit facility	—	—	220,000
Repayments of revolving credit facility	—	(100,000)	(95,000)
Borrowings from long-term debt	—	—	400,000
Repayments of long-term debt and debt issuance costs	(15,235)	(15,202)	(417,990)
Repayments of capital lease obligations	(1,501)	(1,445)	(1,384)
Dividends paid to stockholders	(18,640)	(18,971)	(19,454)
Repurchase of common stock	(216,244)	(93,166)	(94,221)
Proceeds from exercise of stock options	—	—	741
Taxes paid related to net share settlements of equity awards	(3,848)	(3,462)	(4,225)
Issuance of common stock under employee stock purchase plan	5,765	4,793	4,814
Payments for contingent consideration arrangements	(3,339)	(1,017)	—
Distributions to noncontrolling interests	—	—	(2,710)
Net cash used in financing activities	(253,042)	(228,470)	(9,429)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(3,421)	3,242	(6,675)
(Decrease) increase in cash, cash equivalents and restricted cash	(103,174)	2,728	(24,403)
Cash, cash equivalents and restricted cash at beginning of year [(1)]	469,388	466,660	491,063
Cash, cash equivalents and restricted cash at end of period [(1)]	$ 366,214	$ 469,388	$ 466,660

(1) Includes \$2.3 million, \$2.0 million, \$2.0 million and \$4.2 million of restricted cash classified as “Prepaid expenses and other” in the Consolidated Balance Sheet as of December 31, 2018, 2017, 2016 and 2015, respectively.

The accompanying notes to consolidated financial statements are an integral part of these statements.

EMCOR Group, Inc. and Subsidiaries

CONSOLIDATED STATEMENTS OF EQUITY
For The Years Ended December 31,
(In thousands)

		EMCOR Group, Inc. Stockholders					
	Total	Common stock	Capital surplus	Accumulated other comprehensive (loss) income (1)	Retained earnings	Treasury stock	Noncontrolling interests
Balance, December 31, 2015	$ 1,480,056	$ 617	$ 130,369	$ (76,953)	$ 1,432,980	$ (10,302)	$ 3,345
Net income including noncontrolling interests	182,153	—	—	—	181,935	—	218
Other comprehensive loss	(24,750)	—	—	(24,750)	—	—	—
Common stock issued under share-based compensation plans (2)	1,724	4	729	—	991	—	—
Tax withholding for common stock issued under share-based compensation plans	(4,225)	—	(4,225)	—	—	—	—
Common stock issued under employee stock purchase plan	4,814	—	4,814	—	—	—	—
Common stock dividends	(19,454)	—	183	—	(19,637)	—	—
Repurchase of common stock	(88,568)	(15)	(88,553)	—	—	—	—
Distributions to noncontrolling interests	(2,710)	—	—	—	—	—	(2,710)
Share-based compensation expense	8,902	—	8,902	—	—	—	—
Balance, December 31, 2016	$ 1,537,942	$ 606	$ 52,219	$ (101,703)	$ 1,596,269	$ (10,302)	$ 853
Net income including noncontrolling interests	227,193	—	—	—	227,196	—	(3)
Other comprehensive income	7,503	—	—	7,503	—	—	—
Common stock issued under share-based compensation plans	1	2	(1)	—	—	—	—
Tax withholding for common stock issued under share-based compensation plans	(3,462)	—	(3,462)	—	—	—	—
Common stock issued under employee stock purchase plan	4,793	1	4,792	—	—	—	—
Common stock dividends	(18,971)	—	164	—	(19,135)	—	—
Repurchase of common stock (3)	(90,821)	(10)	(55,646)	—	(7,774)	(27,391)	—
Distributions to noncontrolling interests	—	—	—	—	—	—	—
Share-based compensation expense	9,939	—	9,939	—	—	—	—
Balance, December 31, 2017	$ 1,674,117	$ 599	$ 8,005	$ (94,200)	$ 1,796,556	$ (37,693)	$ 850
Net income including noncontrolling interests	283,577	—	—	—	283,531	—	46
Other comprehensive income	6,538	—	—	6,538	—	—	—
Cumulative-effect adjustment (4)	(854)	—	—	—	(854)	—	—
Common stock issued under share-based compensation plans	—	1	(1)	—	—	—	—
Tax withholding for common stock issued under share-based compensation plans	(3,848)	—	(3,848)	—	—	—	—
Common stock issued under employee stock purchase plan	5,765	1	5,764	—	—	—	—
Common stock dividends	(18,640)	—	153	—	(18,793)	—	—
Repurchase of common stock (3)	(216,244)	—	—	—	—	(216,244)	—
Distributions to noncontrolling interests	—	—	—	—	—	—	—
Share-based compensation expense	11,030	—	11,030	—	—	—	—
Balance, December 31, 2018	$ 1,741,441	$ 601	$ 21,103	$ (87,662)	$ 2,060,440	$ (253,937)	$ 896

(1) Represents cumulative foreign currency translation and post retirement liability adjustments of $(0.9) million and $(86.8) million, respectively, as of December 31, 2018, $0.5 million and $(94.7) million, respectively, as of December 31, 2017, and $2.1 million and $(103.8) million, respectively, as of December 31, 2016.

(2) Includes a $1.0 million adjustment to retained earnings to recognize net operating loss carryforwards attributable to excess tax benefits on stock compensation upon the adoption of Accounting Standards Update No. 2016-09.

(3) Beginning June 1, 2017, shares of common stock repurchased are held as treasury stock by the Company.

(4) Represents adjustment to retained earnings upon the adoption of Accounting Standards Codification Topic 606.

The accompanying notes to consolidated financial statements are an integral part of these statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 - NATURE OF OPERATIONS

References to the “Company,” “EMCOR,” “we,” “us,” “our” and similar words refer to EMCOR Group, Inc. and its consolidated subsidiaries unless the context indicates otherwise.

We are one of the largest electrical and mechanical construction and facilities services firms in the United States. In addition, we provide a number of building services and industrial services. We specialize principally in providing construction services relating to electrical and mechanical systems in all types of facilities and in providing various services relating to the operation, maintenance and management of facilities, including refineries and petrochemical plants.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its majority-owned subsidiaries and joint ventures. Significant intercompany accounts and transactions have been eliminated. All investments over which we exercise significant influence, but do not control (a 20% to 50% ownership interest), are accounted for using the equity method of accounting. For joint ventures that have been accounted for using the consolidation method of accounting, noncontrolling interests represent the allocation of earnings to our joint venture partners who either have a minority-ownership interest in the joint venture or are not at risk for the majority of losses of the joint venture.

The results of operations of companies acquired have been included in the results of operations from the date of the respective acquisition.

Principles of Preparation

The preparation of the consolidated financial statements, in conformity with accounting principles generally accepted in the United States, requires us to make estimates and assumptions that affect the reported amounts of 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 materially differ from those estimates.

Our reportable segments reflect certain reclassifications of prior year amounts from our United States mechanical construction and facilities services segment to our United States building services segment due to changes in our internal reporting structure.

During the third quarter of 2014, we ceased construction operations in the United Kingdom. The results of the construction operations of our United Kingdom segment for all periods are presented as discontinued operations.

Revenue Recognition

The Company adopted Accounting Standards Codification Topic 606, “Revenue from Contracts with Customers” (“ASC 606”) on January 1, 2018. In accordance with ASC 606, revenue is recognized when promised goods or services are transferred to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. Refer to Note 3 - Revenue from Contracts with Customers of the notes to consolidated financial statements for additional information.

For the periods presented prior to the adoption of ASC 606, revenues from long-term construction contracts were recognized in accordance with ASC Topic 605-35, “Revenue Recognition-Construction-Type and Production-Type Contracts”. Revenues from the performance of services for maintenance, repair and retrofit work were recognized consistent with the performance of the services, generally on a pro-rata basis over the life of the contractual arrangement. Revenues related to the engineering, manufacturing and repairing of shell and tube heat exchangers were recognized when the product was shipped and all other revenue recognition criteria were met.

Cash and cash equivalents

For purposes of the consolidated financial statements, we consider all highly liquid instruments with original maturities of three months or less to be cash equivalents. We maintain a centralized cash management system whereby our excess cash balances are invested in high quality, short-term money market instruments, which are considered cash equivalents. We have cash balances in certain of our domestic bank accounts that exceed federally insured limits.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - (Continued)

Allowance for Doubtful Accounts

Accounts receivable are recorded at the invoiced amount and do not bear interest. The Company maintains an allowance for doubtful accounts. This allowance is based upon the best estimate of the probable losses in existing accounts receivable. The Company determines the allowances based upon individual accounts when information indicates the customers may have an inability to meet their financial obligations, as well as historical collection and write-off experience. These amounts are re-evaluated and adjusted on a regular basis as additional information is received. Actual write-offs are charged against the allowance when collection efforts have been unsuccessful. At December 31, 2018 and 2017, our accounts receivable of $1,773.6 million and $1,607.9 million, respectively, were recorded net of allowances for doubtful accounts of $15.4 million and $17.2 million, respectively. The provision for doubtful accounts during 2018, 2017 and 2016 amounted to approximately $2.1 million, $7.3 million and $6.2 million, respectively.

Inventories

Inventories are stated at the lower of cost or net realizable value. Cost is determined principally using the average cost method.

Property, plant and equipment

Property, plant and equipment is stated at cost. Depreciation, including amortization of assets under capital leases, is recorded principally using the straight-line method over estimated useful lives of 3 to 10 years for machinery and equipment, 3 to 7 years for vehicles, furniture and fixtures and computer hardware/software, and 25 years for buildings. Leasehold improvements are amortized over the shorter of the remaining life of the lease term or the expected service life of the improvement.

The carrying values of property, plant and equipment are reviewed for impairment whenever facts and circumstances indicate that the carrying amount may not be fully recoverable. In performing this review for recoverability, property, plant and equipment is assessed for possible impairment by comparing their carrying values to their undiscounted net pre-tax cash flows expected to result from the use of the asset. Impaired assets are written down to their fair values, generally determined based on their estimated future discounted cash flows. Based on the results of our testing for the years ended December 31, 2018, 2017 and 2016, no impairment of property, plant and equipment was recognized.

Goodwill and Identifiable Intangible Assets

Goodwill and other identifiable intangible assets with indefinite lives that are not being amortized, such as trade names, are tested at least annually for impairment (which we test each October 1, absent any impairment indicators) and are written down if impaired. Identifiable intangible assets with finite lives are amortized over their useful lives and are reviewed for impairment whenever facts and circumstances indicate that their carrying values may not be fully recoverable. See Note 9 - Goodwill and Identifiable Intangible Assets of the notes to consolidated financial statements for additional information.

Insurance Liabilities

Insurance liabilities for automobile liability, workers' compensation and general liability claims are determined actuarially based on claims filed and an estimate of claims incurred but not yet reported. At December 31, 2018 and 2017, the estimated current portion of such undiscounted insurance liabilities of $44.6 million and $47.3 million, respectively, were included in "Other accrued expenses and liabilities" in the accompanying Consolidated Balance Sheets. The estimated non-current portion of such undiscounted insurance liabilities included in "Other long-term obligations" at December 31, 2018 and 2017 were $179.1 million and $173.2 million, respectively. The current portion of anticipated insurance recoveries of $12.6 million and $14.9 million at December 31, 2018 and 2017, respectively, were included in "Prepaid expenses and other" and the non-current portion of anticipated insurance recoveries of $49.3 million and $48.6 million at December 31, 2018 and 2017, respectively, were included in "Other assets" in the accompanying Consolidated Balance Sheets.

Foreign Operations

The financial statements and transactions of our foreign subsidiaries are maintained in their functional currency and translated into U.S. dollars in accordance with ASC Topic 830, "Foreign Currency Matters". Translation adjustments have been recorded as "Accumulated other comprehensive loss", a separate component of "Equity".

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - (Continued)

Income Taxes

We account for income taxes in accordance with the provisions of ASC Topic 740, "Income Taxes" ("ASC 740"). ASC 740 requires an asset and liability approach which requires the recognition of deferred income tax assets and deferred income tax liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Valuation allowances are established when necessary to reduce deferred income tax assets when it is more likely than not that a tax benefit will not be realized.

We account for uncertain tax positions in accordance with the provisions of ASC 740. We recognize accruals of interest related to unrecognized tax benefits as a component of the income tax provision.

Valuation of Share-Based Compensation Plans

We have various types of share-based compensation plans and programs, which are administered by our Board of Directors or its Compensation and Personnel Committee. See Note 14 - Share-Based Compensation Plans of the notes to consolidated financial statements for additional information regarding the share-based compensation plans and programs.

We account for share-based payments in accordance with the provisions of ASC Topic 718, "Compensation-Stock Compensation" ("ASC 718"). ASC 718 requires that all share-based payments issued to acquire goods or services, including grants of employee stock options, be recognized in the statement of operations based on their fair values. Compensation expense related to share-based awards is recognized over the requisite service period, which is generally the vesting period. For shares subject to graded vesting, our policy is to apply the straight-line method in recognizing compensation expense. ASC 718 requires the benefits of tax deductions in excess of recognized compensation expense to be recognized in the Consolidated Statements of Operations when the underlying awards vest or are settled.

New Accounting Pronouncements

On January 1, 2018, we adopted the accounting pronouncement issued by the Financial Accounting Standards Board ("FASB") to clarify existing guidance on revenue recognition. This guidance includes the required steps to achieve the core principle that a company should recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. We adopted this pronouncement on a modified retrospective basis, and its impact on our financial position and results of operations, as well as required additional disclosures, are included in Note 3 - Revenue from Contracts with Customers. As a result of the adoption of this standard, certain changes have been made to the Consolidated Balance Sheets. The accounts previously named "Costs and estimated earnings in excess of billings on uncompleted contracts" and "Billings in excess of costs and estimated earnings on uncompleted contracts" have been renamed "Contract assets" and "Contract liabilities", respectively. In addition, for periods beginning after December 31, 2017, amounts representing deferred revenues on services contracts, which were previously included in "Other accrued expenses and liabilities" within the Consolidated Balance Sheets, have been reclassified as "Contract liabilities."

On January 1, 2018, we adopted the accounting pronouncement issued by the FASB to clarify how entities should present restricted cash and restricted cash equivalents in the statement of cash flows. This guidance requires entities to show changes in the total of cash, cash equivalents and restricted cash in the statement of cash flows. This guidance was adopted on a retrospective basis, and such adoption did not have a material impact on our financial position and/or results of operations.

During 2018, we adopted the accounting pronouncement issued by the FASB that modifies the presentation of net periodic pension and post retirement benefit costs within the statement of operations. This guidance requires the components of the net periodic pension and post retirement benefit costs, other than service costs, to be recognized below operating income. This change was applied on a retrospective basis, and such adoption did not have a material impact on our financial position and/or results of operations.

In February 2016, an accounting pronouncement was issued by the FASB to replace existing lease accounting guidance. This pronouncement is intended to provide enhanced transparency and comparability by requiring lessees to record right-of-use assets and corresponding lease liabilities on the balance sheet for most leases. Expenses associated with leases will continue to be recognized in a manner similar to current accounting guidance. This pronouncement is effective for annual and interim periods beginning after December 15, 2018, with early adoption permitted. In preparation for adoption, we have performed a process to identify a complete population of our leases, including the review of various contracts to identify whether such arrangements convey the right to control the use of an identified asset. We have additionally implemented new accounting systems, processes,

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - (Continued)

and controls and have drafted revised accounting policies to assist with the adoption of this pronouncement, including the enhanced disclosure requirements. We will adopt this pronouncement on January 1, 2019 utilizing the transition practical expedient added by the FASB which eliminates the requirement that entities apply the new lease standard to the comparative periods presented in the year of adoption. We will additionally utilize the package of practical expedients permitted under the new standard which, among other things, allows us to not reassess the lease classification for any existing leases. Further, as permitted by the standard, we will make an accounting policy election not to record right-of-use assets or lease liabilities for leases with an initial term of 12 months or less. Instead, consistent with current accounting guidance, we will recognize payments for such leases in the statement of operations on a straight-line basis over the lease term. Upon adoption on January 1, 2019, we estimate this accounting pronouncement will result in the recognition of additional assets and liabilities on our balance sheet of between $200.0 million and $225.0 million. We do not believe the new standard will have an impact on our liquidity or results of operations, and such adoption will not impact our compliance with the various covenants contained within our 2016 Credit Agreement as described in further detail within Note 10 - Debt of the notes to consolidated financial statements.

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS

In accordance with ASC 606, the Company recognizes revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. To achieve this core principle, the Company applies the following five steps:

(1) Identify the contract with a customer

A contract with a customer exists when: (a) the parties have approved the contract and are committed to perform their respective obligations, (b) the rights of the parties can be identified, (c) payment terms can be identified, (d) the arrangement has commercial substance, and (e) collectibility of consideration is probable. Judgment is required when determining if the contractual criteria are met, specifically in the earlier stages of a project when a formally executed contract may not yet exist. In these situations, the Company evaluates all relevant facts and circumstances, including the existence of other forms of documentation or historical experience with our customers that may indicate a contractual agreement is in place and revenue should be recognized. In determining if the collectibility of consideration is probable, the Company considers the customer's ability and intention to pay such consideration through an evaluation of several factors, including an assessment of the creditworthiness of the customer and our prior collection history with such customer.

(2) Identify the performance obligations in the contract

At contract inception, the Company assesses the goods or services promised in a contract and identifies, as a separate performance obligation, each distinct promise to transfer goods or services to the customer. The identified performance obligations represent the "unit of account" for purposes of determining revenue recognition. In order to properly identify separate performance obligations, the Company applies judgment in determining whether each good or service provided is: (a) capable of being distinct, whereby the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer, and (b) distinct within the context of the contract, whereby the transfer of the good or service to the customer is separately identifiable from other promises in the contract.

In addition, when assessing performance obligations within a contract, the Company considers the warranty provisions included within such contract. To the extent the warranty terms provide the customer with an additional service, other than assurance that the promised good or service complies with agreed upon specifications, such warranty is accounted for as a separate performance obligation. In determining whether a warranty provides an additional service, the Company considers each warranty provision in comparison to warranty terms which are standard in the industry.

Our contracts are often modified through change orders to account for changes in the scope and price of the goods or services we are providing. Although the Company evaluates each change order to determine whether such modification creates a separate performance obligation, the majority of our change orders are for goods or services that are not distinct within the context of our original contract, and therefore, are not treated as separate performance obligations.

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

(3) Determine the transaction price

The transaction price represents the amount of consideration to which the Company expects to be entitled in exchange for transferring promised goods or services to our customers. The consideration promised within a contract may include fixed amounts, variable amounts, or both. To the extent the performance obligation includes variable consideration, including contract bonuses and penalties that can either increase or decrease the transaction price, the Company estimates the amount of variable consideration to be included in the transaction price utilizing one of two prescribed methods, depending on which method better predicts the amount of consideration to which the entity will be entitled. Such methods include: (a) the expected value method, whereby the amount of variable consideration to be recognized represents the sum of probability weighted amounts in a range of possible consideration amounts, and (b) the most likely amount method, whereby the amount of variable consideration to be recognized represents the single most likely amount in a range of possible consideration amounts. When applying these methods, the Company considers all information that is reasonably available, including historical, current and estimates of future performance. The expected value method is typically utilized in situations where a contract contains a large number of possible outcomes while the most likely amount method is typically utilized in situations where a contract has only two possible outcomes.

Variable consideration is included in the transaction price only to the extent it is probable, in the Company’s judgment, that a significant future reversal in the amount of cumulative revenue recognized under the contract will not occur when the uncertainty associated with the variable consideration is subsequently resolved. This threshold is referred to as the variable consideration constraint. In assessing whether to apply the variable consideration constraint, the Company considers if factors exist that could increase the likelihood or the magnitude of a potential reversal of revenue, including, but not limited to, whether: (a) the amount of consideration is highly susceptible to factors outside of the Company’s influence, such as the actions of third parties, (b) the uncertainty surrounding the amount of consideration is not expected to be resolved for a long period of time, (c) the Company’s experience with similar types of contracts is limited or that experience has limited predictive value, (d) the Company has a practice of either offering a broad range of price concessions or changing the payment terms and conditions of similar contracts in similar circumstances, and (e) the contract has a large number and broad range of possible consideration amounts.

Pending change orders represent one of the most common forms of variable consideration included within contract value and typically represent contract modifications for which a change in scope has been authorized or acknowledged by our customer, but the final adjustment to contract price is yet to be negotiated. In estimating the transaction price for pending change orders, the Company considers all relevant facts, including documented correspondence with the customer regarding acknowledgment and/or agreement with the modification, as well as historical experience with the customer or similar contractual circumstances. Based upon this assessment, the Company estimates the transaction price, including whether the variable consideration constraint should be applied.

Contract claims are another form of variable consideration which is common within our industry. Claim amounts represent revenue that has been recognized for contract modifications that are not submitted or are in dispute as to both scope and price. In estimating the transaction price for claims, the Company considers all relevant facts available. However, given the uncertainty surrounding claims, including the potential long-term nature of dispute resolution and the broad range of possible consideration amounts, there is an increased likelihood that any additional contract revenue associated with contract claims is constrained. The resolution of claims involves negotiations and, in certain cases, litigation. In the event litigation costs are incurred by us in connection with claims, such litigation costs are expensed as incurred, although we may seek to recover these costs.

For some transactions, the receipt of consideration does not match the timing of the transfer of goods or services to the customer. For such contracts, the Company evaluates whether this timing difference represents a financing arrangement within the contract. Although rare, if a contract is determined to contain a significant financing component, the Company adjusts the promised amount of consideration for the effects of the time value of money when determining the transaction price of such contract. Although our customers may retain a portion of the contract price until completion of the project and final contract settlement, these retainage amounts are not considered a significant financing component as the intent of the withheld amounts is to provide the customer with assurance that we will complete our obligations under the contract rather than to provide financing to the customer. In addition, although we may be entitled to advanced payments from our customers on certain contracts, these advanced payments generally do not represent a significant financing component as the payments are used to meet working capital demands that can be higher in the early stages of a contract, as well as to protect us from our customer failing to meet its obligations under the contract.

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

Changes in the estimates of transaction prices are recognized on a cumulative catch-up basis in the period in which the revisions to the estimates are made. Such changes in estimates can result in the recognition of revenue in a current period for performance obligations which were satisfied or partially satisfied in prior periods. Such changes in estimates may also result in the reversal of previously recognized revenue if the ultimate outcome differs from the Company's previous estimate. For the year ended December 31, 2018, we recognized revenue of $7.3 million associated with the final settlement of contract value for three projects which were completed in prior periods. For the year ended December 31, 2017, we recognized $18.1 million of gross profit associated with the recovery of certain contract costs previously disputed on a project completed in 2016. In addition, for the years ended December 31, 2018 and 2017, there were no significant reversals of revenue recognized associated with the revision of transaction prices.

(4) Allocate the transaction price to performance obligations in the contract

For contracts that contain multiple performance obligations, the Company allocates the transaction price to each performance obligation based on a relative standalone selling price. The Company determines the standalone selling price based on the price at which the performance obligation would have been sold separately in similar circumstances to similar customers. If the standalone selling price is not observable, the Company estimates the standalone selling price taking into account all available information such as market conditions and internal pricing guidelines. In certain circumstances, the standalone selling price is determined using an expected profit margin on anticipated costs related to the performance obligation.

(5) Recognize revenue as performance obligations are satisfied

The Company recognizes revenue at the time the related performance obligation is satisfied by transferring a promised good or service to its customers. A good or service is considered to be transferred when the customer obtains control. The Company can transfer control of a good or service and satisfy its performance obligations either over time or at a point in time. The Company transfers control of a good or service over time and, therefore, satisfies a performance obligation and recognizes revenue over time if one of the following three criteria are met: (a) the customer simultaneously receives and consumes the benefits provided by the Company's performance as we perform, (b) the Company's performance creates or enhances an asset that the customer controls as the asset is created or enhanced, or (c) the Company's performance does not create an asset with an alternative use to us, and we have an enforceable right to payment for performance completed to date.

For our performance obligations satisfied over time, we recognize revenue by measuring the progress toward complete satisfaction of that performance obligation. The selection of the method to measure progress towards completion can be either an input method or an output method and requires judgment based on the nature of the goods or services to be provided.

For our construction contracts, revenue is generally recognized over time as our performance creates or enhances an asset that the customer controls as it is created or enhanced. Our fixed price construction projects generally use a cost-to-cost input method to measure our progress towards complete satisfaction of the performance obligation as we believe it best depicts the transfer of control to the customer which occurs as we incur costs on our contracts. Under the cost-to-cost measure of progress, the extent of progress towards completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the performance obligation. For our unit price construction contracts, progress towards complete satisfaction is measured through an output method, such as the amount of units produced or delivered, when our performance does not produce significant amounts of work in process or finished goods prior to complete satisfaction of such performance obligations.

For our services contracts, revenue is also generally recognized over time as the customer simultaneously receives and consumes the benefits of our performance as we perform the service. For our fixed price service contracts with specified service periods, revenue is generally recognized on a straight-line basis over such service period when our inputs are expended evenly, and the customer receives and consumes the benefits of our performance throughout the contract term.

The timing of revenue recognition for the manufacturing of new build heat exchangers within our United States industrial services segment depends on the payment terms of the contract, as our performance does not create an asset with an alternative use to us. For those contracts for which we have a right to payment for performance completed to date at all times throughout our performance, inclusive of a cancellation, we recognize revenue over time. These performance obligations use a cost-to-cost input method to measure our progress towards complete satisfaction of the performance obligation as we believe it best depicts the transfer of control to the customer which occurs as we incur costs on our contracts. However, for those contracts for which we do not have a right, at all times, to payment for performance completed to date, we recognize revenue at the point in time when control is

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

transferred to the customer. For bill-and-hold arrangements, revenue is recognized when the customer obtains control of the heat exchanger, which may be prior to shipping, if the criteria of ASC 606 are met.

For certain of our revenue streams, such as call-out repair and service work, outage services, refinery turnarounds and specialty welding services that are performed under time and materials contracts, our progress towards complete satisfaction of such performance obligations is measured using an output method as the customer receives and consumes the benefits of our performance completed to date.

Due to uncertainties inherent in the estimation process, it is possible that estimates of costs to complete a performance obligation will be revised in the near-term. For those performance obligations for which revenue is recognized using a cost-to-cost input method, changes in total estimated costs, and related progress towards complete satisfaction of the performance obligation, are recognized on a cumulative catch-up basis in the period in which the revisions to the estimates are made. When the current estimate of total costs for a performance obligation indicate a loss, a provision for the entire estimated loss on the unsatisfied performance obligation is made in the period in which the loss becomes evident. During 2018, we recognized losses of $10.0 million related to a change in total estimated costs on a transportation project within our United States electrical construction and facilities services segment, resulting in part from contract scope issues. There were no other changes in total estimated costs that resulted in a significant impact to our operating results for the years ended December 31, 2018 and 2017.

Disaggregation of Revenues

Our revenues are principally derived from contracts to provide construction services relating to electrical and mechanical systems, as well as to provide a number of building services and industrial services to our customers. Our contracts are with many different customers in numerous industries. Refer to Note 18 - Segment Information of the notes to the consolidated financial statements for additional information on how we disaggregate our revenues by reportable segment, as well as a more complete description of our business.

The following tables provide further disaggregation of our revenues by categories we use to evaluate our financial performance within each of our reportable segments (in thousands):

	2018	% of Total
United States electrical construction and facilities services:		
Commercial market sector	$ 839,045	43%
Institutional market sector	110,046	6%
Hospitality market sector	32,338	2%
Manufacturing market sector	388,157	20%
Healthcare market sector	126,218	6%
Transportation market sector	284,464	14%
Water and wastewater market sector	23,337	1%
Short duration projects (1)	120,109	6%
Service work	34,105	2%
	1,957,819	
Less intersegment revenues	(3,496)	
Total segment revenues	$ 1,954,323	

(1) Represents those projects which generally are completed within three months or less.

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

	2018	% of Total
United States mechanical construction and facilities services:		
Commercial market sector	$ 1,063,571	35%
Institutional market sector	292,255	9%
Hospitality market sector	93,827	3%
Manufacturing market sector	430,286	14%
Healthcare market sector	241,113	8%
Transportation market sector	19,415	1%
Water and wastewater market sector	176,574	6%
Short duration projects (1)	335,953	11%
Service work	385,671	13%
	3,038,665	
Less intersegment revenues	(18,358)	
Total segment revenues	$ 3,020,307	

(1) Represents those projects which generally are completed within three months or less.

	2018	% of Total
United States building services:		
Commercial site-based services	$ 519,641	28%
Government site-based services	213,677	11%
Mechanical services	1,032,082	55%
Energy services	110,085	6%
Total segment revenues	$ 1,875,485	
United States industrial services:		
Field services	$ 694,994	80%
Shop services	170,651	20%
Total segment revenues	$ 865,645	
Total United States operations	$ 7,715,760	
United Kingdom building services:		
Service work	$ 216,880	52%
Projects & extras	197,991	48%
Total segment revenues	$ 414,871	
Total worldwide operations	$ 8,130,631	

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

Contract Assets and Contract Liabilities

Accounts receivable are recognized in the period when our right to consideration is unconditional. Accounts receivable are recognized net of an allowance for doubtful accounts. A considerable amount of judgment is required in assessing the likelihood of realization of receivables.

The timing of revenue recognition may differ from the timing of invoicing to customers. Contract assets include unbilled amounts from our long-term construction projects when revenues recognized under the cost-to-cost measure of progress exceed the amounts invoiced to our customers, as the amounts cannot be billed under the terms of our contracts. Such amounts are recoverable from our customers based upon various measures of performance, including achievement of certain milestones, completion of specified units or completion of a contract. In addition, many of our time and materials arrangements, as well as our contracts to perform turnaround services within the United States industrial services segment, are billed in arrears pursuant to contract terms that are standard within the industry, resulting in contract assets and/or unbilled receivables being recorded, as revenue is recognized in advance of billings. Also included in contract assets are amounts we seek or will seek to collect from customers or others for errors or changes in contract specifications or design, contract change orders or modifications in dispute or unapproved as to both scope and/or price, or other customer-related causes of unanticipated additional contract costs (claims and unapproved change orders). Our contract assets do not include capitalized costs to obtain and fulfill a contract. Contract assets are generally classified as current within the Consolidated Balance Sheets.

As of December 31, 2018 and 2017, contract assets included unbilled revenues for unapproved change orders of approximately $25.2 million and $17.4 million, respectively. As of December 31, 2018 and 2017, there were no claim amounts included within contract assets or accounts receivable. There were contractually billed amounts and retention related to contracts with unapproved change orders and claims of approximately $96.1 million and $57.6 million as of December 31, 2018 and 2017, respectively. For contracts in claim status, contractually billed amounts will generally not be paid by the customer to us until final resolution of related claims.

Contract liabilities from our long-term construction contracts arise when amounts invoiced to our customers exceed revenues recognized under the cost-to-cost measure of progress. Contract liabilities additionally include advanced payments from our customers on certain contracts. Contract liabilities decrease as we recognize revenue from the satisfaction of the related performance obligation and are recorded as either current or long-term, depending upon when we expect to recognize such revenue. The long-term portion of contract liabilities is included in “Other long-term obligations” in the Consolidated Balance Sheets.

Net contract liabilities consisted of the following (in thousands):

	2018	2017
Contract assets, current	$ 158,243	$ 122,621
Contract assets, non-current	—	—
Contract liabilities, current	(552,290)	(524,156)
Contract liabilities, non-current	(2,069)	—
Deferred revenue [1]	—	(47,328)
Net contract liabilities	$ (396,116)	$ (448,863)

(1) Represents deferred revenue on service contracts, which was included in “Accrued expenses and other” and “Other long-term liabilities” in the Consolidated Balance Sheet as of December 31 2017. For the periods after December 31, 2017, these amounts are included within “Contract liabilities.”

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

Included within net contract liabilities were $359.2 million and $401.5 million of net contract liabilities on uncompleted construction projects as of December 31, 2018 and 2017, respectively, as follows:

	2018	2017
Costs incurred on uncompleted construction contracts	$ 8,656,642	$ 8,258,802
Estimated earnings, thereon	1,172,224	1,081,509
	9,828,866	9,340,311
Less: billings to date	10,188,023	9,741,846
	$ (359,157)	$ (401,535)

The $52.7 million decrease in net contract liabilities for the year ended December 31, 2018 was primarily attributable to the $42.4 million decrease in the net contract liabilities on our uncompleted long-term construction contracts as a result of the completion or substantial completion of certain large projects which were previously billed in advance pursuant to contract terms. Contract assets and contract liabilities increased by approximately $3.8 million and $9.4 million, respectively, as a result of acquisitions made in 2018. There was no significant impairment of contract assets recognized during the period.

Contract Retentions

As of December 31, 2018 and 2017, accounts receivable included $254.6 million and $243.5 million, respectively, of retainage billed under terms of our contracts. These retainage amounts represent amounts which have been contractually invoiced to customers where payments have been partially withheld pending the achievement of certain milestones, satisfaction of other contractual conditions or completion of the project. We estimate that approximately 86% of this retainage will be collected during 2019.

As of December 31, 2018 and 2017, accounts payable included $43.3 million and $41.0 million, respectively, of retainage withheld under terms of our subcontracts. These retainage amounts represent amounts invoiced to the Company by our subcontractors where payments have been partially withheld pending the achievement of certain milestones, satisfaction of other contractual conditions or upon completion of the project. We estimate that approximately 83% of this retainage will be paid during 2019.

Transaction Price Allocated to Remaining Unsatisfied Performance Obligations

The following table presents the transaction price allocated to remaining unsatisfied performance obligations (“remaining performance obligations”) for each of our reportable segments and their respective percentages of total remaining performance obligations (in thousands, except for percentages):

	2018	% of Total
Remaining performance obligations:		
United States electrical construction and facilities services	$ 1,085,571	27%
United States mechanical construction and facilities services	2,245,584	57%
United States building services	435,074	11%
United States industrial services	67,529	2%
Total United States operations	3,833,758	97%
United Kingdom building services	130,524	3%
Total worldwide operations	$ 3,964,282	100%

Our remaining performance obligations at December 31, 2018 were $3.96 billion. Remaining performance obligations increase with awards of new contracts and decrease as we perform work and recognize revenue on existing contracts. We include a project within our remaining performance obligations at such time the project is awarded and agreement on contract terms has been reached. Our remaining performance obligations include amounts related to contracts for which a fixed price contract value is not assigned when a reasonable estimate of total transaction price can be made.

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

Remaining performance obligations include unrecognized revenues to be realized from uncompleted construction contracts. Although many of our construction contracts are subject to cancellation at the election of our customers, in accordance with industry practice, we do not limit the amount of unrecognized revenue included within remaining performance obligations due to the inherent substantial economic penalty that would be incurred by our customers upon cancellation. We believe our reported remaining performance obligations for our construction contracts are firm and contract cancellations have not had a material adverse effect on us.

Remaining performance obligations also include unrecognized revenues expected to be realized over the remaining term of service contracts. However, to the extent a service contract includes a cancellation clause which allows for the termination of such contract by either party without a substantive penalty, the remaining contract term, and therefore, the amount of unrecognized revenues included within remaining performance obligations, is limited to the notice period required for the termination.

Our remaining performance obligations are comprised of: (a) original contract amounts, (b) change orders for which we have received written confirmations from our customers, (c) pending change orders for which we expect to receive confirmations in the ordinary course of business, (d) claim amounts that we have made against customers for which we have determined we have a legal basis under existing contractual arrangements and as to which the variable consideration constraint does not apply, and (e) other forms of variable consideration to the extent that such variable consideration has been included within the transaction price of our contracts. Such claim and other variable consideration amounts were immaterial for all periods presented.

Refer to the table below for additional information regarding our remaining performance obligations, including an estimate of when we expect to recognize such remaining performance obligations as revenue (in thousands):

	Within one year	Greater than one year
Remaining performance obligations:		
United States electrical construction and facilities services	$ 996,524	$ 89,047
United States mechanical construction and facilities services	1,742,587	502,997
United States building services	424,462	10,612
United States industrial services	67,529	—
Total United States operations	3,231,102	602,656
United Kingdom building services	77,884	52,640
Total worldwide operations	$ 3,308,986	$ 655,296

Impact of the Adoption of ASC 606 on our Financial Statements

The Company adopted ASC 606 on a modified retrospective basis. As part of such adoption, the new standard was applied only to those contracts which were not completed as of the date of adoption. Additionally, the Company has not retrospectively restated contract positions for contract modifications made prior to the adoption of ASC 606. The cumulative effect of applying the new guidance was recorded on January 1, 2018 as a reduction to retained earnings in the amount of $0.9 million, net of tax. The majority of this adjustment related to: (a) a change in the measurement of our progress towards complete satisfaction of performance obligations for certain of our contracts within the United States electrical construction and facilities services segment, (b) a change in the timing of revenue recognition from a point in time to over time for certain repair projects within the United Kingdom building services segment, (c) the recognition of revenue for certain bill-and-hold arrangements within our United States industrial services segment that was not allowed under previous revenue recognition guidance, (d) the recognition of variable consideration for contract bonuses within certain of our construction contracts, and (e) a change in the timing of revenue recognition from a point in time to over time for certain of our contracts within our United States industrial services segment to manufacture or repair heat exchangers. These adjustments were not material to our financial position either individually or in the aggregate.

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

The impact of our adoption of ASC 606 on the Consolidated Balance Sheet and Consolidated Statement of Operations, as of and for the year ended December 31, 2018 was as follows (in thousands):

	As reported	As adjusted
	December 31, 2018	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 363,907	$ 363,907
Accounts receivable	1,773,620	1,778,930
Contract assets	158,243	145,583
Inventories	42,321	54,173
Prepaid expenses and other	48,116	46,687
Total current assets	2,386,207	2,389,280
Investments, notes and other long-term receivables	2,899	2,899
Property, plant and equipment, net	134,351	134,351
Goodwill	990,887	990,887
Identifiable intangible assets, net	488,286	488,286
Other assets	86,177	86,177
Total assets	$ 4,088,807	$ 4,091,880
LIABILITIES AND EQUITY		
Current liabilities:		
Current maturities of long-term debt and capital lease obligations	$ 16,013	$ 16,013
Accounts payable	652,091	652,091
Contract liabilities	552,290	511,089
Accrued payroll and benefits	343,069	343,069
Other accrued expenses and liabilities	170,935	219,166
Total current liabilities	1,734,398	1,741,428
Borrowings under revolving credit facility	25,000	25,000
Long-term debt and capital lease obligations	254,764	254,764
Other long-term obligations	333,204	333,204
Total liabilities	2,347,366	2,354,396
Total equity	1,741,441	1,737,484
Total liabilities and equity	$ 4,088,807	$ 4,091,880

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

	As reported	As adjusted
	2018	
Revenues	$ 8,130,631	$ 8,117,087
Cost of sales	6,925,178	6,918,281
Gross profit	1,205,453	1,198,806
Selling, general and administrative expenses	799,157	799,157
Restructuring expenses	2,306	2,306
Impairment loss on identifiable intangible assets	907	907
Operating income	403,083	396,436
Net periodic pension (cost) income	2,743	2,743
Interest expense	(13,544)	(13,544)
Interest income	2,746	2,746
Income from continuing operations before income taxes	395,028	388,381
Income tax provision	109,106	107,270
Income from continuing operations	285,922	281,111
Loss from discontinued operation, net of income taxes	(2,345)	(2,345)
Net income including noncontrolling interests	283,577	278,766
Less: Net income attributable to noncontrolling interests	(46)	(46)
Net income attributable to EMCOR Group, Inc.	$ 283,531	$ 278,720
Basic earnings per common share:		
From continuing operations attributable to EMCOR Group, Inc. common stockholders	$ 4.92	$ 4.84
Diluted earnings per common share:		
From continuing operations attributable to EMCOR Group, Inc. common stockholders	$ 4.89	$ 4.81

The adoption of ASC 606 had no impact on the Company's cash flows from operations.

The differences between our reported operating results and the pro forma operating results presented in the above tables for the year ended December 31, 2018 primarily related to the previously referenced items identified upon adoption of ASC 606.

NOTE 4 - ACQUISITIONS OF BUSINESSES

Acquisitions are accounted for utilizing the acquisition method of accounting and the prices paid for them are allocated to their respective assets and liabilities based upon the estimated fair value of such assets and liabilities at the dates of their respective acquisition by us.

During 2018, we acquired four companies for a total consideration of $71.3 million. Two companies provide mobile mechanical services, one within the Eastern region and the other within the Western region of the United States. The third company is a full service provider of mechanical services within the Southern region of the United States. The results of these three companies have been included in our United States building services segment. The fourth company provides electrical construction and maintenance services for industrial and commercial buildings in North Texas, and its results have been included in our United States electrical construction and facilities services segment. In connection with these acquisitions, we acquired working capital of $8.6 million and other net assets of $0.2 million and have preliminarily ascribed $25.9 million to goodwill and $36.6 million to identifiable intangible assets. We expect that all of the acquired goodwill will be deductible for tax purposes. The purchase price allocations for the businesses acquired in 2018 are still preliminary and subject to change during their respective measurement periods.

During 2017, we acquired three companies for a total consideration of $111.9 million. One company provides fire protection and alarm services primarily in the Southern region of the United States. The second company provides millwright services for

NOTE 4 - ACQUISITIONS OF BUSINESSES - (Continued)

manufacturing companies throughout the United States. Both of their results have been included in our United States mechanical construction and facilities services segment. The third company provides mobile mechanical services within the Western region of the United States, and its results have been included in our United States building services segment. In connection with these acquisitions, we acquired working capital of $12.3 million and other net assets of $2.3 million and have ascribed $40.7 million to goodwill and $56.6 million to identifiable intangible assets. We expect that all of the acquired goodwill will be deductible for tax purposes. The purchase price allocations for the businesses acquired in 2017 have been finalized with an insignificant impact.

On April 15, 2016, we completed the acquisition of Ardent Services, L.L.C. and Rabalais Constructors, LLC (collectively, “Ardent”). This acquisition has been included in our United States electrical construction and facilities services segment. Ardent provides electrical and instrumentation services to the energy infrastructure market in North America, and this acquisition further strengthens our position in electrical construction and services and broadens our capabilities across the industrial and energy sectors, especially in the Gulf Coast, Midwest and Western regions of the United States. Under the terms of the transaction, we acquired 100% of Ardent’s equity interests for total consideration of $201.4 million. In connection with the acquisition of Ardent, we acquired working capital of $34.1 million and other net assets of $3.9 million and have ascribed $121.9 million to goodwill and $41.5 million to identifiable intangible assets. We expect that $99.7 million of the acquired goodwill will be deductible for tax purposes. The weighted average amortization period for the identifiable intangible assets is approximately 13.5 years. We completed the final allocation of Ardent’s purchase price during the first quarter of 2017 with an insignificant impact.

Additionally in 2016, we acquired a company for an immaterial amount. This company provides mobile mechanical services within the Southeastern region of the United States, and its results have been included in our United States building services segment. The purchase price for this acquisition was finalized in 2016.

NOTE 5 - DISPOSITION OF ASSETS

Due to a historical pattern of losses in the construction operations of our United Kingdom segment and our negative assessment of construction market conditions in the United Kingdom for the foreseeable future, we ceased construction operations in the United Kingdom during the third quarter 2014. The results of the construction operations of our United Kingdom segment for all periods are presented in the Consolidated Financial Statements as discontinued operations.

The results of discontinued operations are as follows (in thousands):

	For the twelve months ended December 31,		
	2018	2017	2016
Revenues	$ —	$ 863	$ 345
Loss from discontinued operation, net of income taxes	$ (2,345)	$ (857)	$ (3,142)
Diluted loss per share from discontinued operation	$ (0.04)	$ (0.01)	$ (0.05)

The loss from discontinued operations in 2018 was primarily due to the settlement of a previously outstanding legal matter. The loss from discontinued operations in 2017 and 2016 was primarily due to legal costs, as well as the settlement of final contract balances on certain construction projects completed in prior years. The loss from discontinued operations in 2017 was partially offset by revenues recognized upon the settlement of a previously outstanding contract claim.

Included in the Consolidated Balance Sheets at December 31, 2018 and 2017 are the following major classes of assets and liabilities associated with the discontinued operation (in thousands):

	December 31, 2018	December 31, 2017
Assets of discontinued operation:		
Current assets	$ —	$ 242
Liabilities of discontinued operation:		
Current liabilities	$ 3,724	$ 2,811

At December 31, 2018, the liabilities of the discontinued operation consisted of contract retentions, contract warranty obligations and other accrued liabilities that are expected to be fulfilled in the ordinary course of business.

NOTE 6 - EARNINGS PER SHARE

The following tables summarize our calculation of Basic and Diluted Earnings (Loss) per Common Share ("EPS") for the years ended December 31, 2018, 2017 and 2016 (in thousands, except share and per share data):

	2018	2017	2016
Numerator:			
Income from continuing operations attributable to EMCOR Group, Inc. common stockholders	$ 285,876	$ 228,053	$ 185,077
Loss from discontinued operation, net of income taxes	(2,345)	(857)	(3,142)
Net income attributable to EMCOR Group, Inc. common stockholders	$ 283,531	$ 227,196	$ 181,935
Denominator:			
Weighted average shares outstanding used to compute basic earnings (loss) per common share	58,112,838	59,254,256	60,769,808
Effect of dilutive securities—Share-based awards	330,629	364,713	436,984
Shares used to compute diluted earnings (loss) per common share	58,443,467	59,618,969	61,206,792
Basic earnings (loss) per common share:			
From continuing operations attributable to EMCOR Group, Inc. common stockholders	$ 4.92	$ 3.85	$ 3.05
From discontinued operation	(0.04)	(0.01)	(0.05)
Net income attributable to EMCOR Group, Inc. common stockholders	$ 4.88	$ 3.84	$ 3.00
Diluted earnings (loss) per common share:			
From continuing operations attributable to EMCOR Group, Inc. common stockholders	$ 4.89	$ 3.83	$ 3.02
From discontinued operation	(0.04)	(0.01)	(0.05)
Net income attributable to EMCOR Group, Inc. common stockholders	$ 4.85	$ 3.82	$ 2.97

The number of outstanding share-based awards that were excluded from the computation of diluted EPS for the years ended December 31, 2018, 2017 and 2016 because they would be anti-dilutive were 550, 2,700 and 3,800, respectively.

NOTE 7 - INVENTORIES

Inventories as of December 31, 2018 and 2017 consist of the following amounts (in thousands):

	2018	2017
Raw materials and construction materials	$ 30,006	$ 23,924
Work in process	12,315	18,800
Inventories	$ 42,321	$ 42,724

NOTE 8 - PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment in the accompanying Consolidated Balance Sheets consisted of the following amounts as of December 31, 2018 and 2017 (in thousands):

	2018	2017
Machinery and equipment	$ 151,339	$ 138,592
Vehicles	58,205	55,648
Furniture and fixtures	20,655	20,195
Computer hardware/software	98,415	95,716
Land, buildings and leasehold improvements	97,937	92,145
Construction in progress	14,443	6,779
	440,994	409,075
Accumulated depreciation and amortization	(306,643)	(281,919)
	$ 134,351	$ 127,156

Depreciation and amortization expense related to property, plant and equipment, including capital leases, was $38.5 million, $39.9 million and $38.9 million for the years ended December 31, 2018, 2017 and 2016, respectively.

NOTE 9 - GOODWILL AND IDENTIFIABLE INTANGIBLE ASSETS

Goodwill at December 31, 2018 and 2017 was approximately $990.9 million and $964.9 million, respectively, and reflects the excess of cost over fair market value of net identifiable assets of companies acquired. Goodwill attributable to companies acquired in 2018 and 2017 has been valued at $25.9 million and $40.7 million, respectively. ASC Topic 805, "Business Combinations" ("ASC 805") requires that all business combinations be accounted for using the acquisition method and that certain identifiable intangible assets acquired in a business combination be recognized as assets apart from goodwill. ASC Topic 350, "Intangibles-Goodwill and Other" ("ASC 350") requires goodwill and other identifiable intangible assets with indefinite useful lives, such as trade names, not be amortized, but instead tested at least annually for impairment (which we test each October 1, absent any impairment indicators), and be written down if impaired. ASC 350 requires that goodwill be allocated to its respective reporting unit and that identifiable intangible assets with finite lives be amortized over their useful lives. As of December 31, 2018, approximately 13.4% of our goodwill related to our United States electrical construction and facilities services segment, approximately 25.9% of our goodwill related to our United States mechanical construction and facilities services segment, approximately 27.7% of our goodwill related to our United States building services segment and approximately 33.0% of our goodwill related to our United States industrial services segment.

We test for impairment of our goodwill at the reporting unit level. Our reporting units are consistent with the reportable segments identified in Note 18, "Segment Information", of the notes to consolidated financial statements. In assessing whether our goodwill is impaired, we compare the fair value of the reporting unit to the carrying amount, including goodwill. If the fair value exceeds the carrying amount, no impairment loss is recognized. However, if the carrying amount of the reporting unit exceeds the fair value, the goodwill of the reporting unit is impaired and an impairment loss in the amount of the excess is recognized and charged to operations. The fair value of each of our reporting units is generally determined using discounted estimated future cash flows; however, in certain circumstances, consideration is given to a market approach whereby fair value is measured based on a multiple of earnings.

During our annual impairment testing procedures as of October 1, 2017, we recorded a non-cash impairment charge of $57.5 million for the year ended December 31, 2017 within our United States industrial services segment. For the years ended December 31, 2018 and 2016, no impairment of our goodwill was recognized.

The weighted average cost of capital used in our annual testing for impairment as of October 1, 2018 was 9.8%, 9.7% and 10.5% for our domestic construction segments, our United States building services segment and our United States industrial services segment, respectively. The perpetual growth rate used for our annual testing was 2.7% for all of our domestic segments. Unfavorable changes in these key assumptions may affect future testing results. For example, keeping all other assumptions constant, a 50 basis point increase in the weighted average costs of capital would cause the estimated fair values of our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment, our United States building services segment and our United States industrial services segment to decrease by approximately $91.7 million, $132.4 million, $71.2 million and $46.4 million, respectively. In addition, keeping all other assumptions constant, a 50 basis point reduction in the perpetual growth rate would cause the estimated fair values of our United States electrical construction and facilities

NOTE 9 - GOODWILL AND IDENTIFIABLE INTANGIBLE ASSETS - (Continued)

services segment, our United States mechanical construction and facilities services segment, our United States building services segment and our United States industrial services segment to decrease by approximately $52.5 million, $74.1 million, $38.3 million and $23.3 million, respectively. Given the amounts by which the fair value exceeds the carrying value for each of our domestic segments, the decreases in estimated fair values described above would not have significantly impacted our 2018 impairment test.

We also test for the impairment of trade names that are not subject to amortization by calculating the fair value using the "relief from royalty payments" methodology. This approach involves two steps: (a) estimating reasonable royalty rates for each trade name and (b) applying these royalty rates to a net revenue stream and discounting the resulting cash flows to determine fair value. This fair value is then compared with the carrying value of each trade name. If the carrying amount of the trade name is greater than the implied fair value of the trade name, an impairment in the amount of the excess is recognized and charged to operations. For the year ended December 31, 2018, no impairment of our indefinite-lived trade names was recognized. The annual impairment review of our indefinite-lived trade names for the years ended December 31, 2017 and 2016 resulted in $0.3 million and $2.4 million, respectively, of non-cash impairment charges as a result of a change in the fair value of subsidiary trade names associated with certain prior acquisitions reported within our United States building services segment and our United States mechanical construction and facilities services segment, respectively.

In addition, we review for the impairment of other identifiable intangible assets that are being amortized whenever facts and circumstances indicate that their carrying values may not be fully recoverable. This test compares their carrying values to the undiscounted pre-tax cash flows expected to result from the use of the assets. If the assets are impaired, the assets are written down to their fair values, generally determined based on their future discounted cash flows. For the year ended December 31, 2018, we recorded a $0.9 million non-cash impairment charge associated with a finite-lived trade name within our United States industrial services segment. For the years ended December 31, 2017 and 2016, no impairment of our other identifiable intangible assets was recognized.

Our development of the present value of future cash flow projections used in impairment testing is based upon assumptions and estimates by management from a review of our operating results, business plans, anticipated growth rates and margins and weighted average cost of capital, among other considerations. Those assumptions and estimates can change in future periods, and other factors used in assessing fair value are outside the control of management, such as interest rates. There can be no assurance that estimates and assumptions made for purposes of our goodwill and identifiable intangible asset impairment testing will prove to be accurate predictions of the future. If our assumptions regarding future business performance or anticipated growth rates and/or margins are not achieved, or there is a rise in interest rates, we may be required to record goodwill and/or identifiable intangible asset impairment charges in future periods. It is not possible at this time to determine if any future impairment charge will result or, if it does, whether such a charge would be material.

The changes in the carrying amount of goodwill by reportable segments during the years ended December 31, 2018 and 2017 were as follows (in thousands):

	United States electrical construction and facilities services segment	United States mechanical construction and facilities services segment	United States building services segment	United States industrial services segment	Total
Balance at December 31, 2016	$ 123,600	$ 226,596	$ 244,793	$ 384,639	$ 979,628
Acquisitions, sales and purchase price adjustments	2,107	30,969	9,640	—	42,716
Intersegment transfers	—	(1,300)	1,300	—	—
Impairment	—	—	—	(57,451)	(57,451)
Balance at December 31, 2017	125,707	256,265	255,733	327,188	964,893
Acquisitions, sales and purchase price adjustments	7,500	56	18,438	—	25,994
Balance at December 31, 2018	$ 133,207	$ 256,321	$ 274,171	$ 327,188	$ 990,887

The aggregate goodwill balance as of December 31, 2016 included $210.6 million of accumulated impairment charges, which were comprised of $139.5 million within the United States building services segment and $71.1 million within the United States industrial services segment.

NOTE 9 - GOODWILL AND IDENTIFIABLE INTANGIBLE ASSETS - (Continued)

Identifiable intangible assets as of December 31, 2018 and 2017 consist of the following (in thousands):

	December 31, 2018			
	Gross Carrying Amount	Accumulated Amortization	Accumulated Impairment Charge	Total
Contract backlog	$ 58,945	$ (56,812)	$ —	$ 2,133
Developed technology/Vendor network	95,661	(55,318)	—	40,343
Customer relationships	522,855	(240,073)	(4,834)	277,948
Non-competition agreements	10,220	(10,220)	—	—
Trade names (amortized)	31,148	(20,893)	—	10,255
Trade names (unamortized)	209,840	—	(52,233)	157,607
Total	$ 928,669	$ (383,316)	$ (57,067)	$ 488,286

	December 31, 2017			
	Gross Carrying Amount	Accumulated Amortization	Accumulated Impairment Charge	Total
Contract backlog	$ 55,545	$ (55,229)	$ —	$ 316
Developed technology/Vendor network	95,661	(50,479)	—	45,182
Customer relationships	500,756	(206,319)	(4,834)	289,603
Non-competition agreements	10,220	(10,178)	—	42
Trade names (amortized)	32,848	(19,461)	—	13,387
Trade names (unamortized)	198,739	—	(52,233)	146,506
Total	$ 893,769	$ (341,666)	$ (57,067)	$ 495,036

Identifiable intangible assets attributable to companies acquired in 2018 and 2017 have been valued at $36.6 million and $56.6 million, respectively. See Note 4 - Acquisitions of Businesses of the notes to consolidated financial statements for additional information. The identifiable intangible amounts are amortized on a straight-line basis, as it approximates the pattern in which the economic benefits of the identifiable intangible assets are consumed. The weighted average amortization periods for the unamortized balances remaining are, in the aggregate, approximately 8.75 years, which are comprised of the following: 0.5 years for contract backlog, 8.5 years for developed technology/vendor network, 8.75 years for customer relationships and 11.75 years for trade names.

Amortization expense related to identifiable intangible assets with finite lives was $42.4 million, $48.6 million and $40.9 million for the years ended December 31, 2018, 2017 and 2016, respectively. The following table presents the estimated future amortization expense of identifiable intangible assets in the following years (in thousands):

2019	$ 42,315
2020	40,000
2021	39,207
2022	37,003
2023	36,065
Thereafter	136,089
	$ 330,679

NOTE 10 - DEBT

Credit Agreement

We have a credit agreement dated as of August 3, 2016, which provides for a $900.0 million revolving credit facility (the “2016 Revolving Credit Facility”) and a $400.0 million term loan (the “2016 Term Loan”) (collectively referred to as the “2016 Credit Agreement”) expiring August 3, 2021. We may increase the 2016 Revolving Credit Facility to $1.3 billion if additional lenders are identified and/or existing lenders are willing to increase their current commitments. We may allocate up to $300.0 million of available capacity under the 2016 Revolving Credit Facility to letters of credit for our account or for the account of any of our subsidiaries. Obligations under the 2016 Credit Agreement are guaranteed by most of our direct and indirect subsidiaries and are secured by substantially all of our assets. The 2016 Credit Agreement contains various covenants providing for, among other things, maintenance of certain financial ratios and certain limitations on payment of dividends, common stock repurchases, investments, acquisitions, indebtedness and capital expenditures. We were in compliance with all such covenants as of December 31, 2018 and 2017. A commitment fee is payable on the average daily unused amount of the 2016 Revolving Credit Facility, which ranges from 0.15% to 0.30%, based on certain financial tests. The fee was 0.15% of the unused amount as of December 31, 2018. Borrowings under the 2016 Credit Agreement bear interest at (1) a base rate plus a margin of 0.00% to 0.75%, based on certain financial tests, or (2) United States dollar LIBOR (2.52% at December 31, 2018) plus 1.00% to 1.75%, based on certain financial tests. The base rate is determined by the greater of (a) the prime commercial lending rate announced by Bank of Montreal from time to time (5.50% at December 31, 2018), (b) the federal funds effective rate, plus ½ of 1.00%, (c) the daily one month LIBOR rate, plus 1.00%, or (d) 0.00%.The interest rate in effect at December 31, 2018 was 3.52%. Fees for letters of credit issued under the 2016 Revolving Credit Facility range from 1.00% to 1.75% of the respective face amounts of outstanding letters of credit and are computed based on certain financial tests. Debt issuance costs are amortized over the life of the agreement and are included as part of interest expense. The 2016 Term Loan previously required us to make principal payments of $5.0 million on the last day of March, June, September and December of each year, which commenced with the calendar quarter ended December 31, 2016. On December 30, 2016, we made a payment of $100.0 million, of which $5.0 million represented our required quarterly payment and $95.0 million represented a prepayment of outstanding principal. Such prepayment was applied against the remaining mandatory quarterly payments on a ratable basis. As a result, commencing with the calendar quarter ended March 31, 2017, our required quarterly payment has been reduced to $3.8 million. All unpaid principal and interest is due on August 3, 2021. As of December 31, 2018 and 2017, the balance of the 2016 Term Loan was $269.6 million and $284.8 million, respectively. As of December 31, 2018 and 2017, we had approximately $109.0 million and $110.1 million of letters of credit outstanding, respectively. There were $25.0 million in borrowings outstanding under the 2016 Revolving Credit Facility as of December 31, 2018 and 2017.

Long-term debt in the accompanying Consolidated Balance Sheets consisted of the following amounts as of December 31, 2018 and 2017 (in thousands):

	2018	2017
Revolving credit facility	$ 25,000	$ 25,000
Term loan, interest payable at varying amounts through 2021	269,620	284,810
Unamortized debt issuance costs	(3,065)	(4,251)
Capitalized lease obligations, at weighted average interest rates from 2.5% to 5.0% payable in varying amounts through 2022	4,213	4,571
Other, payable through 2019	9	20
Total debt	295,777	310,150
Less: current maturities	16,013	15,364
Total long-term debt	$ 279,764	$ 294,786

Capitalized Lease Obligations

See Note 16 - Commitments and Contingencies of the notes to consolidated financial statements for additional information.

NOTE 11 - FAIR VALUE MEASUREMENTS

We use a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy, which gives the highest priority to quoted prices in active markets, is comprised of the following three levels:

Level 1 – Unadjusted quoted market prices in active markets for identical assets and liabilities.

Level 2 – Observable inputs, other than Level 1 inputs. Level 2 inputs would typically include quoted prices in markets that are not active or financial instruments for which all significant inputs are observable, either directly or indirectly.

Level 3 – Prices or valuations that require inputs that are both significant to the measurement and unobservable.

The following tables provide the assets and liabilities carried at fair value measured on a recurring basis as of December 31, 2018 and 2017 (in thousands):

	Assets at Fair Value as of December 31, 2018			
Asset Category	**Level 1**	**Level 2**	**Level 3**	**Total**
Cash and cash equivalents (1)	$ 363,907	$ —	$ —	$ 363,907
Restricted cash (2)	2,307	—	—	2,307
Deferred compensation plan assets (3)	23,124	—	—	23,124
Total	$ 389,338	$ —	$ —	$ 389,338

	Assets at Fair Value as of December 31, 2017			
Asset Category	**Level 1**	**Level 2**	**Level 3**	**Total**
Cash and cash equivalents (1)	$ 467,430	$ —	$ —	$ 467,430
Restricted cash (2)	1,958	—	—	1,958
Deferred compensation plan assets (3)	22,054	—	—	22,054
Total	$ 491,442	$ —	$ —	$ 491,442

(1) Cash and cash equivalents consist primarily of money market funds with original maturity dates of three months or less, which are Level 1 assets. At December 31, 2018 and 2017, we had $161.3 million and $194.2 million, respectively, in money market funds.

(2) Restricted cash is classified as "Prepaid expenses and other" in the Consolidated Balance Sheets. Restricted cash primarily represents cash held in account for use on customer contracts.

(3) Deferred compensation plan assets are classified as "Other assets" in the Consolidated Balance Sheets.

We believe that the carrying values of our financial instruments, which include accounts receivable and other financing commitments, approximate their fair values due primarily to their short-term maturities and low risk of counterparty default. The carrying value of our debt associated with the 2016 Credit Agreement approximates its fair value due to the variable rate on such debt.

NOTE 12 - INCOME TAXES

On December 22, 2017, the U.S. government enacted comprehensive tax legislation, commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act makes broad and complex changes to the U.S. tax code, including, among other things, reducing the U.S. federal corporate tax rate from 35% to 21%, eliminating certain deductions including the domestic manufacturing deduction, providing additional limitations on deductions for executive compensation, imposing a mandatory one-time transition tax on accumulated earnings from certain foreign subsidiaries and creating new taxes on certain foreign sourced earnings. The Tax Act also extended the option to claim accelerated depreciation deductions by allowing companies to fully deduct qualified property in the year such property is placed in service.

We estimated the enactment date effects of the Tax Act and recorded provisional amounts in our 2017 consolidated financial statements in accordance with Staff Accounting Bulletin No. 118. As a result of the reduction of the U.S. corporate tax rate to 21%, U.S. generally accepted accounting principles required a re-measurement of our deferred tax assets and liabilities as of the date of enactment. As such, the Company's net federal and state deferred tax liability balances were reduced by approximately $39.3 million, which was recorded as a reduction of income tax expense in the Company's Consolidated Statements of Operations for the year ended December 31, 2017. We finalized our accounting for the income tax effects of the Tax Act during 2018 with an insignificant impact. As part of such analysis, the Company has concluded that it is not subject to the one-time transition tax

NOTE 12 - INCOME TAXES - (Continued)

referenced above. We will continue to monitor for potential future changes in certain state and local tax regulations resulting from the Tax Act which may have an impact on our consolidated income tax provision.

For the years ended December 31, 2018, 2017 and 2016, our income tax provision was calculated based on income from continuing operations before income taxes as follows: (in thousands):

	2018	2017	2016
United States	$ 375,408	$ 303,854	$ 283,904
Foreign	19,620	14,895	12,590
	$ 395,028	$ 318,749	$ 296,494

The income tax provision in the accompanying Consolidated Statements of Operations for the years ended December 31, 2018, 2017 and 2016 consisted of the following (in thousands):

	2018	2017	2016
Current:			
Federal provision	$ 75,405	$ 120,317	$ 95,171
State and local provisions	28,063	23,496	23,387
Foreign provision	1,389	244	749
	104,857	144,057	119,307
Deferred	4,249	(53,358)	(8,108)
	$ 109,106	$ 90,699	$ 111,199

Our 2018 income tax provision from continuing operations was $109.1 million compared to $90.7 million for 2017 and $111.2 million for 2016. The increase in the 2018 income tax provision compared to 2017 was primarily due to increased income before income taxes. The decrease in the 2017 income tax provision compared to 2016 was predominantly due to the revaluation of the Company's net deferred tax liability balances as discussed above, partially offset by increased income before income taxes.

The actual income tax rates on income from continuing operations before income taxes, less amounts attributable to noncontrolling interests, for the years ended December 31, 2018, 2017 and 2016, were 27.6%, 28.5% and 37.5%, respectively. The decrease in the 2018 actual income tax rate compared to 2017 and the decrease in the 2017 actual income tax rate compared to 2016 were due to the net impact of the Tax Act on each period, including the reduction of the U.S. federal corporate tax rate from 35% to 21% in 2018 and the reduction in income tax expense associated with the re-measurement of our net deferred tax liability balance in 2017.

Items accounting for the differences between income taxes computed at the federal statutory rate and the income tax provision for the years ended December 31, 2018, 2017 and 2016 were as follows (in thousands):

	2018	2017	2016
Federal income taxes at the statutory rate	$ 82,946	$ 111,562	$ 103,773
State and local income taxes, net of federal tax benefits	21,827	15,736	14,801
State tax reserves	(7)	(2,543)	74
Permanent differences	6,584	4,916	3,698
Domestic manufacturing deduction	—	(10,387)	(6,830)
Excess tax benefit from share-based compensation	(1,227)	(1,341)	(2,114)
Goodwill impairment	—	17,055	—
Foreign income taxes (including UK statutory rate changes)	70	(2,586)	(1,290)
Impact of federal rate change on net deferred tax liabilities	—	(39,343)	—
Federal tax reserves	(67)	(1,247)	(893)
Other	(1,020)	(1,123)	(20)
	$ 109,106	$ 90,699	$ 111,199

NOTE 12 - INCOME TAXES - (Continued)

Our income tax provision for the year ended December 31, 2018 included $0.6 million for the minimum tax on global intangible low-taxed income for certain earnings of our foreign subsidiaries, as required under the Tax Act. The Company has elected to recognize such tax as an expense in the period incurred.

As of December 31, 2018, we had undistributed foreign earnings from certain foreign subsidiaries of approximately $54.6 million. Based on our evaluation, and given that a significant portion of such earnings were subject to tax in prior periods or are indefinitely reinvested, we have concluded that any taxes associated with the repatriation of such foreign earnings would be immaterial. As of December 31, 2018, the amount of cash held by these foreign subsidiaries was approximately $60.6 million which, if repatriated, should not result in any federal or state income taxes.

Tax benefits are recognized only if it is “more likely than not” that the tax position would be sustained on its technical merits. The amount recognized is the largest amount of the tax benefit that is greater than 50% likely of being realized on examination, with a tax examination being presumed to occur. For positions not meeting the “more likely than not” test, no tax benefit is recognized. As of December 31, 2018 and 2017, the amount of unrecognized income tax benefits was zero and $0.8 million, respectively.

A reconciliation of unrecognized income tax benefits at the beginning and at the end of the year is as follows (in thousands):

	2018	2017
Balance at beginning of year	$ 841	$ 3,982
Additions based on tax positions related to the current year	—	1,158
Additions based on tax positions related to prior years	—	1,244
Adjustments for tax positions of prior years	184	(5,543)
Reductions for expired statute of limitations	(1,025)	—
Balance at end of year	$ —	$ 841

We report interest expense and/or interest income related to unrecognized tax benefits in the income tax provision. As of December 31, 2018 and 2017, respectively, we had approximately zero and $0.1 million of accrued interest expense related to unrecognized income tax benefits included as a liability in the Consolidated Balance Sheets. For the years ended December 31, 2018 and 2017, less than $0.1 million of interest expense was recognized in the income tax provision. In addition, for the years ended December 31, 2018 and 2017, respectively, approximately $0.1 million and $0.5 million of interest income was recognized in the income tax provision. We do not anticipate any significant changes to our reserves for uncertain tax positions in the next twelve months.

We file income tax returns with the Internal Revenue Service and various state, local and foreign tax agencies. The Company is currently under examination by various taxing authorities for the years 2014 through 2017. During the first quarter of 2017, the Company settled an examination with a taxing authority which resulted in a $3.3 million reversal of reserves for previously uncertain tax positions.

NOTE 12 - INCOME TAXES - (Continued)

Deferred income tax assets and liabilities are recognized in the Consolidated Balance Sheets for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. The deferred income tax assets and deferred income tax liabilities recorded for the years ended December 31, 2018 and 2017 were as follows (in thousands):

	2018	2017
Deferred income tax assets:		
Excess of amounts expensed for financial statement purposes over amounts deducted for income tax purposes:		
Insurance liabilities	$ 44,192	$ 42,425
Pension liability	3,204	6,900
Deferred compensation	29,300	27,742
Other (including liabilities and reserves)	27,400	28,534
Total deferred income tax assets	104,096	105,601
Valuation allowance for deferred tax assets	(3,855)	(3,825)
Net deferred income tax assets	100,241	101,776
Deferred income tax liabilities:		
Costs capitalized for financial statement purposes and deducted for income tax purposes:		
Goodwill and identifiable intangible assets	(152,761)	(150,900)
Depreciation of property, plant and equipment	(14,904)	(11,781)
Other	(3,424)	(3,792)
Total deferred income tax liabilities	(171,089)	(166,473)
Net deferred income tax liabilities	$ (70,848)	$ (64,697)

The components of the net deferred income tax liabilities in the accompanying Consolidated Balance Sheets are included in “Other assets” of $4.7 million and $10.0 million and “Other long-term obligations” of $75.5 million and $74.7 million, at December 31, 2018 and 2017, respectively.

Valuation allowances are established when necessary to reduce deferred income tax assets when it is more likely than not that a tax benefit will not be realized. We file a consolidated federal income tax return including all of our U.S. subsidiaries. As of December 31, 2018 and 2017, the total valuation allowance on deferred income tax assets was approximately $3.9 million and $3.8 million, respectively, related to state and local net operating losses. Although realization is not assured, we believe it is more likely than not that the deferred income tax assets, net of the valuation allowance discussed above, will be realized. The amount of the deferred income tax assets considered realizable, however, could be reduced if estimates of future income are reduced.

At December 31, 2018, we had trading losses for United Kingdom income tax purposes of approximately $4.2 million, which have no expiration date. Such losses are subject to review by the United Kingdom taxing authority. Realization of the deferred income tax assets is dependent on our generating sufficient taxable income. We believe that the deferred income tax assets will be realized through projected future income.

NOTE 13 - COMMON STOCK

As of December 31, 2018 and 2017, there were 55,983,763 and 58,798,428 shares of our common stock outstanding, respectively.

We have paid quarterly dividends since October 25, 2011. We currently pay a regular quarterly dividend of $0.08 per share.

On September 26, 2011, our Board of Directors authorized us to repurchase up to $100.0 million of our outstanding common stock. On December 5, 2013, October 23, 2014, October 28, 2015, October 25, 2017 and October 23, 2018, our Board of Directors authorized us to repurchase up to an additional $100.0 million, $250.0 million, $200.0 million, $100.0 million and $200.0 million of our outstanding common stock, respectively. During 2018, we have repurchased 3,066,869 shares of our common stock for approximately $216.2 million. Since the inception of the repurchase programs through December 31, 2018, we have repurchased approximately 15.9 million shares of our common stock for approximately $791.5 million. As of December 31, 2018, there remained authorization for us to repurchase approximately $158.5 million of our shares. The repurchase programs have no expiration date and do not obligate the Company to acquire any particular amount of common stock and may be suspended, recommenced or discontinued at any time or from time to time without prior notice. We may repurchase our shares from time to time to the extent permitted by securities laws and other legal requirements, including provisions in our 2016 Credit Agreement placing limitations on such repurchases. The repurchase programs have been and will be funded from our operations.

NOTE 14 - SHARE-BASED COMPENSATION PLANS

We have an incentive plan under which stock options, stock awards, stock units and other share-based compensation may be granted to officers, non-employee directors and key employees of the Company. Under the terms of this plan, 3,250,000 shares were authorized, and 1,327,307 shares are available for grant or issuance as of December 31, 2018. Any issuances under this plan are valued at the fair market value of the common stock on the grant date. The vesting and expiration of any stock option grants and the vesting schedule of any stock awards or stock units are determined by the Compensation and Personnel Committee of our Board of Directors at the time of the grant. Forfeitures are recognized as they occur.

The following table summarizes activity regarding our stock options and awards of shares and stock units since December 31, 2015:

Stock Options			Restricted Stock Units		
	Shares	Weighted Average Price		Shares	Weighted Average Price
Balance, December 31, 2015	306,726	$ 23.42	Balance, December 31, 2015	605,488	$ 39.47
Granted	—	—	Granted	191,936	$ 46.86
Expired	—	—	Forfeited	(965)	$ 43.13
Exercised	(163,726)	$ 23.73	Vested	(304,171)	$ 35.29
Balance, December 31, 2016	143,000	$ 23.06	Balance, December 31, 2016	492,288	$ 44.93
Granted	—	—	Granted	198,179	$ 68.33
Expired	—	—	Forfeited	(1,200)	$ 60.68
Exercised	(50,000)	$ 20.42	Vested	(180,395)	$ 44.57
Balance, December 31, 2017	93,000	$ 24.48	Balance, December 31, 2017	508,872	$ 54.13
Granted	—	—	Granted	135,259	$ 80.37
Expired	—	—	Forfeited	(1,250)	$ 71.27
Exercised	(53,000)	$ 24.48	Vested	(166,295)	$ 48.44
Balance, December 31, 2018	40,000	$ 24.48	Balance, December 31, 2018	476,586	$ 63.52

We recognized approximately $11.0 million, $9.9 million and $8.9 million of compensation expense for stock units awarded to non-employee directors and employees pursuant to incentive plans for the years ended December 31, 2018, 2017 and 2016, respectively. We have approximately $9.2 million of compensation expense, net of income taxes, which will be recognized over the remaining vesting periods of up to approximately four years. In addition, an aggregate of 72,771 restricted stock units granted to employees and non-employee directors vested as of December 31, 2018, but issuance has been deferred up to five years.

All outstanding stock options were fully vested; therefore, no compensation expense was recognized for the years ended December 31, 2018, 2017 and 2016.

NOTE 14 - SHARE-BASED COMPENSATION PLANS - (Continued)

The Company received less than $0.1 million, less than $0.1 million and approximately $0.7 million as a result of stock option exercises during the years ended December 31, 2018, 2017 and 2016, respectively. The income tax benefit derived in 2018, 2017 and 2016 as a result of such exercises and share-based compensation was approximately $3.6 million, $3.9 million and $6.2 million, respectively, of which approximately $1.6 million, $1.6 million and $2.5 million, respectively, represented excess tax benefits. The total intrinsic value of options (the amounts by which the stock price exceeded the exercise price of the option on the date of exercise) that were exercised during 2018, 2017 and 2016 was approximately $2.7 million, $2.3 million and $4.6 million, respectively.

At December 31, 2018, 2017 and 2016, 40,000 options, 93,000 options and 143,000 options were exercisable, respectively. The weighted average exercise price of exercisable options at December 31, 2018, 2017 and 2016 was approximately $24.48, $24.48 and $23.06, respectively. The total aggregate intrinsic value of options outstanding and exercisable as of December 31, 2018, 2017 and 2016 were approximately $1.4 million, $5.3 million and $6.8 million, respectively.

The following table summarizes information about our outstanding stock options as of December 31, 2018:

Stock Options Outstanding and Exercisable

Range of Exercise Prices	Number	Weighted Average Remaining Life	Weighted Average Exercise Price
$24.48	40,000	1.45 Years	$24.48

We have an employee stock purchase plan. Under the terms of this plan, the maximum number of shares of our common stock that may be purchased is 3,000,000 shares. Generally, our corporate employees and non-union employees of our United States subsidiaries are eligible to participate in this plan. Employees covered by collective bargaining agreements generally are not eligible to participate in this plan.

NOTE 15 - RETIREMENT PLANS

Defined Benefit Plans

Our United Kingdom subsidiary has a defined benefit pension plan covering all eligible employees (the “UK Plan”); however, no individual joining the company after October 31, 2001 may participate in the plan. On May 31, 2010, we curtailed the future accrual of benefits for active employees under this plan.

We account for our UK Plan and other defined benefit plans in accordance with ASC 715, “Compensation-Retirement Benefits” (“ASC 715”). ASC 715 requires that (a) the funded status, which is measured as the difference between the fair value of plan assets and the projected benefit obligations, be recorded in our balance sheet with a corresponding adjustment to accumulated other comprehensive income (loss) and (b) gains and losses for the differences between actuarial assumptions and actual results, and unrecognized service costs, be recognized through accumulated other comprehensive income (loss). These amounts will be subsequently recognized as net periodic pension cost.

NOTE 15 - RETIREMENT PLANS - (Continued)

The change in benefit obligations and assets of the UK Plan for the years ended December 31, 2018 and 2017 consisted of the following components (in thousands):

	2018	2017
Change in pension benefit obligation		
Benefit obligation at beginning of year	$ 332,618	$ 306,731
Interest cost	8,085	8,622
Actuarial (gain) loss	(27,755)	2,058
Benefits paid	(14,318)	(13,709)
Foreign currency exchange rate changes	(16,854)	28,916
Benefit obligation at end of year	281,776	332,618
Change in pension plan assets		
Fair value of plan assets at beginning of year	295,968	257,236
Actual return on plan assets	(6,489)	22,899
Employer contributions	4,742	4,727
Benefits paid	(14,318)	(13,709)
Foreign currency exchange rate changes	(15,709)	24,815
Fair value of plan assets at end of year	264,194	295,968
Funded status at end of year	$ (17,582)	$ (36,650)

Amounts not yet reflected in net periodic pension cost and included in accumulated other comprehensive loss were as follows (in thousands):

	2018	2017
Unrecognized losses	$ 86,768	$ 102,054

The underfunded status of the UK Plan of $17.6 million and $36.7 million at December 31, 2018 and 2017, respectively, is included in “Other long-term obligations” in the accompanying Consolidated Balance Sheets. No plan assets are expected to be returned to us during the year ending December 31, 2019.

The weighted average assumptions used to determine benefit obligations as of December 31, 2018 and 2017 were as follows:

	2018	2017
Discount rate	2.9%	2.5%

The weighted average assumptions used to determine net periodic pension cost for the years ended December 31, 2018, 2017 and 2016 were as follows:

	2018	2017	2016
Discount rate	2.5%	2.7%	3.8%
Annual rate of return on plan assets	5.0%	5.3%	6.2%

The annual rate of return on plan assets has been determined by modeling possible returns using the actuary’s portfolio return calculator and the fair value of plan assets. This models the long term expected returns of the various asset classes held in the portfolio and takes into account the additional benefits of holding a diversified portfolio. For measurement purposes of the liability, the annual rate of inflation of covered pension benefits assumed for 2018 and 2017 was 2.1%.

NOTE 15 - RETIREMENT PLANS - (Continued)

The components of net periodic pension cost of the UK Plan for the years ended December 31, 2018, 2017 and 2016 were as follows (in thousands):

	2018	2017	2016
Interest cost	$ 8,085	$ 8,622	$ 10,320
Expected return on plan assets	(13,797)	(13,508)	(14,227)
Amortization of unrecognized loss	2,630	2,942	2,047
Net periodic pension cost (income)	$ (3,082)	$ (1,944)	$ (1,860)

Actuarial gains and losses are amortized using a corridor approach whereby cumulative gains and losses in excess of the greater of 10% of the pension benefit obligation or the fair value of plan assets are amortized over the average life expectancy of plan participants. The amortization period for 2018 was 25 years.

The reclassification adjustment, net of income taxes, for the UK Plan from accumulated other comprehensive loss into net periodic pension cost for the years ended December 31, 2018, 2017 and 2016 was approximately $2.1 million, $2.3 million and $1.7 million, respectively. The estimated unrecognized loss for the UK Plan that will be amortized from accumulated other comprehensive loss into net periodic pension cost over the next year is approximately $1.9 million, net of income taxes.

UK Plan Assets

The weighted average asset allocations and weighted average target allocations at December 31, 2018 and 2017 were as follows:

Asset Category	Target Asset Allocation	December 31, 2018	December 31, 2017
Equity securities	15.0%	13.4%	14.1%
Debt securities	65.0%	71.2%	77.3%
Cash	10.0%	6.1%	8.6%
Real estate	10.0%	9.3%	—%
Total	100.0%	100.0%	100.0%

Plan assets of our UK Plan are invested through fund managers. Debt securities include United Kingdom government debt and United States, United Kingdom, European and emerging market corporate debt. Equity securities include marketable equity and equity like instruments across developed global equity markets. Real estate assets represent investments in trusts which invest directly or indirectly in various properties throughout the United Kingdom.

The following tables set forth by level, within the fair value hierarchy discussed in Note 11 - Fair Value Measurements, the fair value of assets of the UK Plan as of December 31, 2018 and 2017 (in thousands):

	Assets at Fair Value as of December 31, 2018			
Asset Category	Level 1	Level 2	Level 3	Total
Equity and equity like investments	$ —	$ 35,425	$ —	$ 35,425
Corporate debt securities	—	37,703	98,077	135,780
Government bonds	—	52,445	—	52,445
Cash	16,097	—	—	16,097
Real estate	—	—	24,447	24,447
Total	$ 16,097	$ 125,573	$ 122,524	$ 264,194

NOTE 15 - RETIREMENT PLANS - (Continued)

	Assets at Fair Value as of December 31, 2017			
Asset Category	**Level 1**	**Level 2**	**Level 3**	**Total**
Equity and equity like investments	$ —	$ 41,684	$ —	$ 41,684
Corporate debt securities	—	69,630	103,945	173,575
Government bonds	—	55,207	—	55,207
Cash	25,502	—	—	25,502
Total	$ 25,502	$ 166,521	$ 103,945	$ 295,968

In regards to the plan assets of our UK Plan, investment amounts have been allocated within the fair value hierarchy based on the nature of the investment. The characteristics of the assets that sit within each level are summarized as follows:

Level 1-This asset represents cash.

Level 2-These assets are a combination of the following:

(a) Assets that are not exchange traded but have a unit price that is based on the net asset value of the fund. The unit prices are not quoted but the underlying assets held by the fund are either:

(i) held in a variety of listed investments; or

(ii) held in UK treasury bonds or corporate bonds with the asset value being based on fixed income streams. Some of the underlying bonds are also listed on regulated markets.

It is the value of the underlying assets that have been used to calculate the unit price of the fund.

(b) Assets that are not exchange traded but have a unit price that is based on the net asset value of the fund. The unit prices are quoted. The underlying assets within these funds comprise cash or assets that are listed on a regulated market (i.e., the values are based on observable market data) and it is these values that are used to calculate the unit price of the fund.

Level 3-Assets that are not exchange traded but have a unit price that is based on the net asset value of the investment or for which fair value is determined by third party appraisals or valuations. Such fair values are not quoted or available on any market.

The table below sets forth a summary of changes in the fair value of the UK Plan's Level 3 assets for the year ended December 31, 2018 (in thousands):

Level 3 Assets	**2018**	**2017**
Start of year balance	$ 103,945	$ —
Actual return on plan assets, relating to assets still held at reporting date	(71)	1,858
Actual return on plan assets, relating to assets sold during the period	216	—
Purchases, sales and settlements, net	25,523	98,633
Change due to exchange rate changes	(7,089)	3,454
End of year balance	$ 122,524	$ 103,945

Level 3 debt securities are valued based on the credit rating and performance of the underlying debt portfolio, which includes benchmarking of risk and return relative to the investment plan. Level 3 real estate investments are valued at fair market value based on third party appraisals or valuations.

The investment policies and strategies for the plan assets are established by the plan trustees (who are independent of the Company) to achieve a reasonable balance between risk, likely return and administration expense, as well as to maintain funds at a level to meet minimum funding requirements. In order to ensure that an appropriate investment strategy is in place, an analysis of the UK Plan's assets and liabilities is completed periodically.

NOTE 15 - RETIREMENT PLANS - (Continued)

Cash Flows:

Contributions

Our United Kingdom subsidiary expects to contribute approximately $4.5 million to the UK Plan in 2019.

Estimated Future Benefit Payments

The following estimated benefit payments are expected to be paid in the following years (in thousands):

	Pension Benefits
2019	$ 14,007
2020	$ 14,425
2021	$ 14,857
2022	$ 15,301
2023	$ 15,757
Succeeding five years	$ 86,141

The following table shows certain information for the UK Plan where the accumulated benefit obligation is in excess of plan assets as of December 31, 2018 and 2017 (in thousands):

	2018	2017
Projected benefit obligation	$ 281,776	$ 332,618
Accumulated benefit obligation	$ 281,776	$ 332,618
Fair value of plan assets	$ 264,194	$ 295,968

We also sponsor three domestic retirement plans in which participation by new individuals is frozen. The benefit obligation associated with these plans as of December 31, 2018 and 2017 was approximately $8.5 million and $9.3 million, respectively. The estimated fair value of the plan assets as of December 31, 2018 and 2017 was approximately $4.9 million and $5.5 million, respectively. The plan assets are considered Level 1 assets within the fair value hierarchy and are predominantly invested in cash, equities, and equity and bond funds. The liability balances as of December 31, 2018 and 2017 are classified as “Other long-term obligations” in the accompanying Consolidated Balance Sheets. The measurement date for these plans is December 31 of each year. The major assumptions used in the actuarial valuations to determine benefit obligations as of December 31, 2018 and 2017 included discount rates of 4.00% to 4.25% for 2018 and 3.50% to 4.00% for 2017. Also, included was an expected rate of return of 7.00% for both 2018 and 2017. The reclassification adjustment, net of income taxes, from accumulated other comprehensive loss into net periodic pension cost was approximately $0.2 million for each of the years ended December 31, 2018, 2017 and 2016. The estimated loss for these plans that will be amortized from accumulated other comprehensive loss into net periodic pension cost over the next year is approximately $0.2 million, net of income taxes. The future estimated benefit payments expected to be paid from the plans for the next ten years is approximately $0.5 million per year.

Multiemployer Plans

We participate in approximately 200 multiemployer pension plans (“MEPPs”) that provide retirement benefits to certain union employees in accordance with various collective bargaining agreements (“CBAs”). As one of many participating employers in an MEPP, we are potentially liable with the other participating employers for such plan's underfunding either through an increase in our required contributions, or in the case of our withdrawal from the plan, a payment based upon our proportionate share of the plan's unfunded benefits, in each case, as described below. Our contributions to a particular MEPP are established by the applicable CBAs; however, our required contributions may increase based on the funded status of an MEPP and legal requirements of the Pension Protection Act of 2006 (the “PPA”), which requires substantially underfunded MEPPs to implement a funding improvement plan (“FIP”) or a rehabilitation plan (“RP”) to improve their funded status. Factors that could impact the funded status of an MEPP include, without limitation, investment performance, changes in the participant demographics, decline in the number of contributing employers, changes in actuarial assumptions and the utilization of extended amortization provisions.

An FIP or RP requires a particular MEPP to adopt measures to correct its underfunding status. These measures may include, but are not limited to: (a) an increase in our contribution rate as a signatory to the applicable CBA, (b) a reallocation of the contributions

NOTE 15 - RETIREMENT PLANS - (Continued)

already being made by participating employers for various benefits to individuals participating in the MEPP and/or (c) a reduction in the benefits to be paid to future and/or current retirees. In addition, the PPA requires that a 5% surcharge be levied on employer contributions for the first year commencing after the date the employer receives notice that the MEPP is in critical status and a 10% surcharge on each succeeding year until a CBA is in place with terms and conditions consistent with the RP.

We could also be obligated to make payments to MEPPs if we either cease to have an obligation to contribute to the MEPP or significantly reduce our contributions to the MEPP because we reduce our number of employees who are covered by the relevant MEPP for various reasons, including, but not limited to, layoffs or closure of a subsidiary assuming the MEPP has unfunded vested benefits. The amount of such payments (known as a complete or partial withdrawal liability) would equal our proportionate share of the MEPPs' unfunded vested benefits. We believe that certain of the MEPPs in which we participate may have unfunded vested benefits. Due to uncertainty regarding future factors that could trigger withdrawal liability, as well as the absence of specific information regarding the MEPP's current financial situation, we are unable to determine (a) the amount and timing of any future withdrawal liability, if any, and (b) whether our participation in these MEPPs could have a material adverse impact on our financial position, results of operations or liquidity. We did not record any withdrawal liability for the years ended December 31, 2018, 2017 and 2016.

The following table lists all domestic MEPPs to which our contributions exceeded $2.0 million in 2018. Additionally, this table also lists all domestic MEPPs to which we contributed in 2018 in excess of $0.5 million for MEPPs in the critical status, "red zone", and $1.0 million for MEPPs in the endangered status, "orange or yellow zones", as defined by the PPA (in thousands):

Pension Fund	EIN/ Pension Plan Number		PPA Zone Status (1)		FIP/RP Status	Contributions			Contributions greater than 5% of total plan contributions (2)	Expiration date of CBA
			2018	2017		2018	2017	2016		
National Automatic Sprinkler Industry Pension Fund	52-6054620	001	Red	Red	Implemented	$ 14,888	$ 14,228	$ 11,075	No	March 2019 to June 2022
Plumbers & Pipefitters National Pension Fund	52-6152779	001	Yellow	Yellow	Implemented	11,868	12,550	12,034	No	January 2019 to August 2026
Sheet Metal Workers National Pension Fund	52-6112463	001	Yellow	Yellow	Implemented	10,895	12,895	11,280	No	April 2019 to May 2023
National Electrical Benefit Fund	53-0181657	001	Green	Green	N/A	10,700	11,572	10,328	No	February 2019 to May 2022
Pension, Hospitalization & Benefit Plan of the Electrical Industry-Pension Trust Account	13-6123601	001	Green	Green	N/A	10,469	9,489	9,687	No	April 2019 to November 2021
Central Pension Fund of the IUOE & Participating Employers	36-6052390	001	Green	Green	N/A	6,384	6,070	6,211	No	January 2019 to September 2023
Plumbers Pipefitters & Mechanical Equipment Service Local Union 392 Pension Plan	31-0655223	001	Red	Red	Implemented	6,047	6,084	5,202	Yes	June 2019
Pipefitters Union Local 537 Pension Fund	51-6030859	001	Green	Green	N/A	6,038	4,057	3,970	No	September 2020 to August 2021
Southern California IBEW-NECA Pension Trust Fund	95-6392774	001	Yellow	Red	Implemented	5,754	3,669	3,289	No	June 2019 to May 2020
Sheet Metal Workers Pension Plan of Northern California	51-6115939	001	Red	Red	Implemented	5,488	6,023	5,164	No	June 2019 to June 2021
Electrical Workers Local No. 26 Pension Trust Fund	52-6117919	001	Green	Green	N/A	5,485	4,441	3,390	Yes	May 2019 to July 2021
Electrical Contractors Association of the City of Chicago Local Union 134, IBEW Joint Pension Trust of Chicago Pension Plan 2	51-6030753	002	Green	Green	N/A	4,308	5,537	5,518	No	June 2019

NOTE 15 - RETIREMENT PLANS - (Continued)

Pension Fund	EIN/ Pension Plan Number	PPA Zone Status (1) 2018	PPA Zone Status (1) 2017	FIP/RP Status	Contributions 2018	Contributions 2017	Contributions 2016	Contributions greater than 5% of total plan contributions (2)	Expiration date of CBA
U.A. Local 393 Pension Trust Fund Defined Benefit	94-6359772 002	Green	Green	N/A	4,298	1,540	2,490	Yes	June 2019 to June 2021
Eighth District Electrical Pension Fund	84-6100393 001	Green	Green	N/A	3,486	3,786	3,444	Yes	February 2019 to May 2022
U.A. Plumbers Local 24 Pension Fund	22-6042823 001	Green	Green	N/A	3,461	3,092	3,147	Yes	April 2020
Edison Pension Plan	93-6061681 001	Green	Green	N/A	3,140	1,628	1,400	No	December 2020
Northern California Pipe Trades Pension Plan	94-3190386 001	Green	Green	N/A	3,104	2,963	6,495	No	June 2019 to June 2021
Southern California Pipe Trades Retirement Fund	51-6108443 001	Green	Green	N/A	3,095	3,907	4,371	No	June 2019 to August 2026
San Diego Electrical Pension Plan	95-6101801 001	Green	Green	N/A	3,008	2,862	2,216	Yes	May 2019 to May 2020
Plumbers & Steamfitters Local 486 Pension Fund	52-6124449 001	Green	Green	N/A	2,720	1,830	1,155	Yes	March 2019 to December 2019
NECA-IBEW Pension Trust Fund	51-6029903 001	Green	Green	N/A	2,650	3,060	3,752	Yes	March 2019 to May 2020
Arizona Pipe Trades Pension Trust Fund	86-6025734 001	Green	Green	N/A	2,640	1,662	681	No	June 2020
Heating, Piping & Refrigeration Pension Fund	52-1058013 001	Green	Green	N/A	2,619	2,437	2,402	No	July 2019
Plumbing & Pipe Fitting Local 219 Pension Fund	34-6682376 001	Red	Red	Implemented	2,197	1,335	838	Yes	May 2019
Connecticut Plumbers & Pipefitters Pension Fund	06-6050353 001	Green	Green	N/A	2,104	1,988	1,631	Yes	June 2021
Sheet Metal Workers Pension Plan of Southern California, Arizona & Nevada	95-6052257 001	Yellow	Yellow	Implemented	1,934	3,268	2,946	No	June 2019 to June 2021
Boilermaker-Blacksmith National Pension Trust	48-6168020 001	Red	Red	Implemented	1,446	1,083	1,710	No	April 2019 to September 2021
Plumbers & Pipefitters Local 162 Pension Fund	31-6125999 001	Yellow	Yellow	Implemented	1,273	801	781	Yes	May 2019
Plumbers & Pipefitters Local Union No. 502 & 633 Pension Fund	61-6078145 001	Yellow	Yellow	Implemented	1,167	801	713	No	July 2019
South Florida Electrical Workers Pension Plan and Trust	59-6230530 001	Red	Red	Implemented	821	503	263	Yes	February 2019 to August 2021
Steamfitters Local Union No. 420 Pension Plan	23-2004424 001	Red	Red	Implemented	706	687	709	No	May 2020
Other Multiemployer Pension Plans					46,036	43,368	39,005		Various
Total Contributions					$190,229	$179,216	$167,297		

(1) The zone status represents the most recent available information for the respective MEPP, which may be 2017 or earlier for the 2018 year and 2016 or earlier for the 2017 year.

(2) This information was obtained from the respective plan's Form 5500 ("Forms") for the most current available filing. These dates may not correspond with our fiscal year contributions. The above noted percentages of contributions are based upon disclosures contained in the plans' Forms. Those Forms, among other things, disclose the names of individual participating employers whose annual contributions account for more than 5% of the aggregate annual amount contributed by all participating employers for a plan year. Accordingly, if the annual contribution of two or more of our subsidiaries each accounted for less than 5% of such contributions, but in the aggregate accounted for in excess of 5% of such contributions, that greater percentage is not available and accordingly is not disclosed.

NOTE 15 - RETIREMENT PLANS - (Continued)

The nature and diversity of our business may result in volatility in the amount of our contributions to a particular MEPP for any given period. That is because, in any given market, we could be working on a significant project and/or projects, which could result in an increase in our direct labor force and a corresponding increase in our contributions to the MEPP(s) dictated by the applicable CBA. When that particular project(s) finishes and is not replaced, the number of participants in the MEPP(s) who are employed by us would also decrease, as would our level of contributions to the particular MEPP(s). Additionally, the amount of contributions to a particular MEPP could also be affected by the terms of the CBA, which could require at a particular time, an increase in the contribution rate and/or surcharges. Our contributions to various MEPPs did not significantly increase as a result of acquisitions made since 2016.

We also participated in two MEPPs that are located within the United Kingdom for which we have contributed less than $0.1 million for the year ended December 31, 2018, less than $0.1 million for the year ended December 31, 2017 and approximately $0.2 million for the year ended December 31, 2016. The decrease in contributions since 2016 was due to the closure of one of these plans. The information that we have obtained relating to these plans is not as readily available and/or as comparable as the information that has been ascertained in the United States. Based upon the most recently available information, the remaining plan is 100% funded.

Additionally, we contribute to certain multiemployer plans that provide post retirement benefits such as health and welfare benefits and/or defined contribution/annuity plans, among others. Our contributions to these plans approximated $135.9 million, $130.9 million and $130.5 million for the years ended December 31, 2018, 2017 and 2016, respectively. Our contributions to other post retirement benefit plans did not significantly increase as a result of acquisitions made since 2016. The amount of contributions to these plans is also subject for the most part to the factors discussed above in conjunction with the MEPPs.

Defined Contribution Plans

We have defined contribution retirement and savings plans that cover eligible employees in the United States. Contributions to these plans are based on a percentage of the employee's base compensation. The expenses recognized for the years ended December 31, 2018, 2017 and 2016 for these plans were approximately $29.8 million, $28.1 million and $26.8 million, respectively. At our discretion and subject to applicable plan documents, we may make additional supplemental matching contributions to one of our defined contribution retirement and savings plans. The expenses recognized related to additional supplemental matching for the years ended December 31, 2018, 2017 and 2016 were approximately $6.1 million, $5.5 million and $5.4 million, respectively.

Our United Kingdom subsidiary has defined contribution retirement plans. The expense recognized for the years ended December 31, 2018, 2017 and 2016 was approximately $4.9 million, $3.9 million and $3.6 million, respectively.

NOTE 16 - COMMITMENTS AND CONTINGENCIES

Commitments

We lease land, buildings and equipment under various leases. The leases frequently include renewal options and escalation clauses and require us to pay for utilities, taxes, insurance and maintenance expenses.

Future minimum payments, by year and in the aggregate, under capital leases, non-cancelable operating leases and related subleases with initial terms of more than one year at December 31, 2018, were as follows (in thousands):

	Capital Leases	Operating Leases	Sublease Income
2019	$ 2,075	$ 55,789	$ 471
2020	1,365	46,817	321
2021	664	39,094	193
2022	297	30,975	97
2023	—	24,971	5
Thereafter	—	72,450	—
Total minimum lease payments	4,401	$ 270,096	$ 1,087
Amounts representing interest	(188)		
Present value of net minimum lease payments	$ 4,213		

NOTE 16 - COMMITMENTS AND CONTINGENCIES - (Continued)

Rent expense for operating leases and other rental items, including short-term equipment rentals charged to cost of sales, for the years ended December 31, 2018, 2017 and 2016 was approximately $191.8 million, $166.5 million and $149.0 million, respectively. Rent expense for each of the years ended December 31, 2018, 2017 and 2016 was reported net of sublease rental income of approximately $0.6 million.

Contractual Guarantees

We have agreements with our executive officers and certain other key management personnel providing for severance benefits for such employees upon termination of their employment under certain circumstances.

In the ordinary course of business, we, at times, guarantee obligations of our subsidiaries under certain contracts. Generally, we are liable under such an arrangement only if our subsidiary fails to perform its obligations under the contract. Historically, we have not incurred any substantial liabilities as a consequence of these guarantees.

The terms of our construction contracts frequently require that we obtain from surety companies ("Surety Companies") and provide to our customers payment and performance bonds ("Surety Bonds") as a condition to the award of such contracts. The Surety Bonds secure our payment and performance obligations under such contracts, and we have agreed to indemnify the Surety Companies for amounts, if any, paid by them in respect of Surety Bonds issued on our behalf. In addition, at the request of labor unions representing certain of our employees, Surety Bonds are sometimes provided to secure obligations for wages and benefits payable to or for such employees. Public sector contracts require Surety Bonds more frequently than private sector contracts and, accordingly, our bonding requirements typically increase as the amount of public sector work increases. As of December 31, 2018, based on our percentage-of-completion of our projects covered by Surety Bonds, our aggregate estimated exposure, assuming defaults on all our then existing contractual obligations, was approximately $1.1 billion. Surety Bonds are issued by Surety Companies in return for premiums, which vary depending on the size and type of bond.

We are subject to regulation with respect to the handling of certain materials used in construction, which are classified as hazardous or toxic by federal, state and local agencies. Our practice is to avoid participation in projects principally involving the remediation or removal of such materials. However, when remediation is required as part of our contract performance, we believe we comply with all applicable regulations governing the discharge of material into the environment or otherwise relating to the protection of the environment.

At December 31, 2018, we employed approximately 33,000 people, approximately 57% of whom are represented by various unions pursuant to approximately 400 collective bargaining agreements between our individual subsidiaries and local unions. We believe that our employee relations are generally good. Only two of these collective bargaining agreements are national or regional in scope.

Restructuring expenses, primarily related to employee severance obligations, were $2.3 million, $1.6 million and $1.4 million for the years ended December 31, 2018, 2017 and 2016, respectively. As of December 31, 2018, 2017 and 2016, the balance of our restructuring related obligations yet to be paid was $1.6 million, $0.5 million and $0.2 million, respectively. The majority of obligations outstanding as of December 31, 2017 and 2016 were paid during 2018 and 2017, respectively. The majority of obligations outstanding as of December 31, 2018 will be paid throughout 2019. No material expenses in connection with restructuring from continuing operations are expected to be incurred during 2019.

NOTE 16 - COMMITMENTS AND CONTINGENCIES - (Continued)

The changes in restructuring activity by reportable segments during the years ended December 31, 2018 and 2017 were as follows (in thousands):

	United States electrical construction and facilities services segment	United States mechanical construction and facilities services segment	United States building services segment	Corporate administration	Total
Balance at December 31, 2016	$ —	$ 188	$ 13	$ —	$ 201
Charges	452	180	945	—	1,577
Payments	—	(368)	(918)	—	(1,286)
Balance at December 31, 2017	452	—	40	—	492
Charges	—	—	882	1,424	2,306
Payments	(422)	—	(746)	—	(1,168)
Balance at December 31, 2018	$ 30	$ —	$ 176	$ 1,424	$ 1,630

A summary of restructuring expenses by reportable segments recognized for the year ended December 31, 2018 was as follows (in thousands):

	United States building services segment	Corporate Administration	Total
Severance	$ 882	$ 1,424	$ 2,306

Government Contracts

As a government contractor, we are subject to U.S. government audits and investigations relating to our operations, fines, penalties and compensatory and treble damages, and possible suspension or debarment from doing business with the government. Based on currently available information, we believe the outcome of ongoing government disputes and investigations will not have a material impact on our financial position, results of operations or liquidity.

Legal Matters

One of our subsidiaries was a subcontractor to a mechanical contractor ("Mechanical Contractor") on a construction project where an explosion occurred in 2010. The Mechanical Contractor asserted claims, in the context of an arbitration proceeding against our subsidiary, alleging that our subsidiary was responsible for a portion of the damages for which the Mechanical Contractor may be liable as a result of: (a) personal injury suffered by individuals as a result of the explosion and (b) the Mechanical Contractor's legal fees and associated management costs in defending against any and all such claims. The general contractor (as assignee of the Mechanical Contractor) on the construction project, and for whom the Mechanical Contractor worked, had alleged that our subsidiary was responsible for losses asserted by the owner of the project and/or the general contractor because of delays in completion of the project and for damages to the owner's property. On January 4, 2019, a final decision was issued by the arbitrator in favor of our subsidiary. The decision denied all claims asserted against our subsidiary in that arbitration.

We are involved in several other proceedings in which damages and claims have been asserted against us. We believe that we have a number of valid defenses to such proceedings and claims and intend to vigorously defend ourselves. Other potential claims may exist that have not yet been asserted against us. We do not believe that any such matters will have a material adverse effect on our financial position, results of operations or liquidity. Litigation is subject to many uncertainties and the outcome of litigation is not predictable with assurance. It is possible that some litigation matters for which liabilities have not been recorded could be decided unfavorably to us, and that any such unfavorable decisions could have a material adverse effect on our financial position, results of operations or liquidity.

NOTE 17 - ADDITIONAL CASH FLOW INFORMATION

The following presents information about cash paid for interest, income taxes and other non-cash financing activities for the years ended December 31, 2018, 2017 and 2016 (in thousands):

	2018	2017	2016
Cash paid during the year for:			
Interest	$ 12,435	$ 11,456	$ 11,033
Income taxes	$ 123,651	$ 130,226	$ 129,540
Non-cash financing activities:			
Assets acquired under capital lease obligations	$ 1,063	$ 1,252	$ 1,914

NOTE 18 - SEGMENT INFORMATION

We have the following reportable segments: (a) United States electrical construction and facilities services (involving systems for electrical power transmission and distribution; premises electrical and lighting systems; process instrumentation in the refining, chemical processing, food processing and mining industries; low-voltage systems, such as fire alarm, security and process control; voice and data communication; roadway and transit lighting; and fiber optic lines); (b) United States mechanical construction and facilities services (involving systems for heating, ventilation, air conditioning, refrigeration and clean-room process ventilation; fire protection; plumbing, process and high-purity piping; controls and filtration; water and wastewater treatment and central plant heating and cooling; cranes and rigging; millwrighting; and steel fabrication, erection and welding); (c) United States building services; (d) United States industrial services; and (e) United Kingdom building services. The “United States building services” and “United Kingdom building services” segments principally consist of those operations which provide a portfolio of services needed to support the operation and maintenance of customers’ facilities, including commercial and government site-based operations and maintenance; facility maintenance and services, including reception, security and catering services; outage services to utilities and industrial plants; military base operations support services; mobile mechanical maintenance and services; floor care and janitorial services; landscaping, lot sweeping and snow removal; facilities management; vendor management; call center services; installation and support for building systems; program development, management and maintenance for energy systems; technical consulting and diagnostic services; infrastructure and building projects for federal, state and local governmental agencies and bodies; and small modification and retrofit projects, which services are not generally related to customers’ construction programs. The “United States industrial services” segment principally consists of those operations which provide industrial maintenance and services, including those for refineries and petrochemical plants, including on-site repairs, maintenance and service of heat exchangers, towers, vessels and piping; design, manufacturing, repair and hydro blast cleaning of shell and tube heat exchangers and related equipment; refinery turnaround planning and engineering services; specialty welding services; overhaul and maintenance of critical process units in refineries and petrochemical plants; and specialty technical services for refineries and petrochemical plants.

NOTE 18 - SEGMENT INFORMATION - (Continued)

The following tables present information about industry segments and geographic areas for the years ended December 31, 2018, 2017 and 2016 (in thousands):

	2018	2017	2016
Revenues from unrelated entities:			
United States electrical construction and facilities services	$ 1,954,323	$ 1,829,567	$ 1,704,403
United States mechanical construction and facilities services	3,020,307	2,963,815	2,643,321
United States building services	1,875,485	1,753,703	1,810,229
United States industrial services	865,645	799,169	1,067,315
Total United States operations	7,715,760	7,346,254	7,225,268
United Kingdom building services	414,871	340,745	326,256
Total worldwide operations	$ 8,130,631	$ 7,686,999	$ 7,551,524
Total revenues:			
United States electrical construction and facilities services	$ 1,959,978	$ 1,836,985	$ 1,728,920
United States mechanical construction and facilities services	3,061,832	2,994,700	2,662,100
United States building services	1,942,663	1,812,763	1,864,824
United States industrial services	867,810	801,531	1,068,662
Less intersegment revenues	(116,523)	(99,725)	(99,238)
Total United States operations	7,715,760	7,346,254	7,225,268
United Kingdom building services	414,871	340,745	326,256
Total worldwide operations	$ 8,130,631	$ 7,686,999	$ 7,551,524
Operating income (loss):			
United States electrical construction and facilities services	$ 139,430	$ 150,001	$ 101,761
United States mechanical construction and facilities services	219,352	212,396	132,743
United States building services	93,827	81,720	77,100
United States industrial services	28,172	19,084	77,845
Total United States operations	480,781	463,201	389,449
United Kingdom building services	15,930	12,905	10,086
Corporate administration	(90,415)	(87,808)	(88,740)
Restructuring expenses	(2,306)	(1,577)	(1,438)
Impairment loss on goodwill and identifiable intangible assets	(907)	(57,819)	(2,428)
Total worldwide operations	403,083	328,902	306,929
Other corporate items:			
Net periodic pension (cost) income	2,743	1,652	1,529
Interest expense	(13,544)	(12,770)	(12,627)
Interest income	2,746	965	663
Income from continuing operations before income taxes	$ 395,028	$ 318,749	$ 296,494

NOTE 18 - SEGMENT INFORMATION - (Continued)

	2018	2017	2016
Capital expenditures:			
United States electrical construction and facilities services	$ 5,993	$ 4,797	$ 5,294
United States mechanical construction and facilities services	7,613	6,778	7,672
United States building services	10,414	10,745	11,080
United States industrial services	18,277	9,583	10,065
Total United States operations	42,297	31,903	34,111
United Kingdom building services	870	2,166	4,523
Corporate administration	312	615	1,014
Total worldwide operations	$ 43,479	$ 34,684	$ 39,648
Depreciation and amortization of Property, plant and equipment:			
United States electrical construction and facilities services	$ 6,221	$ 6,545	$ 6,318
United States mechanical construction and facilities services	8,104	7,819	7,544
United States building services	10,324	11,051	10,241
United States industrial services	9,642	10,274	10,394
Total United States operations	34,291	35,689	34,497
United Kingdom building services	3,447	3,371	3,560
Corporate administration	734	855	824
Total worldwide operations	$ 38,472	$ 39,915	$ 38,881
Contract assets:			
United States electrical construction and facilities services	$ 38,412	$ 35,060	$ 46,193
United States mechanical construction and facilities services	50,463	52,381	46,703
United States building services	33,304	26,028	28,084
United States industrial services	12,956	1,636	2,572
Total United States operations	135,135	115,105	123,552
United Kingdom building services	23,108	7,516	7,145
Total worldwide operations	$ 158,243	$ 122,621	$ 130,697
Contract liabilities:			
United States electrical construction and facilities services	$ 163,951	$ 178,454	$ 163,794
United States mechanical construction and facilities services	285,103	290,216	271,811
United States building services	79,281	48,481	50,546
United States industrial services	8,050	3,098	1,823
Total United States operations	536,385	520,249	487,974
United Kingdom building services	15,905	3,907	1,268
Total worldwide operations	$ 552,290	$ 524,156	$ 489,242

NOTE 18 - SEGMENT INFORMATION - (Continued)

	2018	2017	2016
Long-lived assets:			
United States electrical construction and facilities services	$ 201,333	$ 180,990	$ 183,632
United States mechanical construction and facilities services	346,977	352,970	287,744
United States building services	436,887	409,718	401,154
United States industrial services	617,991	630,184	709,267
Total United States operations	1,603,188	1,573,862	1,581,797
United Kingdom building services	9,264	11,729	11,446
Corporate administration	1,072	1,494	1,734
Total worldwide operations	$ 1,613,524	$ 1,587,085	$ 1,594,977
Total assets:			
United States electrical construction and facilities services	$ 702,112	$ 617,471	$ 631,581
United States mechanical construction and facilities services	1,113,417	1,097,240	954,633
United States building services	846,221	764,085	753,434
United States industrial services	832,034	772,899	850,434
Total United States operations	3,493,784	3,251,695	3,190,082
United Kingdom building services	146,379	131,806	105,081
Corporate administration	448,644	582,403	557,275
Total worldwide operations	$ 4,088,807	$ 3,965,904	$ 3,852,438

During 2018, we recognized losses of $10.0 million on a transportation project within our United States electrical construction and facilities services segment, resulting in part from contract scope issues. During 2017, we recognized $18.1 million of gross profit associated with the recovery of certain contract costs previously disputed on a project completed in 2016 within our United States mechanical construction and facilities services segment. During 2016, we incurred $19.4 million of losses on a transportation project within our United States electrical construction and facilities services segment as a result of productivity issues attributable to unfavorable job-site conditions. Additionally during 2016, within the United States mechanical construction and facilities services segment, we incurred $18.3 million of losses on a project at a process facility as a result of a contract dispute with our customer and $9.6 million of losses on an institutional project due to project delays and unfavorable job-site conditions.

NOTE 19 - SELECTED UNAUDITED QUARTERLY INFORMATION

(In thousands, except per share data)

Quarterly and year-to-date computations of per share amounts are made independently; therefore, the sum of per share amounts for the quarters may not equal per share amounts for the year. The results of the construction operations of our United Kingdom segment for all periods are presented as discontinued operations.

2018 Quarterly Results	March 31	June 30	Sept. 30	Dec. 31
Revenues	$ 1,900,388	$ 1,953,886	$ 2,047,049	$ 2,229,308
Gross profit	$ 269,119	$ 290,844	$ 309,339	$ 336,151
Impairment loss on identifiable intangible assets	$ —	$ 907	$ —	$ —
Net income attributable to EMCOR Group, Inc.	$ 55,374	$ 70,816	$ 79,373	$ 77,968
Basic EPS from continuing operations	$ 0.95	$ 1.22	$ 1.37	$ 1.39
Basic EPS from discontinued operation	(0.00)	(0.00)	(0.01)	(0.02)
	$ 0.95	$ 1.22	$ 1.36	$ 1.37
Diluted EPS from continuing operations	$ 0.94	$ 1.21	$ 1.36	$ 1.38
Diluted EPS from discontinued operation	(0.00)	(0.00)	(0.01)	(0.02)
	$ 0.94	$ 1.21	$ 1.35	$ 1.36

2017 Quarterly Results	March 31	June 30	Sept. 30	Dec. 31
Revenues	$ 1,891,732	$ 1,895,937	$ 1,886,691	$ 2,012,639
Gross profit	$ 266,340	$ 274,501	$ 295,070	$ 311,101
Impairment loss on goodwill and identifiable intangible assets	$ —	$ —	$ —	$ 57,819
Net income attributable to EMCOR Group, Inc.	$ 52,640	$ 56,758	$ 64,597	$ 53,201
Basic EPS from continuing operations	$ 0.89	$ 0.96	$ 1.10	$ 0.91
Basic EPS from discontinued operation	(0.01)	(0.00)	(0.00)	(0.00)
	$ 0.88	$ 0.96	$ 1.10	$ 0.91
Diluted EPS from continuing operations	$ 0.88	$ 0.95	$ 1.09	$ 0.90
Diluted EPS from discontinued operation	(0.01)	(0.00)	(0.00)	(0.00)
	$ 0.87	$ 0.95	$ 1.09	$ 0.90

NOTE 20 - SUBSEQUENT EVENT

In January 2019, we acquired a company for an immaterial amount. This company provides mobile mechanical services within the Southern region of the United States, and its results will be included in our United States building services segment. The acquisition of this business will be accounted for by the acquisition method, and the price paid will be allocated to its respective assets and liabilities, based upon the estimated fair value of such assets and liabilities at the date of acquisition by us.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors of EMCOR Group, Inc. and subsidiaries:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of EMCOR Group, Inc. and subsidiaries (the Company) as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income, equity and cash flows for each of the three years in the period ended December 31, 2018, and the related notes and financial statement schedule listed in the Index at Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, 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, 2018, 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 21, 2019 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 the Company's 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 2002.

Stamford, Connecticut
February 21, 2019

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors of EMCOR Group, Inc. and subsidiaries:

Opinion on Internal Control over Financial Reporting

We have audited EMCOR Group, Inc. and subsidiaries' internal control over financial reporting as of December 31, 2018, 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, EMCOR Group, Inc. and subsidiaries (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, 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 2018 consolidated financial statements of the Company and our report dated February 21, 2019 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

Stamford, Connecticut
February 21, 2019

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Based on an evaluation of our disclosure controls and procedures (as required by Rules 13a-15(b) of the Securities Exchange Act of 1934), our Chairman, President and Chief Executive Officer, Anthony J. Guzzi, and our Executive Vice President and Chief Financial Officer, Mark A. Pompa, have concluded that our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934) are effective as of the end of the period covered by this report.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities and Exchange Act of 1934). Our internal control over financial reporting is a process designed with the participation of our principal executive officer and principal financial officer or persons performing similar functions to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles.

Our internal control over financial reporting includes policies and procedures that: (a) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect our transactions and dispositions of assets, (b) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and Board of Directors and (c) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Because of its inherent limitations, our disclosure controls and procedures may not prevent or detect misstatements. A control system, no matter how well conceived and operated, can only provide reasonable, not absolute, assurance that the objectives of the control system are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. 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.

As of December 31, 2018, our management conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework established in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management has determined that EMCOR's internal control over financial reporting is effective as of December 31, 2018.

The effectiveness of our internal control over financial reporting as of December 31, 2018 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in its report appearing in this Annual Report on Form 10-K, which such report expressed an unqualified opinion on the effectiveness of our internal control over financial reporting as of December 31, 2018.

Changes in Internal Control over Financial Reporting

In addition, our management with the participation of our principal executive officer and principal financial officer or persons performing similar functions has determined that no change in our internal control over financial reporting (as that term is defined in Rules 13(a)-15(f) and 15(d)-15(f) of the Securities Exchange Act of 1934) occurred during the fourth quarter of our fiscal year ended December 31, 2018 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting**.**

ITEM 9B. OTHER INFORMATION

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item 10 with respect to directors is incorporated herein by reference to the Section of our definitive Proxy Statement for the 2019 Annual Meeting of Stockholders entitled “Election of Directors”, which Proxy Statement is to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year to which this Form 10-K relates (the “Proxy Statement”). The information required by this Item 10 concerning compliance with Section 16(a) of the Securities Exchange Act of 1934 is incorporated herein by reference to the section of the Proxy Statement entitled “Section 16(a) Beneficial Ownership Reporting Compliance”. The information required by this Item 10 concerning the Audit Committee of our Board of Directors and Audit Committee financial experts is incorporated by reference to the section of the Proxy Statement entitled “Meetings and Committees of the Board of Directors” and “Corporate Governance”. The information required by this Item 10 regarding stockholder recommendations for director candidates is incorporated by reference to the section of the Proxy Statement entitled “Recommendations for Director Candidates”. Information regarding our executive officers is contained in Part I of this Form 10-K following Item 4 under the heading “Executive Officers of the Registrant”. We have adopted a Code of Ethics that applies to our Chief Executive Officer and our Senior Financial Officers, which is listed on the Exhibit Index.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item 11 is incorporated herein by reference to the sections of the Proxy Statement entitled “Compensation Discussion and Analysis”, “Executive Compensation and Related Information”, “Potential Post Employment Payments”, “Director Compensation”, “Compensation Committee Interlocks and Insider Participation” and “Compensation Committee Report”.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item 12 (other than the information required by Section 201(d) of Regulation S-K, which is set forth in Part II, Item 5 of this Form 10-K) is incorporated herein by reference to the sections of the Proxy Statement entitled “Security Ownership of Certain Beneficial Owners” and “Security Ownership of Management”.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by this Item 13 is incorporated herein by reference to the sections of the Proxy Statement entitled “Compensation Committee Interlocks and Insider Participation” and “Corporate Governance”.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item 14 is incorporated herein by reference to the section of the Proxy Statement entitled “Ratification of Appointment of Independent Auditors”.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) The following consolidated financial statements of EMCOR Group, Inc. and Subsidiaries are filed as part of this report under Part II, Item 8. Financial Statements and Supplementary Data:

Financial Statements:

Consolidated Balance Sheets - December 31, 2018 and 2017

Consolidated Statements of Operations - Years Ended December 31, 2018, 2017 and 2016

Consolidated Statements Comprehensive Income - Years Ended December 31, 2018, 2017 and 2016

Consolidated Statements of Cash Flows - Years Ended December 31, 2018, 2017 and 2016

Consolidated Statements of Equity - Years Ended December 31, 2018, 2017 and 2016

Notes to Consolidated Financial Statements

Reports of Independent Registered Public Accounting Firm

(a)(2) The following financial statement schedule is included in this Form 10-K report: Schedule II - Valuation and Qualifying Accounts

All other schedules are omitted because they are not required, are inapplicable, or the information is otherwise shown in the consolidated financial statements or notes thereto.

(a)(3) For the list of exhibits, see the Exhibit Index immediately following the signature page hereof, which Exhibit Index is incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

Date: February 21, 2019

EMCOR GROUP, INC.
(Registrant)

BY: /s/ ANTHONY J. GUZZI
Anthony J. Guzzi
Chairman, President and Chief 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 indicated on February 21, 2019.

/s/ ANTHONY J. GUZZI **Anthony J. Guzzi**	Chairman, President and Chief Executive Officer (Principal Executive Officer)
/s/ MARK A. POMPA **Mark A. Pompa**	Executive Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)
/s/ JOHN W. ALTMEYER **John W. Altmeyer**	Director
/s/ DAVID A. B. BROWN **David A. B. Brown**	Director
/s/ RICHARD F. HAMM, JR. **Richard F. Hamm, Jr.**	Director
/s/ DAVID H. LAIDLEY **David H. Laidley**	Director
/s/ CAROL P. LOWE **Carol P. Lowe**	Director
/s/ M. KEVIN MCEVOY **M. Kevin McEvoy**	Director
/s/ WILLIAM P. REID **William P. Reid**	Director
/s/ JERRY E. RYAN **Jerry E. Ryan**	Director
/s/ STEVEN B. SCHWARZWAELDER **Steven B. Schwarzwaelder**	Director
/s/ ROBIN WALKER-LEE **Robin Walker-Lee**	Director
/s/ MICHAEL T. YONKER **Michael T. Yonker**	Director

SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS
(In thousands)

Description	Balance at Beginning of Year	Costs and Expenses	Deductions [1]	Balance at End of Year
Allowance for doubtful accounts				
Year Ended December 31, 2018	$ 17,230	2,123	(3,992)	$ 15,361
Year Ended December 31, 2017	$ 12,252	7,264	(2,286)	$ 17,230
Year Ended December 31, 2016	$ 11,175	6,194	(5,117)	$ 12,252

(1) Deductions primarily represent uncollectible balances of accounts receivable written off, net of recoveries.

EXHIBIT INDEX

Exhibit No.	Description	Incorporated By Reference to or Filed Herewith, as Indicated Below
2(a)	Purchase and Sale Agreement, dated as of June 17, 2013 by and among Texas Turnaround LLC, a Delaware limited liability company, Altair Strickland Group, Inc., a Texas corporation, Rep Holdings LLC, a Texas limited liability company, ASG Key Employee LLC, a Texas limited liability company, Repcon Key Employee LLC, a Texas limited liability company, Gulfstar MBII, Ltd., a Texas limited partnership, The Trustee of the James T. Robinson and Diana J. Robinson 2010 Irrevocable Trust, The Trustee of the Steven Rothbauer 2012 Descendant's Trust, The Co-Trustees of the Patia Strickland 2012 Descendant's Trust, The Co-Trustees of the Carter Strickland 2012 Descendant's Trust, and The Co-Trustees of the Walton 2012 Grandchildren's Trust (collectively, "Sellers") and EMCOR Group, Inc.	Exhibit 2.1 to EMCOR's Report on Form 8-K (Date of Report June 17, 2013)
3(a-1)	Restated Certificate of Incorporation of EMCOR filed December 15, 1994	Exhibit 3(a-5) to EMCOR's Registration Statement on Form 10 as originally filed March 17, 1995 ("Form 10")
3(a-2)	Amendment dated November 28, 1995 to the Restated Certificate of Incorporation of EMCOR	Exhibit 3(a-2) to EMCOR's Annual Report on Form 10-K for the year ended December 31, 1995 ("1995 Form 10-K")
3(a-3)	Amendment dated February 12, 1998 to the Restated Certificate of Incorporation of EMCOR	Exhibit 3(a-3) to EMCOR's Annual Report on Form 10-K for the year ended December 31, 1997 ("1997 Form 10-K")
3(a-4)	Amendment dated January 27, 2006 to the Restated Certificate of Incorporation of EMCOR	Exhibit 3(a-4) to EMCOR's Annual Report on Form 10-K for the year ended December 31, 2005 ("2005 Form 10-K")
3(a-5)	Amendment dated September 18, 2007 to the Restated Certificate of Incorporation of EMCOR	Exhibit A to EMCOR's Proxy Statement dated August 17, 2007 for Special Meeting of Stockholders held September 18, 2007
3(b)	Amended and Restated By-Laws and Amendments thereto	Exhibit 3(b) to EMCOR's Annual Report on Form 10-K for the year ended December 31, 2016 ("2016 Form 10-K")
4(a)	Fifth Amended and Restated Credit Agreement dated as of August 3, 2016 by and among EMCOR Group, Inc. and a subsidiary and Bank of Montreal, as Agent and the lenders listed on the signature pages thereof (the "Credit Agreement")	Exhibit 4(a) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016 ("September 2016 Form 10-Q")
4(b)	Fifth Amended and Restated Security Agreement dated as of August 3, 2016 among EMCOR, certain of its U.S. subsidiaries, and Bank of Montreal, as Agent	Exhibit 4(b) to the September 2016 Form 10-Q
4(c)	Fifth Amended and Restated Pledge Agreement dated as of August 3, 2016 among EMCOR, certain of its U.S. subsidiaries, and Bank of Montreal, as Agent	Exhibit 4(c) to the September 2016 Form 10-Q
4(d)	Fourth Amended and Restated Guaranty Agreement dated as of August 3, 2016 by certain of EMCOR's U.S. subsidiaries in favor of Bank of Montreal, as Agent	Exhibit 4(d) to the September 2016 Form 10-Q

EXHIBIT INDEX

Exhibit No.	Description	Incorporated By Reference to or Filed Herewith, as Indicated Below
10(a)	Form of Severance Agreement ("Severance Agreement") between EMCOR and each of Sheldon I. Cammaker, R. Kevin Matz and Mark A. Pompa	Exhibit 10.1 to the April 2005 Form 8-K
10(b)	Form of Amendment to Severance Agreement between EMCOR and each of Sheldon I. Cammaker, R. Kevin Matz and Mark A. Pompa	Exhibit 10(c) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended March 31, 2007 ("March 2007 Form 10-Q")
10(c)	Letter Agreement dated October 12, 2004 between Anthony Guzzi and EMCOR (the "Guzzi Letter Agreement")	Exhibit 10.1 to EMCOR's Report on Form 8-K (Date of Report October 12, 2004)
10(d)	Form of Confidentiality Agreement between Anthony Guzzi and EMCOR	Exhibit C to the Guzzi Letter Agreement
10(e)	Form of Indemnification Agreement between EMCOR and each of its officers and directors	Exhibit F to the Guzzi Letter Agreement
10(f-1)	Severance Agreement ("Guzzi Severance Agreement") dated October 25, 2004 between Anthony Guzzi and EMCOR	Exhibit D to the Guzzi Letter Agreement
10(f-2)	Amendment to Guzzi Severance Agreement	Exhibit 10(g-2) to the March 2007 Form 10-Q
10(g-1)	Continuity Agreement dated as of June 22, 1998 between R. Kevin Matz and EMCOR ("Matz Continuity Agreement")	Exhibit 10(f) to the June 1998 Form 10-Q
10(g-2)	Amendment dated as of May 4, 1999 to Matz Continuity Agreement	Exhibit 10(m) to the June 1999 Form 10-Q
10(g-3)	Amendment dated as of January 1, 2002 to Matz Continuity Agreement	Exhibit 10(o-3) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended March 31, 2002 ("March 2002 Form 10-Q")
10(g-4)	Amendment dated as of March 1, 2007 to Matz Continuity Agreement	Exhibit 10(n-4) to the March 2007 Form 10-Q
10(h-1)	Continuity Agreement dated as of June 22, 1998 between Mark A. Pompa and EMCOR ("Pompa Continuity Agreement")	Exhibit 10(g) to the June 1998 Form 10-Q
10(h-2)	Amendment dated as of May 4, 1999 to Pompa Continuity Agreement	Exhibit 10(n) to the June 1999 Form 10-Q
10(h-3)	Amendment dated as of January 1, 2002 to Pompa Continuity Agreement	Exhibit 10(p-3) to the March 2002 Form 10-Q
10(h-4)	Amendment dated as of March 1, 2007 to Pompa Continuity Agreement	Exhibit 10(o-4) to the March 2007 Form 10-Q
10(i-1)	Change of Control Agreement dated as of October 25, 2004 between Anthony Guzzi ("Guzzi") and EMCOR ("Guzzi Continuity Agreement")	Exhibit E to the Guzzi Letter Agreement
10(i-2)	Amendment dated as of March 1, 2007 to Guzzi Continuity Agreement	Exhibit 10(p-2) to the March 2007 Form 10-Q
10(i-3)	Amendment to Continuity Agreements and Severance Agreements with Sheldon I. Cammaker, Anthony J. Guzzi, R. Kevin Matz and Mark A. Pompa	Exhibit 10(q) to EMCOR's Annual Report on Form 10-K for the year ended December 31, 2008 ("2008 Form 10-K")

EXHIBIT INDEX

Exhibit No.	Description	Incorporated By Reference to or Filed Herewith, as Indicated Below
10(j-1)	Amendment dated as of March 29, 2010 to Severance Agreement with Sheldon I. Cammaker, Anthony J. Guzzi, R. Kevin Matz and Mark A. Pompa	Exhibit 10.1 to Form 8-K (Date of Report March 29, 2010) ("March 2010 Form 8-K")
10(j-2)	Third Amendment to Severance Agreement dated June 4, 2015 between EMCOR and Sheldon I. Cammaker	Exhibit 10(k-2) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015 ("June 2015 Form 10-Q")
10(k-1)	Severance Agreement dated as of October 26, 2016 between EMCOR and Maxine L. Mauricio	Exhibit 10(l-1) to the September 2016 Form 10-Q
10(k-2)	Continuity Agreement dated as of October 26, 2016 between EMCOR and Maxine L. Mauricio ("Mauricio Continuity Agreement")	Exhibit 10(l-2) to the September 2016 Form 10-Q
10(k-3)	Amendment dated April 10, 2017 to Mauricio Continuity Agreement	Exhibit 10(l-3) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017
10(l-1)	EMCOR Group, Inc. Long-Term Incentive Plan ("LTIP")	Exhibit 10 to Form 8-K (Date of Report December 15, 2005)
10(l-2)	First Amendment to LTIP and updated Schedule A to LTIP	Exhibit 10(s-2) to 2008 Form 10-K
10(l-3)	Second Amendment to LTIP	Exhibit 10.2 to March 2010 Form 8-K
10(l-4)	Third Amendment to LTIP	Exhibit 10(q-4) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012 ("March 2012 Form 10-Q")
10(l-5)	Fourth Amendment to LTIP	Exhibit 10(l-5) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended June 30, 2013
10(l-6)	Form of Certificate Representing Stock Units issued under LTIP	Exhibit 10(t-2) to EMCOR's Annual Report on Form 10-K for the year ended December 31, 2007 ("2007 Form 10-K")
10(l-7)	Fifth Amendment to LTIP	Exhibit 10(l-7) to EMCOR's Annual Report on Form 10-K for the year ended December 31, 2015 ("2015 Form 10-K")
10(l-8)	Sixth Amendment to LTIP	Exhibit 10(l-8) to 2015 Form 10-K
10(m)	Key Executive Incentive Bonus Plan, as amended and restated	Exhibit B to EMCOR's Proxy Statement for its Annual Meeting held June 13, 2013
10(n-1)	Amended and Restated 2010 Incentive Plan	Exhibit 10(q-1) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015
10(n-2)	Form of Option Agreement under 2010 Incentive Plan between EMCOR and each non-employee director with respect to grant of options upon re-election at June 11, 2010 Annual Meeting of Stockholders	Exhibit 10(i)(i-2) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended June 30, 2010
10(n-3)	Form of Option Agreement under 2010 Incentive Plan, as amended, between EMCOR and each non-employee director electing to receive options as part of annual retainer	Exhibit 10(q)(q) to 2011 Form 10-K
10(o)	EMCOR Group, Inc. Employee Stock Purchase Plan	Exhibit C to EMCOR's Proxy Statement for its Annual Meeting held June 18, 2008
10(p)	Director Award Program Adopted May 13, 2011, as amended and restated December 14, 2011	Exhibit 10(n)(n) to 2011 Form 10-K
10(q)	Amendment to Option Agreements	Exhibit 10(r)(r) to 2011 Form 10-K
10(r)	Form of Non-LTIP Stock Unit Certificate	Exhibit 10(p)(p) to the March 31, 2012 Form 10-Q
10(s)	Form of Director Restricted Stock Unit Agreement	Exhibit 10(k)(k) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended June 30, 2012 ("June 2012 Form 10-Q")

EXHIBIT INDEX

Exhibit No.	Description	Incorporated By Reference to or Filed Herewith, as Indicated Below
10(t)	Director Award Program, as Amended and Restated December 16, 2014	Exhibit 10(z) to EMCOR's Annual Report on Form 10-K for the year ended December 31, 2014
10(u)	EMCOR Group, Inc. Voluntary Deferral Plan	Exhibit 10(e)(e) to 2012 Form 10-K
10(v)	First Amendment to EMCOR Group, Inc. Voluntary Deferral Plan	Exhibit 10(e)(e) to 2013 Form 10-K
10(w)	Form of Executive Restricted Stock Unit Agreement	Exhibit 10(f)(f) to 2012 Form 10-K
10(x)	Restricted Stock Unit Award Agreement dated June 11, 2014 between EMCOR and Stephen W. Bershad	Exhibit 10(g)(g) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended June 30, 2014
10(y)	Restricted Stock Unit Award Agreement dated June 11, 2015 between EMCOR and Stephen W. Bershad	Exhibit 10(f)(f) to the June 2015 Form 10-Q
10(z)	Restricted Stock Unit Award Agreement dated October 29, 2015 between EMCOR and Steven B. Schwarzwaelder	Exhibit 10.1 to Form 8-K (Date of Report October 30, 2015)
10(a)(a)	Restricted Stock Unit Award Agreement dated June 2, 2016 between EMCOR and Stephen W. Bershad	Exhibit 10(c)(c) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016
10(b)(b)	Executive Compensation Recoupment Policy	Exhibit 10(h)(h) to 2015 Form 10-K
10(c)(c)	Restricted Stock Unit Award Agreement dated June 30, 2017 between EMCOR and Mark A. Pompa	Exhibit 10(f)(f) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017
11	Computation of Basic EPS and Diluted EPS for the years ended December 31, 2018 and 2017	Note 6 of the Notes to the Consolidated Financial Statements
14	Code of Ethics of EMCOR for Chief Executive Officer and Senior Financial Officers	Exhibit 14 to 2003 Form 10-K
21	List of Significant Subsidiaries	Filed herewith
23.1	Consent of Ernst & Young LLP	Filed herewith
31.1	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 by Anthony J. Guzzi, the President and Chief Executive Officer	Filed herewith
31.2	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 by Mark A. Pompa, the Executive Vice President and Chief Financial Officer	Filed herewith
32.1	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 by the President and Chief Executive Officer	Furnished
32.2	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 by the Executive Vice President and Chief Financial Officer	Furnished
95	Information concerning mine safety violations or other regulatory matters	Filed herewith
101	The following materials from EMCOR Group, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2018, formatted in XBRL (Extensible Business Reporting Language): (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Operations, (iii) the Consolidated Statements of Comprehensive Income, (iv) the Consolidated Statements of Cash Flows, (v) the Consolidated Statements of Equity and (vi) the Notes to Consolidated Financial Statements.	Filed

Pursuant to Item 601(b)(4)(iii) of Regulation S-K, upon request of the Securities and Exchange Commission, the Registrant hereby undertakes to furnish a copy of any unfiled instrument which defines the rights of holders of long-term debt of the Registrant's subsidiaries.

EXHIBIT 11

SEE NOTE 6 TO THE ACCOMPANYING CONSOLIDATED FINANCIAL STATEMENTS FOR INFORMATION RELATING TO THE CALCULATION OF BASIC EPS AND DILUTED EPS.

EXHIBIT 21

LIST OF SIGNIFICANT SUBSIDIARIES	JURISDICTION OF INCORPORATION
Dyn Specialty Contracting, Inc.	Virginia
MES Holdings Corporation	Delaware
EMCOR Construction Services, Inc.	Delaware
EMCOR International, Inc.	Delaware
EMCOR Mechanical/Electrical Services (East), Inc.	Delaware
EMCOR (UK) Limited	England
EMCOR Group (UK) plc	England
EMCOR Facilities Services, Inc.	Ohio
EMCOR-CSI Holding Co.	Delaware
FR X Ohmstede Acquisitions Co.	Delaware
RepconStrickland, Inc.	Delaware

EXHIBIT 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

(1) Registration Statement (Form S-8 No. 333-168503) pertaining to the 2010 Incentive Plan of EMCOR Group, Inc.,

(2) Registration Statement (Form S-8 No. 333-152764) pertaining to the EMCOR Group, Inc. Employee Stock Purchase Plan,

(3) Registration Statement (Form S-8 No. 333-147015) pertaining to the 2007 Incentive Plan of EMCOR Group, Inc.,

(4) Registration Statement (Form S-8 No. 333-112940) pertaining to the EMCOR Group, Inc. Stock Option Agreements dated as of January 4, 1999, May 5, 1999, January 3, 2000, January 2, 2001, December 14, 2001, January 2, 2002, June 19, 2002, October 25, 2002, January 2, 2003, February 27, 2003, and January 2, 2004, the EMCOR Group, Inc. 2003 Non-Employee Directors' Stock Option Plan and the EMCOR Group, Inc. 2003 Management Stock Incentive Plan, and

(5) Registration Statement (Form S-8 No. 333-186926) pertaining to the EMCOR Group, Inc Voluntary Deferral Plan;

of our reports dated February 21, 2019, with respect to the consolidated financial statements and schedule of EMCOR Group, Inc. and subsidiaries, and the effectiveness of internal control over financial reporting of EMCOR Group, Inc. and subsidiaries, included in this Annual Report (Form 10-K) of EMCOR Group Inc. for the year ended December 31, 2018.

/s/ Ernst & Young LLP

Stamford, Connecticut
February 21, 2019

EXHIBIT 31.1

CERTIFICATION

I, Anthony J. Guzzi, certify that:

1. I have reviewed this annual report on Form 10-K of EMCOR Group, 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 21, 2019

/s/ ANTHONY J. GUZZI

Anthony J. Guzzi
Chairman, President and
Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION

I, Mark A. Pompa, certify that:

1. I have reviewed this annual report on Form 10-K of EMCOR Group, 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 21, 2019

/s/ MARK A. POMPA

Mark A. Pompa
Executive Vice President
and Chief Financial Officer

EXHIBIT 32.1

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of EMCOR Group, Inc. (the “Company”) on Form 10-K for the period ended December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Anthony J. Guzzi, Chairman, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 21, 2019

/s/ ANTHONY J. GUZZI

Anthony J. Guzzi
Chairman, President and
Chief Executive Officer

EXHIBIT 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of EMCOR Group, Inc. (the “Company”) on Form 10-K for the period ended December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Mark A. Pompa, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 21, 2019

/s/ MARK A. POMPA

Mark A. Pompa
Executive Vice President
and Chief Financial Officer

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS

Inter-Departmental Memo

TO: Office of the County Executive
Att: Brian J. Schneider, Deputy County Executive

FROM: Department of Public Works

DATE: December 16, 2019

SUBJECT: Recommendation to award a bid contract
Signal System Operations Phase 5
Agreement Number T62000-05ER

The County desires to award a contract for the day-to-day operation and maintenance of the County's Traffic Signal communications and Intelligent Transportation Systems infrastructure. The proposed contract will provide field personnel weekdays from 7 AM to 7 PM. This contract is reimbursed at an eighty percent (80%) by New York State Department of Transportation (NYSDOT). The proposed contract will be for a three (3) year period.

The proposed contract was advertised in accordance with the Department's Solicitation Request policy. The RFP was posted on the County's website and advertised in *Newsday* and *NYS Contract Reporter* for a four (4) week period.

Bids from two (2) firms were received on October 29, 2019. The proposals were evaluated by professionals from within the Department and a bid analysis was completed. Following the review, it was determined that Welsbach Electric Corp. of L.I. is the lowest responsible bidder. The bid results are summarized below.

FIRM NAME	RANK	BID PROPOSAL
Welsbach Electric Corp. of L.I.	1	$4,272,240
Hinck Electrical Contractor, Inc.	2	$5,240,508

Funds will be made available from the Department's operating fund. With your concurrence, the Department will process the contract through the appropriate approvals. Following your approval, or disapproval, we will proceed accordingly.

Kenneth G. Arnold
Commissioner

KGA:JGP:HTL:jd
c: Joseph G. Pecora, Deputy Commissioner
Harold T. Lutz, Director of Traffic Engineering
Jeff Lindgren, Project Manager

APPROVED:

12/16/19

Brian J. Schneider — Date
Deputy County Executive

DISAPPROVED:

Brian J. Schneider — Date
Deputy County Executive

S:\SAN\Support Staff\Author\Lindgren, Jeff\Rec to Award Bid T62000-05ER Phase 5 Welsbach.jl.doc

T62000-05ER - Traffic EngineeringNassau DPW B.I.D.S - Summary of Bid Opening 10/29/2019
Traffic Signal System Operations Phase V PIN 0760.59

Bid Opening: 10/29/2019 **Engineer:** Jeff Lindgren **Phone:** (516) 571-6998

Contractor	Address	Insurance	Payment	Bid Amount	Alternate Bid
Welsbach Electric of Long Island	300 Newtown Road Plainview, NY 11803	Travelers Causalty and Surety	10% Bid Amount	$4,272,240.00	$0.00
Hinck Electrical Contractor, Inc.	75 Orville Drive,Ste 1 Bohemia, NY 11716	Fidelity and Deposit Company	10% Bid Amount	$5,240,508.00	$0.00

The above is a review of the bids and subsequent list of all the bids that were read aloud at the public bid opening. Listed bids may be subsequently withdrawn or disqualified. The list does not reflect the Department's determination of the lowest responsible bidder.

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
Inter-Departmental Memo

TO: Kenneth G. Arnold, Commissioner

FROM: Joseph G. Pecora, Deputy Commissioner

DATE: October 31, 2019

SUBJECT: Low Participation for Bid Contract
Traffic Signal System Operations Phase 5
Bid Contract No. T62000-05ER / PIN 0760.59

A contract for the day-to-day operations and maintenance of our on-street traffic signal communications system was advertised for four (4) weeks in Newsday, the New York State Contract reporter and on eProcure on September 25, 2019.

Since this was a contract re-bid, shortly after the advertisement went live, five (5) local electrical contractor firms that perform the work were contacted alerting them of the solicitation and inviting them to review the notice to bidders. Twenty-one (21) vendors downloaded the Contract Documents and only two (2) bids were received. Despite outreach, there is a limited pool of qualified electrical contractor firms that have appropriate staff and resources needed to provide the necessary services outlined in the requirements of the contract. Following the bid, non-participating firms were contacted to inquire why they did not bid. Most referenced the lack of available qualified personnel to commit to the three-year contract.

The following are the questions from the Low Vendor Participation memo dated May 23, 2018 from DCE John Chiara, with responses.

1) Review the specification to ensure that it is not unduly restrictive so as to limit competition. Is any component of the solicitation so restrictive that only one or a small number of vendors is capable of responding to the solicitation? If so, were those vendors notified of the solicitation? ***Response: the bid was not restrictive; however, there is a limited pool of qualified electrical contractor firms that have appropriate staff and resources needed to provide the necessary services to meet the requirements of the contract.***

2) Was the solicitation advertised and posted on the County website as required? ***Response: yes.***

3) Would we be likely to obtain greater vendor participation by advertising in other venues (e.g. New York State Contract Reporter, trade journals, other local media, etc.)? ***Response: the bid was advertised in NYSCR and Newsday.***

4) Was the NIGP commodity code used to conduct the solicitation appropriate? Were appropriate vendors registered with the County for that commodity code or otherwise notified? ***Response: The correct commodity codes were utilized in e-procure, accordingly, the vendors registered for that commodity code received an automatic notification. Additionally, five of the firms normally associated with this work were also contacted directly. They are Welsbach Electric, Hinck Electric, Eldor Electric, Commander Electric and Johnson Electric.***

SUBJECT: Low Participation for Bid Contract
Traffic Signal System Operations Phase 5
Bid Contract No. T62000-05ER / PIN 0760.59

5) Is the market for the specified goods or services structurally limited (i.e. are there geographic, capital, vendor capacity, service schedule, or other requirements) such that the greater vendor participation is not possible? ***Response: Does not apply.***

6) Survey vendors that received notice of the solicitation but did not respond to determine why the vendor chose not to do so. Typical responses include but are not limited to:
   a. The vendor did not see the advertisement. ***Response: Twenty-one (21) vendors downloaded the contract documents.***
   b. The vendor does not offer the specified goods/services-as a follow-up, ask if the specification is too specific to a competitor's product (is the specification "brand-specific" or written to one manufacturer's or service provider's offering?) ***Response: The work specification was not too specific so as to restrict participation.***
   c. The vendor is too busy with other work at this time ***Response: Most vendors contacted stated their personnel were too busy to commit to this contract.***

Joseph G. Pecora
Deputy Commissioner

JGP:jd
c: Jane Houdek, Counsel to the Department of Public Works
Harold T. Lutz, Director of Traffic Engineering
Jeff Lindgren, Project Manager

APPROVED:

11/7/19
Kenneth G. Arnold — Date
Commissioner

DISAPPROVED:

Kenneth G. Arnold — Date
Commissioner

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
Inter-Departmental Memo

TO: Jeff Lindgren, Project Manager

FROM: Office of the Commissioner

DATE: January 22, 2019

SUBJECT: CSEA Sub-Contracting Approval
C19-004 –Signal System Operations Phase 5
Proposed Contract Number: T62000-05E

Please be aware in accordance with Section 32-3 of the CSEA/County CBA, the Department has met with CSEA representatives to discuss your proposed DPW contract referenced above. The Department has determined that it will proceed with the above-referenced contract known as **C19-004.**

Please prepare the necessary documentation to proceed with your work.

If you have any questions, please speak with Jonathan Lesman.

Roseann D'Alleva
Deputy Commissioner

RD:las
c: Harold T. Lutz, Director of Traffic Engineering
Loretta Dionisio, Assistant to Deputy Commissioner
Jonathan Lesman, Management Analyst II

K:\Support Staff\Author\Lesman, Jonathan\C19-004 J. Lindgren T62000-05E.jl.doc

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
Inter-Departmental Memo

TO: Civil Service Employees Association, Nassau Local 830
Att: Ronald Gurrieri, Executive Vice President

FROM: Department of Public Works

DATE: December 31, 2018

SUBJECT: CSEA Notification of a Proposed DPW Contract
Signal System Operations Phase 5
Contract No. T62000-05E

The following notification is to comply with the spirit and intent of Section 32 of the County/CSEA contract. It should not be implied that the proposed DPW authorization is for work, which has "historically and exclusively been performed by bargaining unit members."

1. DPW plans to recommend a contract/agreement for the following services: Operations/Maintenance

2. The work involves the following: Operation of the County's Traffic Management communications infrastructure.

3. An estimate of the cost is: $3,300,000.00

4. An estimate of the duration is: Thirty-six (36) months

5. Due to the nature and complexity of this work, historically, projects of this type have not been completed utilizing County work force.

Should you wish to propose an alternative to the proposed contract/agreement, please respond within ten (10) days to: Department of Public Works, Att: Roseann D'Alleva, Deputy Commissioner, telephone 1-0525, fax 1-9657.

Roseann D'Alleva
Deputy Commissioner

RD:HTL:ac
c: Christopher Nicolino, Director, Office of Labor Relations
Loretta Dionisio, Assistant to Deputy Commissioner
Christopher Yansick, Unit Head, Financial Management Unit
Diane Pyne, Unit Head, Human Resources
Harold T. Lutz, Director of Traffic Engineering
Jonathan Lesman, Management Analyst II
Jeff Lindgren, Project Manager

K:\Support Staff\Author\Lindgren, Jeff\CSEA Notification Ops Ph 5.jl.doc

FORM OF BID BOND

IMPORTANT The bidder shall instruct the Surety Company to **USE THIS FORM PROVIDED** as the use of **ANY OTHER FORM** may cause rejection of the bid.

KNOW ALL MEN BY THESE PRESENTS,

that we, the undersigned Welsbach Electric Corp. of L.I., 300 Newtown Road, Plainview, NY 11803 as Principal; and Travelers Casualty and Surety Company of America One Tower Square, Hartford, CT 06183 as surety, who is Licensed to do business in the State of New York, are hereby firmly bound unto the County of Nassau in the penal sum of

Ten Percent of the Amount Bid dollars ($ 10% of Amt. Bid) for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

Signed, this 22nd day of October, 2019

The conditions of the above obligation is such that whereas the Principal has submitted to the County of Nassau a certain Bid attached hereto and hereby made a part hereof, to enter into a contract in writing for the work under Contract No. T62000-05ER for the Traffic Signal System Operations Phase V - PIN 0760.59

NOW, THEREFORE, the conditions of this obligation are such that if the Principal shall not withdraw said proposal except by mutual consent of the County of Nassau within a period of forty-five (45) days after the opening of bids and in the event of acceptance of the Principal's proposal, if the Principal shall,

a. when notified by the County, execute all necessary counterparts of the contract as set forth in the contract documents in accordance with the proposal as accepted; and

b. furnish bonds and other security as specified in the contract documents for the faithful performance and proper fulfillment of such contract, which bonds or other security shall be satisfactory in all respects to the County; and

c. in all respects, comply with the provisions set forth in the invitation to bid; or if the County of Nassau shall reject the aforesaid proposal for a reason other than the Principal's failure to satisfy the County that he has the necessary skill, experience and liquid assets required for the contract as stated in the documents aforesaid, then this obligation shall be null and void; otherwise to remain in full force and effect.

Provided, however, that this bond is subject to the following additional conditions and limitations.

a. In the event that the Principal fails to submit a financial statement when required by the County or in the event that an examination of the Principal indicates to the County that the Principal does not meet the financial requirements required by the County, the undersigned will, upon demand, pay to the County of Nassau, as liquidated damages for the Principal's failure to meet such requirements, a sum equal to the amount that would have been required by a certified check if the same were delivered in accordance with the provisions of the contract documents and specifications herein stated.

b. In case the Principal shall default in the performance of any provision the undersigned will upon demand pay to the County of Nassau the full amount of the damages sustained by the County of Nassau by reason of such default, except however, it is expressly understood and agreed that the liability of the surety for any and all claims hereunder shall in no event exceed the amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligation of said Surety and its bond shall be in no way impaired or affected by any extension of time within which the County of Nassau may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Welsbach Electric Corp. of L.I.
Contractor

by ______________________ (L.S.)

(Corporate seal of Contractor Title if a corporation)

by ______________________ (L.S.)

Title

by ______________________ (L.S.)

Title

Travelers Casualty and Surety Company of America

Surety

by Rita Losquadro (L.S.)
Title of Officer
Rita Losquadro, Attorney-in-Fact

Witness: ~~XXXXXXXX:~~ ______________________ (L.S.)
~~XXXXXXXXXXXXXXXXX~~

(Corporate seal of Surety)

NO TEXT ON THIS PAGE

(Acknowledgment by Contractor if a corporation)

STATE OF New York)

ss.:)

COUNTY OF Nassau)

On this 22nd day of October, 2019, before me personally came Joseph P. Florio to me known, who, being by me duly sworn, did depose and say for himself, that he resides in XXXXXXXXXXXXXXXXXX that he is the CEO/President of the Welsbach Electric Corp. of L.I. the corporation described in, and which executed the foregoing instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

DAWN E. UCHACZ
Notary Public, State of New York
No. 01UC6047887
Qualified in Suffolk County
Commission Expires September 18,20 22

Notary Public

(Acknowledgment by Contractor if a partnership)

STATE OF ________)

ss.:)

COUNTY OF ________)

On this day of , 20 , before me personally came to me known and known to me to be a member of the firm described in and which executed the foregoing bond or obligation, and he acknowledged to me that he subscribed the name of said firm thereto on behalf of said firm for the purpose therein mentioned.

Notary Public

(Acknowledgment by Contractor if an individual.)

STATE OF ________)

ss.:)

COUNTY OF ________)

On this day of , 20 , before me personally came to me known and known to me to be the person described in and who executed the foregoing instrument, and he duly acknowledged that he executed the same.

Notary Public

NO TEXT ON THIS PAGE

(Acknowledgment by Surety Company)

STATE OF NEW YORK)

ss.:

COUNTY OF NASSAU)

On this 22nd day of October, 2019, before me personally came Rita Losquadro to me Known, who being by me duly sworn, did depose and say that he resides in Nassau County, NY

that he is the Attorney-in-Fact of the Travelers Casualty and Surety Company of America, the corporation described in and which executed the within instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by the order of the Board of Directors of said corporation, and that he signed his name thereto by like order; and that the liabilities of said company do not exceed its assets as ascertained in the manner provided by the laws of the State of New York, and the said Donna Marie Spielman further said that he is acquainted with Rita Losquadro and knows him to be the Attorney-in-Fact of said company; that the signature of the said Rita Losquadro subscribed to the within instrument is in the genuine handwriting of the said Rita Losquadro and was subscribed thereto by like order of the Board of Directors, and in the presence of him, the said Donna Marie Spielman.

Notary Public

DONNA MARIE SPIELMAN
Notary Public, State of New York
Registration No. 01SP6248741
Qualified in Nassau County
Commission Expires 09/19/2023

STATE OF NEW YORK
DEPARTMENT OF FINANCIAL SERVICES

CERTIFICATE OF SOLVENCY UNDER SECTION 1111 OF THE NEW YORK INSURANCE LAW

It is hereby certified that

Travelers Casualty and Surety Company of America
of Hartford, Connecticut

a corporation organized under the laws of the State of Connecticut and duly authorized to transact the business of insurance in this State, is qualified to become surety or guarantor on all bonds, undertakings, recognizances, guaranties and other obligations required or permitted by law; and that the said corporation is possessed of a capital and surplus including gross paid-in and contributed surplus and unassigned funds (surplus) aggregating the sum of \$2,111,227,178.(Capital \$6,480,000) as is shown by its sworn financial statement for the year ended December 31, 2018, on file in this Department, prior to audit.

The said corporation cannot lawfully expose itself to loss on any one risk or hazard to an amount exceeding 10% of its surplus to policyholders, unless it shall be protected in excess of that amount in the manner provided in Section 4118 of the Insurance Law of this State.

In Witness Whereof, I have hereunto set my hand and affixed the official seal of this Department at the City of Albany, this 23rd day of April, 2019.

Linda A. Lacewell
Acting Superintendent

By *Ellen Buxbaum*

Ellen Buxbaum
Special Deputy Superintendent

TRAVELERS

Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **Rita Losquadro** of **UNIONDALE**, **New York**, their true and lawful Attorney-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **17th** day of **January, 2019.**

State of Connecticut

City of Hartford ss.

By: [signature]
Robert L. Raney, Senior Vice President

On this the **17th** day of **January, 2019**, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June, 2021**

[signature]
Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this **22nd** day of **October**, **2019**.

[signature]
Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney-in-Fact and the details of the bond to which this Power of Attorney is attached.

TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA

HARTFORD, CONNECTICUT 06183

FINANCIAL STATEMENT AS OF DECEMBER 31, 2018

CAPITAL STOCK $ 6,480,000

ASSETS	
CASH AND INVESTED CASH	$ 36,728,596
BONDS	3,507,432,239
STOCKS	294,199,598
INVESTMENT INCOME DUE AND ACCRUED	38,287,129
OTHER INVESTED ASSETS	3,507,839
PREMIUM BALANCES	250,478,792
NET DEFERRED TAX ASSET	48,781,239
REINSURANCE RECOVERABLE	29,278,755
SECURITIES LENDING REINVESTED COLLATERAL ASSETS	14,277,262
RECEIVABLES FROM PARENT, SUBSIDIARIES AND AFFILIATES	27,813,266
ASSUMED REINSURANCE RECEIVABLE AND PAYABLE	626,488
OTHER ASSETS	4,936,229
TOTAL ASSETS	$ 4,256,347,432

LIABILITIES & SURPLUS	
UNEARNED PREMIUMS	$ 979,007,378
LOSSES	750,995,504
LOSS ADJUSTMENT EXPENSES	166,673,871
COMMISSIONS	45,868,584
TAXES, LICENSES AND FEES	14,584,663
OTHER EXPENSES	43,858,534
CURRENT FEDERAL AND FOREIGN INCOME TAXES	10,143,037
REMITTANCES AND ITEMS NOT ALLOCATED	21,277,153
AMOUNTS WITHHELD / RETAINED BY COMPANY FOR OTHERS	30,289,553
RETROACTIVE REINSURANCE RESERVE ASSUMED	810,360
POLICYHOLDER DIVIDENDS	10,410,755
PROVISION FOR REINSURANCE	7,641,356
ADVANCE PREMIUM	1,608,777
REINSURANCE PAYABLE ON PAID LOSSES & LOSS ADJ. EXPENSES	868,002
PAYABLE FOR SECURITIES LENDING	14,277,262
CEDED REINSURANCE NET PREMIUMS PAYABLE	46,469,976
OTHER ACCRUED EXPENSES AND LIABILITIES	335,489
TOTAL LIABILITIES	$ 2,145,120,254
CAPITAL STOCK	$ 6,480,000
PAID IN SURPLUS	433,803,760
OTHER SURPLUS	1,670,943,418
TOTAL SURPLUS TO POLICYHOLDERS	$ 2,111,227,178
TOTAL LIABILITIES & SURPLUS	$ 4,256,347,432

STATE OF CONNECTICUT)

COUNTY OF HARTFORD) SS.

CITY OF HARTFORD)

MICHAEL J. DOODY, BEING DULY SWORN, SAYS THAT HE IS SECOND VICE PRESIDENT, OF TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA, AND THAT TO THE BEST OF HIS KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT STATEMENT OF THE FINANCIAL CONDITION OF SAID COMPANY AS OF THE 31ST DAY OF DECEMBER, 2018.

Michael J Doody

VICE PRESIDENT, FINANCE

Susan M. Weissleder

NOTARY PUBLIC

SUBSCRIBED AND SWORN TO BEFORE ME THIS
28TH DAY OF MARCH, 2019

SUSAN M. WEISSLEDER
Notary Public
My Commission Expires November 30, 2022

SUSAN M. WEISSLEDER NOTARY ★ PUBLIC ★ CONNECTICUT

PROPOSAL
To the County of Nassau

SIGNAL SYSTEM OPERATIONS PHASE V
P.I.N. 0760.59
T6200005ER
NASSAU COUNTY, NEW YORK

TO THE COUNTY OF NASSAU:

Pursuant to and in compliance with your Advertisement for Bids and the Instructions to Bidders relating thereto, the undersigned hereby proposes to furnish all plant, labor, materials, supplies, equipment and other facilities necessary or proper for or incidental to the above Contract, as required by and in strict accordance with the plans and specifications for the amount named in the proposal hereinafter described.

In making this proposal the Bidder hereby declares that the Addenda which has been issued by the County of Nassau and has been received by him, that all provisions thereof have been complied with in preparing his bids.

Name of Bidder: WELSBACH ELECTRIC CORP. OF L.I.
(~~Individual, Firm~~ or Corporation as case may be)

Bidder's Address: 300 NEWTOWN RD, PLAINVIEW, NY 11803

Telephone: (516) 454-0023 Date: OCTOBER 29, 2019

FAX Tele: (516) 454-0282

NOTE: IF BIDDER IS A FIRM, FILL IN THE FOLLOWING BLANKS:

Name of Partners	Residence of Partners

NOTE: IF BIDDER IS A CORPORATION, FILL IN THE FOLLOWING BLANKS:

Organized under the laws of the State of: NEW YORK

Name of President/C.E.O. JOSEPH P. FLORIO

President's Domicile: [redacted]

Name of Asst. Vice Pres: DAN PIQUETTE

Vice Pres's Domicile: [redacted]

Corporate Officer: MICHELE VALENTI Title: ASST SECY / ASST TREASURER

Corporate Officer's Domicile: [redacted]

Corporate Officer: — Title: —

Corporate Officer's Domicile: —

NO TEXT ON THIS PAGE

The Following Paragraphs are Applicable to the Contract

THE BIDDER AFFIRMS AND DECLARES:

1. That the above bidder is of lawful age and the only one interested in this bid; and that no other person, firm or corporation, except those herein named, has any interest in this bid or in the Contract proposed to be entered into.

2. That this bid is made without any understanding, agreement or in connection with any other person, firm or corporation, making a bid for the same work, and is in all respects fair and without collusion or fraud.

3. That said bidder is not in arrears to the County of Nassau upon debt or contract, and is not a defaulter, as surety or otherwise, upon any obligation to the County of Nassau.

4. That no officer nor employee of the County of Nassau, or person whose salary is payable in whole or in part from the County Treasury is, shall be, or become interested directly, or indirectly as a contracting party, partner, stockholder, surety or otherwise, in this bid, or in the performance of the contract, or in the supplies, materials, equipment and work or labor to which it relates, or in any portion of the profits thereof.

5. That he has carefully examined the site of the work and that, from his own investigations, has satisfied himself as to the nature and location of the work, the character, quality and quantity of existing materials, all difficulties likely to be encountered, the kind and extent of equipment, other facilities needed for the performance of the work, the general and local conditions, and all other items which may, in any way, affect the work or its performance.

6. The bidder also declares that he has carefully examined and fully understands all the component parts of this Contract, that he will execute the Contract and will completely perform it in strict accordance with its terms for the following prices.

7. Where the work performed under this Contract involves a trade or occupation licensed in the County of Nassau by the Towns of Hempstead, Oyster Bay or North Hempstead or by the Cities Glen Cove or Long Beach, the contractor shall be required to have such a license.

INFORMATION FOR BIDDERS

I. Rejection of Bids.

A. The Commissioner may recommend a reject of bid if:

1. The Bidder fails to furnish any of the information required by the bid documents; or if
2. The bidder misstates or conceals any material fact in the bid, or in the sworn written statement; or if
3. The bid does not strictly conform to law or the requirements of this contract; or if
4. The bid is conditional; or if
5. The bid on Unit Price Contracts, in the opinion of the Commissioner, contains unbalanced bid prices, where the unit price proposed for any item exceeds the estimated cost by more than fifteen percent (15%), or if any lump sum item bid exceeds the estimated cost by more than twenty-five percent (25%); or if
6. A determination that the bidder is not responsible is made in accordance with law.

B. Rejection of all bids and waiver of informalities.

The Commissioner, however, reserves the right to recommend to reject all bids whenever he deems it in the best interest of the County, and also the right to waive any informalities in a bid.

II. Unit Price Contracts, Comparison of Bids.

Bids on Unit Price Contracts will be compared on the basis of a total bid price, arrived at by taking the sum of the Approximate Quantities of such item multiplied by the corresponding Unit Price, and including any Lump Sum Bid on individual items, in accordance with the items set forth in the bid proposal.

Bidders are warned that the Approximate Quantities of the various items of work and material is estimated only, and is given solely to be used as a uniform basis for the comparison of bids. The quantities actually required to complete the contract work may be more or less than estimated.

III. Lump Sum Contracts, Comparison of Bids.

Bids on lump Sum Contracts will be compared on the basis of the Lump Sum Price bid adjusted for alternate prices bid, if any.

IV. Apprenticeship Training Program

For all contracts in excess of $500,000 attach here verification letter regarding your firm's having an approved State of New York Apprenticeship Training Program.

See Attachment #1A

LOCAL 25 IBEW

SINCE 1932

INTERNATIONAL BROTHERHOOD
OF
ELECTRICAL WORKERS
Nassau-Suffolk Counties

To Whom It May Concern:

Ref: Welsbach Electric Corp, L.I.

This will confirm that Welsbach Electric Corp, L.I. is a signatory contractor in good standing with Local Union #25, IBEW since 1975. Welsbach Electric Corp, L.I employs Local #25 member electricians and is affiliated with our New York State Registered Apprenticeship Program

Very truly yours,

L. U. #25, IBEW

Kevin B Casey

Kevin B. Casey
Business Manager

KBC/msb

370 Vanderbilt Motor Pkwy • P.O. Box 18033 • Hauppauge, NY 11788-8833 • (631) 273-4567 • Fax (631) 273-4773

MINORITY, WOMEN'S AND DISADVANTAGED GOALS

The New York State Department of Transportation has established the following Minority Business Enterprise (MBE) and Women's Business Enterprise (WBE) utilization goals for this contract in accordance with §§102-12 of the New York State Standard Specifications. The goals are expressed as a percentage of the total bid price.

For Clarification of Utilization Requirements refer to New York State Specification §102-12

MBE Goal – **0 percent**
WBE Goal – **0 percent**

EEO Participation Goals for Minority – **5.8%**
EEO Participation Goals for Women – **6.9%**

Disadvantaged Business Enterprise (DBE) Goal – **3%**

Directories and/or information related to the current certification status of Minority and Women's Enterprises, can be obtained by contacting the:

New York State Department of Economic Development
Division of Minority and Women's Business Development
One Commerce Plaza
Albany, New York 12223
(518) 473-6442

Minority/Women's Business Enterprise Officer

The Bidder shall designate and enter below the name of a Minority/Women's Business Enterprise Officer who will have the responsibility for and must be capable of effectively administering and promoting an active Minority/Women's Business Enterprise Program and who must be assigned adequate authority and responsibility to do so.

Bidder Designated D/M/WBE

Officer JOSEPH P. FLORIO, PRESIDENT/C.E.O.
(Name, Title)

Telephone Number (516) 454-0023

RETURN THIS PAGE WITH BID

Maintenance and Protection of Traffic
Traffic Control Plan
Signal System Operations Phase V

The work included in this project is related to Traffic Signal System Operations, and therefore road or lane closures will not be required for the duration of the project.

With that being said, Title 23 of the Federal Highway Administration, Department of Transportation Code of Federal Regulations Part 630 section 1010 does not apply relating to the need for a Maintenance and Protection of Traffic layout scheme or a Traffic Control Plan.

NASSAU COUNTY RIGHT-OF-WAY CERTIFICATION

The Contractor shall certify that all work performed under this contract shall be on Nassau County right-of-way only. At no time shall the Contractor's personnel or equipment be permitted on private property. This certification shall remain in effect for the duration of this contract.

Bidder

Officer Joseph P. Floaio, President/C.E.O.
(Name, Title)

Telephone Number (516) 454-0023

RETURN THIS PAGE WITH BID

NO TEXT ON THIS PAGE

Bids will be compared as stated in the proposal for bids, and as provided by law. The bidder is referred to Division 2., Section 1., of the specifications for an interpretation of work performed and bid, and Division 2., Section 2., for a description of the various items delineated below. The cost of performing other kinds of work and furnishing other kinds of material required and necessary to fulfill all the provisions of this contract in their present form for which no item is provided in the schedule below, SHALL BE DEEMED TO HAVE BEEN INCLUDED AND DISTRIBUTED IN THE ITEMS OF THIS SCHEDULE.

OPERATIONS ITEMS:

ITEM NO.	APPROX. QUANTITIES	DESCRIPTION	FACTOR (Months)	UNIT BID PRICE	AMOUNT BID
1A/1B	1	Computer Hardware & Ancillary Equipment UNIT PRICE MUST BE WRITTEN IN WORDS For Twenty thousand three hundred seventy Dollars dollars and no cents Cents	x 36	x 20,370.00	= $ 733,320.00
2A/2B	900	Field Communication Units UNIT PRICE MUST BE WRITTEN IN WORDS For Ninety-two dollars and no cents Dollars Cents	x 36	x 92.00	= $ 2,980,800.00
3	100	IM Camera Equipment UNIT PRICE MUST BE WRITTEN IN WORDS For Twenty-five dollars and no cents Dollars Cents	x 36	x 25.00	= $ 90,000.00
4	6	Travel Time Equipment UNIT PRICE MUST BE WRITTEN IN WORDS For Twenty dollars and no cents Dollars Cents	x 36	x 20.00	= $ 4,320.00
5	50	Variable Message Signs UNIT PRICE MUST BE WRITTEN IN WORDS For One dollar and no cents Dollars Cents	x 36	x 1.00	= $ 1,800.00
6	LS	As Ordered (furnish equipment)			= $ 108,000.00
7	6	Trailer Mount VMS Signs UNIT PRICE MUST BE WRITTEN IN WORDS For Five hundred dollars and no cents Dollars Cents	x 36	x 500.00	= $ 108,000.00

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8	1	Forklift	x 36	x 1,000.00	= $ 36,000.00

UNIT PRICE MUST BE WRITTEN IN WORDS

For One thousand dollars and no cents
Dollars Cents

TIME AND MATERIAL ITEMS:

Time:

$120,000.00 x 120% = $ 144,000.00
(Overhead & Profit % + 100%)

Material:

$ 60,000.00 x 110% = $ 66,000.00
(Overhead & Profit % + 100%)

Subtotal of Time and Material = $ 210,000.00

TOTAL BID:

Subtotal of Operations Items $ 4,062,240.00

Subtotal of Time and Material $ 210,000.00

TOTAL BID $ 4,272,240.00

TOTAL OR GROSS BID MUST BE WRITTEN IN WORDS

For Four million two hundred seventy-two thousand two hundred forty dollars and no cents
Dollars Cents

NOTE: The figure in both the Time and Material percentage are not indicative of an estimate price. This figure is merely inserted as a basis for bidding purposes.

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PROPOSAL: For all work in accordance with the drawings and specifications:

Welsbach Electric Corp of L.I.

(~~Individual, Firm~~ or Corporation as case may be)

Individual's Social Security Number —

Firm or Corporation's Federal ID Number 11-2354251

Firm or Corporation's Municipal License ID Number 2744

Municipal Licensing Agency Town of Hempstead

By: [signature] Date: October 29, 2019

(Print) Joseph P. Fiorio Title: President/C.E.O.

WHERE BIDDER IS A CORPORATION, ADD:

ATTEST: [signature]

Asst. Secretary Michele Valenti

(CORPORATE)
(SEAL)

NO TEXT ON THIS PAGE

PROPOSAL: For all work in accordance with the drawings and specifications:

WELSBACH ELECTRIC CORP. OF L.I.
(~~Individual, Firm~~ or Corporation as case may be)

Individual's Social Security Number ——

Firm or Corporation's Federal ID Number 11-2354251

Firm or Corporation's Municipal License ID Number 2744

Municipal Licensing Agency TOWN OF HEMPSTEAD

By: [signature] Date: OCTOBER 29, 2019

(Print) JOSEPH P. FLORIO Title: PRESIDENT/C.E.O.

WHERE BIDDER IS A CORPORATION, ADD

ATTEST: [signature]

~~Asst.~~ Secretary MICHELE VALENTI

(CORPORATE)
(SEAL)

NO TEXT ON THIS PAGE

LAURA CURRAN
NASSAU COUNTY EXECUTIVE

KENNETH G. ARNOLD, P.E.
COMMISSIONER

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
1194 PROSPECT AVENUE
WESTBURY, NEW YORK 11590-2723

VENDOR PORTAL ACKNOWLEDGMENT

Vendor Name: WELSBACH ELECTRIC CORP. OF L.I.

Contract Title: SIGNAL SYSTEM OPERATIONS PHASE V

Contract Number: T62000-05ER, P.I.N. 0760.59

Vendors doing business with Nassau County, including those responding to this solicitation, must register with the County's Vendor Portal in order to submit the mandatory vendor disclosure forms required for an award pursuant to this solicitation. Vendors may register at www.nassaucountyny.gov by clicking the "Vendor Portal Registration" button at the bottom of the webpage. Failure to do so may result in a delay of contract award.

The undersigned hereby acknowledges that he/she has registered and has submitted the required disclosures on the Nassau County Vendor Portal.

Signature: [signature]

Date: OCTOBER 29, 2019

Print Name: JOSEPH P. FIORIO

If you attempted to register via the Portal but were unable to do so, please explain here:

LAURA CURRAN
NASSAU COUNTY EXECUTIVE

NASSAU COUNTY

Vendor Code of Ethics

POLICY/PROCEDURE TITLE: Nassau County Vendor Code of Ethics	DATE ISSUED: June 5th, 2019
DEPARTMENT ISSUING: Executive – Compliance	AUTHORIZED and SIGNED BY: Deputy County Executive For Compliance; County Executive

POLICY: The Office of the Nassau County Executive recognizes the importance of the vendor community in helping the County provide necessary services for the residents of Nassau County. It is the policy of the County Executive to ensure that all vendors doing business with Nassau County operate under the highest standards of legal and ethical conduct.

PURPOSE: To set forth a Code of Conduct for vendors to ensure that Nassau County Vendors are conducting their business with integrity, ethics, and compliance with all applicable laws and regulations.

SCOPE: All vendors doing business or seeking to do business with Nassau County as specified in the Code.

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Section 10.03 Reporting Violations and Overpayments

Chapter 11: PROHIBITION ON RETALIATION

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Chapter 1: DEFINITIONS

As used in this Code, the following terms have the following meanings:

Adverse Job-Related Action includes any material alteration to existing terms, conditions, and privileges of employment, such as dismissal, demotion, suspension, compulsory leave, disciplinary action, creation of a hostile work environment, negative performance evaluation, any action resulting in loss of staff, office space or equipment or other benefit, reduction in compensation, failure to appoint, failure to promote, or any transfer or assignment or failure to transfer or assign against the wishes of the affected employee.

Contact means any oral or written communication with any Nassau County Employee, other than the Designated Point(s) of Contact, where it could be reasonably inferred that such contact was intended to influence, or could reasonably be expected to influence, the subject of a County procurement.

Designated Point(s) of Contact means the individual(s) designated by the County to be a Vendor's only contact with Nassau County following the public advertisement of a solicitation or the issuance of a request for a bid, proposal, or quote for small purchase, until the award of a resulting contract and, where applicable, approval by the County Legislature. This timeframe, further defined in the State Procurement Lobbying Law, is also known as the Restricted Period.

Nassau County Employee means any officer, official or employee of Nassau County.

Family Member means (i) a Nassau County Employee's Spouse, Domestic Partner, Child, Sibling or Parent; (ii) a person who is a direct descendant (or the spouse of a direct descendant) of a Sibling of the Nassau County Employee or a Sibling of the Nassau County Employee's Spouse or Domestic Partner; or (iii) a person living in the same household as a Nassau County Employee.

Gift means the transfer, without equivalent consideration, of anything of benefit, tangible or intangible, having more than nominal value, including, but not limited to, cash, loans, forbearance, services, travel, gratuities of any kind, favors, money, meals, refreshments, entertainment, hospitality, admittance to private clubs, use of time-shares, personal use of the Vendor's facilities, promises, tickets to entertainment or sporting events, weekend trips, golf outings, loans of equipment, or other thing or benefit. A Gift need not be intended to influence or reward any individual or entity.

Nassau County Code of Ethics means Nassau County Charter Section 2218, and the rules and regulations promulgated thereunder as may be amended or modified.

Participating Employee means any Vendor employee who engages in any written or oral communication of a non-clerical or non-administrative nature with Nassau County or with a Nassau County Employee(s) as part of or in connection with the procurement.

Participating Nassau County Employee means any Nassau County Employee who the Vendor knows, has reason to know, or can reasonably anticipate is involved in a specific procurement, in either a direct or decision-making capacity, but not in a clerical capacity. This includes but is not limited to the Designated Point of Contact, the project manager, the project manager's staff to the extent that they are involved in the procurement, members of selection committees, technical experts and negotiating teams.

Primary Contracting Party means a Vendor who intends to directly enter into or has a contract with Nassau County.

Retaliatory Action is defined as any Adverse Job-Related Action taken by, or at the direction or request of, a Vendor or a Vendors' Employees as a result of any individual's (i) good-faith report with respect to a violation or potential violation of this Code or the law; or (ii) cooperation in any investigation of unlawful conduct or misconduct conducted by Nassau County or by federal, state, or local law enforcement officials.

State Procurement Lobbying Law means New York State Finance Law Sections 139-j and 139-k, and the rules and regulations promulgated thereunder as may be amended or modified.

Vendor means any individual or entity seeking to or doing business with Nassau County within the scope of this Code, including, without limitation, contractors, consultants, suppliers, manufacturers seeking to act as the primary contracting party, officers and employees of the foregoing, as well as any subcontractors, subconsultants and suppliers at all lower tiers.

Chapter 2: LIMITATIONS AND REPORTING OF CONTACTS WITH NASSAU COUNTY

Section 2.01 Designated Point(s) of Contact

Each procurement solicitation issued by Nassau County will identify the Designated Point(s) of Contact for that solicitation as required by the State Procurement Lobbying Law. Once the Designated Point(s) of Contact is/are established, the Vendor and any person or entity acting on the Vendor's behalf, including without limitation, those providing compensated or uncompensated lobbying, advocacy, consulting or other services should ensure that its contacts with Nassau County are in compliance with the requirements of the State Procurement Lobbying Law.

Chapter 3: GIFTS OR CONTINGENT FEES

Section 3.01 Zero Tolerance

No Vendor may offer or give any Gift, directly or indirectly, to a Nassau County Employee. Similarly, no Vendor may offer or give any Gift, directly or indirectly, to any Family Member of a Nassau County employee where such Gift is made because of the Vendor's relationship with the Nassau County Employee. Additionally, no Vendor may accept a gift from a Nassau County Employee.

This Zero-Tolerance Policy applies regardless of actual intentions. In other words, even if a Gift does not, or is not intended to, influence an action or decision by a Nassau County Employee, it is prohibited by this Code.

Section 3.02 Personal Relationships

Notwithstanding the foregoing, if a Vendor has a pre-existing family or personal relationship with the Employee, a Gift that is wholly unconnected with the Employee's duties on behalf of Nassau County is not necessarily prohibited.

In determining whether the giving of an item was motivated by personal rather than business concerns, the following factors are considered:

(a) the history of the relationship between the donor and the recipient, including but not limited to the mutuality of gift giving;

(b) whether the item was paid for by the donor.

The giving of an item shall not be considered to be motivated by a family or personal relationship if the donor seeks to charge or deduct the value of the item as a business expense or seeks reimbursement from a client.

However, regardless of the family or personal relationship between a Vendor and an employee, a Gift is strictly forbidden where it is being given under circumstances where it can reasonably be inferred that it was intended to influence the employee in the performance of his or her official duties.

Section 3.03 Contingent Fees

The Vendor will not employ or retain any individual or entity for the purpose of soliciting or securing a Nassau County contract upon any agreement or understanding for a commission, percentage, brokerage, or fee that is contingent or dependent upon the outcome of the procurement.

Chapter 4: NEGOTIATIONS FOR FUTURE EMPLOYMENT

Section 4.01 Restrictions During the Procurement Process

Vendors shall not discuss future employment with Participating Nassau County Employees or their Family Members from the date the procurement is advertised or solicited through 30 days following the date that the procurement is awarded, even if a Participating Nassau County Employee contacts the Vendor regarding employment. Questions regarding whether a particular Nassau County employee is a Participating Nassau County Employee for a specific procurement should be directed to the Designated Point of Contact for the procurement.

Section 4.02 Restrictions Post Award

Vendors are prohibited from offering or discussing an employment opportunity with a Nassau County Employee or his or her Family Members before whom the Vendor has or expects to have a pending specific matter including, but not limited to, negotiations, performance evaluation, task order selection, approval of a voucher or invoice, or approval of or agreement to a contract amendment, change order, or deviation or waiver until:

(i) 30 days from the time the matter before the Employee is closed, or

(ii) 30 days from the time the Employee has no further involvement with the matter because of recusal or reassignment.

Chapter 5: CONFLICT OF INTEREST

Section 5.01 Financial Interest

Neither the Vendor, nor any director, officer, principal, owner, or partner thereof, as the case may be, may have a 10% or greater interest, nor shall the Vendor, nor any director, officer, principal, owner, or partner thereof, acquire a 10% or greater interest, either directly or indirectly, in any company or firm that would conflict in any manner or degree with the performance of the Nassau County contract.

The Vendor will not permit an employee having a 10% or greater interest, either directly or indirectly, in any company or firm that would conflict in any manner or degree with the performance of the Nassau County contract to be employed in the performance of the Nassau County contract.

Section 5.02 Personal Business Dealings

Neither the Vendor, nor any director, officer, principal, owner, or partner thereof, may have a non-County business dealing with a

Participating Nassau County Employee where it can be reasonably inferred that the purpose of the business dealing, at least in part, is to influence the Participating Nassau County Employee's action on a pending County matter.

Section 5.03 Disclosure and Cooperation

The Vendor shall disclose immediately to the County any real or potential conflict of interest of which it becomes aware. This obligation is ongoing and shall last through the completion of performance of the contract. The Vendor shall provide to Nassau County, at the County's request and upon such forms as may be furnished by Nassau County, a disclosure of organizational, financial, contractual or other affiliations with any organization or entity that has interests that may be substantially affected by the procurement solicitation or award. The Vendor shall fully cooperate in any inquiry or investigation undertaken by Nassau County to determine whether any such affiliations present a conflict of interest, or whether any other provision of this Code has been violated. The Vendor shall fully cooperate with audits, investigations, examinations and reviews by the Nassau County Inspector General conducted pursuant to section 187 of the Nassau County Charter.

Section 5.04 Confidential Information

At no time shall any Vendor who obtains confidential or proprietary Nassau County information in the course of doing or seeking to do business with the County disclose any such information to any person not authorized by Nassau County to receive such information or use such information for any personal gain except as necessary to fulfill its contractual obligations to Nassau County.

If the Vendor receives from any source confidential or proprietary Nassau County information prior to the award of a resulting contract and, where applicable, approval by the County Legislature, without the explicit approval of the Designated Point of Contact, the Vendor shall immediately so notify the Designated Point of Contact.

Nassau County confidential or proprietary information includes, but is not limited to, internal cost estimates and proposals submitted by other Vendors.

Section 5.05 Prohibition Regarding Bidding by Participants in Procurement Development

No Vendor who participates in the development of a scope of work, solicitation documents, assessment criteria, contractual instruments or technical specifications may participate as a bidder, sub-bidder, proposer or sub-proposer on that particular procurement or perform any work on that particular procurement or any other procurement that would constitute an organizational conflict of interest or would give that Vendor an unfair advantage over other bidders or proposers on that procurement. This prohibition may be waived in writing by the County Chief Procurement Officer upon a showing of good cause.

Chapter 6: FORMER NASSAU COUNTY EMPLOYEES

Section 6.01 Appearance Before Former Agency-Two Year Bar

Except as provided for in Section 2218(8) of the Nassau County Code of Ethics, the Vendor will not permit a former Nassau County Employee to appear or practice before any Nassau County agency, either prior to award or in the performance of a Nassau County contract, for a period of two years after termination of the Nassau County Employee's services with the County.

Section 6.02 Appearance Before Former Agency-Life Time Bar

Except as provided for in Section 2218(8) of the Nassau County Code of Ethics, the Vendor will not permit a former Nassau County Employee to appear, practice, communicate or otherwise render services before the agency that employed the officer or employee or any other agency of Nassau County, either prior to award or in the performance of an agency's contract in relation to any case, proceeding, application or transaction with respect to which such former officer or employee was directly concerned and in which he or she personally participated, or which was under his or her active consideration during the period of his or her employment. This provision is a lifetime bar on projects that the former Nassau County Employee previously worked on while employed by the County.

Chapter 7: NON-COLLUSION

Section 7.01 Independent Bid Assessment

The Vendor will calculate the price(s) contained in any bid or proposal independently, without collusion, consultation, communication, or agreement with any competing Vendor for the purpose of restricting competition.

Section 7.02 Non-Communication of Bid

Unless otherwise required by law, the price(s) which the Vendor quotes in its bid or proposal will not knowingly be disclosed by the Vendor, directly or indirectly, to any competing Vendor prior to the closing date for bids or proposals.

Section 7.03 Bid Submission

The Vendor will not make any attempt to induce any other individual or entity to submit or not to submit a bid or proposal.

Chapter 8: DISTRIBUTION AND CERTIFICATION

Section 8.01 Distribution of Vendor Code of Ethics and Vendor's Participating Employee Acknowledgements

As a condition of being considered for the award of any contract above the County's small purchase threshold of $10,000, the Vendor will be required to distribute copies of the Nassau County Vendor Code of Ethics to all Participating Employees prior to any of those employee's participation in the procurement. The Code may be distributed either in hard copy or electronically as a separate PDF.

Additionally, as a condition of being considered for the award of any contract above the County's small purchase threshold, the Vendor will be required to obtain an acknowledgement from each of its Participating Employees ("Participating Employee Acknowledgements") that they have received, read, understand, and will comply with the Nassau County Vendor Code of Ethics.

Vendor Code of Ethics

The Vendor's responsibility for distributing copies of the Nassau County Vendor Code of Ethics and obtaining such signed Participating Employee Acknowledgements is ongoing until completion of performance of the contract and shall be retained for the same period as the Vendor is required to retain other contract documents in accordance with their contract with the County.

Receipt and retention of Participating Employee Acknowledgments by the Vendor shall be subject to audit by Nassau County.

Section 8.02 Vendor Certifications

The vendor by signing the final contract thereby certifies and attests to the following:

(a) The Vendor has been provided with a copy of the Nassau County Vendor Code of Ethics and will comply with all of the provisions of the Code;

(b) All of its Participating Employees during the course of procurement or contract have been provided with a copy of the Nassau County Vendor Code of Ethics prior to any of those employees' participation in the procurement;

(c) All Participating Employees have completed the acknowledgement required by Section 8.01 of this Code;

(d) The Vendor will retain all of the signed Participating Employee Acknowledgements for the same period as the Vendor is required to retain other contract documents in accordance with their contract with the County;

(e) The Vendor will continue to distribute the Nassau County Vendor Code of Ethics, obtain signed Participating Employee Acknowledgements as new Participating Employees are added or changed during the contract period, and retain all of the signed acknowledgements for the same period as the Vendor is required to retain other contract documents in accordance with their contract with the County.

Section 8.03 Subcontractor Certifications

As a condition of being considered for the award of any contract above the County's small purchase threshold, the Vendor will obtain certifications executed by authorized officials from all of its lower tier subcontractors, subconsultants and suppliers (as well as from any other subcontractors, subconsultants and suppliers from whom that Vendor is soliciting or has received proposals for work on a Nassau County contract) whose employees have communicated or may communicate with Nassau County Employees. This obligation is ongoing and shall last through the completion of performance of the contract. Receipt and retention of lower tier certifications by the Vendor shall be subject to audit by Nassau County.

Chapter 9: PENALTIES

Section 9.01 Responsibility Determination

For violation of any provision of the Nassau County Vendor Code of Ethics, Nassau County may avail itself of every remedy in law or equity, or as agreed to by parties in any contract, including but not limited to declaring the Vendor non-responsible or in material breach of the contract.

Section 9.02 Civil/Criminal Penalties

Additionally, violation of the Nassau County Vendor Code of Ethics or a provision thereof may subject the Vendor to criminal or civil penalties under State or Federal law.

Chapter 10: REPORTING OBLIGATION

Section 10.01 Reporting Gift Requests

Notwithstanding the provisions of Chapter 4 above, the Vendor is obligated to immediately report to Nassau County's Inspector General and the County Chief Procurement Officer, any and all requests made to the Vendor by any Nassau County Employee for a Gift.

Section 10.02 Reporting Material Changes

The Vendor is under a continuing obligation to report any change in circumstances that materially affects any prior report to Nassau County to Department of Chief Contracting Officer, including but not limited to disclosure of conflicts of interest and representations made in the Contractor Responsibility Form.

Section 10.03 Reporting Violations and Overpayments

The Vendor is obligated to timely report in writing to Nassau County's Inspector General, in connection with the award, performance or closeout of the Nassau County contract or subcontract, any credible evidence of significant overpayments on the contract or that a principal, employee, agent or subcontractor has committed a violation of law involving fraud, conflict of interest, bribery or gratuities.

Chapter 11: PROHIBITION ON RETALIATION

Section 11.01 Prohibition

To facilitate the reporting obligations under Chapter 10, this code strictly forbids all Vendors and Vendors' Employees from taking any Retaliatory Action against individuals who make such reports.

NO TEXT ON THIS PAGE

Vendor Code of Ethics

CERTIFICATION REGARDING DISTRIBUTION OF NASSAU COUNTY VENDOR CODE OF ETHICS

Bid/Proposal No.: ______________

Project Description: ____

The prospective lower tier participant ______________________(subcontractor, subconsultant, or supplier name) hereby certifies, by submission of this bid or proposal to______________[prime contractor] in connection with the Nassau County bid or proposal number referenced above, to the best of its knowledge and belief, that all officers and personnel who have communicated or may communicate with Nassau County employees during the course of the procurement and through the completion of performance of the contract have been provided with a copy of the Nassau County Vendor Code of Ethics prior to each of these employee's participating in the procurement.

Executed this__________day of______________, 20____.

By ______________________________ Signature of Authorized Official

______________________________ Name and Title of Authorized Official

SEE VENDOR EMAILED CERTIFICATIONS ATTACHED.

- MARBELITE EQUIP CORP.
- TELESTE, LLC
- ACTIVU CORPORATION

NO TEXT ON THIS PAGE

Vendor Code of Ethics

CERTIFICATION REGARDING DISTRIBUTION OF NASSAU COUNTY VENDOR CODE OF ETHICS

Bid/Proposal No.: T62000-05ER

Project Description: Traffic Signal Systems Operations, Phase 5

The prospective lower tier participant Marbelite Equipment Corp (subcontractor, subconsultant, or supplier name) hereby certifies, by submission of this bid or proposal to Welsbach Electric Corp. of L.I. [prime contractor] in connection with the Nassau County bid or proposal number referenced above, to the best of its knowledge and belief, that all officers and personnel who have communicated or may communicate with Nassau County employees during the course of the procurement and through the completion of performance of the contract have been provided with a copy of the Nassau County Vendor Code of Ethics prior to each of these employee's participating in the procurement.

Executed this 28th day of October, 2019.

By ______________________ Signature of Authorized Official

Melissa Verdoni President Name and Title of Authorized Official

Vendor Code of Ethics

CERTIFICATION REGARDING DISTRIBUTION OF NASSAU COUNTY VENDOR CODE OF ETHICS

Bid/Proposal No.: T62000-05ER

Project Description: Traffic Signal Systems Operations, Phase 5

The prospective lower tier participant Teleste, LLC (subcontractor, subconsultant, or supplier name) hereby certifies, by submission of this bid or proposal to Welsbach Electric Corp. of L.I. [prime contractor] in connection with the Nassau County bid or proposal number referenced above, to the best of its knowledge and belief, that all officers and personnel who have communicated or may communicate with Nassau County employees during the course of the procurement and through the completion of performance of the contract have been provided with a copy of the Nassau County Vendor Code of Ethics prior to each of these employee's participating in the procurement.

Executed this 28th day of October, 20 19.

By Michael O'Dea Signature of Authorized Official

Director - North America Name and Title of Authorized Official

Vendor Code of Ethics

CERTIFICATION REGARDING DISTRIBUTION OF NASSAU COUNTY VENDOR CODE OF ETHICS

Bid/Proposal No.: T62000-05ER

Project Description: Traffic Signal Systems Operations, Phase 5

The prospective lower tier participant Activu Corporation (subcontractor, subconsultant, or supplier name) hereby certifies, by submission of this bid or proposal to Welsbach Electric Corp. of L.I. [prime contractor] in connection with the Nassau County bid or proposal number referenced above, to the best of its knowledge and belief, that all officers and personnel who have communicated or may communicate with Nassau County employees during the course of the procurement and through the completion of performance of the contract have been provided with a copy of the Nassau County Vendor Code of Ethics prior to each of these employee's participating in the procurement.

Executed this 28th day of October, 20 19.

By ____________________ Signature of Authorized Official

Chief Operating Officer Name and Title of Authorized Official

Vendor Code of Ethics

PARTICIPATING EMPLOYEE ACKNOWLEDGEMENT REGARDING NASSAU COUNTY VENDOR CODE OF ETHICS

Company: WELSBACH ELECTRIC Corp. of L.I.

Bid/Proposal No.: T62000-05ER, P.I.N. 0760.59

I, DARLENE KUHMER, acknowledge that I have received and read the Nassau County Vendor Code of Ethics on 10/22/19 and that I understand it and will comply with this Code in my participation in procurements between MARBELITE EQUIP Corp. & TELESTE, LLC & ACTIVU Corporation. (Vendor names) and Nassau County.

Executed this 22ND day of OCTOBER, 2019.

By ______________________ Signature of Employee

DARLENE KUHMER, ESTIMATOR/PM Name and Title of Employee

APPENDIX 2
IRAN DIVESTMENT ACT

As a result of the Iran Divestment Act of 2012 (Act), Chapter 1 of the 2012 Laws of New York, a new provision has been added to the State Finance Law (SFL), § 165-a, effective April 12, 2012. Under the Act, the Commissioner of the Office of General Services (OGS) will be developing a list (prohibited entities list) of "persons" who are engaged in "investment activities in Iran" (both are defined terms in the law). Pursuant to SFL § 165-a(3)(b), the initial list is expected to be issued no later than 120 days after the Act's effective date, at which time it will be posted on the OGS website.

By entering into this Contract, Contractor (or any assignee) certifies that once the prohibited entities list is posted on the OGS website, it will not utilize on such Contract any subcontractor that is identified on the prohibited entities list. Additionally, Contractor agrees that after the list is posted on the OGS website, should it seek to renew or extend the Contract, it will be required to certify at the time the Contract is renewed or extended that it is not included on the prohibited entities list. Contractor also agrees that any proposed Assignee of the Contract will be required to certify that it is not on the prohibited entities list before the New York State Department of Transportation (NYSDOT) may approve a request for Assignment of Contract

During the term of the Contract, should NYSDOT receive information that a person is in violation of the above-referenced certification, NYSDOT will offer the person an opportunity to respond. If the person fails to demonstrate that it has ceased its engagement in the investment which is in violation of the Act within 90 days after the determination of such violation, then NYSDOT shall take such action as may be appropriate including, but not limited to, imposing sanctions, seeking compliance, recovering damages, or declaring the Contractor in default.

NYSDOT reserves the right to reject any request for assignment for an entity that appears on the prohibited entities list prior to the award of a contract, and to pursue a responsibility review with respect to any entity that is awarded a contract and appears on the prohibited entities list after contract award.

APPENDIX 2-S
IRAN DIVESTMENT ACT

As a result of the Iran Divestment Act of 2012 (Act), Chapter 1 of the 2012 Laws of New York, a new provision has been added to the State Finance Law (SFL), § 165-a, effective April 12, 2012. Under the Act, the Commissioner of the Office of General Services (OGS) will be developing a list (prohibited entities list) of "persons" who are engaged in "investment activities in Iran" (both are defined terms in the law). Pursuant to SFL § 165-a(3)(b), the initial list is expected to be issued no later than 120 days after the Act's effective date, at which time it will be posted on the OGS website.

By entering into a renewal or extension of this Contract, Contractor (or any assignee) certifies that once the prohibited entities list is posted on the OGS website, it will not utilize on such Contract any subcontractor that is identified on the prohibited entities list.

Additionally, Contractor understands that during the term of the Contract, should NYSDOT receive information that a person is in violation of the above-referenced certification NYSDOT will offer the person an opportunity to respond. If the person fails to demonstrate that it has ceased its engagement in the investment which is in violation of the Act within 90 days after the determination of such violation, then NYSDOT shall take such action as may be appropriate including, but not limited to, imposing sanctions, seeking compliance, recovering damages, or declaring the Contractor in default.

NYSDOT reserves the right to reject any renewal, extension or request for assignment for an entity that appears on the prohibited entities list hereafter and to pursue a responsibility review with respect to any entity that is granted a contract extension/renewal or assignment and appears on the prohibited entities list thereafter.

NO TEXT ON THIS PAGE

MacBride Fair Employment Principles

NONDISCRIMINATION IN EMPLOYMENT IN NORTHERN IRELAND:
MACBRIDE FAIR EMPLOYMENT PRINCIPLES

In accordance with Chapter 807 of the Laws of 1992 the bidder, by submission of this bid, certifies that it or any individual or legal entity in which the bidder holds a 10% or greater ownership interest, or any individual or legal entity that holds a 10% or greater ownership interest in the bidder, either: (answer yes or no to one or both of the following, as applicable),

(1) have business operations in Northern Ireland,

Yes ___ No X

if yes:

(2) shall take lawful steps in good faith to conduct any business operations they have in Northern Ireland in accordance with the MacBride Fair Employment Principles relating to nondiscrimination in employment and freedom of workplace opportunity regarding such operations in Northern Ireland, and shall permit independent monitoring of their compliance with such Principles.

Yes ___ No ___

(Contractor's Signature)
JOSEPH P. FURIO
PRESIDENT/C.E.O.

WELSBACH ELECTRIC CORP. OF L.I.
(Name of Business)

NO TEXT ON THIS PAGE

CONTRACTOR CERTIFICATION STATEMENT REGARDING

STORM WATER POLLUTION AT THE WORK SITE

I certify under penalty of the law that I understand and agree to comply with the terms and conditions of the pollution prevention plan for the construction site identified in such plans as a condition of authorization to discharge storm water. I also understand the operator (Nassau County) must comply with the terms and conditions of the New York State Pollution Discharge Elimination System ("SPDES") general permit for storm water discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Finally, I understand my contractual obligations in the matter as outlined in the contract documents.

CONTRACTOR'S NAME: Welsbach Electric Corp. of L.I.

TELEPHONE NUMBER: (516) 454-0023

WORK SITE OR FACILITY NAME: Various

WORK SITE OR FACILITY ADDRESS OR OTHER IDENTIFYING DESCRIPTION: Various Locations

Throughout Nassau County

Signature

October 29, 2019
Date

Joseph P. Florio President/C.E.O.
Print Name and Title of Signer

NO TEXT ON THIS PAGE

U.S. DEPARTMENT OF JUSTICE
OFFICE OF JUSTICE PROGRAMS
OFFICE OF THE COMPTROLLER

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion Lower Tier Covered Transactions (Sub-Recipient)

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 28 CFR Part 67, Section 67.510, Participants' responsibilities. The regulations were published as Part VII of the May 26, 1988 *Federal Register* (pages 19160-19211).

(BEFORE COMPLETING CERTIFICATION, READ INSTRUCTIONS ON REVERSE)

(1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department of agency.

(2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

JOSEPH P. FLORIO PRESIDENT/C.E.O.
Name and Title of Authorized Representative

m/d/yy

Signature 10/29/19
Date

WELSBACH ELECTRIC CORP. OF L.I.
Name of Organization

300 NEWTOWN RD, PLAINVIEW, NY 11803
Address of Organization

OJP FORM 4061/1 (REV. 2/89) Previous editions are obsolete

NO TEXT ON THIS PAGE

QUALIFICATION STATEMENT

Note: All blanks in the form are to be filled in. Where blanks are not applicable to your firm, so indicate in each instance.

1. How many years has your firm been in the business under your present business name? 64 YEARS

2. How many years experience in the construction work of a similar type as this contract has your firm had;

   a. as a Prime Contractor 64 YEARS

   b. as a Subcontractor 64 YEARS

3. List below the construction projects your firm has under way as of this date:

Contract Amount	Class of work	Percent Completed	Name and Address of Owner or Contracting Officer
SEE ATTACHMENT #1			

(use additional blank sheets if additional space is necessary)

4. List the projects which your firm as a firm has performed in the past few years which you feel will qualify you for this work:

Contract Amount	Class of work	Percent Completed	Name and Address of Owner or Contracting Officer
2,448,500.00	TS SYSTEM OPS PHASE IV	95%	NCDPW 1194 PROSPECT AVE H62000-03E
6,378,220.00	TS MAINT & INSTALLATION	100%	NCDPW 1194 PROSPECT AVE T62250003M
5,862,200.00	DC RD TRAFFIC SIGNALS PHASE 1	100%	NCDPW 1194 PROSPECT AVE H62161
1,442,200.00	INCIDENT MGMT PHASE IV	100%	NCDPW 1194 PROSPECT AVE H62564
4,992,122.00	DC RD TRAFFIC SIGNALS PHASE 2	100%	NCDPW 1194 PROSPECT AVE H62162

(use additional blank sheets if additional space is necessary)

5. Have you:

   a. ever failed to complete any work awarded to You? NO
   If so; identify the project, the owner, the contract amount, the circumstances and date of all such failures to complete.

   b. ever been defaulted on a contract? NO
   If so; identify the project, the owner, the contract amount, the circumstances and the date of all default actions

NO TEXT ON THIS PAGE

Welsbach Electric Corp. of L.I.
Job List

Job	Owner	Contract	Description	Est Revenue	Start Date	Original Comp Date	Comp Date
			Transportation Division				
027	Broadway Maintenance		Broadway Maintenance	[redacted]	01/01/19	12/31/20	12/31/20
065	Garage		Garage	[redacted]	01/01/19	12/31/20	12/31/20
066	Warehouse		Warehouse	[redacted]	01/01/19	12/31/20	12/31/20
300	Town of Oyster Bay	PRE 13-109	Park Electrical Service Requirements	[redacted]	03/19/14	03/18/15	03/10/19
304	Town of Islip	DPW 1-2014	S.L. Maint & Inst	[redacted]	07/16/14	07/16/17	07/16/19
319	American Traffic Solutions		Red Light Camera	[redacted]	12/15/15	12/31/16	12/31/19
323	N.C.D.P.W.	H62000-03E	T.S. System Operations Ph IV	[redacted]	11/01/16	10/31/19	10/31/19
325	N.C.D.P.W.	H62162	OC Rd Traffic Signals Phase II	[redacted]	06/01/17	11/30/18	12/31/19
326	N.Y.S.D.O.T.	D263217	VMS Retrofit	[redacted]	10/01/16	04/19/18	08/31/18
330	N.C.D.P.W.	T62250-03M	T.S. Maint & Inst	[redacted]	01/01/17	12/31/17	12/31/18
333	N.Y.S.D.O.T.	C005237	Roadway Lighting Maint	[redacted]	05/09/17	05/08/19	10/31/19
334	City of Long Beach	C-870	S.L. Maintenance	[redacted]	05/01/17	10/31/18	10/31/20
337	Village of Mineola	2017	S.L. Maintenance	[redacted]	02/01/18	01/31/21	01/31/21
338	Town of Southampton	5416	S.L. LED Upgrade (Guth DeConzo)	[redacted]	04/02/18	07/01/18	11/30/18
340	569 Broadhollow Rd, LLC		T.S. Upgrade Broad Hollow & Spagnoli	[redacted]	05/15/18	08/30/18	04/30/19
342	Town of Babylon	18G76	S.L. LED Conversion	[redacted]	10/01/18	09/30/19	09/30/19
343	City of Long Beach		Pacific Blvd S.L. Reconst (Novelli)	[redacted]	03/01/19	06/30/19	06/30/19
344	N.C.D.P.W.	T62250-04M	T.S. Maint & Inst	[redacted]	01/01/19	12/31/19	12/31/19
345	N.C.D.P.W.	T62181-01G	T.S. Communications Phase II	[redacted]	03/01/19	08/31/20	08/31/20
346	Town of Islip	DPW 8-2018	Bayway Corridor TS/SL Mod (Laser)	[redacted]	03/01/19	12/31/19	12/31/19
347	Town of Oyster Bay	PRE 19-194	Parks Electrical Service Requirements	[redacted]	05/07/19	05/06/20	05/06/20
348	Town of Hempstead	PW 35-18	S.L. Resiliency Program	[redacted]	08/01/19	11/30/19	11/30/19
349	Town of Islip	DPW 4-2019	S.L. Maint & Inst	[redacted]	07/17/19	07/17/22	07/17/22
350	TL Applicant LLC		T.S. Modfication Union Tpk	[redacted]	09/01/19	03/31/20	03/31/20
351	Lalezarian Properties, LLC		T.S. Inst 1999/2400 Marcus Ave	[redacted]	11/01/19	06/30/20	06/30/20
352	S.C.D.P.W.	CP 5558	T.S. Mod CR 10, Elwood Rd (GGG)	[redacted]	11/01/19	06/30/20	06/30/20
394	Misc Maint Contracts		Villages, Towns & Private	[redacted]	01/01/19	12/31/20	12/31/20
395	Lump Sums and T&M		Villages, Towns & Private	[redacted]	01/01/19	12/31/20	12/31/20
			Industrial Division				
654	N.Y.S.O.G.S.	D44561-E	NYS Police Zone Headquarters	[redacted]	06/10/16	01/11/18	05/24/18
658	Massapequa UFSD	E	Berner MS Athletic Field Lighting	[redacted]	08/01/17	11/15/17	01/31/19
659	Massapequa Water District	1566631C-R	New Iron Removal Facility	[redacted]	02/05/18	03/12/19	08/12/19
660	Farmingdale UFSD	FDSD1701	WE Howitt MS Athletic Field (Laser)	[redacted]	04/12/18	03/01/19	07/31/19
662	Massapequa UFSD	MASD1803 E	Ames HS Campus Electric Srvc Upgr	[redacted]	04/01/19	08/23/19	08/23/19
663	Town of Brookhaven	20190021	Percy Raynor Ballfield Ltg Improv	[redacted]	03/14/19	06/12/19	07/31/19
664	Town of Islip	DPD 7-18	Bay Shore Marina Improv (Conway)	[redacted]	04/04/19	03/15/20	03/15/20
665	Town of East Hampton	EH19-021	Lions Field Ballfield Ltg Replacemen	[redacted]	05/13/19	05/13/19	08/13/19
666	West Islip UFSD	186449	West Islip HS Ballfield Ltg Inst (Musc	[redacted]	07/15/19	09/30/19	09/30/19

c. ever been declared a non-responsible bidder by any municipality or public agency? No
If so; identify the project, the owner, the contract amount, the circumstances and the date of all such declarations

d. ever been barred from bidding municipal or public contracts? No
If so; identify the municipality or public agency, the circumstances, date and term of disbarment for all debarments.

(use additional blank sheets if additional space is necessary)

6. Has any officer, partner or principal of your firm ever been on officer, partner or principal of some other firm:

a. that failed to complete a construction contract? No
If so, state name of individual and identify the name of firm, the project, the owner, the contract amount, the circumstances and the date of all such failures to complete for all principals of the firm.

b. that has ever been defaulted on a contract? No
If so; state the name of the individual and identify the name of the firm, the project, the owner, the contract amount, the circumstances and the date of all default actions for all principals of the firm.

c. that has ever been declared a non-responsible bidder by any municipality or public agency? No
If so; state the name of the individual and identify the name of the firm, the project, the owner, the contract amount, the circumstances and the date of all such declarations for all principals of the firm.

NO TEXT ON THIS PAGE

d. that has ever been barred from bidding municipal or public contracts? NO
If so; state the name of the individual and identify the name of the firm, the municipality or public agency, the circumstances, date and term of debarment for all debarments for all principals of the firm.

(use additional blank sheets if additional space is necessary)

7. Has any officer or partner of your firm ever failed to complete a construction contract handled in his name? NO
If so, state name of individual, name of owner and reason therefor:

8. Disclose any and all violations of the Prevailing Wage and Supplemental Payment Requirements of the Labor Law of New York State.

NONE

9. Disclose any and all other Labor Law Violations, including, but not limited to, child labor violations, failure to pay wages, or unemployment insurance tax delinquencies within the past five years.

NONE

10. In what other lines of business are you financially interested?

NONE. WELSBACH ELECTRIC CORP. OF L.I. IS A WHOLLY OWNED SUBSIDIARY OF EMCOR GROUP, INC.

NO TEXT ON THIS PAGE

11. What is the construction experience of the principal individuals of your firm?

Individual's Name	Present Position or Office	Years of Construction Experience	Magnitude and type of work	In what Capacity
JOSEPH P. FLORIO	PRESIDENT/C.E.O.	40 YEARS	ELECTRICAL CONST. ; MAINT	FINANCE/MGMT
DAN PIQUETTE SR	ASST. VICE PRESIDENT	25 YEARS	"	PROJECT MGR/ESTIMATING
MICHELE VALENTI	ASST. SEC'Y/ASST. TREASURER	30 YEARS	"	FINANCE/MGMT
KEVIN GMELIN	LABOR SUPERINTENDENT	24 YEARS	"	ELECTRICIAN/SUPER

(use additional blank sheets if additional space is necessary)

12. List below the equipment that you own that is available for the proposed work, giving present location where it may be inspected:

Item	Description, Size Capacity, Year, etc.	Years of Service	Present Location

SEE ATTACHMENT #2

(use additional blank sheets if additional space is necessary)

NOTE: Should the equipment be moved from the above mentioned location, the submitted hereby agrees upon request of the County to state the new location where same may be found.

13. If any of the above equipment is covered by chattel mortgage, conditional bill of sale, lien, or like encumbrance, state the complete details as to nature and amount of encumbrance, the name and address of the holder, etc.

N/A

(use additional blank sheets if additional space is necessary)

NO TEXT ON THIS PAGE

WELSBACH ELECTRIC CORP. of L.I.

Equipment and Vehicle List

Vehicle #	Description	Vehicle ID #
2	2002 FORD PICK, RD	[redacted]
6	1997 FORD SUBN, WH	
12	2004 FORD VAN, WH	
15	2000 FORD VAN, WH	
17	2000 FORD UTIL, WH	
21	1997 GMC UTIL, WH	
24	1997 FORD VAN, WH	
26	1988 INTER FLAT, WH	
29	1992 FORD VAN, WH	
31	2002 FORD UTIL, WH	
32	1999 FORD UTIL, WH	
35	2002 FORD VAN, WH	
39	2003 FORD VAN, WH	
40	2010 FORD VAN, WH	
41	2004 FORD UTIL, WH	
42	1990 INTER UTIL, WH	
43	2002 FORD VAN, WH	
45	2008 INTER FLAT, WH	
48	2001 FREIG UTIL, WH	
49	2002 FORD SUBN, WH	
51	2000 FORD VAN, WH	
53	2000 FORD VAN, WH	
54	1997 FORD FLAT, WH	
55	1997 FORD VAN, WH	
56	1995 GMC DUMP, WH	
58	1995 INTER UTIL, WH	
60	1997 FORD FLAT, WH	
65	2001 FORD VAN, WH	
66	2001 FORD VAN, WH	
68	2000 FORD VAN, WH	
70	2003 MITSU DELV, WH	
73	2001 FORD VAN, WH	
74	1998 WE/CA TRLR, WH	
75	1999 FORD VAN, WH	
76	1995 FORD FLAT, WH	
78	2004 FORD FLAT, WH	
79	1997 FORD SUBN, WH	
80	1983 CUSTO FLAT, YW	
81	2003 FORD VAN, WH	
83	2001 GMC UTIL, WH	
84	2008 FORD UTIL, WH	
85	1997 FORD UTIL, WH	

WELSBACH ELECTRIC CORP. of L.I.

Equipment and Vehicle List

Vehicle #	Description	Vehicle ID #
87	1998 INTER UTIL, WH	[redacted]
89	2004 FORD VAN, WH	[redacted]
90	2000 GMC UTIL, WH	[redacted]
91	1999 FORD UTIL, BK	[redacted]
92	1999 INTER UTIL, WH	[redacted]
93	2001 INTER UTIL, WH	[redacted]
94	2001 INTER UTIL, WH	[redacted]
95	1992 GMC RBM, WH	[redacted]
96	2001 INTER UTIL, WH	[redacted]
97	1997 INTER UTIL, WH	[redacted]
98	1984 FORD UTIL, WH	[redacted]
99	2000 FORD PICK, WH	[redacted]
102	1997 FORD DUMP, WH	[redacted]
103	1997 FORD DUMP, WH	[redacted]
104	1997 FORD DUMP, WH	[redacted]
105	2001 INTER UTIL, WH	[redacted]
106	1988 CURTI FLAT, YW	[redacted]
109	2000 TO/BR TRLR, BK	[redacted]
110	1999 FRHT UTIL, WH	[redacted]
112	1966 TRUCO TRLR,YW	[redacted]
115	1999 FORD VAN, WH	[redacted]
117	2000 FORD VAN, WH	[redacted]
118	2001 INTER UTIL, WH	[redacted]
119	2008 FORD UTIL, WH	[redacted]
120	1989 BELSH FLAT, YW	[redacted]
121	2006 JTC TRLR, WH	[redacted]
122	1988 CURTI TRLR, YW	[redacted]
123	2000 SHERM TRLR, YW	[redacted]
124	2006 JTCS TRLR, NO CL	[redacted]
125	2001 INTER UTIL, WH	[redacted]
126	1994 FORD UTIL, YW	[redacted]
129	2001 INT UTIL, WH	[redacted]
130	2006 FORD VAN, WH	[redacted]
131	2006 FORD VAN, WH	[redacted]
132	2008 FORD VAN, WH	[redacted]
134	2002 FORD VAN, WH	[redacted]
135	2004 FORD VAN, WH	[redacted]
150	2004 FORD VAN, WH	[redacted]
163	2001 FORD PICK, GR	[redacted]
166	2016 FORD PICK, GR	[redacted]
167	2016 FORD PICK, WH	[redacted]
170	1985 BUTLE FLAT, YW	[redacted]

WELSBACH ELECTRIC CORP. of L.I.

Equipment and Vehicle List

Vehicle #	Description	Vehicle ID #
171	1992 CUSTO TRLR, OR	[redacted]
177	2003 FORD VAN, WH	
178	2003 FORD VAN, WH	
179	2003 FORD VAN, WH	
186	2012 FORD SUBN, BK	
187	2014 FORD SUBN, GY	
188	2014 FORD SUBN, WH	
200	2013 SCORP TRLR, WH	
201	2004 ISUZU FLAT, WH	
202	2004 FORD SUBN, WH	
203	2008 FORD UTIL, WH	
204	2013 CHEVY UTIL, WH	
205	2014 BE/EN TRLR, WH	
207	2011 DODGE UTIL, WH	
210	1999 FORD VAN, WH	
211	2004 FORD UTIL, WH	
212	1999 FORD UTIL, GY	
213	2014 MANCO TRLR, OR	
214	2006 FORD DELV, WH	
215	2006 FORD UTIL, WH	
216	2007 FORD UTIL, YW	
217	2012 FORD VAN, WH	
218	2013 FORD VAN, WH	
219	2008 FORD UTIL, WH	
220	2012 FORD VAN, WH	
221	2019 FORD VAN, WH	
222	2019 FORD VAN, WH	
223	2009 FORD VAN, WH	
703	2004 INTER UTIL, WH	

14. In what manner have you inspected this proposed work? Explain in detail.

WE CURRENTLY MAINTAIN THE TRAFFIC SIGNAL & COMPUTER MAINTENANCE CONTRACTS UNDER T6225004M AND H620003E.

(use additional blank sheets if additional space is necessary)

15. Explain your plan and lay-out for performing the proposed work.

ALL WORK TO BE DONE IN ACCORDANCE TO THE CONTRACT DOCUMENTS AND THE LATEST SPECIFICATIONS INCLUDED OR AVAILABLE TO THE CONTRACTOR AT THE TIME OF BID.

16. If a contract is awarded or a permit is issued, to your firm, who will have the personal supervision of the work? Attach resume.

TO BE PROVIDED UPON AWARD

17. Insurance carried by your firm:

Type	Company	Limits of Coverage	Term
SEE ATTACHMENT #3			

18. The undersigned hereby declares: That the foregoing information contained in this bid is a true statement, including, but not limited to, the financial condition of the individual firm herein first named as of the date herein given; the undersigned has read that portion of the Instructions to the Bidders entitled **"Qualifications and Responsibility of Bidders"** and that the bidder acknowledges its affirmative obligation to transmit with this statement any matters relevant and material to those contractor qualifications and responsibility standards; that this statement is for the express purpose of inducing the party to whom it is submitted to award the submitted a contract or issuance of a permit; that any depository, vendor or other agency herein named is authorized to supply such party with any information necessary to verify this statement; and that it understands and agrees that any material misrepresentation or omission of material fact may be deemed grounds for disqualification of the bidder as "not responsible," and may also subject the bidder to future debarment, penalties, and sanctions, to the extent permitted by law.

ACORD®

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 09/09/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
***MARSH USA INC 1166 AVENUE OF THE AMERICAS NEW YORK, NY 10036 Phone: 866-966-4664 Emcor.Certrequest@marsh.com / Fax: 203-229-6787 134379-Welsb-CON-19-20 323	PHONE (A/C, No, Ext):	FAX (A/C, No):
	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	**NAIC #**
	INSURER A : Continental Casualty Company	20443
INSURED WELSBACH ELECTRIC CORP. OF L.I. 300 NEWTOWN ROAD PLAINVIEW, NY 11803	INSURER B : American Casualty Company of Reading, PA	20427
	INSURER C : Transportation Insurance Co	20494
	INSURER D : Continental Insurance Company	35289
	INSURER E :	
	INSURER F :	

COVERAGES CERTIFICATE NUMBER: NYC-009609516-10 REVISION NUMBER: 4

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC OTHER:			[redacted]	10/01/2019	10/01/2020	EACH OCCURRENCE	$ 2,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 1,000,000
							MED EXP (Any one person)	$ 25,000
							PERSONAL & ADV INJURY	$ 2,000,000
							GENERAL AGGREGATE	$ 6,000,000
							PRODUCTS - COMP/OP AGG	$ 14,000,000
								$
A	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY / SCHEDULED AUTOS X HIRED AUTOS ONLY / X NON-OWNED AUTOS ONLY			[redacted]	10/01/2019	10/01/2020	COMBINED SINGLE LIMIT (Ea accident)	$ 2,000,000
							BODILY INJURY (Per person)	$
							BODILY INJURY (Per accident)	$
							PROPERTY DAMAGE (Per accident)	$
							Auto Physical Damage	$ Included
D	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED X RETENTION $ 10,000			[redacted]	10/01/2019	10/01/2020	EACH OCCURRENCE	$ 5,000,000
							AGGREGATE	$ 5,000,000
								$
B B C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		[redacted]	10/01/2019 10/01/2019 10/01/2019	10/01/2020 10/01/2020 10/01/2020	X PER STATUTE / OTH-ER	
							E.L. EACH ACCIDENT	$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: WEC JOB #323 - NASSAU COUNTY TRAFFIC SIGNAL SYSTEM OPERATIONS PHASE IV - CONTRACT #H62000-03E - PIN #0760.81

ADDITIONAL INSURED UNDER ALL POLICIES (EXCEPT WORKERS COMPENSATION & EMPLOYERS LIABILITY) WHERE REQUIRED BY CONTRACT: THE COUNTY OF NASSAU, ALL MUNICIPALITIES, MUNICIPAL SUB-DIVISIONS, AND FEE OWNERS OF PROPERTIES, CONSULTANTS

CERTIFICATE HOLDER	CANCELLATION
NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF REAL ESTATE INSURANCE 1 WEST STREET MINEOLA, NY 11501	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE of Marsh USA Inc. Manashi Mukherjee *Manashi Mukherjee*

ATTACHMENT 3

NOTE: The bids shall be sworn to by the person signing them, in one of the following forms:

(Form of affidavit where Bidder is a corporation)

STATE OF NEW YORK)
)ss.:
COUNTY OF NASSAU)

JOSEPH P. FLORIO Being duly sworn, deposes and says: That he resides at 1 LYN OAK Street, in the City of XXXXXXXX that he is the PRESIDENT/C.E.O. of WELSBACH ELECTRIC CORP. OF L.I. the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal and was affixed by order of the Board of Directors of said corporation; that he signed his name thereto by like order; and that he has knowledge of the several matters therein stated and they are in all respects true.
Subscribed and sworn to before me
this 29th day of OCTOBER, 2019.

Notary

(Form of Affidavit where Bidder is a firm)

STATE OF NEW YORK)
)ss.:
COUNTY OF NASSAU)

____________ Being duly sworn, deposes and says: That he is a member of the firm described in and which executed the foregoing bid; that he duly subscribed the name of the firm hereunto on behalf of the firm; and that the several matters therein stated are in all respects true.
Subscribed and sworn to before me
this day of , 20 .

Notary

(Form of Affidavit where Bidder is a individual)

STATE OF NEW YORK)
)ss.:
COUNTY OF NASSAU)

____________ Being duly sworn, deposes and says: That he is the person described in and who executed the foregoing bid and that the several matters therein stated are in all respects true.
Subscribed and sworn to before me
this day of , 20 .

Notary

NO TEXT ON THIS PAGE

NOTICE OF AWARD

NO TEXT ON THIS PAGE

Bids will be compared as stated in the proposal for bids, and as provided by law. The bidder is referred to Division 2., Section 1., of the specifications for an interpretation of work performed and bid, and Division 2., Section 2., for a description of the various items delineated below. The cost of performing other kinds of work and furnishing other kinds of material required and necessary to fulfill all the provisions of this contract in their present form for which no item is provided in the schedule below, SHALL BE DEEMED TO HAVE BEEN INCLUDED AND DISTRIBUTED IN THE ITEMS OF THIS SCHEDULE.

OPERATIONS ITEMS:

ITEM NO.	APPROX. QUANTITIES	DESCRIPTION	FACTOR (Months)	UNIT BID PRICE	AMOUNT BID
1A/1B	1	Computer Hardware & Ancillary Equipment UNIT PRICE MUST BE WRITTEN IN WORDS For Twenty thousand three hundred seventy Dollars and no Cents	x 36	x 20,370.00	= $ 733,320.00
2A/2B	900	Field Communication Units UNIT PRICE MUST BE WRITTEN IN WORDS For Ninety-two dollars and no cents	x 36	x 92.00	= $ 2,980,800.00
3	100	IM Camera Equipment UNIT PRICE MUST BE WRITTEN IN WORDS For Twenty-five dollars and no cents	x 36	x 25.00	= $ 90,000.00
4	6	Travel Time Equipment UNIT PRICE MUST BE WRITTEN IN WORDS For Twenty dollars and no cents	x 36	x 20.00	= $ 4,320.00
5	50	Variable Message Signs UNIT PRICE MUST BE WRITTEN IN WORDS For One dollar and no cents	x 36	x 1.00	= $ 1,800.00
6	LS	As Ordered (furnish equipment)			= $ 108,000.00
7	6	Trailer Mount VMS Signs UNIT PRICE MUST BE WRITTEN IN WORDS For Five hundred dollars and no cents	x 36	x 500.00	= $ 108,000.00

8	1	Forklift	x 36	x 1,000.00	= $ 36,000.00

UNIT PRICE MUST BE WRITTEN IN WORDS

For One thousand dollars and no cents
Dollars Cents

TIME AND MATERIAL ITEMS:

Time:

$120,000.00 x 120% = $ 144,000.00
(Overhead & Profit % + 100%)

Material:

$ 60,000.00 x 110% = $ 66,000.00
(Overhead & Profit % + 100%)

Subtotal of Time and Material = $ 210,000.00

TOTAL BID:

Subtotal of Operations Items $ 4,062,240.00

Subtotal of Time and Material $ 210,000.00

TOTAL BID $ 4,272,240.00

TOTAL OR GROSS BID MUST BE WRITTEN IN WORDS

For Four million two hundred seventy-two thousand two hundred forty dollars and no cents
Dollars Cents

NOTE: The figure in both the Time and Material percentage are not indicative of an estimate price. This figure is merely inserted as a basis for bidding purposes.

U.S. DEPARTMENT OF JUSTICE
OFFICE OF JUSTICE PROGRAMS
OFFICE OF THE COMPTROLLER

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion Lower Tier Covered Transactions (Sub-Recipient)

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 28 CFR Part 67, Section 67.510, Participants' responsibilities. The regulations were published as Part VII of the May 26, 1988 *Federal Register* (pages 19160-19211).

(BEFORE COMPLETING CERTIFICATION, READ INSTRUCTIONS ON REVERSE)

(1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department of agency.

(2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

JOSEPH P. FLORIO PRESIDENT/C.E.O.
Name and Title of Authorized Representative

m/d/yy

Signature 10/29/19
Date

WELSBACH ELECTRIC CORP. OF L.I.
Name of Organization

300 NEWTOWN RD, PLAINVIEW, NY 11803
Address of Organization

OJP FORM 4061/1 (REV. 2/89) Previous editions are obsolete

QUALIFICATION STATEMENT

Note: All blanks in the form are to be filled in. Where blanks are not applicable to your firm, so indicate in each instance.

1. How many years has your firm been in the business under your present business name? 64 YEARS

2. How many years experience in the construction work of a similar type as this contract has your firm had;

   a. as a Prime Contractor 64 YEARS

   b. as a Subcontractor 64 YEARS

3. List below the construction projects your firm has under way as of this date:

Contract Amount	Class of work	Percent Completed	Name and Address of Owner or Contracting Officer
SEE ATTACHMENT #1			

(use additional blank sheets if additional space is necessary)

4. List the projects which your firm as a firm has performed in the past few years which you feel will qualify you for this work:

Contract Amount	Class of work	Percent Completed	Name and Address of Owner or Contracting Officer
2,448,500.00	TS SYSTEM OPS PHASE IV	95%	NCDPW 1194 PROSPECT AVE H62000-03E
6,378,220.00	TS MAINT & INSTALLATION	100%	NCDPW 1194 PROSPECT AVE T62250003M
5,862,200.00	OC RD TRAFFIC SIGNALS PHASE 1	100%	NCDPW 1194 PROSPECT AVE H62161
1,442,200.00	INCIDENT MGMT PHASE IV	100%	NCDPW 1194 PROSPECT AVE H62564
4,992,122.00	OC RD TRAFFIC SIGNALS PHASE 2	100%	NCDPW 1194 PROSPECT AVE H62162

(use additional blank sheets if additional space is necessary)

5. Have you:

   a. ever failed to complete any work awarded to You? NO
   If so; identify the project, the owner, the contract amount, the circumstances and date of all such failures to complete.

   b. ever been defaulted on a contract? NO
   If so; identify the project, the owner, the contract amount, the circumstances and the date of all default actions

NO TEXT ON THIS PAGE

Welsbach Electric Corp. of L.I.
Job List

Job	Owner	Contract	Description	Est Revenue	Start Date	Original Comp Date	Comp Date
			Transportation Division				
027	Broadway Maintenance		Broadway Maintenance	[redacted]	01/01/19	12/31/20	12/31/20
065	Garage		Garage	[redacted]	01/01/19	12/31/20	12/31/20
066	Warehouse		Warehouse	[redacted]	01/01/19	12/31/20	12/31/20
300	Town of Oyster Bay	PRE 13-109	Park Electrical Service Requirements	[redacted]	03/19/14	03/18/15	03/10/19
304	Town of Islip	DPW 1-2014	S.L. Maint & Inst	[redacted]	07/16/14	07/16/17	07/16/19
319	American Traffic Solutions		Red Light Camera	[redacted]	12/15/15	12/31/16	12/31/19
323	N.C.D.P.W.	H62000-03E	T.S. System Operations Ph IV	[redacted]	11/01/16	10/31/19	10/31/19
325	N.C.D.P.W.	H62162	OC Rd Traffic Signals Phase II	[redacted]	06/01/17	11/30/18	12/31/19
326	N.Y.S.D.O.T.	D263217	VMS Retrofit	[redacted]	10/01/16	04/19/18	08/31/18
330	N.C.D.P.W.	T62250-03M	T.S. Maint & Inst	[redacted]	01/01/17	12/31/17	12/31/18
333	N.Y.S.D.O.T.	C005237	Roadway Lighting Maint	[redacted]	05/09/17	05/08/19	10/31/19
334	City of Long Beach	C-870	S.L. Maintenance	[redacted]	05/01/17	10/31/18	10/31/20
337	Village of Mineola	2017	S.L. Maintenance	[redacted]	02/01/18	01/31/21	01/31/21
338	Town of Southampton	5416	S.L. LED Upgrade (Guth DeConzo)	[redacted]	04/02/18	07/01/18	11/30/18
340	569 Broadhollow Rd, LLC		T.S. Upgrade Broad Hollow & Spagnoli	[redacted]	05/15/18	08/30/18	04/30/19
342	Town of Babylon	18G76	S.L. LED Conversion	[redacted]	10/01/18	09/30/19	09/30/19
343	City of Long Beach		Pacific Blvd S.L. Reconst (Novelli)	[redacted]	03/01/19	06/30/19	06/30/19
344	N.C.D.P.W.	T62250-04M	T.S. Maint & Inst	[redacted]	01/01/19	12/31/19	12/31/19
345	N.C.D.P.W.	T62181-01G	T.S. Communications Phase II	[redacted]	03/01/19	08/31/20	08/31/20
346	Town of Islip	DPW 8-2018	Bayway Corridor TS/SL Mod (Laser)	[redacted]	03/01/19	12/31/19	12/31/19
347	Town of Oyster Bay	PRE 19-194	Parks Electrical Service Requirements	[redacted]	05/07/19	05/06/20	05/06/20
348	Town of Hempstead	PW 35-18	S.L. Resiliency Program	[redacted]	08/01/19	11/30/19	11/30/19
349	Town of Islip	DPW 4-2019	S.L. Maint & Inst	[redacted]	07/17/19	07/17/22	07/17/22
350	TL Applicant LLC		T.S. Modfication Union Tpk	[redacted]	09/01/19	03/31/20	03/31/20
351	Lalezarian Properties, LLC		T.S. Inst 1999/2400 Marcus Ave	[redacted]	11/01/19	06/30/20	06/30/20
352	S.C.D.P.W.	CP 5558	T.S. Mod CR 10, Elwood Rd (GGG)	[redacted]	11/01/19	06/30/20	06/30/20
394	Misc Maint Contracts		Villages, Towns & Private	[redacted]	01/01/19	12/31/20	12/31/20
395	Lump Sums and T&M		Villages, Towns & Private	[redacted]	01/01/19	12/31/20	12/31/20
			Industrial Division				
654	N.Y.S.O.G.S.	D44561-E	NYS Police Zone Headquarters	[redacted]	06/10/16	01/11/18	05/24/18
658	Massapequa UFSD	E	Berner MS Athletic Field Lighting	[redacted]	08/01/17	11/15/17	01/31/19
659	Massapequa Water District	1566631C-R	New Iron Removal Facility	[redacted]	02/05/18	03/12/19	08/12/19
660	Farmingdale UFSD	FDSD1701	WE Howitt MS Athletic Field (Laser)	[redacted]	04/12/18	03/01/19	07/31/19
662	Massapequa UFSD	MASD1803 E	Ames HS Campus Electric Srvc Upgr	[redacted]	04/01/19	08/23/19	08/23/19
663	Town of Brookhaven	20190021	Percy Raynor Ballfield Ltg Improv	[redacted]	03/14/19	06/12/19	07/31/19
664	Town of Islip	DPD 7-18	Bay Shore Marina Improv (Conway)	[redacted]	04/04/19	03/15/20	03/15/20
665	Town of East Hampton	EH19-021	Lions Field Ballfield Ltg Replacemen	[redacted]	05/13/19	05/13/19	08/13/19
666	West Islip UFSD	186449	West Islip HS Ballfield Ltg Inst (Musc	[redacted]	07/15/19	09/30/19	09/30/19

c. ever been declared a non-responsible bidder by any municipality or public agency? No
If so; identify the project, the owner, the contract amount, the circumstances and the date of all such declarations

d. ever been barred from bidding municipal or public contracts? No
If so; identify the municipality or public agency, the circumstances, date and term of disbarment for all debarments.

(use additional blank sheets if additional space is necessary)

6. Has any officer, partner or principal of your firm ever been on officer, partner or principal of some other firm:

a. that failed to complete a construction contract? No
If so, state name of individual and identify the name of firm, the project, the owner, the contract amount, the circumstances and the date of all such failures to complete for all principals of the firm.

b. that has ever been defaulted on a contract? No
If so; state the name of the individual and identify the name of the firm, the project, the owner, the contract amount, the circumstances and the date of all default actions for all principals of the firm.

c. that has ever been declared a non-responsible bidder by any municipality or public agency? No
If so; state the name of the individual and identify the name of the firm, the project, the owner, the contract amount, the circumstances and the date of all such declarations for all principals of the firm.

NO TEXT ON THIS PAGE

d. that has ever been barred from bidding municipal or public contracts? NO
If so; state the name of the individual and identify the name of the firm, the municipality or public agency, the circumstances, date and term of debarment for all debarments for all principals of the firm.

(use additional blank sheets if additional space is necessary)

7. Has any officer or partner of your firm ever failed to complete a construction contract handled in his name? NO
If so, state name of individual, name of owner and reason therefor:

8. Disclose any and all violations of the Prevailing Wage and Supplemental Payment Requirements of the Labor Law of New York State.
NONE

9. Disclose any and all other Labor Law Violations, including, but not limited to, child labor violations, failure to pay wages, or unemployment insurance tax delinquencies within the past five years.
NONE

10. In what other lines of business are you financially interested?
NONE. WELSBACH ELECTRIC CORP. OF L.I. IS A WHOLLY OWNED SUBSIDIARY OF EMCOR GROUP, INC.

NO TEXT ON THIS PAGE

11. What is the construction experience of the principal individuals of your firm?

Individual's Name	Present Position or Office	Years of Construction Experience	Magnitude and type of work	In what Capacity
JOSEPH P. FLORIO	PRESIDENT/C.E.O.	40 YEARS	ELECTRICAL CONST. & MAINT	FINANCE/MGMT
DAN PIRQUETTE SR	ASST. VICE PRESIDENT	25 YEARS	"	PROJECT MGR/ESTIMATING
MICHELE VALENTI	ASST. SEC'Y/ASST. TREASURER	30 YEARS	"	FINANCE/MGMT
KEVIN GMELIN	LABOR SUPERINTENDENT	24 YEARS	"	ELECTRICIAN/SUPER

(use additional blank sheets if additional space is necessary)

12. List below the equipment that you own that is available for the proposed work, giving present location where it may be inspected:

Item	Description, Size Capacity, Year, etc.	Years of Service	Present Location
	SEE ATTACHMENT #2		

(use additional blank sheets if additional space is necessary)

NOTE: Should the equipment be moved from the above mentioned location, the submitted hereby agrees upon request of the County to state the new location where same may be found.

13. If any of the above equipment is covered by chattel mortgage, conditional bill of sale, lien, or like encumbrance, state the complete details as to nature and amount of encumbrance, the name and address of the holder, etc.

N/A

(use additional blank sheets if additional space is necessary)

NO TEXT ON THIS PAGE

WELSBACH ELECTRIC CORP. of L.I.

Equipment and Vehicle List

Vehicle #	Description	Vehicle ID #
2	2002 FORD PICK, RD	[redacted]
6	1997 FORD SUBN, WH	
12	2004 FORD VAN, WH	
15	2000 FORD VAN, WH	
17	2000 FORD UTIL, WH	
21	1997 GMC UTIL, WH	
24	1997 FORD VAN, WH	
26	1988 INTER FLAT, WH	
29	1992 FORD VAN, WH	
31	2002 FORD UTIL, WH	
32	1999 FORD UTIL, WH	
35	2002 FORD VAN, WH	
39	2003 FORD VAN, WH	
40	2010 FORD VAN, WH	
41	2004 FORD UTIL, WH	
42	1990 INTER UTIL, WH	
43	2002 FORD VAN, WH	
45	2008 INTER FLAT, WH	
48	2001 FREIG UTIL, WH	
49	2002 FORD SUBN, WH	
51	2000 FORD VAN, WH	
53	2000 FORD VAN, WH	
54	1997 FORD FLAT, WH	
55	1997 FORD VAN, WH	
56	1995 GMC DUMP, WH	
58	1995 INTER UTIL, WH	
60	1997 FORD FLAT, WH	
65	2001 FORD VAN, WH	
66	2001 FORD VAN, WH	
68	2000 FORD VAN, WH	
70	2003 MITSU DELV, WH	
73	2001 FORD VAN, WH	
74	1998 WE/CA TRLR, WH	
75	1999 FORD VAN, WH	
76	1995 FORD FLAT, WH	
78	2004 FORD FLAT, WH	
79	1997 FORD SUBN, WH	
80	1983 CUSTO FLAT, YW	
81	2003 FORD VAN, WH	
83	2001 GMC UTIL, WH	
84	2008 FORD UTIL, WH	
85	1997 FORD UTIL, WH	

WELSBACH ELECTRIC CORP. of L.I.

Equipment and Vehicle List

Vehicle #	Description	Vehicle ID #
87	1998 INTER UTIL, WH	[redacted]
89	2004 FORD VAN, WH	
90	2000 GMC UTIL, WH	
91	1999 FORD UTIL, BK	
92	1999 INTER UTIL, WH	
93	2001 INTER UTIL, WH	
94	2001 INTER UTIL, WH	
95	1992 GMC RBM, WH	
96	2001 INTER UTIL, WH	
97	1997 INTER UTIL, WH	
98	1984 FORD UTIL, WH	
99	2000 FORD PICK, WH	
102	1997 FORD DUMP, WH	
103	1997 FORD DUMP, WH	
104	1997 FORD DUMP, WH	
105	2001 INTER UTIL, WH	
106	1988 CURTI FLAT, YW	
109	2000 TO/BR TRLR, BK	
110	1999 FRHT UTIL, WH	
112	1966 TRUCO TRLR,YW	
115	1999 FORD VAN, WH	
117	2000 FORD VAN, WH	
118	2001 INTER UTIL, WH	
119	2008 FORD UTIL, WH	
120	1989 BELSH FLAT, YW	
121	2006 JTC TRLR, WH	
122	1988 CURTI TRLR, YW	
123	2000 SHERM TRLR, YW	
124	2006 JTCS TRLR, NO CL	
125	2001 INTER UTIL, WH	
126	1994 FORD UTIL, YW	
129	2001 INT UTIL, WH	
130	2006 FORD VAN, WH	
131	2006 FORD VAN, WH	
132	2008 FORD VAN, WH	
134	2002 FORD VAN, WH	
135	2004 FORD VAN, WH	
150	2004 FORD VAN, WH	
163	2001 FORD PICK, GR	
166	2016 FORD PICK, GR	
167	2016 FORD PICK, WH	
170	1985 BUTLE FLAT, YW	

WELSBACH ELECTRIC CORP. of L.I.

Equipment and Vehicle List

Vehicle #	Description	Vehicle ID #
171	1992 CUSTO TRLR, OR	[redacted]
177	2003 FORD VAN, WH	
178	2003 FORD VAN, WH	
179	2003 FORD VAN, WH	
186	2012 FORD SUBN, BK	
187	2014 FORD SUBN, GY	
188	2014 FORD SUBN, WH	
200	2013 SCORP TRLR, WH	
201	2004 ISUZU FLAT, WH	
202	2004 FORD SUBN, WH	
203	2008 FORD UTIL, WH	
204	2013 CHEVY UTIL, WH	
205	2014 BE/EN TRLR, WH	
207	2011 DODGE UTIL, WH	
210	1999 FORD VAN, WH	
211	2004 FORD UTIL, WH	
212	1999 FORD UTIL, GY	
213	2014 MANCO TRLR, OR	
214	2006 FORD DELV, WH	
215	2006 FORD UTIL, WH	
216	2007 FORD UTIL, YW	
217	2012 FORD VAN, WH	
218	2013 FORD VAN, WH	
219	2008 FORD UTIL, WH	
220	2012 FORD VAN, WH	
221	2019 FORD VAN, WH	
222	2019 FORD VAN, WH	
223	2009 FORD VAN, WH	
703	2004 INTER UTIL, WH	

14. In what manner have you inspected this proposed work? Explain in detail.

WE CURRENTLY MAINTAIN THE TRAFFIC SIGNAL & COMPUTER MAINTENANCE CONTRACTS UNDER T62250004M AND H62000 3E.

(use additional blank sheets if additional space is necessary)

15. Explain your plan and lay-out for performing the proposed work.

ALL WORK TO BE DONE IN ACCORDANCE TO THE CONTRACT DOCUMENTS AND THE LATEST SPECIFICATIONS INCLUDED OR AVAILABLE TO THE CONTRACTOR AT THE TIME OF BID.

16. If a contract is awarded or a permit is issued, to your firm, who will have the personal supervision of the work? Attach resume.

TO BE PROVIDED UPON AWARD

17. Insurance carried by your firm:

Type	Company	Limits of Coverage	Term
SEE ATTACHMENT #3			

18. The undersigned hereby declares: That the foregoing information contained in this bid is a true statement, including, but not limited to, the financial condition of the individual firm herein first named as of the date herein given; the undersigned has read that portion of the Instructions to the Bidders entitled **"Qualifications and Responsibility of Bidders"** and that the bidder acknowledges its affirmative obligation to transmit with this statement any matters relevant and material to those contractor qualifications and responsibility standards; that this statement is for the express purpose of inducing the party to whom it is submitted to award the submitted a contract or issuance of a permit; that any depository, vendor or other agency herein named is authorized to supply such party with any information necessary to verify this statement; and that it understands and agrees that any material misrepresentation or omission of material fact may be deemed grounds for disqualification of the bidder as "not responsible," and may also subject the bidder to future debarment, penalties, and sanctions, to the extent permitted by law.

ACORD®

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 09/09/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
***MARSH USA INC
1166 AVENUE OF THE AMERICAS
NEW YORK, NY 10036
Phone: 866-966-4664
Emcor.Certrequest@marsh.com / Fax: 203-229-6787
134379-Welsb-CON-19-20 323

CONTACT NAME:
PHONE (A/C, No, Ext): FAX (A/C, No):
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Continental Casualty Company	20443
INSURER B : American Casualty Company of Reading, PA	20427
INSURER C : Transportation Insurance Co	20494
INSURER D : Continental Insurance Company	35289
INSURER E :	
INSURER F :	

INSURED
WELSBACH ELECTRIC CORP. OF L.I.
300 NEWTOWN ROAD
PLAINVIEW, NY 11803

COVERAGES CERTIFICATE NUMBER: NYC-009609516-10 REVISION NUMBER: 4

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY			[redacted]	10/01/2019	10/01/2020	EACH OCCURRENCE	$ 2,000,000
	CLAIMS-MADE [X] OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 1,000,000
							MED EXP (Any one person)	$ 25,000
							PERSONAL & ADV INJURY	$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 6,000,000
	POLICY [X] PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$ 14,000,000
	OTHER:							$
A	AUTOMOBILE LIABILITY			[redacted]	10/01/2019	10/01/2020	COMBINED SINGLE LIMIT (Ea accident)	$ 2,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY; SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	X HIRED AUTOS ONLY; X NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
							Auto Physical Damage	$ Included
D	X UMBRELLA LIAB; X OCCUR			[redacted]	10/01/2019	10/01/2020	EACH OCCURRENCE	$ 5,000,000
	EXCESS LIAB; CLAIMS-MADE						AGGREGATE	$ 5,000,000
	DED X RETENTION $ 10,000							$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			[redacted]	10/01/2019	10/01/2020	X PER STATUTE; OTH-ER	
B	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N: N	N/A			10/01/2019	10/01/2020	E.L. EACH ACCIDENT	$ 1,000,000
C	If yes, describe under DESCRIPTION OF OPERATIONS below				10/01/2019	10/01/2020	E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
RE: WEC JOB #323 - NASSAU COUNTY TRAFFIC SIGNAL SYSTEM OPERATIONS PHASE IV - CONTRACT #H62000-03E - PIN #0760.81
ADDITIONAL INSURED UNDER ALL POLICIES (EXCEPT WORKERS COMPENSATION & EMPLOYERS LIABILITY) WHERE REQUIRED BY CONTRACT: THE COUNTY OF NASSAU, ALL MUNICIPALITIES, MUNICIPAL SUB-DIVISIONS, AND FEE OWNERS OF PROPERTIES, CONSULTANTS

CERTIFICATE HOLDER

NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS
BUREAU OF REAL ESTATE INSURANCE
1 WEST STREET
MINEOLA, NY 11501

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE of Marsh USA Inc.
Manashi Mukherjee Manashi Mukherjee

ATTACHMENT 3

NOTE: The bids shall be sworn to by the person signing them, in one of the following forms:

(Form of affidavit where Bidder is a corporation)

STATE OF NEW YORK)
)ss.:
COUNTY OF NASSAU)

JOSEPH P. FLORIO Being duly sworn, deposes and says: That he resides at 1 Lyn Oak Street, in the City of ~~XXXXXXXX~~ that he is the PRESIDENT/C.E.O. of WELSBACH ELECTRIC CORP. OF L.I. the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal and was affixed by order of the Board of Directors of said corporation; that he signed his name thereto by like order; and that he has knowledge of the several matters therein stated and they are in all respects true.

Subscribed and sworn to before me
this 29th day of October , 2019 .

Notary

(Form of Affidavit where Bidder is a firm)

STATE OF NEW YORK)
)ss.:
COUNTY OF NASSAU)

____________ Being duly sworn, deposes and says: That he is a member of the firm described in and which executed the foregoing bid; that he duly subscribed the name of the firm hereunto on behalf of the firm; and that the several matters therein stated are in all respects true.

Subscribed and sworn to before me
this day of , 20 .

Notary

(Form of Affidavit where Bidder is a individual)

STATE OF NEW YORK)
)ss.:
COUNTY OF NASSAU)

____________ Being duly sworn, deposes and says: That he is the person described in and who executed the foregoing bid and that the several matters therein stated are in all respects true.

Subscribed and sworn to before me
this day of , 20 .

Notary

NO TEXT ON THIS PAGE

NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS

CONSULTANT/ CONTRACTOR DETAILED MBE/WBE UTILIZATION PLAN

Part 1- General Information:

Consultant/Contractor Name:	Welsbach Electric Corp. of L.I.
Address (street/city/state/zip code):	300 Newtown Road, Plainview, New York 11803
Authorized Representative (name/title):	Joseph P. Florio, President / C.E.O.
Authorized Signature:	
Contract Number:	T620000-05ER
Contract/Project Name:	Nassau County Signal System Operations, Phase V
Contract/Project Description:	Maintenance of the Nassau County owned traffic signal communication system as per Contract documents and specifications

Part 2- Projected MBE/WBE Contract Summary:

	Amount ($)		Percentage (%)
Total Dollar Value of the Prime Contract	4,272,240.00		
Total MBE Dollar Amount	0.00	MBE Contract Percentage	0.00%
Total WBE Dollar Amount	182,950.00	WBE Contract Percentage	4.28%
Total Combined M/WBE Dollar Amount	182,950.00	Combined M/WBE Contract Percentage	4.28%

Part 3- MBE Information (use additional blank sheets as necessary):

MBE Firm	Description of Work (MBE)	Projected MBE Contract Amount($) and Award Date	MBE Contract Scheduled Start Date and Completion Date
Name: Address: City: State/Zip Code: Authorized Representative: Telephone No.		Amount ($): Award Date:	Start Date: Completion Date:
Name: Address: City: State/Zip Code: Authorized Representative: Telephone No.		Amount ($): Award Date:	Start Date: Completion Date:
Name: Address: City: State/Zip Code: Authorized Representative: Telephone No.		Amount ($): Award Date:	Start Date: Completion Date:

Part 4- WBE Information (use additional blank sheets as necessary):

WBE Firm	Description of Work (WBE)	Projected WBE Contract Amount($) and Award Date	WBE Contract Scheduled Start Date and Completion Date
Name: Marbelite Equip Corp Address: 646 Cross St, Unit 21 City: Lakewood State/Zip Code: NJ 08701 Authorized Representative: Melissa Verdoni Telephone No. (732) 551-1030	Provide materials to fulfill the Contractor required Inventory and on-going maintenance materials as needed.	Amount ($): $ 46,950.00 Award Date:	Start Date: 02/01/2020 Completion Date: 01/31/2023
Name: Marbelite Equip Corp Address: 646 Cross St, Unit 21 City: Lakewood State/Zip Code: NJ 08701 Authorized Representative: Melissa Verdoni Telephone No. (732) 551-1030	Provide Siemens contract as detailed under Item 1A	Amount ($): $ 136,000.00 Award Date:	Start Date: 02/01/2020 Completion Date: 01/31/2023
Name: Address: City: State/Zip Code: Authorized Representative: Telephone No.		Amount ($): Award Date:	Start Date: Completion Date: