CEMATRIX CORPORATION

Management's Discussion and Analysis For the Year Ended December 31, 2018

Date Completed: April 1, 2019

<u>CEMATRIX CORPORATION</u> <u>www.cematrix.com</u>

Form 51-102F1 - Management's Discussion & Analysis For the Year Ended December 31, 2018

The following is the management's discussion and analysis ("MD&A") of CEMATRIX Corporation ("CEMATRIX" or the "Company") for the year ended December 31, 2018. This MD&A should be read in conjunction with the audited consolidated financial statements of the Company for the year ended December 31, 2018 and the related notes thereto ("Consolidated Financial Statements") and the audited consolidated financial statements of the year ended December 31, 2017 and the audited financial statements and MD&A of the Company for the year ended December 31, 2017 and related notes thereto. The Consolidated Financial Statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") and interpretations of the International Reporting Interpretation Committee ("IFRIC"). All dollar figures included therein and in this MD&A are in Canadian dollars.

Additional information relevant to the Company's activities can be found on SEDAR at <u>www.sedar.com</u>. CEMATRIX is listed on the TSX Venture Exchange under the trading symbol "cvx".

The Audit Committee of the Company reviewed and recommended for approval by the Board of Directors of the Company the Consolidated Financial Statements and MD&A for the year ended December 31, 2018. The Board of Directors of the Company reviewed and approved these Consolidated Financial Statements and MD&A on April 1, 2019.

Index		
Forwa	ard Looking Statements	3
А	Purpose of the Company's MD&A	4
В	Highlights	4
С	Business Strategy for Growth and Shareholder Value Creation	9
D	Key Market Drivers	9
Е	Key Risks and Uncertainties	11
F	Operations and Overall Performance	13
G	Selected Financial Information and Summary of Financial Results	18
Н	Consolidated Statements of Financial Position	19
Ι	Consolidated Statements of Cash Flows	21
J	Liquidity, Capital Resources and Commitments	24
Κ	Off Balance Sheet Arrangements	26
L	Transactions with Related Parties	26
М	Critical Accounting Judgments, Estimates and Assumptions	26
Ν	Changes in Accounting Policies including Initial Adoption	28
0	Financial Instruments	29
Р	Disclosure of Outstanding Share Data	34
Q	Outlook	36
Appei	ndix A – Forward Looking Statements	37
	ndix B – Definitions	38

Forward Looking Statements

This MD&A contains certain statements and disclosures that may constitute forward-looking information under applicable securities law. All statements and disclosures, other than those of historical fact, which address activities, events, outcomes, results or developments that the Company anticipates or expects may or will occur in the future (in whole or in part) should be considered forward-looking information. In some cases, forward-looking information can be identified by such terms as "forecast", "future, "may", "will", "expect", "anticipate", "believe", "potential", "enable", "plan", "continue", "contemplate", "pro-forma" or other comparable terminology. Forward-looking information presented in such statements or disclosures may, amongst other things relate to: sources of revenue and income; forecasts of capital expenditures and sources of financing thereof; the Company's business outlook; plans and objectives of management for future operations; forecast business results; and anticipated financial performance.

The Company has identified what it considers to be the material forward-looking statements and disclosure in this MD&A and has listed them in Appendix A. The material factors, material assumptions and material risks that provide the basis for those statements and disclosure have also been provided in Appendix A.

The forward-looking information in statements or disclosure in this MD&A is based (in whole or in part) upon factors which may cause actual results, performance or achievements of the Company to differ materially from those contemplated (whether expressly or by implication) in the forward-looking information. Various assumptions or factors are typically applied in drawing conclusions or making forecasts or projections set out in forward-looking information. Those assumptions and factors are based on information currently available to the Company including information obtained by the Company from third-party industry analysts and other third-party sources. Actual results or outcomes may differ materially from those predicted by such statements or disclosures. While the Company does not know what impact any of those differences may have, its business, results of operations, financial condition and its credit stability may be materially adversely affected.

The Company has discussed, in Section D. – Key Market Drivers and in Section E. - Key Risks and Uncertainties of its MD&A the significant market drivers and risk factors that affect its business and could cause actual results to differ materially from the forward-looking information disclosed herein. The Company cautions the reader that these factors are not exhaustive. The risk factors that could lead to differences in business results and which could cause actual results to differ materially from the forward-looking information disclosed herein include, without limitation, legislative and regulatory developments that may affect costs, revenues, the speed and degree of competition entering the market, global capital markets activity, timing and extent of changes in prevailing interest rates, inflation levels and general economic conditions in geographic areas where the Company operates, results of financing efforts, changes in counterparty risk and the impact of accounting standards issued by the International Accounting Standards Board.

The Company is not obligated to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable laws. Because of the risks, uncertainties and assumptions contained herein, prospective investors should not place undue reliance on forward-looking statements or disclosures. The foregoing statements expressly qualify any forward-looking information contained herein.

A. Purpose of the Company's MD&A

The purpose of this MD&A is to provide a narrative explanation, through the eyes of management, to assist the reader in understanding the Company's performance for the year ended December 31, 2018, the Company's financial condition as at December 31, 2018 and its future prospects.

B. Highlights

Corporate Overview

Through its wholly-owned subsidiary, CEMATRIX (Canada) Inc. and its subsidiary CEMATRIX (USA) Inc. ("Cematrix USA") and MixOnSite USA, Inc. ("MOS"), CEMATRIX uses specially developed equipment and proprietary or exclusive use foaming agents to produce and pour cellular concrete for various applications in the infrastructure and oil and gas construction markets.

Cellular concrete is a cement slurry-based product that is combined with air to result in a very lightweight, foamed concrete-like material that has thermal insulating qualities with moderate structural strength. It is generally lighter than water and is used as a replacement for rigid and other types of insulation and as a lightweight fill or a void fill, which includes tunnel grouting.

The Company's current market focus is in the construction market for infrastructure in Western Canada, Ontario and Quebec and the United States of America ("U.S."), and the oil and gas construction projects in Western Canada and U.S.

The infrastructure market sector primarily relates to work on public construction projects that are funded by provincial, state and federal governments. Some examples of this type of work are as follows: the insulation of road bases; the protection of permafrost under buildings, utilities, roads and runways; the insulation of shallow utility installations; industrial and commercial floor bases; the replacement of weak and/or unstable soils and soils that are subject to seismic conditions; mechanical stabilized earth ("MSE") panels and retaining wall backfill; grouting; and tunnel backfill. Work in this sector generally requires the prior approval of the Company's various products and applications by local regulatory bodies.

The Company's revenue is recognized as the Company processes and places the cellular concrete on site, based on the number of cubic metres processed and placed.

The nature of the Company's sales is generally "one-off" type sales, meaning there is little in the way of carry over in sales from year to year with the same customer; except to the extent that the Company has repeat business related to a specific application or location, or a project is sufficiently large in scope, that it continues from one period into the next. The goal is to increase this type of repeatable and predictable source of revenue.

Work is generally as a sub-contractor to various engineering and construction firms who are awarded the prime contract from the owner of the particular project.

The Company has two distinct types of production equipment, as follows:

Dry mix production equipment is fully automated and the cement slurry mixing process is done directly from cement and other dry powders. This equipment permits the production of high hourly volumes. The dry mix system enables the Company to improve the quality of its end product, while reducing its unit cost by up to 20% as compared to the wet mix process. However, the dry mix process is typically not suitable for small to medium sized projects because of the higher costs associated with mobilization together with the onsite space required for set up; and

Wet mix production equipment is partially automated and the pre-designed cement slurry required is delivered by a Ready Mix provider; this equipment has lower hourly production capability and is suitable for small volume projects or projects where there is no space for the larger dry mix units.

The Company's fleet of production equipment currently consists of six dry mix units that can produce up to 230 cubic metres per hour of cellular concrete and six wet mix units that have the capability of producing from 50 to 100 cubic metres per hour of cellular concrete. The fleet is mobile and can be moved to any project in North America.

The value proposition that CEMATRIX offers to customers is as follows:

CEMATRIX cellular concrete saves significant time and money for its customers (the "Value Proposition").

The Company's customer service solution is supported by acquired and internally developed technologies that enable the production of high volumes of consistent, low density insulating cellular concrete; the North American exclusive rights to a protein based foaming agent and an acquired synthetic foaming agent formula; the proprietary material mix design expertise; the technical support for thermal and structural design to assist engineering firms in the design of applications for cellular concrete; and internally designed and constructed specialty equipment for the production of cellular concrete.

Over the years the Company has invested in additional staff and equipment in order to prepare for what management believes will be a significant increase in annual sales, as the Company's product reaches the "tipping point' for a number of applications. Tipping point refers to the point in time where customers decide that they will use the Company's product, as opposed to alternative products, for certain applications (i.e. all bridge abutment work, or all MSE panel backfill or all the insulation of oil sand modules etc.). The tipping point for oil and gas applications began to be realized for oil and gas construction before the financial crisis of 2008/9 and the significant oil price decrease in 2014/15, but have ended with those events. Revenue from oil and gas applications has never rebounded because the related construction has become negligible. The Company is now working towards the tipping point for various infrastructure type applications. The cost of this investment, in terms of additional staff and equipment, has negatively affected the financial results over the past few years, however, it has helped to put the Company in a better position to achieve sales growth, as it occurs and to utilize its economies of scale with the acquisition of MixOnSite in the US, who had little inhouse technical expertise.

The Company's head office is located in Calgary, Alberta.

Financial

Cematrix had a transformative and record setting year. This started with the acquisition of MOS on May 31, 2018, and resulted in record revenues of \$17.6 million for the year. The top line revenue growth had a ripple effect on the financials and in conjunction with the Company's high financial and operating leverage, has resulted in significant improvements to Gross Margin Percentage, earnings and cash flow.

Revenues, which only included seven months of MOS's sales for 2018 were \$17.6 million, an increase of \$9.9 million or 128%, compared to \$7.7 million in 2017. Gross Margin and Gross Margin Percentage were \$4.3 million and 25% respectively for 2018 compared to \$0.8 million or 11%, when compared to 2017, an increase of \$3.5 million or 413%. This carried through and resulted in a significant reduction in the loss before other items of \$149,762 in 2018 compared to \$1,543,914 in 2017.

Liquidity continues to be a focus for management and the cash flow being generated from the business is a significant part of that equation. Management believes that Funds Flow from Operations is the best measure for capturing this metric and it is defined as cash flow from operating activities before the net change in non-cash working capital. For the full year 2018, Funds Flow from Operations was \$552,361 and improved significantly from the negative \$1,090,389 in 2017. The third and fourth quarters of 2018 include MOS for the full period and are indicative of the new future state, which is significantly more positive. Revenues were \$7,039,839 and \$6,136,576 respectively, but more importantly, Funds Flow from Operations were \$508,003 and \$995,587, respectively.

Acquisition of MOS

On May 31, 2018 (the 'Closing Date'), the Company executed ("the 'Acquisition') the share purchase agreement (the "Definitive Agreement") between the Company and Mr. Ed Weiner (the "Vendor"), for the acquisition of all of the issued and outstanding shares (the "MOS Shares") of MOS.

Pursuant to the Definitive Agreement, the purchase price for the MOS Shares paid on the Closing Date to the Vendor by CEMATRIX was as follows:

- cash in the amount of \$2,000,000 US dollars ("USD") (the "Cash Purchase Price");
- secured convertible note (the "Convertible Note") issued by the Purchaser in the amount of \$2,500,000 USD;
- 3,343,421 common shares of CEMATRIX (the "CEMATRIX Shares") issued at a deemed price of \$0.19 per CEMATRIX Share;
- and earn-out payment (the "Earn-out") calculated on the operations of MOS for three years following closing of the Acquisition.

The aggregate consideration paid for the MOS Shares was \$5,000,000 USD, as well as the obligation of the Earn-out.

The cash payment on the Closing Date of \$2,000,000 USD consisted of \$200,000 USD, coming from a portion of the funds raised from the first tranche of the Company's Private Placement (see below) and \$1,800,000 USD came from an approved loan with the Business Development Bank of Canada ("the "BDC USD Loan") (see below).

The Convertible Note will pay interest to the holder at a rate of 8% per year, payable quarterly, for a period of three years. The Convertible Note will convert into 13,373,684 CEMATRIX Shares at the option of the holder, at any time, at \$0.2375 per CEMATRIX Share. CEMATRIX may repay the Convertible Note and may force the conversion of the Convertible Note upon 40 days' written notice after a period of 12 months, subject to an early payment and forced conversion penalties, as applicable.

The Earn-out will pay the Vendor 70% of the earnings before interest, income taxes, depreciation and amortization ("MOS EBITDA") above \$500,000 USD for the first year after closing of the Acquisition and 65% of the MOS EBITDA above \$500,000 USD for the second and third years after the Closing Date.

In addition to the consideration payable pursuant to the Definitive Agreement, the Vendor was appointed a director of the Company and was engaged as a consultant for a period of three years as of the Closing Date with an annual fee of \$20,000 USD. The Vendor received 150,000 stock options for his role as a director and 350,000 for his role as a consultant. The stock options are exercisable into common shares of the Company at an exercise price of \$0.20 per common share. These stock options are for a three year term and vest over three years as to one third at the end of each year.

MOS is incorporated under the laws of California, with a head office in Buffalo Grove, Illinois, U.S. MOS is a contractor in the same business as CEMATRIX specializing in low density cellular concrete and offering complete installation services including technical mix design support through its foaming agent supplier for development for a wide variety of construction applications in the U.S.

MOS is a profitable growing supplier of cellular concrete in the U.S. CEMATRIX is already known as a leader in cellular concrete technologies in North America and the leading supplier of cellular concrete in Canada, so management of CEMATRIX believes the acquisition of MOS by CEMATRIX is poised to make CEMATRIX the foremost source of cellular concrete throughout North America. MOS' sales have averaged approximately \$10,000,000 USD and EBITDA has averaged approximately \$1,300,000 USD over the past two years ended December 31, 2017.

Besides the increased sales, profits and cash flows MOS brings to CEMATRIX, MOS owns certain technologies and capabilities that management believes can benefit CEMATRIX. In addition, the existing CEMATRIX technologies stand to make MOS a stronger cellular concrete provider in the U.S. MOS also owns three dry mix units, two wet mix units and ancillary equipment, which will increase CEMATRIX group's seasonally adjusted annual production capacity to in excess of 1,000,000 cubic meters.

Private Placements

On April 30, 2018 and June 25, 2018, the Company completed the first and second tranches of a nonbrokered private placement for 3,481,130 units (each, a "Unit") at a price of \$0.20 per Unit for gross proceeds of \$696,226 (the "Private Placement"). Each Unit is comprised of one common share and one half warrant (each a "Warrant"). Each full warrant is exercisable into one common share for a period of two years at an exercise price of \$0.35 per common share.

The Company paid a finder's fee and finder's warrants of 6% of the gross proceeds to qualified non-related parties that participated. The fees amounted to \$8,100 and the Company issued 20,250 finder's warrants that entitle the holder thereof to acquire one common share for \$0.35 until the expiry date of April 30, 2020. In addition to this, costs of \$3,482 were incurred in conjunction with the offering.

On August 24, 2018, the Company completed a non-brokered private placement for 2,880,224 units (each, a "Unit") at a price of \$0.20 per Unit for gross proceeds of \$576,045 (the "Private Placement"). Each Unit is comprised of one common share and one half warrant (each a "Warrant"). Each full warrant is exercisable into one common share for a period of two years at an exercise price of \$0.35 per common share.

The Company paid a finder's fee and finder's warrants of 6% of the gross proceeds to qualified non-related parties that participated. The fees amounted to \$24,900 and the Company issued 62,250 finder's warrants that entitle the holder thereof to acquire one common share for \$0.35 until the expiry date of August 24, 2020. In addition to this, costs of \$11,544 were incurred in conjunction with the Private Placement.

The net proceeds of the Private Placement were used to fund working capital requirements and to finance a portion of the Acquisition purchase price.

BDC USD Loan

In May 2018 the Company entered into a BDC USD Loan agreement. The proceeds of \$1,800,000 USD from this financing were used to fund a portion of the purchase price for the Acquisition.

Appointment of New Chief Financial Officer

The Company announced the appointment of Mr. James Chong to the position of Chief Financial Officer of CEMATRIX effective April 28, 2018. the former Chief Financial Officer of CEMATRIX, retired on June 30, 2018, but still provides consulting services to the company.

Proposed Acquisition of Pacific International Grout Company and Engagement of Joseph Gunnar LLC as the Company's Exclusive Investment Banker

On Jan 21, 2019, CEMATRIX announced that it had entered into a letter of intent with Pacific International Grout Company January 18, 2019 (the "Letter of Intent") in respect of a proposed transaction pursuant to which CEMATRIX is anticipated to acquire all of the issued and outstanding shares of PIGCO (the "PIGCO Shares"), such that PIGCO will be a wholly owned subsidiary of CEMATRIX (the "Acquisition"). It is currently anticipated that the Acquisition will occur as a share sale, with the final structure of the Acquisition being subject to receipt of tax, corporate and securities law advice for both CEMATRIX and PIGCO. Upon completion of the Acquisition, PIGCO, or such other appropriate US entity the Purchaser uses to acquire the PIGCO Shares and continue the operations of PIGCO (the "Operational Subsidiary"), will continue to carry on the business of PIGCO.

Effective January 1, 2019, it the Company entered into an exclusive agreement with a Wall Street investment banking and securities boutique, Joseph Gunnar & Co. LLC. This investment bank will be providing CEMATRIX with financial advisory services, in particular relating to evaluating financing options and targeting further U.S. based acquisitions including the PIGCO acquisition.

Additionally, Joseph Gunnar & Co. LLC will also focus on assisting CEMATRIX in creating and executing new strategies for maximizing shareholder value, through its full scope of investment banking services. The Corporation does not have a defined timeline for any specific financing and cannot provide any assurance whether or when a financing will be announced or consummated.

The Joint Marketing Arrangement with Lafarge

Lafarge Canada Inc. ("Lafarge") re-affirmed a strengthened commitment to CEMATRIX, including increased sales and marketing support for the development of cellular concrete markets across Canada.

The overall objective of the agreements for both parties continues to be to work together to increase sales of cellular concrete, which in turn results in the sale of more cement and ready mix products for Lafarge. Although the joint efforts did not generate a significant number of new sales in 2017 or 2018, both parties believe that together a great deal was accomplished, in the education of the market and Lafarge's significant staff across Canada on the uses and benefits of cellular concrete. Much was also learned about the implementation of the regional expansion approach, although successful, it has not worked as intended. Recent changes to that program by both parties, should generate stronger results, and become a model for expansion into other regions across Canada. This will include additional support for the hiring of experienced sales professionals for the development of each new regional market. This process started on August 20, 2018 with the hiring of a salesperson to develop and grow the Prairie Region.

Introduction of New Lower Density Cellular Concretes

CEMATRIX continues to lead the cellular concrete industry, with the introduction of its new lower density Cellular Concrete. The new standard is a significant change from its original leading industry standard of 475 kg/m³. See "Comparison to Industry Standards" on the Company's website. The new 400 kg/m³ product provides superior load reduction, as well as insulating properties for many geotechnical applications. Additionally, higher production rates, and lower raw material usage, can provide potential cost savings, when compared to "typical" higher density cellular concrete product. The 400 kg/m³ product is also a preferred density of product by MSE wall designers and suppliers, due to the virtually equivalent strength properties of the product, compared to standard density cellular concrete.

CEMATRIX is now working on the development of a 300 kg/m3 product, as it continues to set new standards in the industry.

Canadian Highways Research Project

The University of Waterloo is currently working on a research program that will measure performance of cellular concrete as a roadway subbase. This program is co-funded by CEMATRIX and the Natural Science and Engineering Research Council of Canada (NSERC). The project includes both laboratory testing and multiple instrumented roadway test sections. Laboratory testing of cellular concrete samples is ongoing, and preliminary test results are excellent. The first test section was successfully installed in October 2018 in The Region of Waterloo, with another to follow in 2019. Positive results from this study will lead to specification of CEMATRIX Cellular Concrete on road construction projects in Ontario and other provinces. The preliminary results of lab and field tests have been extremely encouraging with cellular concrete, as a subbase, testing much stronger than traditional granular subbases, which should result in longer lasting highways. CEMATRIX's cost of the three-year program will be approximately \$270,000 spread over three years.

C. Business Strategy for Growth and Shareholder Value Creation

CEMATRIX's strategic goal remains to be the leading supplier of competitively priced, high volume, high quality cellular concrete in North America. In 2017, the Company engaged the BDC Consulting Team to help the company evaluate and develop a plan to achieve this goal. this The recently developed and implemented BDC Consulting Group/CEMATRIX business strategy is centered on the following key elements:

- Establish and maintain a strong financial position;
- Grow the business through:
 - Building a foundation of key proven applications in existing markets;
 - Methodical regional expansion of these developed applications;
 - Expansion into the U.S. market, which may include other acquisitions; and
 - Plan and execute the timely acquisition and upgrading of the Company's production fleet of equipment.
- Retention, recruitment and maintenance of an experienced and focused management, operations and support team;
- Development and acquisition of technologies to maintain competitiveness; and
- Ongoing development of strategic alliances to support research and development, to supply raw materials and to develop new products and markets.

Since the development and implementation of this strategy, CEMATRIX has improved its financial position, increased its equipment fleet through the acquisition of MOS; have grown its infrastructure sales in both Canada and the U.S.; advanced its strategic alliances with Lafarge and others; have expanded regionally into the Canadian Prairies and in part to both the West Coast of Canada and the Ottawa/Montreal regions; have retained and added to its key management and support teams; have continued the development of its products and technologies and are now contemplating the acquisition of one of the other key U.S. provider of higher density cellular concrete grouts for tunnels in North America.

Furthermore, CEMATRIX has engaged a successful and reputable US Investment Bank to assist with the continued implementation of its strategy with a greater focus on growing U.S. cellular concrete markets, which are ten years ahead of the market development that CEMATRIX has created in Canada.

D. Key Market Drivers

The primary drivers in the marketplace that affect the demand for the Company's cellular concrete include the following:

Product Acceptance Through Education of the Market

CEMATRIX's mission statement is to gain broad market acceptance of its product for various applications throughout North America, with its main focus on Canadian infrastructure and now U.S. infrastructure applications through its newly acquired U.S. subsidiary MOS. The successful implementation of this vision is dependent on its product becoming accepted by more of the project design engineers and specifiers. These individuals are in charge of the engineering and design of oil and gas and infrastructure projects, the materials that can be used in various projects and the determination of whether cellular concrete can be considered for a particular application.

Extensive education and marketing to geotechnical and design engineers has been, and continues to be, completed by the Company to demonstrate its Value Proposition for cellular concrete for a number of applications.

The Company's ongoing education and marketing program, together with the experience generated from projects throughout its markets in Canada and the U.S. has improved the acceptance by a number of design engineers, particularly in Canada where CEMATRIX continues to develop new markets. For some

applications in these new markets, cellular concrete will also need to be accepted and become an approved product by various municipal and provincial government departments.

In this regard, in Canada CEMATRIX has obtained, or is in the process of obtaining, the various approvals in all provinces and territories that it currently operates in. Quebec is the next major market where approvals are in process.

In the U.S., cellular concrete is already an approved product for various infrastructure applications in most regions of the U.S. and in fact the market development in the U.S. is probably more than ten years ahead of the development of cellular concrete in Canada, a market which has been developed mostly by CEMATRIX on its own, since the early 2000's. The Canadian market significantly different than the U.S. where there are a number of larger competitors, which had included MOS and significant smaller producers, all of whom have been developing their markets for over forty years, if not longer.

Continued product acceptance by the engineering community, provincial/state transportation departments and project owners is the most important primary driver in generating the Company's sales growth.

Sole Source Provider

When engineering firms or companies are considering specifying cellular concrete into a specific project, particularly in projects related to oil sands and refinery construction, a concern that can arise is the fact that CEMATRIX is the sole provider of cellular concrete in Alberta and for many other regions of Canada. Their concern is that if CEMATRIX is not available to complete their project, then there may be no one else that can do the work as specified. In many cases, this will mean that the project will have to be reengineered because cellular concrete is not a one for one direct replacement to the products that it replaces. This is less of an issue for a number of infrastructure applications because there are other more expensive product solutions that may be specified as an alternative to the Company's product.

In some instances, owners of projects will not allow the use of a sole provider and others continue to be hesitant to do so, because the costs of re-engineering could be prohibitive. This practice has slowed the development of CEMATRIX's product penetration in Western Canada and has affected the development of other markets in Canada. The Company continues to work with customers, specifiers and design engineers to ensure that the benefits of the CEMATRIX products and services warrant the use of a sole source provider and to ensure these customers that CEMATRIX will be around to be that provider.

The strengthened relationship with Lafarge will benefit the credibility of CEMATRIX as a sole source supplier.

If engineering firms and companies do not accept the nature of CEMATRIX being a sole source supplier this could affect the ability of the Company to grow its sales in the oil and gas construction market.

Of note, the problems inherent of being a sole source provider is not an issue in the U.S. because there is competition in the U.S.

Joint Marketing and Supply Agreements with Lafarge Supporting the Regional Development of Cellular Concrete Markets

The joint marketing agreement with Lafarge, completed in 2016, is for the joint development of CEMATRIX cellular concrete markets throughout Canada to increase the awareness of the construction challenges which can be solved by CEMATRIX cellular concrete solutions and thereby grow sales.

The agreements with Lafarge for the regional development of CEMATRIX cellular concrete markets for the Ready Mix division of Lafarge, completed in February 2017, are intended to grow sales at various regions in Canada where CEMATRIX does not have a physical presence. The initial agreement was for Winnipeg, Manitoba, and other locations will be added at the direction of Lafarge.

The intent of both of these agreements is to increase the sale of cellular concrete by CEMATRIX and the sale of Cement and Ready Mix slurry by Lafarge across Canada.

Whether the agreements result in significant sales growth for CEMATRIX is still not known other than both companies are committed to making it successful.

Availability of Capital for Infrastructure Construction

Government funded infrastructure construction throughout Canada and the U.S. is dependent on the capital funding that is made available to the various municipal, provincial/state and federal governments to make these types of investments. This also affects the timing of projects with which the Company's products could be applicable. Both the Canadian and the U.S. federal, provincial/state and municipal governments continue to allocate significant funds to infrastructure construction, however, the benefit, if any, to CEMATRIX, will be dependent on the type and location of projects to which the infrastructure funds will be allocated.

E. Key Risks and Uncertainties

Besides the issues discussed under Section D - Key Market Drivers, management has identified the following additional risks and uncertainties:

Under Capitalization

The Company has been undercapitalized since its inception and this situation had hindered the Company from establishing adequate operational support for any significant increase in sales, however the acquisition of MOS has alleviated this issue to some extent, as it has provided CEMATRIX access to MOS's operational team and, additionally, MOS access to CEMATRIX's technical and operational team.

Being undercapitalized, had also hindered the Company's ability to expand its sales force in Canada, which was one of the recommendations that came out of the 2017 BDC Consulting strategic review of CEMATRIX. The recommended solution to that issue was to try and use its partners sales staff to provide greater sales coverage in Canada, and although our partner has provided some referrals in Canadian regions where CEMATRIX does not have a physical prescence, they have not generated the same level of sales or growth that would have been generated if CEMATRIX had invested in its own sales staff for those regions.

The Company can reduce the effect of the risk of being undercapitalized by either raising additional capital in a difficult market or generate it from operations. The latter method is preferred, but the Company is looking at raising additional capital as part of the PIGCO acquisition process. Furthermore, the Company is forecasting a return to profitability in 2019, with \$25 million in sales and an forecasted EBITDA of in excess of \$4.0 million, which should reduce the effects of the under capitalization that has slowed the company's growth in the past.

Staffing Requirements

CEMATRIX will always have issues finding experienced individuals to hire for various positions because of the uniques nature of its business, but this has become less of an issue with the acquisition of MOS, and in fact it enables the CEMATRIX group of companies to use its economies of scale to allocate underutilized operating and technical staff resources between its operating subsidiaries, subject to the limitation created by cross border issues.

Capital Resource Requirements

Capital resource requirements must be matched to the demand for the Company's products. If this demand had increased more quickly than anticipated, prior to the acquisition of MOS, then the Company may have been challenged to react quickly enough to realize the sales opportunities. With the acquisition of MOS, the CEMATRIX group of companies has sufficient capacity for the foreseeable future.

Project Scheduling

The Company has no control over the timing of contracted projects. Delays in contracted work can occur at any time. Furthermore, delays in projects can also result in scheduling issues that can prove costly to the Company. The risks associated with scheduling changes will be an ongoing issue for the Company.

Increasing Cement Commodity Prices

In previous years the Company has experienced significant increases in the cost of its key raw materials, cement and flyash. To date, the Company has been able to pass a significant portion of these price increases on to its customers. There is no certainty that this practice will continue, in which case this would reduce the Company's Gross Margin on sales. The prices for these materials have remained relatively stable over the past few years and the Company has been advised by its suppliers of minor increases for 2018. The Company is working towards minimizing any risk by developing equipment that will eliminate the need to rely on higher priced Ready Mix products for its raw material supply, for these types of projects.

Competition

Although the Company is the only significant supplier of cellular concrete in Canada, there are a couple of smaller suppliers in Ontario and British Columbia. There are many more suppliers in the U.S. and other countries where the cellular concrete markets are more developed. Accordingly, the possibility of future competition in Canada exists.

There are a significant number of competitors in the U.S., some of which compete with CEMATRIX in the higher volume market. Competition could result in lost sales or reduced Gross Margin. The Company is positioning itself for competition with other suppliers, by

- Developing strong customer and suplier relationships;
- Ensuring that its costs are competitive in relation to costs being incurred by other companies in the industry;
- Developing new materials and processes that continue to place CEMATRIX ahead of the competitions capabilities;
- Striving to ensure that it provides the best in cellular concrete technology, including thermal modeling and structural design assistance, material mix designs, foaming agents and processing equipment.

Product Warranties

The Company has not experienced warranty claims during its existence due to the nature of its product and does not accrue any expense related to possible warranty claims. Even though the Company's products are used in very low risk applications (i.e. replacement of dirt or rigid insulations), the potential exists for such warranty claims being made. The Company works to minimize this risk through ongoing material mix design, product and equipment development and by requiring highly trained quality control staff to be on hand for all projects to check and monitor all input and end product materials.

F. Operations and Overall Performance

Results of Operations

Comparison of the Three Months Ended December 31, 2018 and December 31, 2017

	Three Months Ended December 31					
		2018		2017		Change
Revenue	\$	6,136,476	\$	548,784	\$	5,587,692
Gross margin	\$	2,020,323	\$	(327,350)	\$	2,347,673
Operating expenses		(1,221,770)		(614,667)		(607,103
Operating income (loss)		798,553		(942,017)		1,740,570
Non-cash stock based compensation		(43,833)		(5,534)		(38,299
Finance costs		(198,591)		(53,017)		(145,574
Other income (expense)		(244,441)		2,524		(246,965
Income (loss) before other items		311,688		(998,044)		1,309,732
Non-cash accretion costs		(55,433)		1,290		(56,723
Non-cash fair value of derivatives		381,690		-		381,690
Revaluation of earn-out liability		(305,031)		-		(305,031
Income (loss) before income taxes		332,914		(996,754)		1,329,668
Deferred taxes recovery (expense)		(133,644)		221,350		(354,994
Net income (loss) attributable to the common shareholder Unrealized foreign exchange gain on		199,270		(775,404)		974,674
translation of foreign subsidiaries		373,739		7,465		366,274
Comprehensive income (loss)	\$	573,009	\$	(767,939)	\$	1,340,948
Fully diluted gain (loss) per common share	\$	0.004	\$	(0.022)	\$	0.026

Three Months Ended December 31						
	2018		2017		Change	
\$						
	910,044	\$	443,499	\$	466,545	
	2,452,224		85,495		2,366,729	
	2,774,208		-		2,774,208	
_	6,136,476	·	528,994		5,607,482	
	-		19,790		(19,790)	
\$	6,136,476	\$	548,784	\$	5,587,692	
	_	2018 \$ 910,044 2,452,224 2,774,208 6,136,476	2018 \$ 910,044 \$ 2,452,224 2,774,208 6,136,476 -	2018 2017 \$ 910,044 \$ 443,499 2,452,224 85,495 2,774,208 - 6,136,476 528,994 - 19,790	2018 2017 \$ 910,044 \$ 443,499 \$ 2,452,224 85,495 2,774,208 - 6,136,476 528,994 - 19,790	

Revenue was higher by \$5,587,692 across all geographic regions. The increase of \$2,774,208 in infrastructure sales in the United States was driven solely by the acquisition of MOS, which closed on May 31, 2018. Infrastructure sales in Eastern Canada were \$2,452,224 in the fourth quarter of 2018, an increase of \$2,366,729 compared \$85,495 in the same period last year. This increase was driven by a number of large tunnel projects in Ontario and Quebec. Western Canada infrastructure sales were \$910,044 in the fourth quarter of 2018 compared to \$443,499 in the prior year period. The increase was due to a couple of large projects that started or were completed in the fourth quarter of 2018. There were no oil and gas sales for this quarter in 2018.

Gross Margin was \$2,020,323 in the fourth quarter of 2018, an increase of \$2,347,673, compared to a negative Gross Margin of \$327,350 in the prior year period. As a percentage of revenues, the Gross Margin Percentage improved to 33% compared to negative 60% in 2017. The variability in Gross Margin Percentage is a function of fixed costs included cost of sales. The higher the proportion of fixed costs compared to variable costs in costs of sales, the higher the operating leverage and the more dramatic a change in sales will have on Gross Margin and Gross Margin Percentage. Revenue was \$6,136,476 in the fourth quarter of 2018 and was more than enough to recover the fixed and variable components of cost of sales, which resulted in the increase in Gross Margin Percentage to 33%. Conversely, in the fourth quarter of 2017 revenues of 548,784 did not allow for the full recovery of the Company's fixed cost of sales.

Operating expenses were higher by \$607,103 or 99% mainly due to the following:

- Inclusion of MOS operating costs of \$344,946;
- Amortization of the intangible asset relating to the sales backlog originating from the MOS acquisition of \$123,690;
- Salaries and benefits increased by \$29,845 as a result of an additional part time employee and a new Prairie sales representative.
- Audit costs increased by \$49,318 as a result of additional work relating to the MOS acquisition; and
- Consulting charges increased by \$21,605 as a result of costs associated with the BDC growth driver program and transition costs associated with the new CFO and MOS acquisition;.

Non-cash stock based compensation was \$43,833 in the fourth quarter of 2018 compared to \$5,534 in the fourth quarter of 2017. The increase of \$38,299 is the result of the 1,295,000 options granted in 2018.

Finance costs were \$198,591 in the fourth quarter of 2018 compared to \$53,017 in the prior year period. The increase mainly relates to the MOS acquisition which was financed primarily with debt and can be specifically attributed to the following factors:

- Incremental interest on the bank operating loan in the amount of \$19,601;
- Interest on the new \$750,000 USD Operating Loan in the amount of \$25,170;
- Interest on the new \$1,800,000 USD BDC Loan in the amount of \$47,391; and
- Interest on the new \$2,500,000 USD Convertible Note in the amount of \$63,765.

Other income was a loss of \$244,441 in the fourth quarter of 2018 compared to a gain of \$2,524 in the fourth quarter of 2017. The decrease of \$246,965 is largely the result of an increase of \$273,383 unrealized foreign exchange losses recognized on USD denominated debt. In 2018 the amount of USD debt increased as a result of the MOS acquisition. This combined with the weakening in the Canadian dollar relative to the USD, resulted in the an increase in the recorded value of these USD loans. This resulted in an increase in the unrealized foreign exchange losses as compared to the same period in 2017. This was partially offset by a reduction in realized foreign exchange losses, higher equipment rental income and other items of \$50,224.

Non-cash accretion was an expense of \$55,433 in the fourth quarter of 2018 compared to income of \$1,290 for the same period last year. The increase in non-cash accretion expense can be mostly attributed to the Earn-out Liability and Convertible Note, both of which originated from the acquisition of MOS. On acquisition, the Earn-out liability was recorded at a discount, while the Convertible Note was trifurcated into the host debt contract, which was recorded at a discount and conversion and prepayment features, which are accounted for as derivatives. Furthermore the Earn-out Liability and conversion feature must be revaluated at every period post acquisition. Based upon management's estimates, the Earn-out Lability increased by \$305,031 in the fourth quarter of 2018 resulting in a revaluation expense. Based upon the black-scholes option pricing model, the fair value of the conversion and prepayment features of the Convertible Note decreased by \$381,690 in the fourth quarter of 2018 resulting in a non-cash fair value adjustment gain.

- Non-cash accretion expense on the Earn-out Liability in the amount of \$112,659;
- Non cash accretion recovery on the host debt contract portion of the new Convertible Note in the amount of \$56,332; and
- Non cash fair value adjustment to the derivative portions of the Convertible Note in the amount of \$381,691.

Unrealized foreign exchange gains and losses are recognized on the translation of foreign subsidiaries. Both MOS and Cematrix USA have a USD functional currency and as the Canadian dollar weakened relative to the USD, the value of these assets appreciated resulting in an unrealized foreign exchange gain of \$373,739 in the fourth quarter of 2018. The same effect occurred in the fourth quarter of 2017, where the only foreign subsidiary at that time was Cematrix USA. which resulted in an unrealized foreign exchange gain of \$7,465.

The total comprehensive loss was lower by \$1,340,948. This was principally due to higher sales and the resulting higher Gross Margin offset partially by higher operating expenses, finance costs and non-cash stock based compensation.

		Year Ended December 31				
		2018		2017		Change
Revenue	\$	17,560,716	\$	7,713,906	\$	9,846,810
Gross margin	\$	4,346,200	\$	847,803	\$	3,498,397
Operating expenses	_	(3,639,032)	_	(2,231,376)		(1,407,656)
Operating income (loss)		707,168		(1,383,573)		2,090,741
Non-cash stock based compensation		(85,145)		6,737		(91,882)
Finance costs		(549,284)		(212,650)		(336,634)
Other income	_	(222,501)	-	45,572		(268,073)
Loss before other items		(149,762)		(1,543,914)		1,394,152
Acquisition costs		(619,723)		-		(619,723)
Non-cash accretion costs		(284,859)		5,160		(290,019)
Non-cash fair value of derivatives		65,257		-		65,257
Revaluation of earnout liability		(305,031)		-		(305,031)
Loss before income taxes		(1,294,118)		(1,538,754)		244,636
Recovery of deferred taxes		202,143		353,553		(151,410)
Net loss attributable to the common shareholder Unrealized foreign exchange gain on		(1,091,975)		(1,185,201)		93,226
translation of foreign subsidiaries		364,162		4,658		359,504
Comprehensive loss	\$	(727,813)	\$	(1,180,543)	\$	452,730
Fully diluted loss per common share	\$	(0.027)	\$	(0.034)	\$	0.008

Comparison of the year ended December 31, 2018 and December 31, 2017

	Year Ended December 31						
		2018		2017		Change	
Revenue							
Infrastructure							
Western Canada	\$	2,429,348	\$	4,085,626	\$	(1,656,278)	
Eastern Canada		6,822,566		3,533,016		3,289,550	
United States		8,308,802		-		8,308,802	
	_	17,560,716		7,618,642		9,942,074	
Oil and Gas		-		95,264		(95,264)	
	\$	17,560,716	\$	7,713,906	\$	9,846,810	

Revenue was \$17,560,716 for the year end December 31, 2018, an increase of \$9,846,810 when compared to revenue of \$7,713,906 recognized in the prior year 2017. This increase was the result of the MOS acquisition which contributed revenue of \$8,308,802 and an increase of \$3,289,550 or 93% in Eastern Canada driven by tunnel projects. This was offset by a \$1,656,278 or 41% decline in revenue from infrastructure projects in Western Canada.

Gross Margin was \$4,346,200 in fiscal 2018 compared to \$847,803 in the prior year, an increase of \$3,498,397 or 413%. Gross Margin Percentage also improved, increasing to 25% in 2018 compared to 11% in 2017 as a result of the effect of increased sales on fixed costs included in cost of sales. Operating expenses were higher by \$1,407,656 or 63%, primarily due to the following:

- MOS operating costs of \$805,228;
- Amortization of the intangible asset relating to the sales backlog originating from the MOS acquisition of \$283,410;
- Salaries and benefits increased by \$122,419 as a result of transition costs relating due to the new CFO, an additional part time employee and a new sales representative based in Manitoba,
- Consulting charges increased by \$90,041 as a result of costs associated with the BDC growth driver program and transition costs associated with the new CFO and MOS acquisition;
- Audit costs increased by \$54,065 as a result of additional work relating to the MOS acquisition;
- Travel and business development costs increased \$33,060 due to increased sales presentations; and
- Recruitment costs of \$22,000 were incurred to hire a new sales representative based in Manitoba.

Non-cash stock based compensation expense was \$85,145 in 2018 compared to a recovery of \$6,737 in 2017, an increase of \$91,882. During 2018 an additional 1,295,000 stock options were granted. In the prior year, 250,000 stock options were forfeited when an employee left the Company before they vest. As a result, the non-cash stock based compensation previously recorded in the amount of \$63,544 was reversed to income. Under IFRS rules, the associated non-cash stock based compensation related to stock options has to be expensed based on the vesting privileges of the particular option grants.

Finance costs were \$549,284 in 2018 an increase of \$336,634 or 158% from the \$212,650 incurred in the same period last year. The increase mainly relates to the acquisition of MOS which was financed primarily with debt and can be specifically attributed to the following factors:

- Incremental interest on the bank operating loan in the amount of \$44,583;
- Interest on the new \$750,000 USD Operating Loan in the amount of \$47,739;
- Interest on the new \$1,800,000 USD BDC Loan in the amount of \$111,338; and
- Interest on the new \$2,500,000 USD Convertible Note in the amount of \$147,949.

Other income was a loss of \$222,501 in 2018 compared to income of \$45,572 in 2017. The change of \$268,073 is largely the result of an increase in unrealized foreign exchange losses in the current year on the revaluation of the new USD denominated debt incurred on the acquisition of MOS.

Business acquisition costs of \$619,723 were incurred in 2018 on the acquisition of MOS. These costs were for the MOS acquisition and relate to: legal services of \$310,190, audit and accounting services of \$175,296, one time costs incurred to secure financing of \$75,333, valuations of \$15,672 and other of \$43,232.

Non-cash accretion was an expense of \$284,859 in 2018 compared to income of \$5,160 for the same period last year. The increase in non-cash accretion expense can be attributed to the Earn-out Liability and Convertible Note, both of which originated from the acquisition of MOS. On acquisition, the Earn-out Liability was recorded at a discount, while the Convertible Note was trifurcated into the host debt contract, which was recorded at a discount, a conversion feature and a prepayment feature, both of which are accounted for as a derivatives. Furthermore the Earn-out Liability and conversion feature is revaluated at every period post acquisition. Based upon management's estimates, the Earn-out Liability increased by \$305,031 since the Closing Date resulting in a revaluation expense being recognized. Based upon the black-scholes option pricing model, the fair value of the conversion feature of the Convertible Note decreased by \$500,271 since the Closing Date resulting in a gain.

- Non-cash accretion expense on the Earn-out Liability in the amount of \$243,032;
- Non cash accretion expense on the host debt contract portion of the new Convertible Note in the amount of \$45,403; and
- Non cash fair value adjustment to the derivative portions of the Convertible Note in the amount of \$65,257.

Unrealized foreign exchange gains and losses are recognized on the translation of foreign subsidiaries. Both MOS and Cematrix USA have a USD functional currency and as the Canadian dollar weakened relative to the USD, the value of these assets appreciated resulting in an unrealized foreign exchange gain of \$364,162 in 2018 and gain of \$4,658 for the same period last year.

The total comprehensive loss was lower by \$452,730. This was principally due to higher sales and the resulting higher Gross Margin offset partially by higher operating expenses, finance costs and non-cash stock based compensation.

G. Selected Financial Information and Summary of Financial Results

Annual Results

The following is a summary of the audited financial results for each of the five years ended December 31, 2018. No cash dividends have been declared or paid since the inception of the Company.

	Total	Total Comprehensive		e (Loss) Share	Total	Total Non Current
Year Ended	Revenues	Income (Loss)	Basic	Diluted	Assets	Liabilities
	\$	\$	\$	\$	\$	\$
December 31, 2018	17,560,716	(727,813)	(0.027)	(0.027)	20,421,964	9,004,190
December 31, 2017	7,713,906	(1,180,543)	(0.034)	(0.034)	6,530,062	2,042,553
December 31, 2016	9,598,861	(1,097,592)	(0.031)	(0.031)	7,575,832	2,123,907
December 31, 2015	15,379,787	1,566,395	0.047	0.046	11,260,623	1,877,457
December 31, 2014	8,712,193	(585,809)	(0.017)	(0.017)	9,259,642	2,016,175

Quarterly Results

The Company's business is seasonal in nature as it follows the construction season. Typically, revenues in the second half of the year are significantly greater than the first half of the year. The Company continues pursuing other markets where seasonality is less of an issue. This seasonality is reflected in the quarterly results summarized in the table below:

			Income ((Loss)
Quarters		Comprehensive	Per Share	Per Share
Ended	Revenues	Income (Loss)	Basic	Diluted
	\$	\$	\$	\$
2018 Year				
March 31	1,476,468	(314,375)	(0.009)	(0.009)
June 30	2,907,933	(930,351)	(0.026)	(0.026)
September 30	7,039,839	(56,096)	(0.000)	(0.000)
December 31	6,136,476	573,009	0.004	0.004
Total for year	17,560,716	(727,813)	(0.027)	(0.027)
2017 Year				
March 31	2,527,471	(51,859)	(0.002)	(0.002)
June 30	2,208,230	(255,435)	(0.007)	(0.007)
September 30	2,429,421	(105,310)	(0.003)	(0.003)
December 31	548,784	(767,939)	(0.022)	(0.022)
Total for year	7,713,906	(1,180,543)	(0.034)	(0.034)

Note 1: Quarterly loss per share is calculated on a standalone quarterly basis and accordingly the sum of the quarterly amounts may not equal the total for the year

H. Consolidated Statements of Financial Position

	December 31 2018	December 31 2017	Change
Total current assets	\$ 6,542,167	\$ 1,574,263	\$ 4,967,904
Total non current assets	 13,879,797	 4,955,799	8,923,998
Total assets	\$ 20,421,964	\$ 6,530,062	\$ 13,891,902
Current liabilities	\$ 6,672,199	\$ 1,102,564	\$ 5,569,635
Non current liabilities	 9,004,190	 2,042,553	6,961,637
Total liabilities	\$ 15,676,389	\$ 3,145,117	\$ 12,531,272
Shareholders' equity	\$ 4,745,575	\$ 3,384,945	\$ 1,360,630

Total current assets increased by \$4,967,904. This increase in aggregate is summarized below:

- Cash increased by \$610,420 (See the discussion in Section F Consolidated Statement of Cash Flows);
- Trade and other receivables increased by \$4,304,493 as a result of the higher sales in the quarter compared to the fourth quarter of 2017 as a result of the MOS acquisition;
- Inventory decreased by \$74,844 as a result of increased consumption driven by increased sales;
- Prepaids and deposits increased by \$111,572 mainly due to timing difference on current expenses as compared to the 2017 in addition to the acquisition of MOS; and
- Current portion of share acquisition loans increased by \$16,263 as a result of \$20,756 becoming current in the period, \$3,576 in accretion income and interest income of \$494 being offset by \$8,563 in repayments.

Total non current assets increased by \$8,923,998. This increase in aggregate is summarized below:

- Share acquisitions loans decreased by \$20,756. This amount was reclassified to current.
- Property and equipment increased by \$2,242,539 as a result of \$2,709,402 in assets being assumed on the acquisition of MOS, \$46,856 in a new finance lease and general additions of \$33,229 being offset by depreciation expense for the twelve months ended December 31, 2018 of \$680,402.
- Goodwill and intangibles assets increased by \$6,645,255 largely as a result of the acquisition of MOS which created \$5,881,947 in goodwill and a \$638,879 sales backlog. In addition to this, \$91,767 was spent on research projects (including \$26,269 of capitalized labour). This was partially offset by \$283,410 in amortization of the aforementioned sales backlog and \$16,775 in government grants received in respect of research projects.
- The deferred tax asset increased by \$56,960 as a result of an increase in the loss carryforwards in Cematrix (Canada) Inc..

Total current liabilities increased by \$5,569,635. This increase in aggregate is summarized below:

- Bank overdraft increased by \$478,662 (See the discussion in Section F Consolidated Statement of Cash Flows);
- Bank operating loan increased by \$1,139,044 to fund working capital requirements in the Canadian operations;
- The US operating loan is \$1,023,150 and was fully drawn on close of the MOS acquisition;
- Trade and other payables increased by \$1,423,676 largely as a result of the acquisition of MOS and increased business activity in the fourth quarter of 2018 as compared to the fourth quarter of 2017;
- Current portion of long term debt increased by \$348,265 largely as a result of the new \$1,800,000 USD BDC loan entered into by the Company on May 31, 2018 to close the MOS acquisition.;
- Current portion of finance lease obligations increased by \$105,066 as a result of the current portion of a finance lease assumed on the acquisition of MOS and a new finance lease on a vehicle used to support the new Prairie sales representative.
- Current portion of the Earn-out Liability is \$1,051,772 and originates from the acquisition of MOS. The Earn-out Liability is based upon management's estimate and represents 70% of MOS's EBITDA above \$500,000 USD for the 12 month period from June 1, 2018 to May 31, 2019.

Total non-current liabilities increased by \$6,961,637. This increase in aggregate is summarized below:

- Long term debt increased by \$1,553,523 largely as a result of the new \$1,800,000 USD BDC loan entered into by the Company on May 31, 2018 to close the MOS acquisition.
- Finance lease obligations decreased by \$57,187 as a result of reclassifications to the current portion of finance lease obligations being offset by a vehicle finance lease assumed on the acquisition of MOS and a new finance lease on a vehicle used to support the new Prairie sales representative.
- Earn-out Liability is \$1,128,258 and originated from the acquisition of MOS. The Earn-out Liability is based upon management's estimate and represents 65% of MOS's EBITDA above \$500,000 US for the 24 month period from June 1, 2019 to May 31, 2021.
- The Convertible Note has a face value of \$2,500,000 USD and was issued on the acquisition of MOS. On issuance, the Convertible Note was trifurcated into a conversion feature, prepayment feature and a debt host contract. At December 31, 2018, the Convertible Note had an aggregate carrying value of \$3,378,392. The conversion feature is a derivative liability and is accounted for at fair value and had a value of \$972,472 at December 31, 2018. The prepayment feature is a derivative asset and is accounted for at fair value and had a value of \$772,494 at December 31, 2018. The host debt contract is accounted for at amortized cost and had a value of \$3,178,414 at December 31, 2018.
- The deferred tax liability increased by \$958,951 as a result of the acquisition of MOS.

Shareholders' Equity increased by \$1,360,630. This increase in aggregate is summarized below:

- Share capital increased by \$1,645,146 as a result of proceeds received from private placements closed during the year (\$1,224,245), common shares issued on the acquisition of MOS (\$735,553), proceeds from the exercise of employee options (\$43,500) and the reclassification of related non-cash stock based compensation previously charged to contributed surplus (\$41,922). The securities offered on the private placement were comprised of a common share and one-half share purchase warrant. Consequently, \$400,074 in value was attributed to the value of the share purchase warrants and reclassified to contributed surplus.
- Contributed surplus increased by \$430,295 as a result of non-cash stock based compensation of \$85,145 recorded in the period and the reclassification of share purchase warrants from the private placement of \$400,074 from share capital. This was partially offset by the reclassification of \$41,922 to share capital relating to the exercise of employee options and the reclassification of \$13,002 to deficit relating to the forfeiture of employee options.
- Accumulated other comprehensive income increased by \$364,162 due to the unrealized foreign exchange gain on the translation of MOS and Cematrix USA for the year ended December 31, 2018; and
- The Deficit increased by \$1,078,973 due to the loss to common shareholders in the year (\$1,091,975) and the reclassification from contributed surplus for employee options that were forfeited in September 2018 (\$13,002).

See the Consolidated Statements of Shareholders' Equity included in the Consolidated Financial Statements.

I. Consolidated Statements of Cash Flows

Comparison of the Three Months ended December 31, 2018 and December 31, 2017

The cash position of the Company at December 31, 2018 was \$119,638 (consisting of cash in the bank of \$653,353 net of the bank overdraft of \$533,715) compared to a cash deficiency of \$12,120 (consisting of cash in the bank of \$42,933 net of the bank overdraft of \$55,053) at December 31, 2017.

	Three Months Ended December 31					
	_	2018	2017	Change		
Cash generated from (used in) operating activities Before non-cash working capital adjustment	\$	995,587 \$ (1.452.204)	(881,778) \$	1,877,365		
Net change in non-cash working capital items		(1,453,294)	<u>1,049,924</u> 168,146	$\frac{(2,503,218)}{(625,853)}$		
Cash used in investing activities		(457,707) (18,795)	(31,680)	12,885		
Cash used in financing activities Foreign exchange effect on cash		(107,239) 30,169	(98,651) 7,465	(8,588) 22,704		
Increase (decrease) in cash		(553,572)	45,280	(598,852)		
Cash (cash deficiency), at beginning of period		673,210	(57,400)	730,610		
Cash (cash deficiency), at end of period	\$	119,638 \$	(12,120) \$	131,758		

The change in cash in the fourth quarter of 2018 was decrease of \$553,572 as compared to a increase of \$45,280 in the same period of 2017. This change is outlined in the table on the next page:

- Cash generated from operating activities decreased by \$625,853.
 - Cash flow before non cash working capital adjustments increased by \$1,877,365 and is the result of the acquisition of MOS and an increase in revenues across all geographic regions, both of which have had a positive effect on cash flow; and
 - Net change in non-cash working capital items was negative \$2,503,218 as it reflects a general change the Company's outlook to the positive. The Company is generating positive Cash Flow in the current year period and those funds have been used to pay vendors that have been stretched. In the prior year period the Company was not generating positive Cash Flow and it's vendors were being paid later than normal.
- Cash used in investing activities decreased by \$12,885.
 - Intangible asset spending relating to product testing decreased by \$22,435. Expenditures of \$12,031 (including \$2,031 of capitalized internal labour) were incurred in the fourth quarter of 2018 compared to \$34,466 (including \$18,728 of capitalized internal labour) in the fourth quarter of 2017;
 - Equipment spending decreased by \$5,950;
 - Absence of \$10,000 in proceeds of disposition from an asset sold in 2017; and
 - Repayments on the share acquisition loans decreased by \$5,500; a scheduled repayment of \$5,500 was not made at the year end.
- Cash used in financing activities increased by \$8,588.
 - In 2018 the Company used \$107,239 in financing activities. Principal repayments of \$342,945 on the long term debt and \$26,220 on finance lease obligations were made during the quarter. This was offset by a \$261,926 draw on the demand operating loan; and
 - In 2017 the Company used \$98,651 in financing activities. Principal repayments of \$153,591 on the long term debt and \$25,769 on finance lease obligations were made during the quarter. This was offset by a \$66,399 draw on the demand operating loan and \$14,310 in government grants received on its research projects.

Comparison of the Year Ended December 31, 2018 and December 31, 2017

The cash position of the Company at December 31, 2018 was \$119,638 (consisting of cash in the bank of \$653,353 net of the bank overdraft of \$533,715) compared to a cash deficiency of \$12,120 (consisting of cash in the bank of \$42,933 net of the bank overdraft of \$55,053) at December 31, 2017.

The change in cash for the year ended December 31, 2018 was a increase of \$131,758 as compared to a decrease of 63,253 in the same period of 2017. This change is outlined in the table below:

	Year Ended December 31					
		2018	-	2017	_	Change
Cash generated from (used in) operating activities Before non-cash working capital adjustment Net change in non-cash working capital items	\$	552,361 (1,653,358)	\$	(1,090,389) 1,344,792	\$	1,642,750 (2,998,150)
Cash used in investing activities Cash generated from (used in) financing activities Foreign exchange effect on cash		(1,100,997) (2,924,418) 4,129,694 27,479		254,403 (348,081) 25,767 4,658		(1,355,400) (2,576,337) 4,103,927 22,821
Increase (decrease) in cash Cash (cash deficiency), at beginning of year		131,758 (12,120)	-	(63,253) 51,133	+	195,011 (63,253)
Cash (cash deficiency), at end of year	\$	119,638	\$	(12,120)	<u>\$</u>	131,758

- Cash generated from operating activities decreased by \$1,355,400.
 - Cash flow before non-cash working capital adjustments increased by \$1,642,750 and is the result of the acquisition of MOS and increased revenues in Canadian infrastructure driven by tunnel projects in Eastern Canada. This ultimately has a positive effect on cash flow; and
 - Net change in non-cash working capital items decreased by \$2,998,150 as it reflects a general change the Company's outlook to the positive. The Company is generating positive Cash Flow in the current year and those funds have been used to pay vendors that have been stretched. In the prior year the Company was not generating positive Cash Flow and it's vendors were being paid later than normal.
- Cash used in investing activities increased by \$2,576,337.
 - The gross cash cost of the acquisition of MOS was \$3,051,595, which was financed with a \$1,800,000 USD loan from the BDC, a portion of the funds raised from the Private Placements and from working capital. Cash held by MOS on the acquisition date was \$243,610. The consolidated statement of cash flow reflects \$2,807,985, which is the net of the two aforementioned numbers.
 - Equipment purchases decreased by \$187,319 as a reflection of the curtailment efforts made by management in the current year. In 2017 equipment and vehicles were required to support the agreement with Lafarge for the regional expansion of cellular concrete and Ready Mix sales;
 - Intangible spending related to product testing decreased by \$62,129. Expenditures of \$91,767 (including \$26,269 of capitalized internal labour) were made in 2018 compared to \$153,896 (including \$42,700 of capitalized internal labour) in 2017; and
 - Absence of \$12,300 in proceeds of disposition from an asset sold in 2017.
 - Repayments on the share acquisition loans decreased by \$5,500; a scheduled repayment of \$5,500 was not made at the year end.

J. Liquidity, Capital Resources and Commitments

Liquidity

The Company's liquidity, including obtaining cash resources to finance capital spending to increase its production capacity, is dependent on generating sales, profits, cash flow from operations, maintaining a facility to finance working capital and accessing capital debt facilities through loans or lease financing.

The Company, through its wholly owned subsidiary CEMATRIX Canada, has a \$1,500,000 bank operating loan with the Canadian Western Bank ("CWB" or "Bank"). Under the bank operating loan, the Bank will advance up to \$1,500,000 based on 75% of trade receivables less than ninety days outstanding at the end of each month and 50% of inventories (up to a maximum \$250,000). Based on these restrictions \$1,500,000 of the bank operating loan was available at December 31, 2018 with \$1,205,443 being drawn.

The bank operating loan bears interest at an amount equal to the greater of 4.7% or 2.0% above the CWB prime lending rate, which is currently set at 5.95%.

The demand operating loan has four financial covenants that must be maintained on a consolidated basis:

- Cash flow coverage ratio of not less than 1.25, tested not less than annually. This is a ratio of EBITDA to all interest (paid or accrued) plus the actual principal payment obligations for the trailing fiscal year on all indebtedness for borrowed money and finance leases;

- Tangible net worth of not less than \$4,000,000, tested no less than monthly. Tangible net worth is defined as the aggregate of share capital and retained earnings (shareholders' equity) less goodwill or any assets determined by CWB to be intangibles without value;

- Debt to tangible net worth ratio not greater than 1.75, tested no less than monthly. This is the ratio of indebtedness for borrowed money and finance leases divided by the net tangible worth (defined above); and

- Current ratio not less than 1.25, tested no less than monthly. This is the ratio of current assets, excluding amounts due from related parties, to current liabilities.

At December 31, 2018, the bank operating loan covenants were not met. In March 2019, the CWB granted relief for the year ended December 31, 2018.

The Company, through its wholly owned subsidiary MOS, has a \$750,000 USD operating loan which is fully drawn. The interest, which is payable quarterly, is at a variable rate of 2.0% above the JPMorgan Chase Bank's prime lending rate, which is currently set at 5.50%. The principal must be repaid in full before May 31, 2019. At December 31, 2018 the Canadian equivalent of this loan was \$1,023,150.

The Company has \$319,445 of undrawn equipment financing with the BDC that will be used, as required, to fund the construction of additional production units or upgrade existing production units.

At December 31, 2018, the Company had Net Working Capital of \$3,771,900 compared to \$854,355 at December 31, 2017, reflecting the positive impact of the MOS acquisition and an increase in activity in the fourth quarter of 2018.

For the year ended December 31, 2018, the Company reported a loss before other items of \$149,762 and positive cash flow from operations before net change in non-cash working capital items of \$552,361 and EBITDA of \$1,721,862.

On April 30, 2018 and June 25, 2018, the Company completed the first and second tranches of a Private Placement for net proceeds of \$684,644. The net proceeds were used for general working and growth capital and to finance a portion of the purchase price for the MOS acquisition.

On August 24, 2018, the Company another Private Placement for net proceeds of \$539,601. The net proceeds were used for general working capital.

The Company introduced cash flow measures at the beginning of 2018 to reduce cash flow requirements. The executive management took a 20% reduction in base salary, and all other salaried staff a 10% reduction; the Company negotiated a six month 10% deferral in the rental cost of its Calgary facility, the Company leased out part of its Calgary facility and cost constraints were placed on all discretionary spending. With the increase in business and the addition of MOS, the salary reductions were restored. Management continues to closely monitor discretionary costs.

The Company has signed contracts on hand for \$16.1 million and Verbally Awarded projects of \$8.1 million for a total of \$24.2 million, \$3.8 million of which will be scheduled for completion in 2020.

The realization of Net Working Capital, the availability of the CWB demand operating loan and the successful completion of sales contracts that are in place provide the necessary liquidity to carry the Company's operations through 2019. Ongoing liquidity beyond this, is dependent on the Company achieving additional sales and profitable results.

Capital resources

Capital additions to build new productive capacity in the current year will come from the funds generated from operations and the BDC loan 3, which has \$319,445 remaining to be drawn down.

Building additional productive capacity in future years is dependent on the Company generating the required funds from operations or new debt or equity financing. There is no certainty that additional debt or equity financing will be available to the Company.

The Company defines its capital as the long term debt, the finance lease obligations and shareholders' equity. The current objective of the Company is to manage its capital through growth in earnings and to reinvest the earnings generated to facilitate the continued growth in the Company, in order to provide an appropriate rate of return to shareholders in relation to the risks underlying the Company's assets. The consolidated capital of the Company, as outlined in Note 28 - Capital management to the Interim Consolidated Financial Statements, was \$14,756,528 at December 31, 2018 as compared to \$5,839,246 at December 31, 2017 (see Section H. Consolidated Statements of Financial Position for details).

Commitments

The table below is a summary of the Company's operating lease commitments for the next five years from December 31, 2018.

Debt Category	2019	2020	2021	2022	2023
	\$	\$	\$	\$	\$
Operating leases (1)	451,118	168,555	171,926	175,365	118,458

(1) The Company's current lease for its Calgary facilities expires December 31, 2019. MOS's current lease for its Illinois facility expires August 31, 2023.

K. Off Balance Sheet Arrangements

There were no off balance sheet arrangements at December 31, 2018 or 2017.

L. Transactions with Related Parties

During the year ended December 31, 2018, the Company incurred legal fees from a firm which employs one of the directors of the Company in the amount of \$114,774 (\$20,515 for the year ended December 31, 2017) of which \$4,347 is in trade and other payables as at December 31, 2018 (2017 - \$2,651).

The Vendor is currently a director of the Company and holds half of the US operating loan (\$1,023,150 at December 31, 2018), half of the earn-out liability (\$2,180,030 at December 31, 2018) and half of the convertible note (\$3,378,392 at December 31, 2018). The Vendor is also a consultant and is entitled to an annual consulting fee of \$20,000 USD over the term of the agreement which is 3 years.

The remuneration of directors and other members of key management personnel during the year were as follows:

	 2018	2017
Short term employment benefits Non-cash stock based compensation	\$ 454,865 \$ 16,280	433,532 1,347
	\$ 471,145 \$	434,879

M. Critical Accounting Judgments, Estimates and Assumptions

The preparation of the consolidated financial statements in conformity with IFRS requires management to make judgements, estimates and assumptions that affect the reported amounts of assets, liabilities and contingent liabilities at the date of the consolidated financial statements and reported amounts of revenues and expenses during the reporting period. Judgements, estimates and assumptions are continuously evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. However, actual outcomes can differ from these estimates.

The key sources of these uncertainties that have a significant risk of causing material adjustment to the amounts recognized in the consolidated financial statements are discussed below:

(a) Impairment of non-financial assets

When an impairment test is performed on an asset or a cash generating unit ("CGU"), management estimates the recoverable amount of the asset or CGU based on its fair value less costs of disposal ("FVLCD") or its value in use ("VIU"). These estimates are based on valuation models requiring the use of a number of assumptions such as forecasts of future cash flows, gross margin, pre-tax discount rate (weighted average cost of capital or "WACC") and perpetual growth rate. These assumptions have a significant impact on the results of impairment tests and on the impairment charge (if required) recorded in the consolidated statement of loss and comprehensive loss.

(b) Non-cash stock based compensation

The Company measures the cost of non-cash stock based compensation transactions with employees by reference to the fair value of the equity instruments. Estimating fair value for non-cash stock based compensation transactions requires determining the most appropriate valuation model, which is dependent on the terms and conditions of the grant. This estimate also requires determining and making assumptions about the most appropriate inputs to the valuation model including the expected life, forfeiture rate, volatility and dividend yield of the share option. The Company measures the cost of non-cash stock based compensation transactions with consultants by reference to the fair value of the services to be performed.

(c) Taxes

Uncertainties exist with respect to the interpretation of complex tax regulations and the amount and timing of future taxable income. The Company establishes provisions, based on reasonable estimates, for possible consequences of audits by the tax authorities. The amount of such provisions is based on various factors, such as experience of previous tax audits and differing interpretations of tax regulations by the taxable entity and the responsible tax authority. Deferred tax assets are recognized for all unused tax losses to the extent that it is probable that taxable earnings will be available against which the losses can be utilized. Significant estimates are required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and the level of future taxable earnings together with future tax planning strategies..

(d) Fair value of financial instruments

The fair value of financial instruments is determined wherever possible based on observable market data. If not available, the Company uses third-party models, independent price publications, market exchanges, investment dealer quotes and valuation methodologies that utilize observable data. Actual values may significantly differ from these estimates.

(e) Useful life of property and equipment

Depreciation and amortization are calculated using a systematic and rational basis, which are based upon an estimate of each assets useful life and residual value. The estimated useful life and residual value chosen are the Company's best estimate of such and are based on industry norms, historical experience, market conditions and other estimates that consider the period and distribution of future cash inflows.

(f) Identification of CGU's

A CGU is defined as the lowest grouping of integrated assets that generate identifiable cash inflows that are largely independent of the cash inflows of other assets or groups of assets. The allocation of assets into CGUs requires significant judgment and interpretations with respect to the integration between assets, the existence of active markets, similar exposure to market risks, shared infrastructures, and the way in which management monitors the operations. Management has determined that the appropriate CGU's for the Company are CEMATRIX (Canada) Inc. and MOS.

(g) Business acquisitions

The Company uses judgment in applying the acquisition method of accounting for business acquisitions and estimates to value identifiable assets and liabilities at the acquisition date. The Company may engage independent third parties to determine the fair value of property, plant and equipment, and intangible assets. Estimates are used to determine cash flow projections, including the period of future benefit, and future growth and discount rates, among other factors. The values placed on the acquired assets and liabilities assumed affect the amount of goodwill recorded on an acquisition.

(h) Going Concern

The Company has experienced lower than planned revenue combined with operating losses. Management has assessed and concluded that the going concern assumption is appropriate for a period of at least twelve months following the end of the reporting period. Management applied significant judgement in arriving at this conclusion including:

- The amount of new sales orders and total revenue to be generated to provide sufficient cash flow to continue to fund operations and other committed expenditures;
- The timing of generating those new sales and the timing of the related cash flow;
- The ability to draw upon existing financing facilities to support ongoing operations; and
- The assessment of potentially discretionary expenditures that could be delayed in order to manage cash flows.

Given the judgement involved, actual results may lead to a materially different outcome.

N. Changes in Accounting Policies including Initial Adoption.

New accounting policies

During 2018 the Company adopted new IFRS standards and amendments in accordance with the transitional provisions of each standard as outlined below.

IFRS 15 Revenue from Contracts with Customers ("IFRS 15")

The Company adopted IFRS 15 on a modified retrospective basis effective January 1, 2018. The standard supersedes IAS 18 Revenue, IAS 11 Construction Contracts and related interpretations.

IFRS 15 sets out a five step model for revenue recognition. The core principal is that revenue should be recognized to depict the transfer of goods and services to customers in an amount that reflects the consideration that the Company expects to be entitled for those goods and services.

The Company principally generates revenue from the onsite production and placement of cellular concrete (the "Product") pursuant to contractual arrangements with its customers. This revenue is recognized when control or title of the Product is transferred from the Company and collection is reasonably assured in accordance with specified contract terms. All revenue is generally earned at a point in time and is based on the consideration that the Company expects to receive for the transfer of the Product to the customer.

The Company has reviewed its sources of revenue and major contacts with customers using the guidance found in IFRS 15 and determined that there is no material changes to the timing and measurements of the Company's revenue, as compared to the provisions of the previous standards.

Revenue is measured based on the consideration specified in a contract with its customers. Payment terms with customers are generally 30 days from the date of the invoice. The Company generally does not have any sales contracts where the period between the transfer of the Product to the customer and payment by the customer exceeds one year. As a result, the Company does not adjust its revenue transactions for the time value of money.

The Company enters into contracts with customers that have performance obligations that are unsatisfied (or partially unsatisfied) at the reporting date. The Company applies a practical expedient of IFRS 15 and does not disclose information about the remaining performance obligations that have original expected durations of one year or less, or for performance where the Company has a right to consideration from a customer in an amount that corresponds directly with the value to the customer on the Company's performance to date.

Contract modifications with the Company's customers could change the scope of the contract, the price of the contract, or both. A contract modification exists when the parties to the contract approve the modification in writing. Contract modifications are generally accounted for as part of the existing contract prospectively over the remaining term of the contract.

All of trade receivables were generated from contracts with customers.

IFRS 9 Financial Instruments ("IFRS 9")

The Company adopted IFRS 9 effective January 1, 2018. The adoption of IFRS 9 did not result in any adjustments to the amounts recognized in the Company's consolidated financial statements for the year ended December 31, 2018.

Classification

The Company classifies its financial assets and financial liabilities in the following measurement categories: (i) those to be measured subsequently at fair value through profit or loss ("FVTPL"); (ii) those to be measured subsequently at fair value through other comprehensive income ("FVOCI"); and (iii) those to be measured at amortized cost. The classification of financial assets depends on the business model for managing the financial assets and whether the contractual cash flows represent solely payments of principal and interest ("SPPI"). Financial liabilities are classified as those to be measured at amortized cost unless they are designated as those to be measured subsequently at FVTPL (irrevocable election at the time of recognition). For assets and liabilities measured at fair value, gains and losses are either recorded in net loss or other comprehensive income (loss).

The Company reclassifies financial assets when and only when its business model for managing those assets changes. Financial liabilities are not reclassified.

Financial Assets at Fair Value Through Comprehensive Income

Equity instruments that are not held-for-trading can be irrevocably designated to have their change in fair value recognized through comprehensive income instead of through profit or loss. This election can be made on individual instruments and is not required to be made for the entire class of instruments. Attributable transaction costs are included in the carrying value of the instruments. Financial assets at fair value through other comprehensive income are initially measured at fair value and changes therein are recognized in other comprehensive income.

Measurement

All financial instruments are required to be measured at fair value on initial recognition, plus, in the case of a financial asset or financial liability not at FVTPL, transaction costs that are directly attributable to the acquisition or issuance of the financial asset or financial liability. Transaction costs of financial assets and financial liabilities carried at FVTPL are expensed in profit or loss. Financial assets and financial liabilities with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

Financial assets that are held within a business model whose objective is to collect the contractual cash flows, and that have contractual cash flows that are solely payments of principal and interest on the principal outstanding are generally measured at amortized cost at the end of the subsequent accounting periods. All other financial assets including equity investments are measured at their fair values at the end of subsequent accounting periods, with any changes taken through profit and loss or other comprehensive income (irrevocable election at the time of recognition). For financial liabilities measured subsequently at FVTPL, changes in fair value due to credit risk are recorded in other comprehensive income.

Financial instrument	New classification under IFRS 9	Previous classification under IAS 39
Financial asset:		
Cash and cash equivalents	FVTPL	FVTPL
Term deposits	FVTPL	FVTPL
Trade and other receivables	Amortized cost	Loans and receivables
Share acquisition loans	Amortized cost	Loans and receivables
Acquisition related assets – Derivative assets	FVTPL	FVTPL
Financial liabilities:		
Bank overdraft	Amortized cost	Other financial liabilities
Bank operating loan	Amortized cost	Other financial liabilities
US operating loan	Amortized cost	Other financial liabilities
Trade and other payables	Amortized cost	Other financial liabilities
Long term debt	Amortized cost	Other financial liabilities
Earn-out liability	FVTPL	FVTPL
Convertible note	Amortized cost	Other financial liabilities
Acquisition related liabilities – Derivative liabilities	FVTPL	FVTPL

Impairment

IFRS 9 also introduces a new model for the measurement of impairment of financial assets based on expected credit losses which replaces the incurred losses impairment model previously applied.

The Company's trade and other receivables are subject to the ECL model under IFRS 9. For trade and other receivables, the Company apples the simplified approach to providing for expected losses prescribed by IFRS 9, which requires the use of the lifetime expected loss provision for all trade receivables. In estimating the expected lifetime expected loss provision, the Company considered historical Company and industry default rates as well as credit ratings of major customers.

Future accounting pronouncements

Certain new standards, interpretations, amendments and improvements to existing standards were issued by the IASB or the IFRIC that are mandatory for accounting periods beginning on or after January 1, 2019 or later periods. The standards impacted that are applicable to the Company are as follows:

IFRS 16 Leases – In January 2016, the IASB issued IFRS 16, "Leases" ("IFRS 16") replacing International Accounting Standard 17, "Leases" ("IAS 17"). IFRS 16 sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract, the customer ("lessee") and the supplier ("lessor"). The standard provides revised guidance on identifying a lease and separating lease and non-lease components of a contract. It introduces a single accounting model for all leases and requires a lessee to recognize right-of-use assets and lease liabilities for leases with a term of more than 12 months, unless the underlying asset is of low value, and depreciation of lease assets separately from interest on lease liabilities in the income statement. Lessor accounting for operating and finance leases will remain substantially unchanged. IFRS 16 is effective for years beginning on or after January 1, 2019.

O. Financial Instruments

Set out below is a comparison, by category, of the carrying amounts and fair values of all of the Company financial instruments that are carried in the consolidated financial statements and how the fair value of financial instruments are measured.

Other financial liabilities

Other financial liabilities are initially measured at fair value and are subsequently measured at amortized cost using the effective interest rate method, with interest expense recognized on an effective yield basis. Liabilities in this category include bank overdraft, bank operating loan, US operating loan, trade and other payables, loan and long-term debt.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recorded at the proceeds received, net of direct issue costs.

Fair values

The fair values of cash and cash equivalents, term deposits, trade and other receivables, bank overdraft, bank operating loan, US operating loan, and trade and other payables approximate their carrying values due to the relatively short periods to maturity of these instruments.

The fair value of the BDC Financing loans approximate its carrying value as the debt rate floats with prime and is representative of market rates offered to the Company.

The fair value of the share acquisition loans has been determined using a market rate of interest.

The fair value of the secured debenture approximates its carrying value as the interest rate is a market rate for similar instruments offered to the Company for similar instruments.

The fair value of the convertible debenture approximates its carrying value as the interest rate used to discount the host debt contract approximates a market rate for similar instruments offered to the Company.

The Company has no plans to prepay any debt instruments prior to maturity.

Fair value represents the price at which a financial instrument could be exchanged in an orderly market, in an arm's length transaction between knowledgeable and willing parties who are under no compulsion to act. The Company classifies the fair value of the financial instruments according to the following hierarchy based on the amount of observable inputs used to value the instrument

Level 1 – Quoted prices are available in active markets for identical assets or liabilities as of the reporting date. Active markets are those in which transactions occur in sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2 – Pricing inputs are other than quoted prices in active markets included in level 1. Prices in level 2 are either directly or indirectly observable as of the reporting date. Level 2 valuations are based on inputs, including quoted forward prices for commodities, time value and volatility factors, which can be substantially observed or corroborated in the market place. The embedded derivatives related to the conversion and prepayment features on the convertible note are measured based on level 2.

Level 3 - V aluations in this level are those with inputs for the assets or liabilities that are not based on observable market date. The earn-out liability is measured at level 3.

There were no transfers between level 1, 2 and 3 inputs during the year.

Risk management

The Company's activities are exposed to a variety of financial risks: interest rate risk, credit risk, liquidity risk and foreign exchange risk. The Company's overall risk management program focuses on the unpredictability of financial and economic markets and seeks to minimize potential adverse effects on the Company's financial performance. Risk management is carried out by financial management in conjunction with overall Company governance.

Interest Rate Risk

The BDC Financings, which had a balance of \$3,115,015 outstanding at December 31, 2018, the bank operating loan, which had a balance at December 31, 2018 of \$1,205,443, and the US operating loan, which had a balance at December 31, 2018 of \$1,023,150 are subject to floating market rates. Based on the floating rate debt outstanding as at December 31, 2018, a 1% increase/decrease in interest rates would result in a decrease/increase in net loss attributable to common shareholders of approximately \$46,100.

Credit Risk

The Company is responsible for reviewing the credit risk for each customer before standard payment and delivery terms and conditions are offered. The Company review consists of external ratings, when available, and in some cases bank and trade references. Management has established a credit policy under which new customers are analyzed for creditworthiness before the Company extends credit. The Company monitors its trade and other receivables aging on an ongoing basis as part of its process in managing its credit risk. The

Company also manages credit risk related to trade and other receivables on a consolidated basis whereby the aggregate exposure to individual customers is reviewed and their credit quality is assessed.

Financial instruments that subject the Company to credit risk consist primarily of cash and cash equivalents, term deposits, trade receivables and the share acquisition loans. The Company's cash is held with large established financial institutions. The Company manages credit risk using credit approval and monitoring practices. The credit risk on share acquisition loans is minimal as the Company can cancel the common shares issued to these individuals in the event of non payment. At December 31, 2018, 6 customers accounted for approximately 51% of trade receivables (at December 31, 2017, 9 customers accounted for approximately 92% of trade receivables). For the years ended December 31, 2018 and 2017, 3 customers each accounted for over 6% of revenue and 9% of revenue. At December 31, 2018, the Company had \$653,353 of cash and cash equivalents (2017 - \$42,933), an \$80,000 term deposit (2017 - \$80,000) and \$43,874 (2017 - \$48,367) of fair valued share acquisition loans that are outstanding with two officers, and a former officer of the Company

Liquidity Risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations. Liquidity risk management involves maintaining sufficient cash and cash equivalents and the availability of working capital financing.

		ess than 1 year	1	to 2 years	2	to 6 years	Total
As at December 31, 2018							
Bank overdraft	\$	533,715	\$	-	\$	-	\$ 533,715
Bank operating loan		1,205,443		-		-	1,205,443
US operating loan		1,023,150		-		-	1,023,150
Trade and other payables		1,993,040		-		-	1,993,040
Long-term debt		697,407		2,004,233		1,413,375	4,115,015
Finance lease obligations		167,672		118,771		2,510	288,953
Earn-out liability		1,051,772		594,304		533,954	2,180,030
Convertible note		-		-		3,378,392	 3,378,392
	\$	6,672,199	\$	2,717,308	\$	5,328,231	\$ 14,717,738
	Less	s than 1 year	1	to 2 years	2	to 6 years	Total
As at December 31, 2017							
Bank overdraft	\$	55,053	\$	-	\$	-	\$ 55,053
Bank operating loan		66,399		-		-	66,399
Trade and other payables		569,364		-		-	569,364
Long-term debt		349,142		1,390,462		473,623	2,213,227
Finance lease obligations		62,606	<i>•</i>	135,287		43,181	 241,074
	\$	1,102,564	\$	1,525,749	\$	516,804	\$ 3,145,117

The table below summarizes the maturity profile of the Corporation's financial liabilities at December 31, 2018 and 2017 based on contractual undiscounted payments.

Foreign Exchange Risk

Foreign exchange risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The Company's exposure relates to balances denominated in US dollars ("USD") and the operations of its US subsidiary which are predominantly in USD. The Company does not hedge these items as the timing of related transactions is not certain. As at December 31, the following balances were denominated in USD:

	2018		 2017	
Cash and cash equivalents	\$	477,244	\$ 32,136	
Trade and other receivables	\$	1,355,817	\$ 39,191	
Prepaid expenses and deposits	\$	62,916	\$ 10,127	
Trade and other payables	\$	1,148,915	\$ 8,148	
US operating loan	\$	750,000	\$ -	
Long term debt	\$	1,650,000	\$ -	
Finance lease obligations	\$	49,242	\$ -	
Earn-out liability	\$	1,598,028	\$ -	
Convertible note	\$	2,221,772	\$ -	

The Company's primary foreign exchange sensitivity is in relation to movements of the USD against the Canadian dollar. Based on USD balances as at December 31, 2018 a 5% increase/decrease of the USD against the Canadian dollar would result in an increase/decrease in total comprehensive loss of approximately \$281,800.

P. Disclosure of Outstanding Share Data As at December 31, 2018 and March 27, 2019, the following is a description of the outstanding equity securities and convertible securities previously issued by the Company

	Authorized	Outstanding as at December 31, 2018	Outstanding as at March 27, 2019
Voting or equity securities issued and outstanding	Unlimited Common Shares	44,480,769 Common Shares	44,480,769 Common Shares
Securities convertible or exercisable into voting or equity securities – stock options	Stock options to acquire up to 10% of outstanding Common Shares	Stock options to acquire 4,220,000 Common Shares at an exercise price at between \$0.145 - \$0.43	Stock options to acquire 4,220,000 Common Shares at an exercise price at between \$0.145 - \$0.43
Securities convertible or exercisable into voting or equity securities – share purchase warrants	Unlimited Share Purchase Warrants	Share purchase warrants to acquire 3,263,177 common shares at a price of \$0.35	Share purchase warrants to acquire 3,263,177 common shares at a price of \$0.35

On April 30, 2018 and June 25, 2018, the Company completed the first and second tranches a non-brokered Private Placement for 3,481,130 units (each, a "Unit") at a price of \$0.20 per Unit for net proceeds of \$684,644. Each Unit is comprised of one common share and one half warrant (each a "Warrant"). Each full Warrant entitles the holder thereof to acquire one common share for \$0.35 until their expiry date of April 30, 2020.

On April 30, 2018, 250,000 stock options were issued to the newly appointed chief financial officer of the Company with an exercise price of \$0.20 per common share. The stock options are for a three year term and will vest over three years as to one third at the end of each year.

In May 2018, as part of the MOS acquisition agreement, the Vendor was appointed a director of the Company and engaged as a consultant. The consulting agreement is \$20,000 USD per annum for a period of three years from the Closing Date. The Vendor received 150,000 stock options for his role as a director and 350,000 for his role as a consultant. The stock options will be exercisable into common shares of the Company at an exercise price of \$0.20 per common share. These stock options will be for a three year term and will vest over three years as to one third at the end of each year.

In August 2018, the Company issued 345,000 options to MOS employees. The stock options will be exercisable into common shares of the Company at an exercise price of \$0.20 per common share. These stock options will be for a five year term and will vest over three years as to one third at the end of each year.

On August 24, 2018, the Company completed a non-brokered private placement for 2,880,224 units (each, a "Unit") at a price of \$0.20 per Unit for gross proceeds of \$576,045 (the "Private Placement"). Each Unit is comprised of one common share and one half warrant (each a "Warrant"). Each full warrant is exercisable into one common share for a period of two years at an exercise price of \$0.35 per common share.

The Company paid a finder's fee and finder's warrants of 6% of the gross proceeds to qualified non-related parties that participated. The fees amounted to \$24,900 and the Company issued 62,250 finder's warrants that entitle the holder thereof to acquire one common share for \$0.35 until the expiry date of August 24, 2020. In addition to this, costs of \$11,544 were incurred in conjunction with the Private Placement.

On September 25, 2018, 300,000 common shares were issued on the exercise of employee stock options by the former Chief Financial Officer, proceeds of \$43,500 were received by the Company and \$41,922 of related non-cash stock based compensation previously charged to contributed surplus was reclassified to share capital.

On November 12, 2018, 200,000 options were issued to The Howard Group, the Company's investor relations firm, with an exercise price of \$0.25, for a three year term. One-third vesting immediately, one-third twelve months after the option grant date and one-third twenty four months after the option grant date.

Q. Outlook

Management believes that the outlook for CEMATRIX continues to be extremely positive. Reflecting back upon the prior year, 2018 was a transformative year and gives us a platform for the future. Some of the key highlights of 2018 include:

- Record revenue of \$17.6 million resulting in gross margin of \$4.3 million and EBITDA of \$1.7 million.
 - Closing of the MOS acquisition on May 31, 2018 which contributed \$8.3 million in revenue over 7 months.
 - Growth in the Canadian operation which contributed \$9.3 million in revenue, an increase of 20% or \$1.5 million compared to the prior year.
- Run rate Cash Flow of \$0.5 million in Q3 2018 and \$1.0 million in Q4 2018.

The results in the last two quarters not only validate that the acquisition was accretive, but puts Cematrix in a better position financially as we enter into a seasonal and historically slow first quarter. In terms of 2019, management has the following priorities:

- Executing on the core business
 - Forecasted revenues of \$25.0 million resulting in gross margin of \$7.1 million and EBITDA of \$4.1 million.
 - The Company has signed contracts on hand for \$16.1 million and Verbally Awarded projects of \$8.1 million for a total of \$24.2 million, \$3.8 million of which will be scheduled for completion in 2020.
 - Improved liquidity and a return to profitability and sustainability
- Growth Strategy into the U.S.
 - Proposed acquisition of Pacific International Grout Company
 - Engagement of Joseph Gunner and Co. LLC as an Exclusive Investment Banker to assist with the PIGCO acquisition and further growth opportunities.

<u>CEMATRIX CORPORATION</u> <u>www.cematrix.com</u>

Form 51-102F1 - Management's Discussion & Analysis For the Year Ending December 31, 2018

Appendix A – Forward Looking Statements

The forward-looking statements in the MD&A for the year ending December 31, 2018 are outlined below:

General

There are a number of statements in the MD&A which refer to "expect", "expects", "expected", "believes", "should", "anticipated" and "will".

The foregoing statements contains forward-looking statements which are based on sales forecasts prepared for 2018; sales forecasts include work which is under contract or Verbally Awarded for 2018, as well as probability adjusted forecasts for projects on which the Company has placed or will place bids in the coming year, where the probabilities applied to the sales forecast are based on management's assessment of the particular project based on historical experience and the stage the project is in the sales cycle. There are a number of risks that could affect these assumptions which include: contracted work is delayed; the failure of 2018 sales to materialize, because of project delays or cancelations or because CEMATRIX's cellular concrete is not specified into projects, management's assumptions in applying probabilities to the various projects in the sales forecast are incorrect, and product acceptance in new markets takes longer than anticipated resulting in reduced sales.

<u>CEMATRIX CORPORATION</u> <u>www.cematrix.com</u>

Form 51-102F1 - Management's Discussion & Analysis For the Year Ending December 31, 2018

Appendix B – Definitions

Sales Pipeline:

The Company's sales pipeline is defined as the total forecasted dollar amount of those future projects that CEMATRIX has been contacted by engineering firms, or owners, or contractors for design assistance (which could include thermal modelling), a quote, or both. The sales pipeline does not include the dollar value of contracted sales; or the dollar value of sales, where volumes have not been determined by the designers; or the dollar value of sales that have been lost for various reasons, including that the proposed project has been cancelled, lost to an alternative product or lost to a competitor. The sales pipeline is updated when changes in the status of a project becomes known to CEMATRIX. The sales pipeline includes projects from the current and future years and grows with the continued acceptance of the product throughout the Company's market territory, which currently includes significant parts of Canada and parts of the U.S.

Cost of Sales:

Direct costs related to the production of cellular concrete, including materials and labour; direct and indirect variable costs related to the production of cellular concrete; and fixed costs related to the production of cellular concrete, including depreciation related to the equipment used in the production of cellular concrete.

Gross Margin:

The profit after cost of sales is deducted from revenue.

Gross Margin Percentage:

The percentage of the gross margin as a percentage of revenue.

Operating Expenses:

Represents costs not directly related to the production of cellular concrete, including general and administrative, sales and marketing and technology development.

Operating Income / (Loss):

Income / (loss) before non-cash stock based compensation, finance costs and other miscellaneous items and taxes.

Net Working Capital:

The sum of trade and other receivables, inventory and prepaid expenses and deposits minus trade and other payables.

Ready Mix

This refers to pre-designed cement slurry which is delivered by a ready mix supplier.

EBITDA

Earnings before interest, taxes, depreciation, amortization, non cash stock based compensation, non cash unrealized foreign exchange gains / (loss), non cash revaluation of derivatives, non cash revaluation of earn-out liabilities and business acquisition costs.

Funds Flow from Operations

Cash generated from (used in) operating activities before net change in non-cash working capital items.