

**CEMATRIX CORPORATION**  
**Management's Discussion and Analysis**  
*For the Year Ended December 31, 2017*

Date Completed: March 7, 2018

**CEMATRIX CORPORATION**  
**www.cematrix.com**

**Form 51-102F1 - Management's Discussion & Analysis**  
**For the Year Ended December 31, 2017**

*The following is the management's discussion and analysis ("MD&A") of CEMATRIX Corporation ("CEMATRIX" or the "Company") for the year ended December 31, 2017. This MD&A should be read in conjunction with the audited consolidated financial statements of the Company for the year ended December 31, 2017 and the related notes thereto ("Consolidated Financial Statements") and the audited consolidated financial statements and MD&A of the Company for the year ended December 31, 2016 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 [www.sedar.com](http://www.sedar.com). 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, 2017. The Board of Directors of the Company reviewed and approved these Consolidated Financial Statements and MD&A on March 7, 2018.

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## **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, 2017, the Company's financial condition as at December 31, 2017 and its future prospects.

## **B. Overview**

### ***Corporate Overview***

Through its wholly-owned subsidiary, CEMATRIX (Canada) Inc. and its subsidiary CEMATRIX (USA) Inc., 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 on a selective basis the Northwest Territories and the United States of America ("U.S."), and the oil and gas construction projects in Western Canada.

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 oil and gas sector primarily relates to work on refinery, oil sand facilities and tank base construction projects that are funded by various corporations in this sector. Some examples of the type of work are as follows: the insulation of shallow utilities, facility floors, pile caps, modules and tank bases. There is also a growing market for repairs and replacements at existing oil sands and refineries.

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 in both market sectors 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 three dry mix units that can produce up to 125 cubic metres per hour of cellular concrete and four 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 past few 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 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.

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

### ***Annual Review***

#### **Financial Results**

Revenue decreased by 19.6% or \$1,884,955 in 2017. The growth in infrastructure sales has still not been sufficient to offset the 98% decline in sales related to oil and gas construction sales. This decline in the oil and gas construction market was anticipated, but, not to the extent that occurred. The good news is that infrastructure sales have grown by 54.2%, as compared to the same period in 2016, and these infrastructure sales are expected to replace all of the lost oil and gas construction sales in 2018, thus returning the Company to profitability, with continued upside potential.

The significant drop in sales did not allow for the full recovery of the Company's fixed operating costs. As a result the Gross Margin on sales was lower by \$468,573, or 35.6%. The Gross Margin Percentage achieved of 11% compared to 13.7% in 2016.

The total comprehensive loss was \$1,180,543 as compared to a loss of \$1,097,592, an increase of \$82,951. This was principally due to lower sales and the resulting lower Gross Margin and higher finance costs as partially offset by lower operating expenses, lower non-cash stock-based compensation and higher other income.

#### **Proposed Acquisition**

On February 26, 2018, CEMATRIX announced that it had entered into a letter of intent with MixOnSite USA, Inc. ("MOS") dated February 23, 2018 (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 MOS

(the “MOS Shares”), such that MOS 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 MOS. Upon completion of the Acquisition, MOS, or such other appropriate US entity the Purchaser uses to acquire the Shares and continue the operations of MOS (the “Operational Subsidiary”), will continue to carry on the business of MOS.

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. For the year ended December 31, 2018, MOS already has over \$12,000,000 (USD) either contracted or Verbally Awarded, so 2018 is shaping up to be MOS’ best year to date. It is anticipated that after closing of the Acquisition, combined sales of the expanded CEMATRIX group could exceed \$30,000,000 (CDN) for 2018, with an estimated EBITDA exceeding \$3,000,000 (CDN).

Besides the increased sales, profits and cash flows MOS brings to CEMATRIX, MOS owns certain technologies 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 and four wet mix units, which will increase CEMATRIX group’s seasonally adjusted production capacity to in excess of 1,000,000 cubic meters.

Of note, upon the closing of the Acquisition, the owner of MOS, Ed Weiner (the “Vender”), will become a shareholder of CEMATRIX and he has agreed to become a Director of CEMATRIX, as well. Mr. Weiner is also expected to provide consulting services to the Company’s U.S. operations during a three-year transition period. Furthermore, the owner’s son who has lead MOS for the past number of years will continue as President of MOS and provide his expertise for at least three years after closing, although he has already indicated his desire to remain a part of the CEMATRIX team in the future.

#### General Information on MOS

MOS is an S Corporation 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 foam concrete and offering complete installation services including technical mix design support and development for a wide variety of construction applications in the U.S. All of the MOS Shares are owned by the Vender.

#### The Acquisition

Pursuant to the Letter of Intent, consideration for the MOS Shares shall be paid to the Vendor by CEMATRIX as follows:

- cash in the amount of \$2,500,000 (USD);
- secured convertible note (the “Convertible Note”) issued by the Purchaser in the amount of \$2,000,000 USD;
- \$500,000 USD in CEMATRIX shares, which is equivalent to 3,343,421 common shares of CEMATRIX; and
- earn-out payment (the “Earn-out”) calculated on the operations of the Operational Subsidiary for three years following closing of the Acquisition.

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 common shares of CEMATRIX (the “CEMATRIX Shares”) at \$0.2375 per CEMATRIX shares. CEMATRIX may repay the Convertible Note upon 30 days’ written notice after a period of 12 months, subject to an early payment penalty.

The Earn-out will pay the Vendor 70% of the Operational Subsidiary's EBITDA above \$500,000 (USD) for the first year after closing of the Acquisition and 65% of the Operational Subsidiary's EBITDA above \$500,000 (USD) for the second and third years after closing of the Acquisition.

In addition to the consideration payable, pursuant to the Letter of Intent, the Vendor has agreed to be appointed a director of the Corporation and to remain a consultant of the Operational Subsidiary for a period of three years. Furthermore, the Vendor has agreed to provide interim financing of the Operational Subsidiary in an amount of \$750,000 (USD) at a rate of 2% above the prime rate listed at MOS' main bank for a period of one year from the closing of the Acquisition for the purposes of maintaining working capital in the Operational Subsidiary during the transition of control.

#### Proposed Financing

The Letter of Intent contains a condition that CEMATRIX obtain sufficient financing to complete the Acquisition and maintain sufficient working capital after closing of the Acquisition in its sole discretion. Such financing is anticipated to come from a combination of debt obtained through one of the Corporation's Canadian lenders and secured by the assets of the Operational Subsidiary in an amount up to \$2,500,000 (USD), pending appraisal of MOS' fixed assets, and an additional amount through a combination of an expanded operating facility and private placement financing (the "Private Placement"), which are expected to be announced and completed prior to the closing of the Acquisition. The net proceeds from the Private Placement may be used to fund a portion of the Acquisition and for general working and growth capital for CEMATRIX.

#### Additional Information

The Acquisition will be carried out by parties dealing at arm's length to one another and therefore will not be considered to be a "Non-Arm's Length Transaction", as such term is defined under the policies of the Exchange, however, the Acquisition will constitute a "Fundamental Acquisition" under the policies of the Exchange. No finder's fees are payable by CEMATRIX as a part of the Acquisition.

The transaction terms outlined in the Letter of Intent are binding on the parties however, the Letter of Intent is expected to be superseded by a definitive agreement (the "Definitive Agreement") to be signed between the parties (which agreement shall include representations, warranties, conditions and covenants typical for a transaction of this nature). The Acquisition is subject to the receipt of all necessary regulatory, corporate and third party approvals, including the approval of the Exchange, and the satisfaction of customary closing conditions: including the approval of the Definitive Agreement and the Acquisition by the board directors of CEMATRIX; completion of due diligence investigations to the satisfaction of CEMATRIX; the arranging of appropriate financing by CEMATRIX for the Acquisition; MOS retaining working capital of \$750,000 (USD) at closing; compliance with all applicable regulatory requirements and conditions in connection with the Acquisition; the absence of any material adverse condition with respect to the financial and operational condition or the assets of MOS; and the delivery of customary closing documentation.

***Sections of the MD&A subsequent to the Proposed Acquisition have been prepared before giving any consideration to the Proposed Acquisition unless specifically identified in the narrative.***

#### **Report on Major Initiatives**

##### Development and Implementation of a Strategic Growth Strategy

In 2017 the Company worked with the Business Development Bank of Canada's consulting group ("BDC Consulting") using their Growth Driver Program to develop a revitalized strategic growth strategy for the Company (the "Growth Strategy"). Three key items identified in this phase of the strategy work were: first BDC Consulting verified through third party information that there is a significant growing market for cellular concrete in Canada and the U.S.; second that CEMATRIX's major challenge is having more sales people in place to take advantage of this growing market opportunity; and third that CEMATRIX should work closely with Lafarge's to help implement the Growth Strategy, including amongst other things increased sales and marketing support for the development of cellular concrete markets across Canada.

The first phase resulted in a Growth Strategy to achieve \$20 million in sales by 2020 and will involve:

- Scaling sales of cellular concrete by establishing a strategic focus on selected infrastructure markets, locations where CEMATRIX cellular concrete hold an advantage over other competing products (i.e. regions with weak and unstable soil), the use of the right CEMATRIX products and applications and targeting sales regions/segments that are attractive to Lafarge and/or look at other options like acquisitions;
- Building an internal predictive sales infrastructure that would include additional sales staff;
- Eliminating non-core sales activities;
- Investing in sales support systems (now in place);
- Aligning the sales incentive program with the sales strategy; and
- Integrating the strategy into succession and physical locations.

The Company will be working with BDC Consulting in the first part of 2018 to develop comprehensive plans for implementing the Growth Strategy and to establish metrics to measure the success of the program. BDC consulting will provide regular advisory support throughout the two-year implementation period as well as provide a series of leadership and growth management courses.

#### Introduction of New 400 kg/m<sup>3</sup> Density Cellular Concrete

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/m<sup>3</sup>. See "Comparison to Industry Standards" on the Company's website. The new 400 kg/m<sup>3</sup> 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/m<sup>3</sup> 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.

#### 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, 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.

#### Research Projects

##### *MSE Wall Construction Projects*

The testing related to the expanded use of CEMATRIX cellular concrete as light weight fill material for mechanically stabilized earth ("MSE") wall construction projects is completed. The focus was on CEMATRIX's new 400 kg/m<sup>3</sup> density material. Traditionally, the wet (cast) density supplied for our projects was specified as 475 kg/m<sup>3</sup>. Development of this even lighter cellular concrete provides a significant competitive edge to CEMATRIX by reducing the overall sales cost of the installed product.

Also, lighter mixes using less cement per cubic meter will result in further reductions to the carbon footprint of the system.

The results of the project are very positive. In particular, the testing indicated high pullout strengths of the MSE wall panel reinforcement embedded in CEMATRIX cellular concrete. The high pullout strength results in less overall reinforcement required for the MSE wall system when compared to the use of granular backfill. The Company will now use this information to facilitate the specification of CEMATRIX cellular concrete for use on MSE wall and other types of applications.

The final cost of this program was approximately \$205,000, of which the National Research Council funded approximately \$72,000 through their Industrial Research Assistance Program.

### *Road Construction*

The research with the University of Waterloo's civil engineering department was delayed into 2018 due to difficulty in finding a suitable test location. This project will involve the University of Waterloo, CEMATRIX and the Federal Government at a test location near Waterloo, Ontario. The request for a federal grant by the University of Waterloo to cover some of their costs has been approved. The project will involve pouring CEMATRIX cellular concrete for road bases with pavement structures at different densities to be monitored over three years. The purpose is to develop road bases that will last longer, as well as monitoring the effect on utilities buried beneath the road systems. Positive results from this study will lead to CEMATRIX cellular concrete to be specified into road construction projects in Ontario and other provinces. CEMATRIX's cost of the three-year program will be approximately \$270,000 spread over three years.

### *Highlights*

- Entered into an agreement for the purchase of MOS – see previous discussion – Proposed Acquisition
- Management, with the assistance of BDC Consulting, completed a strategic review of CEMATRIX. This work confirmed that there is a large growing cellular concrete market in Canada and the U.S. and that CEMATRIX is the leader in the Canadian market; this work also highlighted the need for more salesman on the ground to realize on this growing opportunity and this will be part of the CEMATRIX plan for 2018 and beyond.
- Lafarge re-affirmed a strengthened commitment to CEMATRIX, including an increased sales and marketing support for the development of cellular concrete markets across Canada. Although the joint efforts of CEMATRIX and Lafarge did not generate a significant number of new sales in 2017, both parties believe that 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. Recent changes to the regional development approach should generate stronger results and become a model for expansion into other regions across Canada;
- The Sales Pipeline for North America remains above \$100 million and continues to grow;
- Contracted sales for currently scheduled work for 2018 now stand at \$6.2 million and there is another \$5.3 million of Verbally Awarded 2018 projects;
- Infrastructure sales were up 54.2% but this was not yet sufficient to offset the 98% decline in higher margin oil and gas sales;
- One of the research projects is completed and the test results on the use of CEMATRIX cellular concrete on MSE wall projects are positive. This will help to get CEMATRIX cellular concrete, in particular its new 400 kg/m<sup>3</sup> density material specified into MSE wall projects in 2018;
- A new web site was released, highlighting why CEMATRIX is the premier cellular concrete supplier in North America;

### **C. Business Strategy for Growth and Shareholder Value Creation**

The work with the BDC Consulting Group will help management to focus on its growth strategy and the development of a comprehensive implementation action plan. However, CEMATRIX's strategic goal remains to be the leading supplier of competitively priced, high volume, high quality cellular concrete in North America. In order to accomplish this, CEMATRIX's strategy is to continue to build a strong foundation for its business from its base province, Alberta, and then continue by opening new infrastructure construction markets throughout the balance of Canada and the U.S..

This 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
- Development of strategic alliances to support research and development, to supply raw materials and to develop new products and markets.

CEMATRIX is currently working on expanding its infrastructure markets geographically in Western Canada, Ontario and in Quebec, while selectively bidding on projects in the U.S. and northern Canada in order to utilize unused production capacity. The infrastructure market segment provides the opportunity for continued growth in sales, while working to reduce the effect of seasonality.

There continue to be opportunities in the construction market in the oil and gas sector of Western Canada. Although the volatility in commodity prices has affected this sector recently it is expected that many of the announced project delays, in particular on oil sands projects, will be revived in the coming years. However, the timing of work in this sector is difficult to forecast.

### **D. Key Market Drivers**

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

#### ***Joint Marketing and 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.

### ***Effect of Low Oil Prices and the Availability of Capital by Companies to Invest in Projects***

The development of the oil sands and refineries in Alberta are dependent on the availability of capital to companies making these investments as well as their outlook for oil prices as well as gas prices. The price for oil have been negatively affected by the impact of excess supply in global markets. Oil prices for Western Canada also continued to be negatively affected due to reduced take away capacity on connecting pipelines. The individual company's views on these factors affects the timing of projects which could be specified to use various quantities of the Company's products.

Whether CEMATRIX will participate in other oil sand and refinery projects will be dependent on the recovery of the commodity prices and the Company's ability to convince the project design engineers of CEMATRIX's Value Proposition, which is largely dependent on the Company's experiences to date.

### ***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.

### ***Product Acceptance***

CEMATRIX's mission statement is to gain broad market acceptance of its product for various applications throughout North America, with its main focus on infrastructure and Canadian oil and gas construction applications. 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.

In the U.S. cellular concrete is already an approved product for various infrastructure applications in most regions of the U.S.

Continued product acceptance by the engineering community and provincial transportation departments is important to support 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 re-engineered 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. This is less of an issue in the U.S. where there are a number of established cellular concrete producers.

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.

### ***Research and Development***

Increasingly customers, particularly in the infrastructure market, are requesting third party verification of the various properties of CEMATRIX's cellular concrete products and applications that have never been required in the past. As a result, the Company is regularly required to hire third parties to provide these requested engineering test results (See Report on Major Initiatives – Research Projects).

The availability of third party test results on CEMATRIX's cellular concrete products and applications is important for future sales growth, particularly in the infrastructure sector. Without these there could be certain projects that the Company would not be considered for and this could affect the ability of the Company to grow sales in this market.

### **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 continues to hinder it from establishing adequate operational support for any significant increase in sales. To date, cash from operations and working capital financing hasn't provided the necessary funds to support the hiring and training of additional operations and technical staff, even though the Company has been able to expand its production capacity from an equipment perspective and increase its technical sales capability.

Accordingly, the Company continues to be more reactionary in its preparation for growth, as opposed to being in the position it would like to be, which would be more proactive. The inability to prepare for the forecasted growth increases the risk that the Company will not be able to achieve its growth expectations and/or that the cost to achieve that growth may be higher than currently expected.

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 continues to explore its options.

### ***Staffing Requirements***

Staff required to operate the Company's equipment require extensive training and work experience time. The Company has retained its key equipment operators and other staff but faces a challenge in recruiting and training additional skilled labour if sales demand increases more quickly than anticipated. In Ontario and the U.S., the Company has established relations with the appropriate unions that have helped in providing labour and operators in these markets. The Company is currently in a better, but not optimum position, to hire, train and retain sufficient operations staff to meet the sales growth expected over the next few years. Accordingly, it plans to hire and train staff closer to when projects are scheduled to commence. The challenge is that CEMATRIX must hire and train new staff based on the best available information available at the time the hiring is made so when projects get delayed the additional cost of carrying the new staff affects the Company's Gross Margin.

### ***Capital Resource Requirements***

Capital resource requirements must be matched to the demand for the Company's products. If demand increases more quickly than anticipated, the Company may be challenged to react quickly enough to realize the sales opportunities. The Company continues to evaluate various equipment options to enable the Company to be in a better position to react to these changing market conditions. Even so, there is no guarantee that financing would be available to fund new capital asset requirements, nor is there certainty that the Company could react in a timely fashion to new capital asset requirements, even if the financing is available. The Company currently has sufficient equipment in place to enable significant growth in sales without adding additional production capacity.

### ***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.

### ***Cement Supply***

The Company has experienced shortages in its key raw material, cement, in the past, meaning several years ago. As there are alternatives to the Company's products, such as granular fills, rigid and other types of insulating materials that the Company's cellular concrete is replacing, shortages of cement may have an adverse effect on the Company's market development and forecasted sales. The Company continues to minimize the effect of this risk by working closely with the cement suppliers to secure cement as soon as the contract is executed and to alert them of future cement requirements as soon as they are known. Of note, the Company's major cement supplier has more than doubling the capacity at its plant in Western Canada, so cement supply should not be an issue in Western Canada in the near future and this will affect the Ready Mix supply described below, as well.

The Company has experienced supply issues in past years, meaning several years ago, with the supply of Ready Mix in Alberta for wet mix type projects, because of the high demand for this product arising from the economic growth experienced in these years. Constraints on the supply of Ready Mix can affect the ability of the Company to grow future sales. In those years where there are Ready Mix supply constraints, the Company attempts to maximize the utilization of dry mix process equipment that uses Cement powder, in lieu of Ready Mix slurry, to meet market demands. The Company continues to pursue production equipment design and construction to reduce the Company's reliance on Ready Mix products.

The supply of cement will be less of an issue with the new agreements with Lafarge.

### ***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 Alberta and the balance of 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 exists. Competition could result in lost sales or reduced Gross Margin. The Company is positioning itself for competition with other suppliers, by

- Developing strong customer relationships;
- Ensuring that its costs are competitive in relation to costs being incurred by other companies in the industry;
- 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, 2017 and December 31, 2016

	Three Months Ended December 31		
	2017	2016	Change
Revenue	\$ 548,784	\$ 1,167,827	\$ (619,043)
Gross margin	\$ (327,350)	\$ (55,409)	\$ (271,941)
Operating expenses	(614,667)	(511,633)	(103,034)
Operating loss	(942,017)	(567,042)	(374,975)
Non-cash stock based compensation	(5,534)	(32,667)	27,133
Finance costs	(51,727)	(41,036)	(10,691)
Other income (expenses)	2,524	(70,100)	72,624
Loss before income taxes	(996,754)	(710,845)	(285,909)
Recovery of deferred taxes	221,350	159,274	62,076
Net loss			
attributable to the common shareholders	(775,404)	(551,571)	(223,833)
Unrealized foreign exchange gain on translation of foreign subsidiary	7,465	17,166	(9,701)
Total comprehensive loss	\$ (767,939)	\$ (534,405)	\$ (233,534)
Diluted loss per common share	\$ (0.022)	\$ (0.016)	\$ (0.007)

	Three Months Ended December 31		
	2017	2016	Change
Revenue			
Infrastructure			
Western Canada	\$ 443,499	\$ 127,349	\$ 316,150
Eastern Canada	85,495	447,767	(362,272)
United States	-	94,304	(94,304)
	528,994	669,420	(140,426)
Oil and Gas	19,790	498,407	(478,617)
	\$ 548,784	\$ 1,167,827	\$ (619,043)

Revenue decreased by 53% or \$619,043. Volumes were down by 50.9% combined with a slight decrease in the average selling price of 4.4%. Infrastructure sales were down \$140,426, or 21%. Volumes were down slightly by 1.7%, however, the average selling price was down 19.6%. The decline in average selling price was due to a change in the mix of projects between the two periods to a higher level of dry mix production. Dry mix production has a lower selling price due to the lower cost of cement powder used in this type of production as compared to the cost of cement slurry that is used for wet mix production. There were no projects in the U.S. in 2017. Oil and gas sales were down \$478,617, or 96%, mainly due to a decrease in volumes of 97.2%. In 2017 there was only one small project in this sector whereas in the same period of 2016 the Company was finishing a large project in this sector. The oil and gas industry is still recovering from depressed oil and gas prices.

The Gross Margin on sales was a negative \$327,350, a decrease of \$271,941. The Gross Margin percentage was a negative 59.7% compared to a negative 4.7% in 2016. The decrease in the Gross Margin dollars and the Gross Margin Percentage for the fourth quarter of 2017 was mainly due to the significant drop in sales which did not allow for the full recovery of the Company's fixed operating costs.

Operating expenses were higher by \$103,034 or 20.1% due to the aggregate of the following:

- Salaries and benefits were up \$57,000 – a temporary 10%-20% salary reduction for salaried employees and management for the first half of 2017 was repaid over the second half of the year;
- The Company expensed \$55,000 of costs incurred to develop financing alternatives which had previously been deferred in expectation that the financings would proceed in 2017.
- Other costs were down by \$8,966.

Non-cash stock based compensation was down by \$27,133 as a result of the timing of vesting of issued stock options. 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 up \$10,691, or 26.1%. The increase was principally due to higher interest on the BDC Financings, as interest on new loans taken out late in 2016 and early 2017 more than offset the loan balances that were reduced through scheduled repayments.

Other income was higher by \$72,624 due to new 2017 revenues from the Lafarge equipment rental agreement which went into place in May 2017 as part of the CEMATRIX/Lafarge regional expansion plans for Canada; a lower loss in 2017 on the sale/retirement of property and equipment and lower 2017 foreign exchange losses.

The recovery in deferred income taxes was higher by \$62,076. The change is due to weaker results of the Canadian operations in comparison to the same period in 2016.

Unrealized foreign exchange loss on translation of foreign subsidiary was higher by \$9,701. The variability period over period is due to changes in the foreign exchange rate of the U.S. dollar vs. the Canadian dollar, which has strengthened in 2017, and changes in the levels of the assets, liabilities, revenues and expenses of the U.S. subsidiary between the two periods.

The total comprehensive loss was higher by \$233,534. This was principally due to lower sales and the resulting lower Gross Margin, higher operating expenses and finance costs as partially offset by lower non-cash stock based compensation.

**Comparison of the year ended December 31, 2017 and December 31, 2016**

	<b>Year Ended December 31</b>		
	<b>2017</b>	<b>2016</b>	<b>Change</b>
Revenue	<b>\$ 7,713,906</b>	\$ 9,598,861	\$ (1,884,955)
Gross margin	<b>\$ 847,803</b>	\$ 1,316,376	\$ (468,573)
Operating expenses	<b>(2,231,376)</b>	(2,283,876)	52,500
Operating loss	<b>(1,383,573)</b>	(967,500)	(416,073)
Non-cash stock based compensation	<b>6,737</b>	(142,256)	148,993
Finance costs	<b>(207,490)</b>	(199,936)	(7,554)
Other income (expenses)	<b>45,572</b>	(18,617)	64,189
Loss before income taxes	<b>(1,538,754)</b>	(1,328,309)	(210,445)
Recovery of deferred taxes	<b>353,553</b>	246,860	106,693
Net loss			
attributable to the common shareholders	<b>(1,185,201)</b>	(1,081,449)	(103,752)
Unrealized foreign exchange gain (loss) on translation of foreign subsidiary	<b>4,658</b>	(16,143)	20,801
Total comprehensive loss	<b>\$ (1,180,543)</b>	\$ (1,097,592)	\$ (82,951)
Diluted loss per common share	<b>\$ (0.034)</b>	\$ (0.031)	\$ (0.003)

	<b>Year Ended December 31</b>		
	<b>2017</b>	<b>2016</b>	<b>Change</b>
Revenue			
Infrastructure			
Western Canada	<b>\$ 4,085,626</b>	\$ 1,239,752	\$ 2,845,874
Eastern Canada	<b>3,533,016</b>	3,605,763	(72,747)
United States	<b>-</b>	94,304	(94,304)
	<b>7,618,642</b>	4,939,819	2,678,823
Oil and Gas	<b>95,264</b>	4,659,042	(4,563,778)
	<b>\$ 7,713,906</b>	\$ 9,598,861	\$ (1,884,955)

Revenue decreased by 19.6% or \$1,884,955. Volumes were down only slightly, by 2.9%, however, the average selling price declined by 17.3%. Infrastructure sales were up \$2,678,823, or 54.2%. Volumes were up by 88.1%, however, the average selling price was down 18%. The decline in average selling price was due to a change in the mix of projects between the two periods to a higher level of dry mix production. Dry mix production has a lower selling price due to the lower cost of cement powder used in this type of production as compared to the cost of cement slurry that is used for wet mix production. There were no projects in the U.S. in 2017. Oil and gas sales were down \$4,563,778, or 98%, which was due to a decrease in volumes. In 2017 there were only a couple of small projects whereas in the same period of 2016 the Company was finishing two large projects. The oil and gas industry is still recovering from depressed oil and gas prices.

The Gross Margin on sales was lower by \$468,573, or 35.6%. The Gross Margin Percentage achieved of 11% compared to 13.7% in 2016. The decrease in the Gross Margin dollars and the Gross Margin Percentage in 2017 was mainly due to the significant drop in sales which also did not allow for the full recovery of the Company's fixed operating costs.

Operating expenses were lower by \$52,500 or 2.3% due to the aggregate of the following:

- Sales commissions to sales staff were down \$8,900 due to the decrease in sales discussed previously;

- Insurance costs were down \$10,200 due to lower premiums on the policy renewal because of decreased sales levels combined with positive experience ratings;
- Costs incurred in 2016 to put in place the new demand operating loan with the CWB bank and the new BDC working capital loan were \$33,300; there was no comparable costs in 2017;
- Business development and investor relations costs were down \$36,000 as the Company reduced activity in these areas in 2017;
- Recruitment costs were down \$16,250 – costs were incurred in 2016 to hire additional operating staff with no comparable amount in 2017;
- Salaries, within Operating Expenses, capitalized on research projects were up \$10,000 in 2017;
- In 2017 the Company expensed \$55,000 of costs incurred to develop financing alternatives which had previously been deferred in expectation that the financings would proceed in 2017.
- In 2017 the Company incurred \$25,000 in fees for the BDC Growth Driver Program; there were no comparable costs in 2016;
- Computing costs were up \$17,000 related to the implementation of a new sales and project management system which was installed in 2017; and
- Other costs were down by \$34,850 due to ongoing cost constraints.

Non-cash stock based compensation was down by \$148,993. In 2017, 250,000 employee share options were forfeited by an employee who left the Company. None of the options had vested at the time the employee left the Company and as a result the non-cash stock based compensation previously recorded in the amount of \$58,245 was reversed to income. For the remaining options, 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 up \$7,554, or 3.8%. The increase was principally due to higher interest on the BDC Financings, as interest on new loans taken out late in 2016 and early 2017 more than offset the interest reduction on loan balances that were reduced through scheduled repayments. This was partially offset by lower interest on the mezzanine loan and factoring agreement as this high cost working capital financing was replaced with the new demand operating loan with the CWB in April 2016.

Other income was up \$64,189 due principally to new 2017 revenues from the Lafarge equipment rental agreement which went into place in May 2017 and a lower loss in 2017 on the sale/retirement of property and equipment.

The recovery in deferred income taxes was higher by \$106,693. The change is due to weaker results of the Canadian operations in 2017.

Unrealized foreign exchange on translation of foreign subsidiary was a positive \$20,801. The variability period over period is due to changes in the foreign exchange rate of the U.S. dollar vs. the Canadian dollar, which has strengthened in 2017, and changes in the levels of the assets, liabilities, revenues and expenses of the U.S. subsidiary between the two periods.

The total comprehensive loss was higher by \$82,951. This was principally due to lower sales and the resulting lower Gross Margin and higher finance costs as partially offset by lower Operating Expenses, lower non-cash stock based compensation and higher other income.

## 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, 2017. No cash dividends have been declared or paid since the inception of the Company.

Year Ended	Total Revenues	Total Comprehensive Income (Loss)	Income (Loss) Per Share		Total Assets	Total Non Current Liabilities
			Basic	Diluted		
	\$	\$	\$	\$	\$	\$
<b>December 31, 2017</b>	<b>7,713,906</b>	<b>(1,180,543)</b>	<b>(0.034)</b>	<b>(0.034)</b>	<b>6,530,062</b>	<b>2,042,553</b>
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
December 31, 2013	8,072,148	(208,591)	(0.007)	(0.007)	5,845,487	816,234

### Quarterly Results

Due to the seasonal nature of the Company's business, which typically follows the construction season in Canada, a significant portion of the Company's sales occur between the latter part of the second quarter and the first half of the fourth quarter, on an annual basis. In the first quarter of 2017 and 2016 the Company benefitted from winter projects carried over from 2017 and 2016. The Company continues pursuing other markets where seasonality is less of an issue. This seasonality is reflected in the quarterly results summarized on the next page:

Quarters Ended	Total Revenues	Total Comprehensive Income (Loss)	Income (Loss)	
			Per Share Basic (1)	Per Share Diluted (1)
	\$	\$	\$	\$
<b>2017 Year</b>				
<b>March 31</b>	<b>2,527,471</b>	<b>(51,859)</b>	<b>(0.002)</b>	<b>(0.002)</b>
<b>June 30</b>	<b>2,208,230</b>	<b>(255,435)</b>	<b>(0.007)</b>	<b>(0.007)</b>
<b>September 30</b>	<b>2,429,421</b>	<b>(105,310)</b>	<b>(0.003)</b>	<b>(0.003)</b>
<b>December 31</b>	<b>548,784</b>	<b>(767,939)</b>	<b>(0.022)</b>	<b>(0.022)</b>
<b>Total for year</b>	<b>7,713,906</b>	<b>(1,180,543)</b>	<b>(0.034)</b>	<b>(0.034)</b>
<b>2016 Year</b>				
March 31	3,170,689	(22,487)	-	-
June 30	2,755,072	(148,119)	(0.004)	(0.004)
September 30	2,505,273	(392,581)	(0.011)	(0.011)
December 31	1,167,827	(534,405)	(0.016)	(0.015)
<b>Total for year</b>	<b>9,598,861</b>	<b>(1,097,592)</b>	<b>(0.031)</b>	<b>(0.031)</b>

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

	<b>December 31 2017</b>	December 31 2016	<b>Change</b>
Total current assets	\$ 1,574,263	\$ 2,865,927	\$ (1,291,664)
Total non current assets	<u>4,955,799</u>	<u>4,709,905</u>	<u>245,894</u>
Total Assets	<u>\$ 6,530,062</u>	<u>\$ 7,575,832</u>	<u>\$ (1,045,770)</u>
Current liabilities	\$ 1,102,564	\$ 879,700	\$ 222,864
Non current liabilities	<u>2,042,553</u>	<u>2,123,907</u>	<u>(81,354)</u>
Total liabilities	<u>\$ 3,145,117</u>	<u>\$ 3,003,607</u>	<u>\$ 141,510</u>
Shareholders' equity	<u>\$ 3,384,945</u>	<u>\$ 4,572,225</u>	<u>\$ (1,187,280)</u>

Total current assets decreased by \$1,291,664. This decrease in aggregate is summarized below:

- Cash and cash equivalents were down \$41,401 (See the discussion in Section F - Consolidated Statement of Cash Flows);
- Trade and other receivables were down by \$1,220,414 as a result of the lower sales in the fourth quarter of 2017 in comparison to the fourth quarter of 2016, combined with timing differences in the collection of trade receivables;
- Inventory was down \$8,456 due to the normal usage in the production process as partially offset by foaming agent purchases to bring inventory back to a level to support sales;
- Prepaids and deposits were down \$31,535; mainly due to timing differences on certain items in 2017 as compared to the 2016 year end balances; and
- Current portion of share acquisition loans was up \$10,142 due the accretion of the fair value adjustment of \$5,160, the reclassification from the long term portion of \$19,045 as offset by repayments of \$14,063. One of the individuals, who is not a Company employee, with a shareholder loan, of which \$25,686 was outstanding at December 31, 2017, was out of the country and was unable to make a scheduled repayment of \$8,562. Commencing January 1, 2018 interest will be charged on this outstanding payment at the Bank of Canada prime plus two percent until the outstanding repayment is made. The \$8,562 amount is included in the current portion of the share acquisition loans.

Total non current assets increased by \$245,894. This increase in aggregate is summarized below:

- The long term portion of the share acquisition loans was down \$19,045 due to the reclassification to current portion;
- Property and equipment was down \$190,914 - additions to property and equipment of \$281,648, including \$61,100 through finance leases, mainly relates to setting up a wet mix production unit and support vehicles and equipment in the first expansion region under the Lafarge/CEMATRIX agreements; this was partially offset by depreciation expense of \$453,961 and the removal of the book value related to the 2017 sale of plant and equipment of \$18,601;
- Intangibles increased by \$102,300 – the Company incurred expenditures of \$153,896 (including \$42,700 of capitalized internal labour) and received government grants of \$51,59; these expenditures are related to testing costs incurred to validate certain properties of the Company's cellular concrete

products which will assist in the marketing of these products in the future, particularly in the infrastructure market; other intangibles remained at the same amount: no amortization is recorded on the remaining trademarks and technology as the Company views these as having an indefinite life; and

- The deferred tax asset increased by \$353,553 as a result of recording a deferred tax recovery on Canadian losses during the year ended December 31, 2017.

Total current liabilities increased by \$222,864. This increase in aggregate is summarized below:

- Bank overdraft increased by \$21,852;
- Demand operating loan increased by \$66,399;
- Trade and other payables were up \$84,387; trade payables normally would be lower due to reduced business activity in the fourth quarter of 2017 as compared to the same period in 2016, however, in 2017 the Company had arranged for a deferral of payment on certain cement charges;
- Current portion of long term debt was up \$64,680 due the reclassification from long term portion of the new to scheduled repayments on the BDC Financings of \$303,822 as partially offset by the reclassification from the long term portion \$368,502; and
- Current portion of finance lease obligations was down \$14,454 due to the reclassification from the long term portion of \$54,507 as partially offset by scheduled repayments of \$68,961.

Total non current liabilities decreased by \$81,354. This decrease in aggregate is summarized below:

- Long term debt was down \$87,947 due to a 2017 draws on new BDC Financings of \$280,555 in 2017 as offset by the reclassification to current of \$368,502 to current portion as at December 31, 2017 (see comments above); and
- Finance lease obligations were up \$6,593 due to \$61,100 of new leases as partially offset by a reclassification of \$54,507 to current portion as at December 31, 2017 (see comment above).

Shareholders' Equity decreased by \$1,187,280. This decrease in aggregate is summarized below:

- Contributed surplus decreased by \$6,737 due to the non-cash stock based compensation recovery in 2017;
- Accumulated other comprehensive loss decreased by \$4,658 due to an unrealized foreign exchange gain on translation of the Company's U.S. subsidiary; and
- The Deficit increased by \$1,185,201 due to the loss to common shareholders in the period.

See the Consolidated Statements of Shareholders' Equity included in the Interim Consolidated Financial Statements at December 31, 2017.

## **I. Consolidated Statements of Cash Flows**

### ***Comparison of the Three Months ended December 31, 2017 and December 31, 2016***

The cash deficiency position of the Company at December 31, 2017 was \$12,120 (consisting of cash and cash equivalents of \$42,933 and bank overdraft of \$55,053) compared to a cash position \$51,133 at December 31, 2016 (consisting of cash and cash equivalents in the bank of \$84,334 and bank overdraft of \$33,201).

The change in cash in the fourth quarter of 2017 was an increase of \$45,280, as compared to a decrease of \$440,544 in the same period of 2016. This change is outlined in the table on the next page:

	<b>Three Months Ended December 31</b>		
	<b>2017</b>	2016	Change
Cash generated from (used in) operating activities	\$ <b>168,146</b>	\$ (291,170)	\$ 459,316
Cash used in investing activities	<b>(31,680)</b>	(36,174)	4,494
Cash used in financing activities	<b>(98,651)</b>	(130,366)	31,715
Foreign exchange effect on cash	<b>7,465</b>	17,166	(9,701)
Increase (decrease) in cash	<b>45,280</b>	(440,544)	485,824
Cash (cash deficiency), at beginning of period	<b>(57,400)</b>	491,677	(549,077)
Cash (cash deficiency), at end of period	<b>\$ (12,120)</b>	\$ 51,133	\$ (63,253)
Cash (cash deficiency)			
Cash and cash equivalents	\$ <b>42,933</b>	\$ 84,334	\$ (41,401)
Bank overdraft	<b>(55,053)</b>	(33,201)	(21,852)
	<b>\$ (12,120)</b>	\$ 51,133	\$ (63,253)

- Cash generated from (used in) operating activities increased by \$459,316.
  - Cash flow, before non-cash working capital adjustments, decreased by \$368,414. The decrease was mainly due to the higher loss before taxes of \$285,909 in 2017 combined with a lower addback of non-cash items of \$82,605, mainly lower depreciation, and lower non-cash stock based compensation and lower loss on sale of property and equipment.
  - The net change in non-cash working capital items was a positive increase of \$827,730. This is primarily due to the timing of sales and the collection of the related trade receivables between the two periods.
- Cash used in investing activities decreased by \$4,494.
  - Plant and equipment additions were down \$2,581;
  - Intangible spending related to product testing was down \$22,015; in 2017 \$34,465 was spent (including \$18,728 of capitalized internal labour); in 2016 \$56,481 (including \$23,000 of capitalized internal labour) was spent; the difference is due to timing on the projects.
  - Proceeds on the sale of equipment were down \$11,540; and
  - Repayments on the share acquisition loans was down \$8,562; a scheduled repayment of \$8,562 was not made until after the year end.
- Cash used in financing activities changed by \$31,715.
  - In 2017 the Company used \$98,651 in financing activities; the Company drew down its bank loan by \$66,399; received \$14,310 in government grants on its project testing program (the government grants came into effect January 1, 2017); and scheduled repayments of \$153,591 and \$25,769, respectively, on BDC Financings and finance lease obligations were made; and
  - In 2016 the Company used \$130,366 in financing activities; a new \$500,000 working capital loan with the BDC and other realized working capital was used to pay down the bank loan by \$460,064; and scheduled repayments of \$143,331 and \$26,971, respectively, on BDC Financing and finance lease obligations were made;

***Comparison of the Year Ended December 31, 2017 and December 31, 2016***

The cash position of the Company at December 31, 2017 was \$51,133 (consisting of cash and cash equivalents of \$84,334 and bank overdraft of \$33,201) compared to \$51,133 at December 31, 2016 (consisting of cash and cash equivalents of \$84,334 and bank overdraft of \$33,201).

The change in cash in the year ended December 31, 2017 was a decrease of \$1,399,652 as compared to a decrease of \$1,399,652 in the same period of 2016. This change is outlined in the table below:

	<b>Year Ended December 31</b>		
	<b>2017</b>	2016	Change
Cash generated from operating activities	\$ 254,403	\$ 248,818	\$ 5,585
Cash used in investing activities	(348,081)	(358,654)	10,573
Cash generated from (used in) financing activities	25,767	(1,273,673)	1,299,440
Foreign exchange effect on cash	4,658	(16,143)	20,801
Decrease in cash	(63,253)	(1,399,652)	1,336,399
Cash, at beginning of year	51,133	1,450,785	(1,399,652)
Cash (cash deficiency), at end of year	\$ (12,120)	\$ 51,133	\$ (63,253)
Cash (cash deficiency)			
Cash and cash equivalents	\$ 42,933	\$ 84,334	\$ (41,401)
Bank overdraft	(55,053)	(33,201)	(21,852)
	\$ (12,120)	\$ 51,133	\$ (63,253)

- Cash generated from operating activities increased by \$5,585.
  - Cash flow, before non-cash working capital adjustments, decreased by \$398,108. The decrease was mainly due to the higher loss before taxes of \$285,909 in 2017 combined with a lower addback of non-cash items of \$112,199, mainly lower depreciation, and lower non-cash stock based compensation and lower loss on sale of property and equipment.
  - The net change in non-cash working capital items was a positive increase of \$403,693. This is primarily due to the timing of the collection of the related trade receivables between the two periods.
- Cash used in investing activities decreased by \$10,573.
  - Plant and equipment additions were down \$190,900; in 2016 a new wet mix unit was completed;
  - Proceeds on the sale of idle equipment were down \$30,591;
  - Intangible spending related to product testing was up \$82,000; in 2017 \$153,896 was spent (including \$42,700 of capitalized internal labour); in 2016 \$71,896 (including \$23,000 of capitalized internal labour) was spent;
  - The cash invested in the term deposit was lower by \$10,000; the term deposit is required as security for the Company's corporate credit cards, an additional \$10,000 was added in 2016 to secure additional credit cards issued to new staff; there was no similar requirement in 2017; and
  - Repayments on the share acquisition loans was down \$8,562; a scheduled repayment of \$8,562 was not made until after the year end.
- Cash generated (used in) financing activities changed by \$1,299,440.
  - In 2017 the Company generated \$25,747 from financing activities; the Company drew down its bank loan by \$66,399, to finance working capital requirements, and its BDC Financings by \$280,555,

to fund new equipment for the Cematrix/Lafarge regional development program; received \$51,596 in government grants on its project testing program (the government grants came into effect January 1, 2017); and scheduled repayments of \$303,822 and \$68,961, respectively, on BDC Financings and finance lease obligations were made; and

- In 2016 the Company used \$1,273,673 in financing activities; cash collected on trade receivables that had been factored at December 31, 2015 was used to repay the factoring liability of \$703,462; the \$750,000 mezzanine loan was repaid and scheduled repayments of \$286,662 and \$78,549, respectively, on BDC Financing and finance lease obligations were made; a new loan with the BDC provided \$500,000 for working capital financing and the issue of common shares for \$45,000 on the exercise of stock options by The Howard Group, the Company's investor relations firm.

## **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 \$2,000,000 demand operating loan with the Canadian Western Bank ("CWB"). The demand operating loan bears interest at an amount equal to the greater of 4.7% or 2% above the CWB prime lending rate, as may occur from time to time.

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, 2017, two of the demand operating loan covenants were not met - the cash flow coverage ratio and the tangible net worth covenant tests.

In March 2018, the CWB granted relief on the consolidated cash flow coverage and the level of net tangible assets in relation to the Company's demand operating loan for the year ended December 31, 2017. In addition, a new commitment letter was received which reduces the level of the demand operating loan to \$1,500,000 from \$2,000,000 and reduces the required tangible net worth covenant to \$3,000,000 from \$4,000,000. There were no other material changes to the previous commitment letter.

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. (See note 12 to the Consolidated Financial Statements)

At December 31, 2017, the Company had Net Working Capital of \$854,355, down from \$2,199,147 in 2016, reflecting the decline in activity in the fourth quarter of 2017 as compared to 2016.

For the year ended December 31, 2017, the Company reported a loss of \$1,545,491, before taxes and non-cash stock based compensation, and negative cash from operations of \$1,090,389, before the non-cash working capital adjustment, and negative EBITDA of \$884,040.

The Company introduced cash flow measures to reduce cash flow requirements in 2018. The executive management have taken a 20% reduction in base salary, and all other salaried staff a 10% reduction, until the Company returns to profitability; the Company has negotiated a 10% reduction in the rental cost of its Calgary facility and cost constraints have been placed on all discretionary spending.

As of this date the Company has signed contracts on hand for \$6.2 million and Verbally Awarded projects of \$5.3 million for work that is scheduled for 2018 and has a number of other contracts in process.

The realization of the net working capital as at December 31, 2017, the benefit from cost reduction initiatives to reduce cash flow requirements, the availability of the CWB demand operating loan and the working capital to be raised from a private placement and the successful completion of sales contracts that are in place provide the necessary liquidity to carry the Company's operations through 2018. 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 has come from the operating funds. There are no significant capital expenditures planned for 2018. For future years, the Company may need to add additional equipment to replace existing equipment or to build additional production units for geographical allocation.

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 or that the Company can generate sufficient operating cash flows to fund future equipment additions.

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 re-invest 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 24 - Capital management to the Consolidated Financial Statements, was \$5,839,246 at December 31, 2017 as compared to \$7,057,654 at December 31, 2016 (see Section E. Consolidated Statements of Financial Position for details).

#### *Commitments*

The table below is a summary of the Company's lease and debt obligations and commitments for the next five years from December 31, 2017.

Debt Category	2018	2019	2020	2021	2022
	\$	\$	\$	\$	\$
Finance lease obligations <sup>(1)</sup>	76,908	140,948	37,606	5,904	2,389
BDC financing <sup>(2)</sup>	349,142	390,462	295,543	94,800	83,280
Secured Debenture <sup>(3)</sup>	-	1,000,000	-	-	-
Operating leases <sup>(4)</sup>	302,508	277,168	-	-	-

(1) Includes principal and interest.

(2) Based on BDC Financing loans as of December 31, 2017.

(3) Principal repayment

(4) The Company's current lease for its Calgary facilities expires December 31, 2019.

## K. Off Balance Sheet Arrangements

There were no off balance sheet arrangements at December 31, 2017 or 2016.

## L. Transactions with Related Parties

During the year ending December 31, 2017, the Company incurred legal fees from a firm which employs one of the directors of the Company in the amount of \$20,515 (\$44,071 for the year ending December 31, 2016) of which \$2,651 is in trade and other payables as of December 31, 2017 (2016 - \$nil).

There were no other significant related party transactions.

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

	2017		2016
Short term employment benefits	\$ 433,532	\$	445,260
Non-cash stock based compensation	1,347		39,190
	<u>\$ 434,879</u>	<u>\$</u>	<u>484,450</u>

The amount of non-cash stock based compensation is an estimate of the future value of the options, which can only be realized by the holders of those options should the stock price of the Company increase above the option exercise price and should the option holders exercise them and sell them at a stock price, which is greater than the exercise price of the options. Otherwise there is no value to the holders of those options.

## M. Critical Accounting Judgments, Estimates and Assumptions

The preparation of the Consolidated Financial Statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the reported amounts of assets, liabilities and contingent liabilities at the date of the financial statements and reported amounts of revenues and expenses during the reporting period. Judgments, 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

Impairment exists when the carrying value of an asset or cash generating unit ("CGU") exceeds its recoverable amount, which is the higher of its fair value less costs of disposal ("FVLCD") and its value in use ("VIU"). The fair value less costs of disposal calculation is based on available data from binding sales transactions in an arm's length transaction of similar assets or observable market prices less incremental costs for disposing of the asset. The value in use calculation is based on a discounted cash flow model. For purposes of impairment testing of property and equipment and intangibles, the Company has only one CGU which is the production and placement of cellular concrete. The carrying values of non financial assets are disclosed in notes 8 and 9 to the Consolidated Financial Statements.

The recoverable amounts have been determined based on a value in use calculation using cash flow projections from financial forecasts approved by senior management covering a five year discounted future cash flow model plus a terminal value. There is a significant amount of uncertainty with respect to estimating the recoverable amount given the necessity of making key economic projections related to the following key assumptions: future cash flows, industry growth opportunities, including general economic risk assumptions, Gross Margin, terminal value and discount rate.

The key assumptions used in the calculation of recoverable amounts are Gross Margin and discount rates:

	2017	2016
Gross Margin	<b>25%</b>	25%
Pre-tax discount rate	<b>18%</b>	18%

Near term (1 year) sales growth assumptions are based on contracted projects (including backlogs), as well as probability adjusted forecasts (range of 10% to 100%) for projects on which the Company has placed or will place bids, where the probabilities applied are based on management's assessment of a particular project based on historical experience and the stage that the project is in the sales cycle. Management has also given consideration to its relationships with customers, the competitive landscape and changes in its business strategy. With regard to the Gross Margin, consideration is given to historical Gross Margins in the end markets where prospective work opportunities are most significant and changes in the Company's business. A 2% change in Gross Margin in isolation would not result in an impairment charge.

The terminal value was calculated using a discount rate of 18% and steady annual growth of 2.0% in the terminal year.

Pre-tax discount rates used reflect management's assessment of the risks of the cash operating unit and its past experience in raising capital. The Company's pre-tax discount rate has been applied based on the weighted cost of capital and reflects the current market assessments of the time value of money and the risks specific to the CGU. Furthermore, suitable sensitivity tests are also applied in conjunction with cash flow forecast for the CGU in question. A change in the absolute discount rate of 2% in isolation would not result in an impairment charge.

This exercise did not indicate any need for an impairment provision as at December 31, 2017.

*(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, volatility, forfeiture rate 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) Allowance for doubtful accounts*

The Company makes allowance for doubtful accounts based on an assessment of the recoverability of receivables. Allowances are applied to receivables where events or changes in circumstances indicate that the carrying amounts may not be recoverable. Management specifically analyses historical bad debts, customer concentrations, customer creditworthiness, current economic trends and changes in customer payment terms when making a judgment to evaluate the adequacy of the allowance for doubtful debts of receivables. Where the expectation is different from the original estimate, such difference will impact the carrying value of receivables.

*(d) 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.

**N. Changes in Accounting Policies including Initial Adoption.**

***New accounting policies***

During 2017 the Company adopted new IFRS standards and amendments in accordance with the transitional provisions of each standard as outlined below:

IAS 7 Statement of Cash Flows – In January 2016, the ISAB published amendments to IAS 7. The adjustments are intended to clarify IAS 7 to improve information provided to users of financial statements about an entity's financing activities. This pronouncement was effective for annual periods beginning on or after January 1, 2017.

The adoption of this standard did not have any significant impact on the Company's consolidated financial statements

***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, 2018 or later periods. The standards impacted that are applicable to the Company are as follows:

IFRS 9 Financial Instruments – On July 24, 2014, the IASB issued the final version of IFRS 9, "Financial Instruments" ("IFRS 9") to replace IAS 39, "Financial Instruments: Recognition and Measurement" ("IAS 39"). The Company has evaluated the impact of adopting IFRS 9 on the consolidated financial statements and will adopt the new standard using the modified retrospective method effective January 1, 2018. The new standard will result in a change of accounting policy for impairment of trade and other receivables using an expected credit loss model as compared to incurred loss model required by IAS 39. The Company will apply the simplified approach to providing for expected credit losses prescribed by IFRS 9, which requires the use of the lifetime expected loss provision for all trade receivables. In estimating the lifetime expected loss provision, the Company considered historical industry default rates as well as credit ratings of major customers. The effect of this change in accounting policy will not have a material impact on the Company's consolidated financial statements. Other financial instruments are not expected to have a material impact on the adoption of this standard.

IFRS 15 Revenue from Contracts With Customers – On May 28, 2014, the IASB issued IFRS 15, "Revenue From Contracts With Customers" ("IFRS 15") replacing International Accounting Standard 11, "Construction Contracts" ("IAS 11"), IAS 18, "Revenue" ("IAS 18"), and several revenue-related interpretations. IFRS 15 is effective for years beginning on or after January 1, 2018 and the Company will adopt the new standard using the modified retrospective method. The Company has evaluated the impact of adopting IFRS 15 on the consolidated financial statements and it will not have a material impact. The Company will be required to provide enhanced disclosures relating to the disaggregation of revenues from contracts with customers, the Company's performance obligations and any significant judgements.

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.

The Company has determined the impact on its consolidated financial statements from the adoption of this future accounting pronouncement will not be material.

## **O. Financial Instruments**

Non-derivative financial instruments are recognized when the Company becomes a party to the contractual provisions of the instrument. Financial assets are derecognized when the rights to receive cash flows from the assets have expired or have been transferred and the Company has transferred substantially all risks and rewards of ownership. Non-derivative financial instruments are recognized initially at fair value plus, for instruments not at fair value through profit or loss, any directly attributable transaction costs.

At initial recognition, all financial instruments are classified in one of the following categories depending on the purpose for which the instruments were acquired:

### ***Financial assets at fair value through profit and loss***

Financial assets at fair value through profit or loss are financial assets held for trading or is designated as such by management. Such assets are held for trading if it is acquired principally for the purpose of selling in the short-term. These assets are initially recognized, and subsequently carried, at fair value, with changes recognized in the consolidated statement of income (loss) and comprehensive income (loss). Transaction costs are expensed. Assets in this category include cash and cash equivalents and the term deposit.

### ***Loans and receivables***

Loans and receivables are subsequently measured at amortized cost using the effective interest method, less any impairment losses, with interest expense recognized on an effective yield basis. Assets in this category include trade and other receivables and share acquisition loans.

A provision for impairment of trade receivables is established when there is objective evidence that the Company will not be able to collect all amounts due according to the original terms of the trade receivables. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganization, and default or delinquency in payments are considered indicators that the trade receivable is impaired. The amount of the provision is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. The carrying amount of the asset is reduced through the use of an allowance account, and the amount of the loss is recognized in the consolidated statement of income (loss) and comprehensive income (loss). When a trade receivable is uncollectible, it is written off against the allowance account for trade receivables.

### ***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, demand operating loan, trade and other payables, factoring liability, mezzanine 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 deposit, trade and other receivables, bank overdraft, demand 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. The fair value of the share acquisition loans has been determined using the effective interest rate method. The fair value of the secured debenture approximates its carrying value as the interest rate is a market rate for similar instruments.

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.

Level 3 – Valuations in this level are those with inputs for the assets or liabilities that are not based on observable market data.

The Company's cash and cash equivalent and term deposit are measured based on Level 1. There were no transfers between Level 1, 2 and 3 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 \$1,213,227 outstanding at December 31, 2017, and the demand operating loan, which had a balance at December 31, 2017 of \$66,399, are subject to floating rates. Based on the floating rate debt outstanding at December 31, 2017 a 1% increase/decrease in interest rates would result in a decrease/increase in the comprehensive income (loss) of approximately \$9,300.

### ***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 equivalent, trade receivables and the share acquisition loans. The Company manages credit risk using credit approval and monitoring practices. At December 31, 2017, 9 customers accounted for approximately 92% of trade receivables (at December 31, 2016, 9 customers accounted for approximately 90% of trade receivables). (See Note 5 for aging of outstanding trade receivables at December 31, 2017 and 2016). For the years ended December 31, 2017 and 2016, 3 customers each accounted for over 10% of revenue. At December 31, 2017 the Company had \$84,338 of cash and cash equivalents, an \$80,000 term deposit and \$57,270 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.

The table below summarizes the maturity profile of the Corporation's financial liabilities at December 31, 2017 and 2016 based on contractual undiscounted payments.

	Less than 1 year	1 to 2 years	2 to 6 years	Total
As at December 31, 2017				
Bank overdraft	\$ 55,053	\$ -	\$ -	\$ 55,053
Demand 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	135,287	43,181	241,074
	<u>\$ 1,102,564</u>	<u>\$ 1,525,749</u>	<u>\$ 516,804</u>	<u>\$ 3,145,117</u>

	Less than 1 year	1 to 2 years	2 to 5 years	Total
As at December 31, 2016				
Bank overdraft	\$ 33,201	\$ -	\$ -	\$ 33,210
Trade and other payables	484,977	-	-	484,977
Long-term debt	284,462	1,284,142	667,890	2,236,494
Finance lease obligations	77,060	47,243	124,632	248,935
	<u>\$ 879,700</u>	<u>\$ 1,331,385</u>	<u>\$ 792,522</u>	<u>\$ 3,003,607</u>

#### ***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 trade receivables, and the collection thereof, denominated in 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:

	2017	2016
Cash and cash equivalents	\$ 32,136	\$ 60,666
Trade and other receivables	\$ 39,191	\$ 39,672
Prepaid expenses and deposits	\$ 10,127	\$ 9,837
Trade and other payables	\$ 8,148	\$ 14,317

The Company's primary foreign exchange sensitivity is in relation to movements of the USD against the Canadian dollar. Based on the USD balances at December 31, 2016, a 5% increase/decrease of the USD dollar against the Canadian dollar would result in an increase/decrease in total comprehensive income (loss) of approximately \$4,600.

## P. Disclosure of Outstanding Share Data

As at December 31, 2017 and March 7, 2018, the following is a description of the outstanding equity securities and convertible securities previously issued by the Company

	<b>Authorized</b>	<b>Outstanding as at December 31, 2017</b>	<b>Outstanding as at March 7, 2018</b>
Voting or equity securities issued and outstanding	Unlimited Common Shares	34,475,994 Common Shares	34,475,994 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 3,275,000 Common Shares at an exercise price at \$0.145 to \$0.43	Stock options to acquire 3,275,000 Common Shares at an exercise price at \$0.145 to \$0.43

In 2017, there were 100,000 stock options granted and 250,000 granted stock options were forfeited.

At December 31, 2017, 275,000 granted options had not vested and the Company had 172,599 shares reserved for the issuance of new stock options.

Pursuant to the closing of the Proposed Acquisition 3,343,421 common shares are to be issued to the Vender and a three-year Convertible Note is to be issued to the Vender, which will convert at the option of the holder, into 10,698,947 common shares, if converted. In addition, as part of the Proposed Acquisition, the Vender has agreed to serve as a director of the Company and to provide consulting services for the Company's U.S. operations. In these capacities he will receive 150,000 stock options, as a director, and 350,000 stock options, as part of the consulting service agreement. These options will vest over three years as to one third at the end each year.

## Q. Outlook

Management is focusing on delivering a return to profitability in 2018 and implementing its Growth Strategy.

As of this date, the Company has \$11.5 million of contracted and Verbally Awarded sales contracts in place scheduled for 2018. When combined with MOS there would currently be in excess of \$26 million of contracted and Verbally Awarded sales contracts in place scheduled for 2018.

The Company's Sales Pipeline for 2018, including MOS, is well over \$100 million and indicates that there will be significant growth in infrastructure sales in both the Canadian and U.S. market. The positive results from one of CEMATRIX's research projects has increased the probability of being specified into MSE wall construction projects. The addition of new sales staff, as recommended by the BDC Consulting Group during its 2017 strategic review of CEMATRIX, is also expected to result in increased sales as well. In addition, the strengthened CEMATRIX/Lafarge relationship, which includes financial and sales support, will give CEMATRIX a broader participation with Lafarge on larger projects and will assist in further regional expansion across Canada.

The proposed MOS acquisition will position CEMATRIX for further growth in the US and will provide both trained operation staff and additional equipment to meet this growth.

Management expects sales in the oil and gas sector of Western Canada will begin to improve in 2018 with a number of projects announced where cellular concrete may be used. The year over year work in this sector is associated with refinery and pipeline annual maintenance spending. Future growth in this market will be dependent on the re-bounding of consistent oil and gas prices to a level that supports the investment in new or expansion facilities by this industry.

**CEMATRIX CORPORATION**  
**www.cematrix.com**

**Form 51-102F1 - Management's Discussion & Analysis  
For the Year Ending December 31, 2017**

**Appendix A – Forward Looking Statements**

The forward-looking statements in the MD&A for the year ending December 31, 2017 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.*

**CEMATRIX CORPORATION**

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**Form 51-102F1 - Management's Discussion & Analysis  
For the Year Ending December 31, 2017**

**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), as 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.

**Verbally Awarded Projects:**

These represent projects where the customer has provided verbal confirmation that CEMATRIX or MOS will be completing the specific project.

**Revenues:**

Total revenues of the Company that primarily consists of the production and placement of cellular concrete.

**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; 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:**

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

**Unrealized Foreign Exchange Gain (Loss) on Translation of Foreign Subsidiary:**

The unrealized gain (loss) resulting from the translation of CEMATRIX's U.S. subsidiary into Canadian dollars. This foreign exchange gain or loss is recognized only when there is a return of capital from the U.S. subsidiary.

**Net Working Capital:**

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