

3000 Main Street  
West St. Paul, MB R2V 4T2



Phone (204)-989-4700  
Fax (204)-338-4774

## **JMT Holdings Inc.**

April 24, 2014

**Eshetu Beshada, PhD, PEng.**  
Environmental Engineer  
Environmental Approvals Branch  
Manitoba Conservation and Water Stewardship  
Suite 160, 123 Main Street  
Winnipeg, MB R3C 1A5

Dear Mr. Beshada,

Please find enclosed our Environment Act Proposal (EAP) for a concrete batch plant operation for JMT Holdings Inc.

We look forward to your reply.

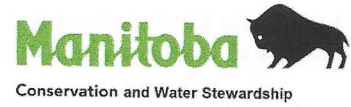
Thank you.

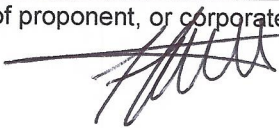
Sincere regards,



**Tony Teixeira**  
Vice President

Environment Act Proposal Form



Name of the development: JMT Holdings Inc Concrete Batch Plant	
Type of development per Classes of Development Regulation (Manitoba Regulation 164/88): Class 1	
Legal name of the applicant: J.M.T. Holdings Inc. operating as Winnipeg Ready Mix	
Mailing address of the applicant: 3000 Main Street	
Contact Person: TONY TEIXEIRA	
City: WEST ST PAUL	Province: MANITOBA      Postal Code: R2V4Z3
Phone Number: 204-989-4700	Fax: 204-338-4774      email: tony@jcpaving.com
Location of the development:	
Contact Person: TONY TEIXEIRA	
Street Address:	
Legal Description: Lot 3 Plan 28571 WLTO in OTM Lots 1 and 2 Parish of St. Paul	
City/Town: WEST PAUL	Province: MANITOBA      Postal Code: R2V4Z3
Phone Number:	Fax:      email:
Name of proponent contact person for purposes of the environmental assessment: TONY TEIXEIRA	
Phone: 204-989-4700	Mailing address: 3000 Main Street
Fax:	West St Paul, MB
	R2V 4Z3
Email address: tony@jcpaving.com	
Webpage address:	
Date: APRIL 24, 2014	Signature of proponent, or corporate principal of corporate proponent: 
	Printed name: TONY TEIXEIRA

**J.M.T. Holdings Inc. operating as Winnipeg Ready Mix  
Concrete Batch Plant**

**Environment Act Proposal**

Date Prepared: April 24, 2014

# Table of Contents

<b>Title</b>	<b>Page</b>
1.0 Introduction and Background .....	1
2.0 Proposed Development .....	1
3.0 Existing Land Use .....	1
4.0 Concrete Batch Plant: Installation and Operation .....	1
5.0 Existing Environment in the Project Area .....	3
6.0 Environmental Hazards and Controls .....	5
6.1 Site Preparation and Installation of Batch Plant .....	6
6.2 Concrete Batch Plant Operations .....	7
6.3 Concrete Delivery – Mixer Trucks .....	16
7.0 Other General Environmental Mitigation Measures .....	16
8.0 Greenhouse Gas Emissions .....	17
9.0 Residual Environmental Effects .....	18
10.0 Decommissioning the Plant .....	18
11.0 Monitoring and Reporting .....	18
12.0 Conclusions .....	18
Appendix A .....	19
• Certificate of Title	
• Site Drawings	
• Silo Vent Filter information	
• Conditional Use Letters	
• Ready-mixed Concrete Batch Plant Photos and Information	

## **1.0 Introduction and Background**

We are proposing to establish and operate a ready-mixed concrete batch plant. Our family business has been involved in the construction industry in Manitoba since 1977. We are proposing to expand our existing construction operations to also include a ready-mixed concrete batch plant.

The concrete batch plant is portable in design and we propose to locate the batch plant on our parcel of land Lot 3 Plan 28571 in the RM of West St. Paul at the NW corner of the intersection of Second St. and Emes Road. The plant will be used to produce concrete at the site. The concrete mix will be deposited into mixer trucks and delivered throughout Winnipeg and possibly other nearby locations.

## **2.0 Proposed Development**

### **Property Location**

**Second St.:** The proposed location for the concrete batch plant is Lot 3 Plan 28571 Roll #400570. The location is at the NW corner of the intersection of Second St. and Emes Road in the R.M. of West St. Paul. The property size is 10.62 acres. The owner of the land is J.M.T. Holdings Inc. (see Certificate of Title in Appendix A) which is a corporation in good standing in the Province of Manitoba. The mineral rights beneath the land belong to J.M.T. Holdings Inc. The land is currently zoned as industrial use. Conditional use for a concrete batch plant was granted by the RM of West St. Paul at a public meeting on April 10, 2014 (see documentation in Appendix A).

## **3.0 Existing Land Use at the site and adjoining properties**

The property has recently been built up using waste clay material from other construction projects. The adjoining property to the northeast is used as a soil storage area for a landscaping company. The land to the northwest and southeast is agricultural. The northwest border of the property is with a hydro transmission line ROW. The adjoining land to the southwest is undeveloped bush and hay field.

## **4.0 Concrete Batch Plant Installation and Operation**

A new Concrete Batch Plant (Thoroughbred Model) from Stephen Manufacturing Company is proposed for use. The plant is portable in design but will be used as a permanent plant for our purposes. The plant will be used for central mixing of concrete and discharging the concrete to ready-mixed trucks for offsite use.

The plant is proposed to be installed in approximately August 2014 and operational for the latter portion of the 2014 construction season. The construction will involve assembly of the plant using various pieces of heavy equipment including a mobile crane. Concrete piles will be poured

for the structure. A paved area will be established for the plant and corresponding truck wash area and settling ponds.

The proposed hours of operation for the plant are 7:00 a.m. to 7:00 p.m., Monday to Friday with occasional use of the plant on Saturdays during the construction season (May to October 31). The plant will remain operational for an indefinite number of years as long as it is economically and environmentally feasible.

Ready-mixed concrete components are typically coarse and fine aggregate, cement and water. Often times, fly ash or other cementitious mater is added to supplement the cement. Admixtures may be added to improve the properties of the fresh and/or hardened concrete.

### **Cementitious Materials**

We may use up to 1,000 tonnes of cementitious product on an annual basis. Cement and Fly ash are delivered to the site by tanker trucks. The air blower system on the trucks is used to blow the cement or flyash into the silo at the batch plant. The silo is equipped with a silo vent to reduce any dust emissions during the loading process (see silo vent filter information in appendix A).

### **Aggregate**

Gravel dump trailers will deliver aggregate to the site as needed. Two or three types of stone and one type of sand will be delivered to the site on an ongoing basis. The material will be stockpiled and divided by concrete forms. Approximately 500 yards of each aggregate will be stored on site.

A wheeled loader will be used to load the conveyor hopper with the appropriate aggregate. The conveyor will transport the material to the correct plant hopper and from there is mixed into the cement mix as controlled by the plant operator.

### **Admixtures**

Admixtures are usually liquid additives to control the characteristics of the concrete. Admixtures are supplied by a tanker truck in bulk liquids although smaller plastic containers may be used.

### **Operation of the Plant**

The ready mix truck is positioned under the load-out chute of the plant. From the control room the plant operator controls the concrete mix and quantity using the computer. The computer operates the plant. Scaling off the amount of aggregate, water, cement, and, if required chemical admixtures is done at the control of the operator. The components are added to the plant mixer drum where it is mixed and then discharged into the mixer truck for delivery offsite.

### **Water use**

Well water will be used for production – the location and depth of the well is to be determined and application will be made to Manitoba Conservation for the well. It is estimated water will be consumed at approximately 150 L per cubic metre of batched concrete. Water will also be used on the site to washout the plant mixer drum, washing out mixer drums on trucks at the end of the day, washing off load out chutes at the project site and also at the yard at the end of the day. Water will be used in dust suppression at the plant site and access roads on the property

but limited water will be needed for the road surfaces as it will be asphalt-chip surface. Water will also be used to spray on stockpiles as dust suppression is required.

## 5.0 Existing Environment in the Project Area

### Biophysical Environment

**Second Street:** Soil classification by Agriculture and Agri-Food Canada is that of clayey soils. The site was formally an agricultural crop and had been fallowed in 2009. The property is generally vegetated with a variety of grass and broad-leaves plant species. A ditch has been constructed along the northeast boundary of the property and the drainage ditch for Second Street runs along the south east boundary. Neither of the drainage ditches provide fish habitat. Some low lying areas of the property likely hold water in the spring and after rain events. These areas may provide temporary habitat for some waterfowl and shorebirds but very little terrestrial or aquatic habitat benefits are provided by the property.

**Figure A.** Photo at Second Street – looking northwest across the property. This area has small pockets of cattail (*Typha latifolia*) and various domestic grass species. The Hydro transmission line is visible in the back part of the property. Photo was taken in December 2009.



**Figure B.** Photo at Second St.— looking north along Second St. This area has small pockets of cattail (*Typha latifolia*) and various domestic grass species. Photo was taken in December 2009. The proposed area of development for the operations has been built up with waste clay material.



**Figure C.** Aerial photo of Second St. Property



## **Socioeconomic Environment**

Public safety will not be negatively impacted by the proposed development. Aggregate and other material delivery will be very intermittent and the 10 mixer trucks at peak operations will make a total of approximately 40 concrete deliveries each day.

Based on the limited traffic currently in the areas our traffic should not impact public safety.

We will have in place practices to limit any mud tracking onto the roadways. Our proposed control to protect the environment will also provide safety measures such as our dust suppression techniques.

## **Protected Areas**

There are no protected areas in the vicinity of the proposed development location.

## **Heritage Resources**

There are no known heritage resources in the vicinity of the proposed development location.

## **First Nation Communities**

There are no First Nation communities in the vicinity of the proposed development location.

## **6.0 Environmental Hazards and Controls**

This section identifies the environmental effects, referred to here as environmental hazards, created by the work activities during installation and operation of the concrete batch plant. The hazard controls to mitigate the environmental effects are also discussed in this section. Following the discussion directed at the work activities we've also included our environmental considerations made at the design stage of the project. The controls outlined below have been identified from the Best Environmental Management Practices for Redi-Mix Concrete Plants prepared by the Manitoba Heavy Construction Association and the Canadian Ready Mixed Concrete Association Environmental Management Practices for Ready Mixed Concrete Operations in Canada.

## 6.1 Site Preparation and Installation of Concrete Batch Plant

Work Activity:	Site Clearing and Grading
Environmental Hazards:	Vegetation Removal resulting in loss of habitats for wildlife, insects, etc.
Hazard Controls	Reduce the amount of vegetation removal to only what is needed by clearly identifying to equipment operators where clearing is needed for site development. Using boundary tapes and stakes will also aid during actual clearing and grading operations.

Work Activity:	Site Clearing and Grading
Environmental Hazards:	Exposing soils resulting in soil erosion by wind and water
Hazard Controls	Reduce the amount of vegetation removal to only what is needed as noted above. Proper site development planning, implement erosion controls – revegetate exposed soil as soon as practicable.

Work Activity:	General vehicle and heavy equipment movement during site clearing/grading and also material deliveries
Environmental Hazards:	Greenhouse gas emissions – point source emissions – see calculations at end of this section
Hazard Controls	Reduced idling and well maintained equipment (engine/exhaust)

Work Activity:	General vehicle and heavy equipment movement during site clearing/grading and also material deliveries
Environmental Hazards:	Fugitive Dust Emissions – yard and roads
Hazard Controls	<ol style="list-style-type: none"> <li>1. Asphalt chip yard and road surface to reduce dust</li> <li>2. controlled travel speeds</li> <li>3. watering worksite and roads as needed</li> <li>4. training and awareness of dust emission concerns and how to estimate dust emission rates (visual opacity observation) – site supervisor and equipment operators</li> <li>5. vegetated buffer around perimeter of property – stop dust release outside of property</li> </ol>

Work Activity:	General vehicle and heavy equipment movement during site clearing/grading and also material deliveries
Environmental Hazards:	Noise pollution
Hazard Controls	<ol style="list-style-type: none"> <li>1. proper vehicle inspections maintenance – engine, exhaust, etc.</li> <li>2. hours of operation</li> <li>3. vegetated buffer around perimeter of property – reduce potential noise impacts outside of property</li> </ol>

Work Activity:	General vehicle and heavy equipment movement
Environmental Hazards:	Tracking out mud to public roadways (safety and environmental hazard)
Hazard Controls	<ol style="list-style-type: none"> <li>1. proper travel routes on worksite to minimize mud caking on vehicles leaving the site</li> <li>2. clean up of roadway on a regular basis – loader scrapes roadway</li> <li>3. monitoring road conditions leaving the worksite – site supervisor is responsible</li> </ol>

## 6.2 Concrete Batch Plant Operations

Work Activity:	Loading Silos with Portland Cement
Environmental Hazards:	Dust emissions
Hazard Controls	<ol style="list-style-type: none"> <li>1. Following bulk tanker load-out procedure – purchase from reputable suppliers with acceptable load out procedures – ensure air pressures are within limits of the silo vent</li> <li>2. Proper operation and maintenance of silo vent – daily inspection of silo vent operation. Any torn or damaged silo vent filters will be replaced as soon as is practicable.</li> <li>3. worker training and awareness of dust emission concerns and how to estimate dust emission rates (visual opacity observation) and when the silo vent needs repair/maintenance or other problems during the transfer of cement.</li> </ol>

Work Activity:	Front end loader material handling
Environmental Hazards:	Dust emissions
Hazard Controls	<ol style="list-style-type: none"> <li>1. follow Front-end loader safe work practices</li> <li>2. Water down stockpiles if dust becomes excessive – use water hose</li> <li>3. water down travel routes for loader – water truck/spray bar</li> <li>4. visual qualitative monitoring of dust emissions (visual opacity observations) – plant operator and loader operator</li> </ol>

Work Activity:	Concrete Batch Plant Operation
Environmental Hazards:	Dust Emissions – cement and aggregate
Hazard Controls	<ol style="list-style-type: none"> <li>1. Proper operation and maintenance of silo vent – see above</li> <li>2. worker training and awareness of dust emission in order to address hazards if dust emissions worsen</li> <li>3. visual qualitative monitoring of dust emissions – plant operator</li> </ol>

Work Activity:	Feeding hoppers with aggregate and movement of aggregate by conveyor and deposit to elevated bins/weigh hoppers - – concrete batch plant
Environmental Hazards:	Dust Emissions
Hazard Controls	<ol style="list-style-type: none"> <li>1. Watering aggregate stockpiles</li> <li>2. conveyor belt speeds that help reduce dust emissions</li> <li>3. reduce drop heights into hoppers/bins</li> <li>4. worker training and awareness of dust emission concerns and potential problems – loader operators</li> <li>5. visual qualitative monitoring of dust emissions – plant operator and loader operator</li> <li>6. vegetated buffer around perimeter of property – stop dust release outside of property</li> </ol>

Work Activity:	Haul Roads and Yard travel routes for aggregate and cement deliveries to the site, mixer truck departures, mixer truck returns for reloading or end of day washouts, loader movements in yard area
Environmental Hazards:	Dust Emissions
Hazard Controls	<ol style="list-style-type: none"> <li>1. chip sealed travel surface – reducing dust emissions</li> <li>2. apply water to road surface or general travel routes in the yard (no contaminated water will be used in road applications – batch plant process water or settling pond waters)</li> <li>3. Assign and enforce a speed limit in the yard area – initial consideration is for a 15 kph limit.</li> <li>4. Create a Worker/Driver awareness of dust emissions resulting from their vehicle operation on roads and in the yard.</li> <li>5. visual qualitative monitoring of dust emissions – plant operator, loader operator, drivers</li> <li>6. shutdown during excessive winds and/or increase watering efforts on haul roads and yard area – consider use of an environmentally responsible surfactant if water is not acceptably controlling dust emissions from the site.</li> <li>7. use wet sweeping on paved surfaces to keep the dust down</li> <li>8. vegetated buffer around perimeter of property – stop dust release outside of property</li> </ol>

Work Activity:	Stockpiling of Aggregate – use of stacking conveyors and general storage of stockpiles
Environmental Hazards:	Dust emissions
Hazard Controls	<ol style="list-style-type: none"> <li>1. Watering stockpiles.</li> <li>2. Drop heights from stacking conveyor – manage heights to reduce dust kicked up by dropped aggregate material.</li> <li>3. Site location for stockpiles considering prevailing south winds – take advantage of landform.</li> <li>4. 1.2 m high soil berm with trees to be planted on top - around perimeter of property.</li> </ol>

Work Activity:	Mixing water for batching concrete loads, truck water tank filling for use in checking slump and chute wash downs, washing down the truck chute at worksite, washing the truck drum and chute at the end of the day, water for dust suppression
Environmental Hazards:	Water consumption/excess usage
Hazard Controls	<ol style="list-style-type: none"> <li>1. worker awareness of the impacts of excess water usage</li> <li>2. use recycled water for mixer and chute washouts – recycle water from washout/settling ponds for washouts</li> <li>3. We will review the options for enhancing the site drainage plans to capture and reuse storm water and process water.</li> <li>4. We will also review the potential use of water-reducing chemical admixtures for batching and also the use of hydration stabilization admixtures to reduce the volume of water used for truck washouts at the end of the day.</li> </ol>

Work Activity:	Acid washing of trucks at concrete batch plant
Environmental Hazards:	Surface and ground water contamination
Hazard Controls	<ol style="list-style-type: none"> <li>1. acid washing is to be done on the wash pad and the liquid is to drain to the settling basins – the lower pH of the acid wash will help to lower the pH of the wash out water in the basins.</li> <li>2. We will test acid alternative for truck wash downs.</li> <li>3. liquid from settling basins pumped out and taken to pollution treatment center for proper disposal</li> <li>4. settling basins emptied out once at 75% capacity</li> <li>5. Follow requirements for MR 282/87, MR55/2003, MR175/87 and MR139/99 – use professional hazardous waste disposal company – become registered as a generator through the disposal company services.</li> </ol>

Work Activity:	End of Day Washout of Mixer Drums at batch plant – mixer trucks and plant mixer
Environmental Hazards:	Release of washout liquid to the environment – surface and subsurface water contamination and soil contamination
Hazard Controls	<ol style="list-style-type: none"> <li>1. ensure settling ponds are functioning and no leaks or structural failures have occurred – through daily inspection</li> <li>2. worker training and awareness of the potential impacts of releasing concrete wash to the environment – visual inspection of the settling ponds and ensure all washout material enters the ponds</li> <li>3. ensure plant process water and plant mixer water are captured by the settling ponds – paved surface, grading and curbing towards the settling ponds</li> <li>4. liquid from settling basins pumped out and taken to pollution treatment center for proper disposal.</li> <li>5. settling basins emptied out once at 75% capacity</li> <li>6. Follow requirements for MR 282/87, MR55/2003, MR175/87 and MR139/99 – use professional hazardous waste disposal company – become registered as a generator through the disposal company services.</li> </ol>

Work Activity:	Handling returned concrete in truck mixer drums
Environmental Hazards:	Improper handling/disposal resulting in soil or water contamination
Hazard Controls	<ol style="list-style-type: none"> <li>1. returned concrete will be used to make pre-cast products for use in aggregate pile management, or;</li> <li>2. returned concrete will be discharged at a designated site where it will be allowed to harden and then later crushed for use as a base material, and/or</li> <li>3. we will review the feasibility of using hydration stabilization admixtures so that returned concrete can be reused in pours the next day (up to 72 hours or longer after return to the yard)</li> <li>4. if feasible, we will assess the option of re-using the returned concrete</li> <li>5. small amounts of returned concrete will be washed out into the settling basins</li> </ol>

Work Activity:	General operations at the concrete batch plant
Environmental Hazards:	Noise pollution
Hazard Controls	<ol style="list-style-type: none"> <li>1. maintain equipment to reduce noise increases from worn parts</li> <li>2. limit hours and days of operation</li> <li>3. installation of pumps and motors on rubber mounts where feasible</li> <li>4. minimal free fall height of aggregates</li> <li>5. use reputable suppliers of cement – using truck equipped with intake and exhaust muffles on bulk tankers.</li> <li>6. treed buffer around the property will reduce noise off the property</li> <li>7. the plant will be located as far as is practical from the property line of neighbours who may be disturbed.</li> <li>8. Lock and secure all mixer truck chutes to reduce the amount of rattle and band during travel</li> <li>9. use a controlled rate of depressurization of the truck mounted water tanks</li> </ol>

Work Activity:	On-site storage and transfer of Admixtures
Environmental Hazards:	Storage container spills and leaks during transfer or storage
Hazard Controls	<ol style="list-style-type: none"> <li>1. Proper container use as provided by manufacturer – corrosion-proof and reinforced plastic tanks.</li> <li>2. Proper storage area – inside plant, no freezing, lighting</li> <li>3. Spill kit at storage site; worker training with spill kits, follow spill response plan, secure the site for potential vandalism, equipment collision, etc.; proper disposal of affected soil and clean up material (hazardous waste pick-up), notify Manitoba Conservation if any spills occur - at 204- 944-4888 24 hours.</li> <li>4. WHMIS training – proper labelling, handling techniques, MSDSs will be available – ensure incompatible products are stored separately</li> <li>5. on-going visual inspection of containers – immediately replace container if damaged</li> </ol>



Work Activity:	Diesel Fuel and Lubricant Storage
Environmental Hazards:	Spills and/or fires at storage area/Soil and water contamination
Hazard Controls	<ol style="list-style-type: none"> <li>1. Appropriate storage site away from surface water</li> <li>2. use of double-walled tank and/or secondary containment – 110% capacity the tank. Professional installation of the tank by Petroleum Mechanic.</li> <li>3. spill kit at storage site; worker training with spill kits, follow spill response plan, grounding tanks, secure the site for potential vandalism, equipment collision, etc.; proper disposal of affected soil and clean up material (hazardous waste pick-up), notify Manitoba Conservation if any fuel spills greater than 100 L - at 204- 944-4888</li> <li>4. monitor fuel use</li> <li>5. WHMIS training – annual refresher and specific to hazardous products on-site, safe handling reviewed at WHMIS training and through toolbox talks and safe work practices</li> <li>6. Gasoline or associated products not stored on site.</li> <li>7. Proper security precautions – locking valves to prevent access or vandalism by unauthorized persons.</li> <li>8. Routine inspections of the fuel tanks and other lubricant containers.</li> <li>9. Follow good housekeeping practices</li> <li>10. Comply with MR55/2003</li> </ol>

Work Activity:	Fuel Transfer
Environment Hazards:	Spills and/or fires during transfer
Hazard Controls	<ol style="list-style-type: none"> <li>1. worker training and enforce fuel transfer safe work practice – worker is to be at the nozzle at all times during transfer</li> <li>2. fuel appropriate distance from water bodies</li> <li>3. fuel at designated site that doesn't drain to watercourse;</li> <li>4. spill kit at designated site and/or on all vehicles with slip tanks; worker training on fuel transfer and spill kits; follow spill response plan, proper disposal of affected soil and clean up material (hazardous waste pick-up), notify Manitoba Conservation if any spills occur greater than 100 L- at 204- 944-4888 24 hours.</li> <li>5. Follow good housekeeping practices</li> </ol>

Work Activity:	Maintenance of Machinery at concrete batch plant – mobile and stationary equipment
Environmental Hazards:	oils, hydraulic fluid spills and leaks; soil contamination
Hazard Controls	<ol style="list-style-type: none"> <li>1. single maintenance area to be used – equipment to be moved to maintenance area as soon as possible</li> <li>2. daily equipment inspections before use</li> <li>3. immediate response/repair of leaks</li> <li>4. drip pans/sheets used during maintenance activities</li> <li>5. spill kit at maintenance area; immediate clean up of spills, worker training with spill kits; follow spill response plan, proper disposal of affected soil and clean up material (hazardous waste pick-up), notify Manitoba Conservation if any spills occur - at 204-944-4888 24 hours</li> <li>6. clean up maintenance materials including fluid pails, etc.</li> <li>7. worksite inspections to ensure proper work practices and housekeeping at maintenance area</li> </ol>

Work Activity:	Non-hazardous waste accumulation
Environmental Hazards:	Litter and wastes
Hazard Controls	<ol style="list-style-type: none"> <li>1. Clean up site on daily basis</li> <li>2. Maintain designate waste collection site and removal of waste on a regular basis or as needed</li> <li>3. good housekeeping</li> <li>4. worksite inspections</li> <li>5. Recyclable material to be recycled – oil containers, plastics, paper, wood</li> <li>6. green purchasing – consider packaging, etc.</li> </ol>

Work Activity:	Hazardous waste collection, storage and disposal
Environmental Hazards:	Spills, soil and water contamination
Hazard Controls	<ol style="list-style-type: none"> <li>1. Regular pick up of hazardous wastes – do not allow haz waste storage onsite for long periods of time – used oil and lubricants, antifreeze, lead acid batteries, solvents, paints,</li> <li>2. spill kit at hazardous waste storage area; worker training on spill kit use; follow spill response plan, proper disposal of affected soil and clean up material (hazardous waste pick-up), notify Manitoba Conservation if any spills occur - at (204) 944-4888 24 hours;</li> <li>3. registration as hazardous waste generator (and carrier if transporting hazardous waste to appropriate facility) – use professional haz waste transporter for pickup and disposal</li> <li>4. Follow Transportation of Dangerous Goods Act requirements</li> </ol>

Work Activity:	General vehicle and heavy equipment movement
Environmental Hazards:	Rutting in sensitive areas
Hazard Controls	<ol style="list-style-type: none"> <li>1. Repair rutting outside normal work area</li> <li>2. worker awareness of the site and negative impacts of rutting and benefits of maintaining the existing vegetation on the site</li> </ol>

Work Activity:	General vehicle and heavy equipment movement
Environmental Hazards:	Greenhouse gas emissions Noise Pollution
Hazard Controls	Reduced idling and well maintained equipment (engine/exhaust)

### 6.3 Concrete Delivery – Mixer Trucks

Work Activity:	Mixer truck travel on public roadways
Environmental Hazards:	Traffic accident and potential spill of wet concrete and and/or diesel fuel - surface water or soil contamination
Hazard Controls	<ol style="list-style-type: none"> <li>1. emergency plan in place for roadway accidents and spills</li> <li>2. spill kits are available on mixer trucks and train workers in emergency spill response -</li> <li>3. cement is to be recovered from the mixer truck as soon as possible</li> </ol>

Work Activity:	Washing down mixer truck chute at work site/delivery site
Environmental Hazards:	Surface water and soil contamination
Hazard Controls	<ol style="list-style-type: none"> <li>1. washout at designated site – not allowing runoff of the washout water – high alkalinity of the water makes it a hazardous waste and will kill fish and contaminate soils – appropriate washout sites will be lined pits or designated tanks to wash the chute water into.</li> <li>2. If an appropriate designate site is not available the mixer truck operator will use a form fitting chute cover to allow the truck to return to the yard for a wash down of the chute.</li> </ol>

## 7.0 Other General Environmental Mitigation Measures

### Plant Location on the Property

Batch plant location on the property has been chosen to reduce the amount of nuisance dust that may be created by vehicles and general plant operation. Clean storm water will drain to the ditch on either the north or south side of the property and stay separate from the plant process water or other cementitious materials. The north and south ditches will drain to the Second St. west side ditch. Plant process water and truck mixer/chute washout waters will be maintained on-site and recycled when possible.

## **Settling Basins Location and Design**

The settling basins will be provided to collect end of day truck washouts, chute washout, acid truck washing runoff and plant processing water runoff. This area for truck washouts, acid truck washing, etc. area will be paved, and curbed and graded, in order to contain the runoff and prevent contamination of surface and subsurface waters.

The settling basins are excavated and constructed of concrete walls and floor. The two cells are designed to be 6 m x 6 m and 1.6 m in depth. The mixer trucks will washout into the first cell where the heavier components of the cement slurry will settle to the bottom of the cell and the water will flow through a screened opening into the second cell. The water in the second cell will be reused for end of day truck washouts and chute washouts. The first cell will be cleaned out as needed by an excavator. The material removed from the first cell is deposited in a contained area where the excess fluid runs back into the first cell. The area will curbed and graded to prevent runoff from the settling basins. The solid materials will eventually harden and be removed from the site to be crushed and used as base material.

## **Traffic Flow around the site**

The traffic flow will be designed to be efficient and safe but also consider the environment by not allowing vehicle movement through standing water or sheet runoff of storm water. Keeping vehicles out of the water we can reduce the chance of introducing hydrocarbons to the aquatic environment.

## **8.0 Greenhouse Gas Emissions**

Using a greenhouse gas emissions conversion factor of 2.66 for burning diesel fuel and following Environment Canada guidelines we are able to estimate our greenhouse gas emissions.

### **Emissions for Concrete Batch Plant Operation and Mixer Trucks**

It is estimated the plant and associated equipment will consume on average 150L of diesel fuel/day and the plant will be operating for approximately 140 days resulting in the consumption of approximately 21,000L of diesel fuel per year.  $21,000\text{L/year} \times 2.66 = 55,860 \text{ kg of CO}_{2e}$  annually.

It is estimated each mixer truck will consume on average 100L of diesel fuel/day and 10 trucks will be operating for approximately 140 day/per year resulting in the consumption of approximately 14,000L of diesel fuel per year for each mixer truck.  $10 \text{ trucks} @ 14,000\text{L/year} \times 2.66 = 372,400 \text{ kg of CO}_{2e}$  annually. We will continually review options available to us in efforts to reduce our greenhouse gas emissions.

## **9.0 Residual Environmental Effects**

There should be no residual environmental effects of the proposed development after implementation of the mitigation measures. We are proposing many of the best practices as suggested by the Canadian Ready-Mixed Concrete Association and Manitoba Heavy Construction Association. The dust suppression and collection practices will reduce our impacts to air quality and potential public health. The environmental management practices we're following will also minimize our impacts to vegetation, wildlife and aquatic organisms.

## **10.0 Decommissioning the Plant**

Prior to permanent closure of the concrete batch plant a formal decommissioning plan for the site will be developed and submitted to Manitoba Conservation for approval.

## **11.0 Monitoring and Reporting**

We will continually monitor for our potential impacts on the environment.

We will be implementing accepted management practices and evaluating their success. As new information and environmental management techniques come available we will assess applicability and feasibility for our operations.

We will be holding toolbox talks every two weeks during operation. During the toolbox talks we discuss safety and environment. We will also be conducting documented worksite inspections every two weeks – during these worksite inspections we will be looking for needed improvements in both safety and environment.

The abovementioned worksite inspections are in addition to our daily inspections of the silo vent, settling ponds, fuel and chemical storage tanks, and daily equipment inspections.

We will also be able to show our maintenance records for all the machinery and equipment in use at the concrete batch plant.

We will be required to provide data to the National Pollutant Release Inventory for the concrete batch plant.

We will also provide the sampling data and reports to Manitoba Conservation as required by the Director.

## **12.0 Conclusions**

We will implement the environmental mitigation measures outlined in this proposal and it is believed the environmental effects will be negligible.

## **Appendix A**

- Certificate of Title
- Site Drawings Property
- Silo Vent Filter information
- Conditional Use Letters (separate attachment on e-file)
- Concrete Batch Plant pictures and information (separate attachment with electronic file of the proposal)

DATE: 2014/01/22  
TIME: 11:16

**MANITOBA**  
**STATUS OF TITLE**

TITLE NO: 2263882/1  
PAGE: 1

STATUS OF TITLE..... ACCEPTED  
ORIGINATING OFFICE... WINNIPEG  
REGISTERING OFFICE... WINNIPEG  
REGISTRATION DATE.... 2007/11/06  
COMPLETION DATE..... 2007/11/15  
PRODUCED FOR.. X  
ADDRESS.....  
CLIENT FILE... NA  
PRODUCED BY... S.MACDONALD

**LEGAL DESCRIPTION:**

JMT HOLDINGS INC.

IS REGISTERED OWNER SUBJECT TO SUCH ENTRIES RECORDED HEREON  
IN THE FOLLOWING DESCRIBED LAND

BLOCK 3 PLAN 28571 WLTO  
IN OTM LOTS 1 AND 2 PARISH OF ST PAUL

**ACTIVE TITLE CHARGE(S):**

4448130/1 \*\*VERIFIED\*\* CAVEAT REG'D: 2014/01/16  
DESCRIPTION: DEVELOPMENT AGREEMENT  
FROM/BY: THE R.M. OF WEST ST. PAUL  
TO: MARIA L. GRANDE AS AGENT  
CONSIDERATION: NOTES:

**ADDRESS(ES) FOR SERVICE:**

EFFECT	NAME AND ADDRESS	POSTAL CODE
ACTIVE	JMT HOLDINGS INC. 3000 MAIN STREET WEST ST. PAUL MB	R2V 4T2

**ORIGINATING INSTRUMENT(S):**

REGISTRATION NUMBER	TYPE	REG. DATE	CONSIDERATION	SWORN VALUE
3536127/1	T	2007/11/06	\$175,000.00	\$175,000.00

PRESENTED BY: MYERS, WEINBERG & ASSOCIATES  
FROM: GEORGE STREILEIN & RUTH STREILEIN  
TO: JMT HOLDINGS INC.

**FROM TITLE NUMBER(S):**

1572667/1 ALL

**LAND INDEX:**

LOT	BLOCK	SURVEY PLAN
	3	28571

NOTE:

CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA  
STORAGE SYSTEM ON 2014/01/22 OF TITLE NUMBER 2263882/1



DATE: 2014/01/22  
TIME: 11:16

**MANITOBA**  
**STATUS OF TITLE**

TITLE NO: 2263882/1

PAGE: 2

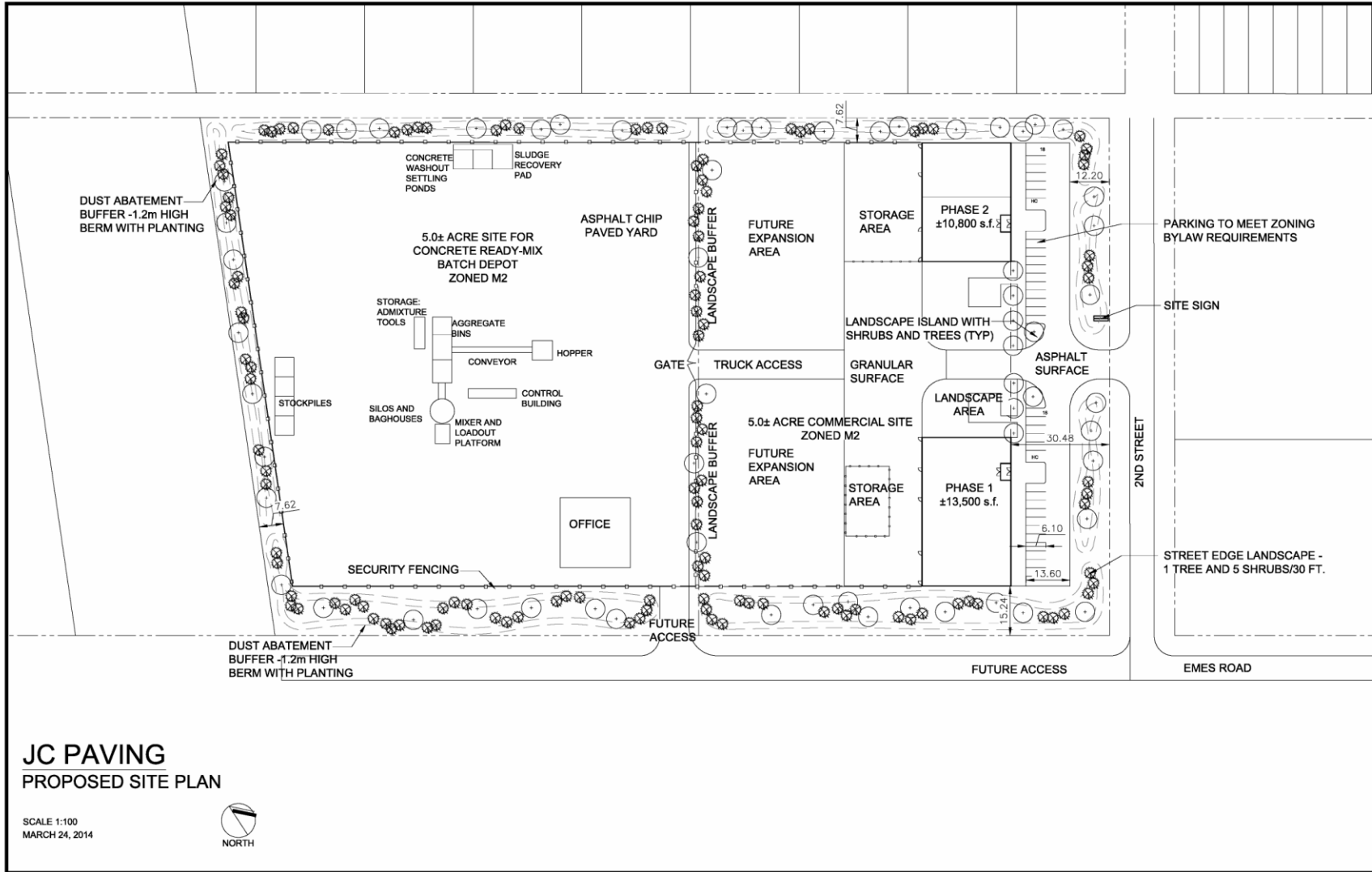
STATUS OF TITLE.....	ACCEPTED	PRODUCED FOR..	X
ORIGINATING OFFICE...	WINNIPEG	ADDRESS.....	
REGISTERING OFFICE...	WINNIPEG		
REGISTRATION DATE....	2007/11/06		
COMPLETION DATE.....	2007/11/15		
		CLIENT FILE...	NA
		PRODUCED BY...	S.MACDONALD

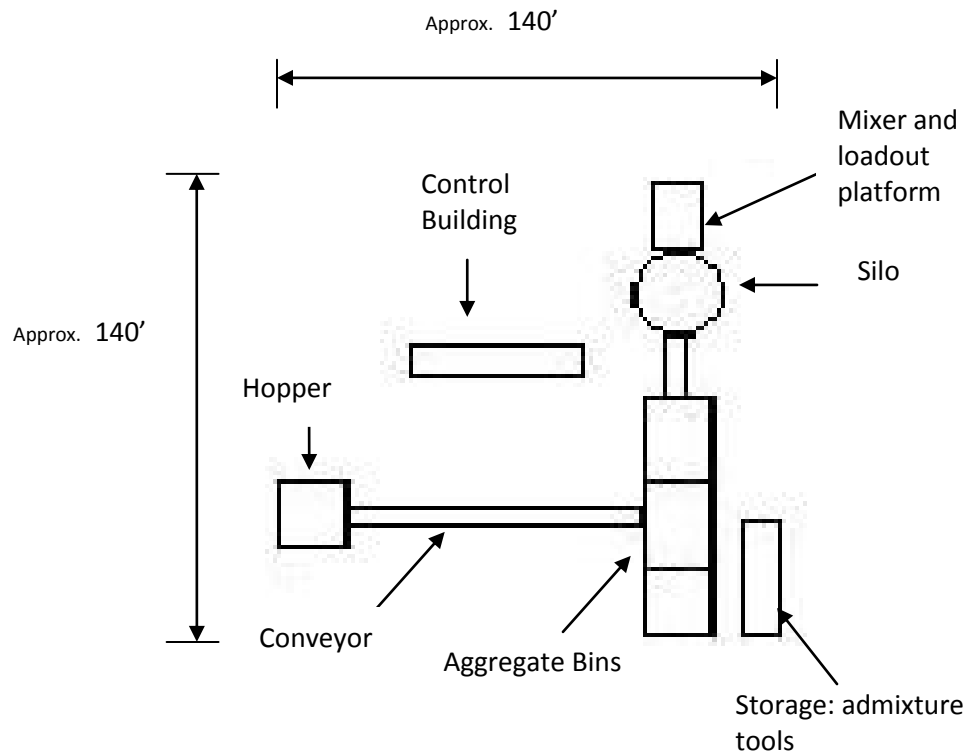
---

ACCEPTED THIS 6TH DAY OF NOVEMBER, 2007  
BY W.BROWN FOR THE DISTRICT REGISTRAR OF  
THE LAND TITLES DISTRICT OF WINNIPEG.

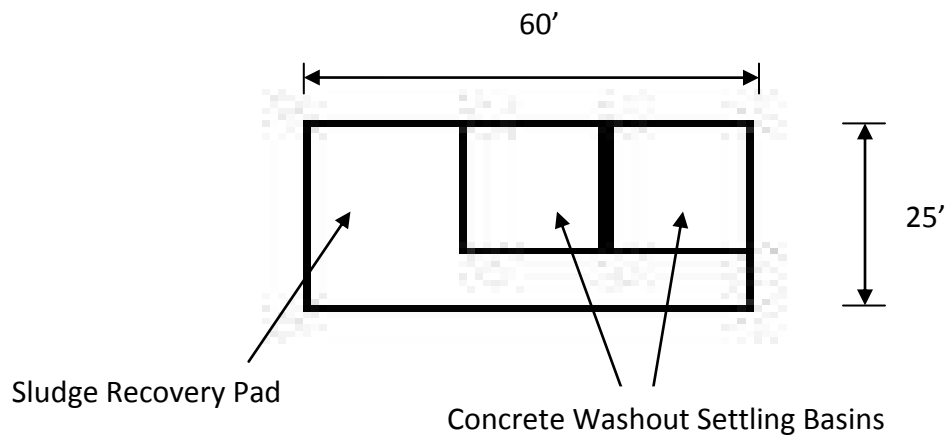
CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA  
STORAGE SYSTEM ON 2014/01/22 OF TITLE NUMBER 2263882/1.

\*\*\*\*\* END OF STATUS OF TITLE 2263882/1 \*\*\*\*\*





**Figure 1.** Ready-Mixed Concrete Batch Plant Components – the batch plant will be located at the back of the property (towards the transmission line – see site layout diagram above).



**Figure 2.** Mixer Truck Concrete Washout Site

**STEPHENS MFG CO  
711 WEST FOURTH ST.  
P.O. BOX 488  
TOMPKINSVILLE, KY. 42167  
800-626-0200**

**REF: CARTRIDGE FILTER**

**PART NUMBER: 36-15150-3234**

**DIMENSIONS: 13.84" OD X 9.48" ID X 36" H**

### **SPECIFICATIONS**

**STYLE: ECO 23W PLEATED MEDIA**

**FIBER: 100% POLYESTER**

**MEDIA EFFICIENCY: 99.995% AT 1 MICRON AND ABOVE**

**AIR PERMEABILITY: 28 CFM @ 1/2" DELTA P**

**THERMAL STABILITY: 2% MAXIMUM AT 250-DEG. F**

**MOISTURE TOLERANT: CAN BE WASHED AND REUSED**

**MAX. OPERATING TEMP: 275-DEG. F (FABRIC), ELEMENTS**

**200-DEG. F (HIGHER TEMP.**

**RATING CONSTR. AVAILABLE)**

### **CHEMICAL RESISTANCE**

**ACIDS: FAIR**

**ALKALIS: GOOD**

**OXIDIZING AGENTS: GOOD**

**ORGANIC SOLVENTS: GOOD**

**HYDROLYSIS: FAIR**

**ABRASION: GOOD**

### **FABRIC CHARACTERISTICS**

**USING 3 GRAINS PER CUBIC FOOT LOADING AT A RATIO OF 8.5:1 FOR 24 HOURS  
CONSTANT, THE MATERIAL AND FILTER MEDIA IS WEIGHED BEFORE AND AFTER  
THE TEST AND THE RESULTS ARE AS FOLLOWS:**

**99.5 AT .2 TO 2.0 MICRON RANGE**

**99.995 AT 1 MICRON AND ABOVE**



# THOROU

STATIONARY AND PORTABLE

# Cement Silo

Standard Silo 374 BBL.  
Optional: Silos up to 1,069 BBL single  
and dual compartments.  
837 - 1,067 have 1/4" 1st band.

- Standard
- 1,496 cubic feet – cylindrical design – 11'5"-1/2" diameter constructed of 3/16" steel with 1/4" steel top.
- 4" diameter fill line inside silo with cover mounted on top of silo.
- Outside ladder and safety CAGE, with toe board and pipe handrails around top of silo.
- SV-170 filter vent (170 Sq. Ft. cloth) and timer switch controls with wiring in liquid tight flexible metallic conduit from filter vent on top of silo to junction box on plant power panel. Internal electric shaker cleaning devise, with 1/3 HP single-phase motor. Optional: Vents available.
- Hinged silo or cement batcher for easy transporting. (Silos over 528 BBL or 2,112 cu. ft. will be separate load).
- Silo support structure constructed of steel "structural" beams 374 –606 = W8x31#, 837 – 1,069 = W8 x 48#.

THOROUGHBRID

# Thoroughbred Portable Concrete Plant

The Stephens Thoroughbred comes with bolt on extension legs with 13' 6" clearance to metal.

Stephens Mfg. is a member of the CPMB (Concrete Plant Manufacturers Bureau) Each plant will have a CPMB rating plate to guarantee that it meets the specifications for that size plant.





# Cement Batcher

- 14 yd cement batcher 140 cu. ft. with 10,000 lb. lever system, one "s" type load cell (100' cable) with 0-10 VDC digital readout, with inching gate on batcher inspection hatch on top of batcher.
- Hanger lugs for hanging test weights and safety chains to secure batcher. Optional: Limit Switches available.



# Aggregate Bin

Standard 70 TON - Three Compartments.  
(Optional: Bins up to 200 Ton- Six Compartments).

1400 cubic feet 70 ton – 51 cubic yards with heap – 3 compartment overhead storage bins.

- Bolt on extension legs between overhead bins and aggregate batcher.
- 10 yards of material may be discharged from any two (2) compartments. (On 4-compartment bin consult factory).
- Hinged fold down sides for easy transportation. (Note: It may be to customer's advantage to have bins welded up to save crane time and labor in the field.)
- Two clam gates on each compartment. Gear type gates with six (6)  $\frac{3}{4}$ " teeth on each gear.
- Each gate has permanently lubricated bronze bushings.
- 5" diameter air cylinder with electric solenoid.
- Heap plates.
- $\frac{1}{4}$ " abrasive resistant steel (400 brinnell) welded immediately above each gate (approx 12" tall.)

Optional: A/R Liners available



# Aggregate Batcher

- 12 yard with 40,000 LBS lever system with one "s" type load cell and 0-10 VDC digital readout.
- 580 Cu. Ft. capacity at water level.
- Two discharge openings in batcher with one (1) extra long double acting clamshell gates, under both openings. Gear type gate with six (6)  $\frac{3}{4}$ " teeth per gate. Gate has permanently lubricated bronze bushing. Gate will be actuated by two 5" air cylinders, with flow restrictors mounted in solenoid.



# Transfer Conveyor



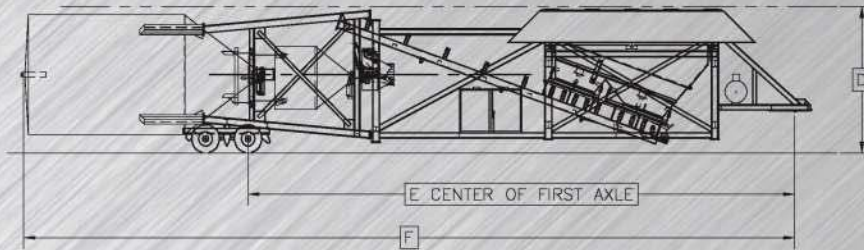
- 30" x 33'6" channel frame transfer conveyor.
- 15-HP 3-phase TEFC motor 230/460 volts.
- Stephens conveyors are rated by the CPMB (Concrete Plant Manufacturers Bureau) for accurate discharge rates.
- Optional: 36 Transfer Conveyor available



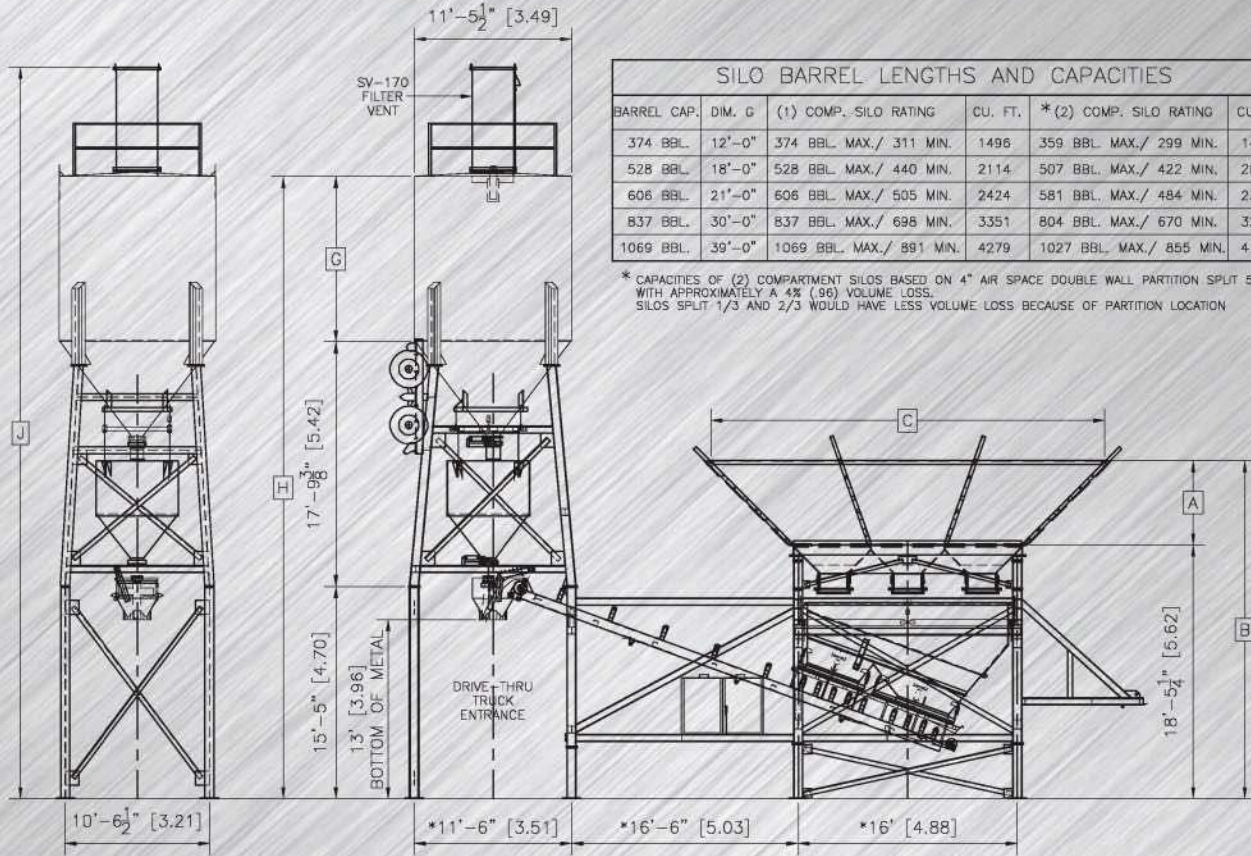
**AIR COMPRESSOR**  
Standard: 15 HP 240 Gallon  
Optional: 20 HP and Rotary Compressors



**ELECTRICAL PANEL**  
200 AMP Power Panel  
Optional: 400 and 600 AMP



**THOROUGHbred - TOWING POSITION**



**SILO BARREL LENGTHS AND CAPACITIES**

BARREL CAP.	DIM. G	(1) COMP. SILO RATING	CU. FT.	*(2) COMP. SILO RATING	CU. FT.
374 BBL.	12'-0"	374 BBL. MAX./ 311 MIN.	1496	359 BBL. MAX./ 299 MIN.	1436
528 BBL.	18'-0"	528 BBL. MAX./ 440 MIN.	2114	507 BBL. MAX./ 422 MIN.	2029
606 BBL.	21'-0"	606 BBL. MAX./ 505 MIN.	2424	581 BBL. MAX./ 484 MIN.	2327
837 BBL.	30'-0"	837 BBL. MAX./ 698 MIN.	3351	804 BBL. MAX./ 670 MIN.	3217
1069 BBL.	39'-0"	1069 BBL. MAX./ 891 MIN.	4279	1027 BBL. MAX./ 855 MIN.	4108

\* CAPACITIES OF (2) COMPARTMENT SILOS BASED ON 4" AIR SPACE DOUBLE WALL PARTITION SPLIT 50/50 WITH APPROXIMATELY A 4% (.96) VOLUME LOSS. SILOS SPLIT 1/3 AND 2/3 WOULD HAVE LESS VOLUME LOSS BECAUSE OF PARTITION LOCATION

**70 TON - 200 TON**

**THOROUGHbred PORTABLE CONCRETE PLANT DIMENSIONS CHART**

DESCRIPTION	UNITS	A	B	C	D	E	F	G	H	J	CAPACITIES CU YARDS CU METERS
70 TON AGG. BIN	STD.	3'-1 1/2"	21'-6 3/4"	22'-8 3/4"	14'-0"	---	---	---	---	---	51.85
	METRIC	.95 M	6.57 M	6.93 M	4.27 M	---	---	---	---	---	39.6
100 TON AGG. BIN	STD.	5'-1 1/2"	23'-6 3/4"	26'-8 3/4"	14'-0"	---	---	---	---	---	74.07
	METRIC	1.58 M	7.18 M	8.15 M	4.27 M	---	---	---	---	---	56.0
120 TON AGG. BIN	STD.	6'-1 1/2"	24'-6 3/4"	28'-8 3/4"	14'-0"	---	---	---	---	---	88.8
	METRIC	1.85 M	7.49 M	8.76 M	4.27 M	---	---	---	---	---	67.8
150 TON AGG. BIN	STD.	8'-2"	26'-7 1/4"	28'-0"	14'-0"	---	---	---	---	---	111.11
	METRIC	2.49 M	8.11 M	8.53 M	4.27 M	---	---	---	---	---	84.9
200 TON AGG. BIN	STD.	11'-4"	29'-9 1/4"	28'-0"	14'-0"	---	---	---	---	---	148.1
	METRIC	3.45 M	9.07 M	8.53 M	4.27 M	---	---	---	---	---	113.2
374 BARREL CEM. SILO	STD.	---	---	---	---	52'-5 3/8"	73'-11 3/8"	12'-0"	45'-2 3/8"	53'-1 3/4"	55.4
	METRIC	---	---	---	---	15.99 M	22.54 M	3.66 M	13.78 M	16.2 M	42.3
528 BARREL CEM. SILO	STD.	---	---	---	---	52'-5 3/8"	76'-11 3/8"	18'-0"	51'-2 3/8"	59'-1 3/4"	78.2
	METRIC	---	---	---	---	15.99 M	23.45 M	5.49 M	15.61 M	18.03 M	59.7
606 BARREL CEM. SILO	STD.	---	---	---	---	SEE NOTE A	SEE NOTE A	21'-0"	54'-2 3/8"	62'-1 3/4"	89.7
	METRIC	---	---	---	---	---	---	6.40 M	16.52 M	18.94 M	68.5
837 BARREL CEM. SILO	STD.	---	---	---	---	SEE NOTE A	SEE NOTE A	30'-0"	63'-2 3/8"	71'-1 3/4"	124.0
	METRIC	---	---	---	---	---	---	9.14 M	19.26 M	21.69 M	94.8
1069 BARREL CEM. SILO	STD.	---	---	---	---	SEE NOTE A	SEE NOTE A	39'-0"	72'-2 3/8"	80'-1 3/4"	158.3
	METRIC	---	---	---	---	---	---	11.89 M	22.01 M	24.43 M	121.0

NOTE A: MAY REQUIRE SPECIAL TWO PIECE DESIGN - PLEASE CONSULT FACTORY.

NOTE: TO CONTINUALLY UPDATE AND IMPROVE OUR PRODUCT WE RESERVE THE RIGHT TO AMMEND OUR STANDARD SPECIFICATIONS WITHOUT NOTICE.



## Why a Stephens?

- Owned by Stephens family since 1957
- Reputation of honest, reliable and second to none sales and service
- In-house CNC/Machine shop
- Certified in-house scales to keep load cell size and quantity down
- Simple and easy to service and maintain, features standard off the shelf parts
- Each plant is designed for your seismic requirements

Proud  
Members of



**Stephens**

[www.stephensmfg.com](http://www.stephensmfg.com)

Find us on:



**Stephens**

CONCRETE PLANTS • Tompkinsville, KY

*Stephens Manufacturing*

P.O. BOX 488 • TOMPKINSVILLE, KY 42167

PHONE: 800-626-0200 • OUTSIDE the USA 270-487-6774

FAX: 270-487-8368

[www.stephensmfg.com](http://www.stephensmfg.com)



**Local Distributor:**