
**ENVIRONMENT ACT PROPOSAL
GREENWALD BIOMASS PELLETIZING PLANT
NW 01-17-08 EPM**

**Prepared for:
Greenwald Colony Farms Ltd.**

Project No: 121-23044-00

September 2012



**GENIVAR
10 PRAIRIE WAY
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0.0 EXECUTIVE SUMMARY

The Manitoba Environment Act outlines the environmental assessment and licensing process for developments in Manitoba that may have potential for significant environmental effects. The proposed project is listed as a Class 1 Development under the Manitoba Environment Act Classes of Development Regulation (Manitoba Regulation 164/88) and is therefore required to complete and submit an Environment Act Proposal (EAP) to the Environmental Assessment and Licensing Branch (EALB).

Greenwald Colony Farms Limited has proposed to construct a biomass pelletizing plant near Stead, Manitoba to process straw into burnable fuel pellets. The proposed project (Project) includes facilities for a processing plant, office trailer and raw material storage. The proposed site is located at NW 01-17-08 EPM approximately 5 kilometres east of the Town of Stead in the Rural Municipality of Alexander, Manitoba.

This document has been developed using the Information Bulletin – Environment Act Proposal Report Guidelines, January 2011.

Upon approval from Manitoba Conservation and issuance of an Environment licence, it is anticipated that construction will begin in late fall/early winter 2012.

1.0 DEVELOPMENT INFORMATION

Greenwald Biomass Pelletizing Plant

Name of development

Greenwald Colony Farms Limited

Legal name of the proponent of the development

5 kilometres east of the Community of Stead, Manitoba – NW 01-17-08 EPM

Location of development

Contact Person for Proponent:

Mr. Ben Hofer

Treasurer, Greenwald Colony Farms Ltd.
Box 3140 RR 3
Beausejour, Manitoba R0E 0C0
Phone: (204) 265-3315
Fax: (204) 265-3367
E-mail: hoferben@yahoo.ca

Contact Person for Environmental Assessment:

Mr. Iain Pimlott, B. Sc.

GENIVAR
10 Prairie Way
Winnipeg, Manitoba R2J 3J8

Proposal Contents:

Section of Environmental Act Proposal Form		Section Number in Report
DESCRIPTION OF DEVELOPMENT:		
(i)	Legal description and map of development	2.1
(ii)	Mineral rights	2.2
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(vii)	Storage of gasoline or associated products	4.3.1
(viii)	Potential impacts	4.0
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SCHEDULE:		6.0

2.0 DESCRIPTION OF DEVELOPMENT

2.1 CERTIFICATE OF TITLE

A copy of a Title Search and a Property Tax Bill are included in Appendix B.

The legal description for the site is:

NW ¼ 1-17-8 EPM

EXC POWER TRANSMISSION LINE PLAN 5142 WLTO

SUBJECT TO THE RESERVATIONS AND PROVISIONS CONTAINED IN THE GRANT
FROM THE CROWN

2.2 MINERAL RIGHTS

The mines and minerals rights for the development area are vested with the Crown. A letter from the Crown Lands and Property Agency is attached in Appendix C.

2.3 LAND USE DESIGNATION

The property is currently zoned Rural Area (A80) and will retain this designation with this new land use. The municipality's zoning by-law provides for the approval of this project through a conditional use process, as it relates to the processing of agriculture products. An email from the RM of Alexander is attached in Appendix C.

2.4 EXISTING LAND USE

The land intended for development is currently utilised for agricultural production. The project is located on a 6 acre lot on the northwest corner of NW 01-17-08 EPM in the Rural Municipality of Alexander. A farm yard is located directly north of the proposed site. The nearest residence is located on SW 12-17-08 EPM, approximately 230 metres north of the proposed facility.

2.5 PREVIOUS STUDIES

No previous studies were completed for this project.

2.6 DESCRIPTION OF PROPOSED DEVELOPMENT

2.6.1 Project Schedule

Following regulatory approval, the Proponent will commence construction of the facility as early as late fall, 2012. Construction activities are expected to last approximately three (3) to six (6) months. It is expected that the first commercial processing of straw will take place in the spring of 2013.

Detailed project construction schedule (proposed dates)

Activity	Proposed Start Date	Proposed Finish Date
Land survey	Sept. 24, 2012	Sept. 28, 2012
Site Preparation	Sept. 29, 2012	Oct. 10, 2012
Design and build tendering	Oct. 11, 2012	Oct. 22, 2012
Main processing facility construction	Oct. 30, 2012	Dec. 3, 2012
Equipment installation and finish	Dec. 7, 2012	Dec. 23, 2012

2.6.2 Proposed Development

The conceptual design drawings of the project are attached in Appendix D. The project will include the following components:

- Construction of a state-of-the-art biomass pelletizing facility, office trailer and storage bins;
- Upgrading of access roads, parking area and utility infrastructure;
- Operation of a biomass pelletizing facility, including;
- Production of stove pellets;
- Shipping products to end users.

An estimated area of six (6) acres of land will be required for the processing plant, office trailer and storage facilities.

Any construction activities conducted will be carried out by certified contractors trained in the safe handling and disposal of hazardous materials.

The proposed facility will include the construction of an 1187.6 m² (12,776.6 ft²) processing facility and storage building. The processing area will incorporate approximately 650.3 m² (7,000 ft²) of the footprint, the storage area utilizing 487.7 m² (5,250 ft²) and a mechanical

room utilizing 48.3 m² (520 ft²). The facility will be a structural steel style building with metal insulated walls and concrete steel reinforced slab-on-grade floors. The building design drawings of the project are attached in Appendix E.

The proposed development is consistent with compatible land use policies for the area and interference with other resources and highways is minimised as direct access is from an existing municipal road (97N).

The area surrounding the facility will be graded to facilitate proper drainage of rainwater. Gravel paving will be provided for primary walkways, driveways, and staff parking lot.

Water will be supplied via truck haul from a well located on Greenwald Colony. Wastewater disposal will be via a holding tank located in the ATCO Trailer Office located adjacent the processing building.

Manitoba Hydro is scheduled to install 3-phase power service in the easement on the northwest corner of the property to supply the appropriate load to the facility.

2.6.3 Process Description

The facility will process and supply biomass stove pellet products to local farm operations. The plant will strive to minimize wastes and emissions including particulate matters and GHG emissions. The plant is designed to utilize 100% of the straw including waste and dust which will be collected and pressed into stove pellets.

Generally, raw straw bales are brought to site for temporary storage and preliminary tempering. The straw will then be processed through a rotary screen and bale crusher for the grinding. The end product will be finely grinded straw material that will be processed into biomass stove pellets. The production line will consist of a belt conveyor, rotary screen and a bale crusher for straw grinding; conveyor, furnace and rotary drum dryer for drying the product; bucket elevators, conveyor and pelletizing machine for pellet production; conveyor and counter flow cooler for cooling the product.

Dust produced throughout the processing will be collected using a bag dust collector MC 36 Pulse Dust Collector. This dust collector has a speed of filtration of up to 4 meters/sec. At 4 metres/sec, the inlet concentration is $\leq 3 \text{ g/m}^3$. De-dusting efficiency is 99 percent.

In the first year of operation, the facility expects approximately 400-450 tandem grain trucks entering to supply primarily straw bales and other materials and in total 400-450 tandem grain trucks leaving the plant for products distribution. In other words, it is 1 – 2 loads per day coming in and 1 to 2 trucks going out.

For year one which has only one shift per day, normal hours of operation are 7:00AM – 8:00PM from Monday to Saturday. The operation is expected to operate between April 1 and October 31 on an annual basis. The total number of employees for year one is 5.

The facility will be operated primarily through the use of electric energy via a 500 kVA Diesel Generator, to provide power to the processing equipment.

The proponent anticipates that approximately 100% of the feed stock will be produced within 50 km of the site.

2.6.4 On-site Material Storage Plan

Straw bales will be stored temporarily on site and processed immediately. Once processed, the stove pellets will be immediately loaded on to trucks and shipped to Greenwald and Brightstone Colonies. Twenty – 30,000 bushel grain bins will be located onsite for storage of the stove pellets if necessary.

2.6.5 Hazardous Waste

This plant will use a renewable biomass (straw) as the primary feedstock for production. No hazardous materials will be stored on-site. Some petroleum products will be stored for lubrication of the industrial equipment. Any spillage of these petroleum products will be managed according to safety requirements. All materials will be stored, used, and disposed of according to applicable regulations. A WHMIS program will be implemented by the proponent.

2.6.6 Solid Waste

Waste from the project will include typical municipal waste generated from the office and plant personnel. Construction waste will be generated during construction phase of the project.

2.6.7 Fire Protection

A truck equipped with a 10,000 gallon tank of water and pump will be stored on site. The Municipal Fire Department and fire trucks from neighbouring communities are also available for emergency service. There is immediate access to additional equipment and fire fighters located at Greenwald and Brightstone Hutterite Colonies (a total of three fire trucks).

2.7 DECOMMISSIONING

It is anticipated that the venue will be operational for at least the next 25 to 50 years. Decommissioning activities will be conducted in accordance with the legislation, standards, and guidelines applicable at that time.

2.8 FUNDING

An application has been filed with The Manitoba Biomass Energy Support Program; Manitoba Agriculture Food and Rural Initiatives Agri-Energy Office for funding support of the facility.

Manitoba Agriculture Food and Rural Initiatives Agri-Energy
1200 – 155 Carlton
Winnipeg, MB R3C 3H8

2.9 REGULATORY APPROVAL

The Manitoba Conservation Environmental Assessment and Licensing Branch is the lead Regulatory Authority (RA).

2.10 PUBLIC INVOLVEMENT

The RM of Alexander held a public hearing on February 14, 2012 in regard to Greenwald Colony Farms Ltd. Conditional Use Application. Minutes from this hearing are attached in Appendix G.

Comments from concerned members of the public will be solicited as part of Manitoba Conservation's review prior to issuing a licence.

3.0 DESCRIPTION OF EXISTING ENVIRONMENT

3.1 BIOPHYSICAL ENVIRONMENT

3.1.1 Regional Setting

The economy in the RM of Alexander consists mainly of forestry, recreation and agriculture. The forest areas are utilized for production of pulp fiber and wood products, and in conjunction with the organic terrain also provide habitat for wildlife and various recreation opportunities. The limited land area developed for agriculture is used mainly for mixed farming. Infrastructure to support agriculture, forestry, urban areas, transportation and recreation also occupies a small land area.

3.1.2 Regional Climatological Setting

The mean annual temperature is 1.9° Celsius and the mean annual precipitation is 523 mm at Pine Falls. The average frost-free period is 107 days and degree-days above 5° Celsius accumulated from May to September average 1579. The seasonal moisture deficit calculated between May and September is slightly greater than 200 mm. The estimated effective growing degree-days accumulated from May to September vary from 1400 to 1500. These parameters provide an indication of moisture and heat energy available for crop growth and are generally adequate to support a wide range of crops adapted to western Canada.

3.1.3 Regional Surface and Groundwater Conditions

The closest surface water resource is Gull Lake, located approximately five kilometres to the west. Catfish Creek is located seven kilometres to the north of the site. During precipitation events and snow melt, the natural slope of the property provides for surface water drainage to the ditches surrounding the property.

Well logs within a ten-kilometre radius of the site indicate that water for domestic and livestock usage is obtained from lenses and some fairly extensive deposits of sand and gravel at about 3 to 65 metres below grade. Groundwater quality ranges from good to excellent. Drainage maps indicate the surface drainage moves northeast toward Catfish Creek and eventually Lake Winnipeg.

3.1.4 Regional Terrestrial Environment

The land is in close proximity to the community of Stead and is currently used for agricultural purposes. The agricultural conditions and the impacted landscape limit suitability of the area to wildlife. Species reported to be present in the area include gophers, deer, geese, coyote, raccoons, fox, mice, ducks, ravens, seagulls, songbirds, and various insect species.

3.1.5 Species at Risk

A search of the MB Conservation Data Centre, rare and endangered species database was requested September 10, 2012, the search found no occurrences at this time for the area of interest. An email from the Manitoba Conservation Data Centre is attached in Appendix C.

Fish and fish habitat will not be affected by this project. Navigable and non-navigable waters will not be encountered or crossed during this project.

3.2 SOCIO-ECONOMIC ENVIRONMENT

3.2.1 Public Safety and Health Risks

A potential safety risk of the project is the periodic delays and inconvenience to individuals utilising the area during construction. The effects will be mitigated by the incorporation of site access for vehicles, which will be coordinated with local traffic patterns to minimise delays in vehicle movement. No other impacts on public safety were identified within the Project area.

3.2.2 Protected Areas

Belair Provincial Forest is located directly north and Brightstone Sand Hills Provincial Forest is located eight kilometres to the west of the proposed project location. Brokenhead Wetland Provincial Ecological Reserve is located 12 kilometres west of the proposed site.

3.2.3 Heritage Resources

Manitoba Historic Resources Branch has indicated that the potential to impact significant heritage resources is low and therefore, the Branch has no concerns with the project. A letter from the Manitoba Historic Resources Branch is attached in Appendix C.

3.2.4 First Nations

The nearest First Nation community is the Brokenhead Ojibway Nation #4 (Baaskaandibewiziibiing) which is located approximately 15 kilometres west of the proposed project.

4.0 ENVIRONMENTAL EFFECTS

4.1 EMISSIONS IMPACT

Fines or dust generated from processing straw fibre are the major source of particulate matter emission in the facility. Dust is expected in processes including bale opening, bale crushing, fibre separations, fibre grinding, and fibre blending, where severe mechanical forces are applied to the material in a semi-closed space. Metal vacuum enclosures will be mounted to all processing areas, and dust will be drawn through pipes to a dust collection system that includes a pulse air bag-house fabric filter. Specifications of this filter system are attached in Appendix F. The concentration of dust in the input air is estimated at less than 3 g/m³. Based on the 99.5% dust removal efficiency, dust in the output clean air should be less than 15 mg/m³.

4.2 LAND IMPACT

Project related activities will be limited to the proposed project location. It is unlikely that construction on the disturbed (agricultural) site will have any significant adverse environmental effects on local flora or fauna. The proposed site is currently used in an agricultural capacity for grain storage; it is highly unlikely any of the listed flora occur on site. The proposed project site is highly unlikely to provide important habitat for rare or endangered animal species.

4.3 SURFACE WATER

The closest surface water resource is Gull Lake, located approximately five kilometres to the west. Catfish Creek is located seven kilometres to the north of the site. During precipitation events and snow melt, the natural slope of the property provides for surface water drainage to the ditches surrounding the property.

According to maps in the Rural Municipality of Alexander Information Bulletin 99-27, the subject property is not located in a flood prone area.

4.3.1 Fuel Storage On-Site

Hazardous materials stored on-site will include diesel and gasoline as fuel for their own industrial equipment and other petroleum products for lubrication. Any spillage of these petroleum products will be managed according to safety requirements. All hazardous

materials will be stored, used, and disposed of according to applicable regulations. A WHMIS program will be implemented by the proponent.

4.4 GROUNDWATER

Well logs within a ten-kilometre radius of the site indicate that water for domestic and livestock usage is obtained from lenses and some fairly extensive deposits of sand and gravel at about 3 to 65 metres below grade. Groundwater quality ranges from good to excellent. Drainage maps indicate the surface drainage moves northeast toward Catfish Creek and eventually Lake Winnipeg.

4.5 SPECIES IMPACT

A file search with the Biodiversity Conservation Wildlife and Ecosystem Protection Branch of Manitoba Conservation resulted in no occurrences in the region. Correspondence is included in Appendix B.

4.6 FISHERIES IMPACT

The closest surface water resource is Gull Lake, located approximately five kilometres to the west. A network of drainage ditches surrounds the site and eventually drains into Catfish Creek, located seven kilometres to the north. The proposed project will not discharge wastewater into any surface water stream. All wastewater from the processing facility will be collected in an on-site holding tank. No water is used during processing. No wastewater is generated during the processing phase.

4.7 FORESTRY IMPACT

There is no known forestry activity near the proposed project location. Construction activities will not affect any forested area.

4.8 HERITAGE RESOURCES

In a letter from the Historic Resources Branch dated September 12, 2012, it was stated that the potential to impact significant heritage resources is low, and, therefore, the Historic Resources Branch has no concerns with the project at this time. This letter is included in Appendix C.

4.9 SOCIO-ECONOMIC IMPACTS

The construction of the proposed facility will result in a short-term boost to the construction industry in the area. A long-term boost to the agricultural sector will be achieved through the purchasing of straw material.

4.10 CLIMATE IMPACT

Local road traffic and agricultural emissions are the predominant sources of greenhouse gas emissions (GHG) in the area. The region surrounding the site includes residential dwellings and agricultural fields. An increase in truck traffic will occur during construction and operation of the plant. The effect of these activities on air quality will vary with seasonal weather patterns.

The processing facility will not be heated year-around. All equipment will run on hydro electricity, resulting in nearly zero GHG emissions. The GHG emission sources for this plant will be diesel or gasoline driven industrial equipment, including 1 bobcat, 1 forklift, 1 tractor, and several tandem trucks. It is estimated that those vehicles consume 5,000 litres diesel (GHG emission 2.73kg/L), 3,000 litres gasoline (GHG emission 2.43 kg/L), resulting in GHG emissions of 21 metric tonnes. The plant will use E10 gasoline (with 10% ethanol) and B5 diesel (5% bio-diesel) as much as possible to minimize GHG emissions. It is also assumed that 2 employees will drive up to 50 km daily to and from work for the first year of operation. Based on this assumption, the annual gasoline consumption for employees traveling to and from the plant is approximately 3,500 litres, resulting in 9 metric tonnes of GHG emissions.

4.11 PUBLIC INVOLVEMENT

Comments from concerned members of the public will be solicited as part of Manitoba Conservation's review prior to issuing a licence.

5.0 MITIGATION MEASURES AND RESIDUAL ENVIRONMENTAL EFFECTS

The impact assessment of the Project focused on an evaluation of the factors that may affect existing environmental conditions within the Project area, and includes mitigation measures to prevent or minimise potential effects. Implementing responsible construction and operation practices can mitigate most potential environmental impacts. The impact assessment is based on GENIVAR's understanding of the Project at this time; predicted issues and associated effects may change as construction plans are finalised.

5.1 AIR QUALITY

Potential environmental effects on the atmospheric environment will be primarily from construction activities and facility emissions during operation.

Emission of particulate matter, combustion gases, and greenhouse gases will be generated through normal operation of construction vehicles (i.e., delivery trucks, dump trucks, excavators, rollers). Emissions will also result from workers traveling to and from site in personal vehicles. Vehicular emissions are expected to be nominal.

Construction of the facility may result in intermittent, short-term increases in ambient noise levels surrounding the property, due to operation of heavy equipment and noise generated directly from construction activities. Noise generated by project construction may temporarily exceed ambient levels. To mitigate against this potential effect, all construction activities will abide by the provincial regulations and municipal by-laws.

Local road traffic and agricultural emissions are the predominant sources of GHG emissions in the area. The region surrounding the site includes residential dwellings and agricultural fields. An increase in truck traffic will occur during construction and operation of the plant. The effect of these activities on air quality will vary with seasonal weather patterns.

During operation, noise will be generated from trucks entering and exiting the facility, and from processing equipment inside the facility. This plant resembles a typical processing plant, with major noise sources from electrical motors, blower fans, and running rollers in pelletizing and separation units. However, since all running parts are encased, the noise

level is greatly reduced. It is estimated that the noise level is not greater than 85Db for 8-hour continuous working environment. The plant will develop a health and safety program as required by regulations. Workers will wear earmuffs or earplugs if required. If operational noise is deemed to be a nuisance, the proponent is committed to installing the necessary sound insulation at the facility.

The environmental effects of accidents and malfunctions on the atmospheric environment would include fires and accidental releases of hazardous materials (such as fuel spills) from construction equipment and vehicles. Following federal/provincial regulatory guidelines and training of construction and operational personnel will minimize the potential for adverse effects on the atmospheric environment due to accidents and malfunctions.

5.2 TERRESTRIAL ENVIRONMENT

Project related activities will be limited to the proposed project location. It is unlikely that construction on the disturbed (agricultural) site will have any significant adverse environmental effects on local flora or fauna. The proposed site is currently used in an agricultural capacity for crop production; it is highly unlikely any of the listed flora occur on site. The proposed project site is highly unlikely to provide important habitat for rare or endangered animal species.

Migratory birds are protected under the *Migratory Birds Convention Act (MBCA)*. There is very low potential for the project to affect species protected under the *MBCA* given the agricultural disturbance that occurs on the site, surrounding development, and the higher quality habitats within surrounding natural areas.

Excavation (for construction) will be required to remove top soil and fill materials from site. All excavated material will be removed by the contractor and will be handled in a provincially approved manner.

Accidents and malfunctions may result in potential soil contamination on the site. Proper training of construction personnel and adherence to applicable regulations will minimize the risk of accidental events.

During operation, the facility will be used to process straw fibre. All activities will be confined to the property. As previously noted, there is very low potential for rare or uncommon species to inhabit this site.

5.3 GROUNDWATER

The greatest threat to groundwater is the potential for accidents and malfunctions such as the release of hazardous materials (i.e., fuel or lubricants from construction machinery), during the construction phase. The Proponent will ensure that standard contingency planning (i.e., spill response plan and spill kits on site) will be implemented prior to mobilization of construction machinery. All construction and operational personnel will be trained to handle all the hazardous materials that will be used on site. Under these conditions, it is unlikely that the construction phase of the project will have any significant adverse environmental effect on groundwater. All spills will be reported to the appropriate authority and remediated in accordance with applicable regulations (Manitoba Environment Act Regulation 97/88R).

Vehicles and equipment will not be refueled on site, unless in a pre-designated contained area for the construction of the facility only. All hazardous materials used as part of the construction or operational phase of the project will be stored according to applicable regulations.

5.4 LAND USE

The Project Development Area is currently an agricultural plot of land vacant of infrastructure.

There are agricultural operations to the north and east of the property. Since construction and operational activities will be confined to the property, the project is not expected to affect land use at these operations or at nearby residences.

In the operational phase, the facility will be used as a seasonal production facility, receiving truck loads of straw and processing materials, and shipping out finished product. Considering the use of neighbouring properties (agricultural operations), residents in the area should be accustomed to any project related truck traffic.

Accidents and malfunctions during construction and operation represent potential for temporary loss of useable space at the site. Spills or fires may render nearby areas (commercial enterprises and residences) unsuitable for typical activity levels. To minimize the risk to adjacent land users, mitigation will include preparation of contingency plans for spills and large fires. The proponent will ensure that standard contingency planning (i.e., spill response plan and spill kits to be available on site) will be implemented so that the potential for spills and fires is minimized during all phases of the project.

5.5 DECOMMISSIONING

The project is not scheduled for decommissioning, but will follow all applicable regulations, guidelines, and by-laws regarding the atmospheric environment, if decommissioning is required in the future. It is anticipated that decommissioning of the facility would generate impacts on the atmospheric environment that are of similar magnitude and duration as those effects generated during construction.

6.0 SCHEDULE

It is anticipated that the Environmental Act Licence process will be finalized by December of 2012. Following regulatory approval, the Proponent will commence construction of the facility. Construction activities are expected to last approximately three (3) to six (6) months.

Project Construction Schedule (proposed dates)

Activity	Proposed Start Date	Proposed Finish Date
Land survey	Sept. 24, 2012	Sept. 28, 2012
Site Preparation	Sept. 29, 2012	Oct. 10, 2012
Design and build tendering	Oct. 11, 2012	Oct. 22, 2012
Main processing facility construction	Oct. 30, 2012	Dec. 3, 2012
Equipment installation and finish	Dec. 7, 2012	Dec. 23, 2012

7.0 REFERENCES

Groundwater Resources in the LGD of Alexander Planning District (A Synopsis), 1982. Manitoba Natural Resources, Water Resources Branch.

Health Canada, 2008. Guidelines for Canadian Drinking Water Quality. Accessed via internet. http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/sum_guide-res_recom/chemical_chimiqueseng.php

Information Bulletin – Environment Act Proposal Report Guidelines , January 2011- Environmental Assessment and Licencing Branch, Manitoba Conservation. Accessed via internet. <http://www.gov.mb.ca/conservation//eal/pubs/index.html>

Manitoba Department of Agriculture and Conservation, 1967. Soils of the Lac Du Bonnet Area.

Land Resource Unit, 2000. Soils and Terrain. An Introduction to the Land Resource. Rural Municipality of Alexander. Information Bulletin 99-27, Brandon Research Centre, Research Branch, Agriculture and Agri-Food Canada.

8.0 STANDARD LIMITATIONS

The findings and recommendations provided in this report were prepared by GENIVAR (the Consultant) in accordance with generally accepted professional engineering principles and practices. The information contained in this report represents the professional opinion of the Consultant and their best judgment under the natural limitations imposed by the Scope of Work.

This report is limited in scope to only those items that are specifically referenced in this report. There may be existing conditions that were not recorded in this report. Such conditions were not apparent to the Consultant due to the limitations imposed by the scope of work. The Consultant, therefore, accepts no liability for any costs incurred by the Client for subsequent discovery, manifestation or rectification of such conditions.

This report is intended solely for the Client named and Manitoba Conservation as a general indication of the visible or reported condition of the items addressed in the report at the time of the assessment. The material in this report reflects the Consultant's best judgment in light of the information available to it at the time of preparation.

This report and the information and data contained herein are to be treated as confidential and may be used only by the Client and its officers and employees and Manitoba Conservation in relation to the specific project that it was prepared for. Any use a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. The Consultant accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

The report has been written to be read in its entirety, do not use any part of this report as a separate entity.

All files, notes, source data, test results and master files are retained by GENIVAR and remain the property of the Consultant.

GENIVAR

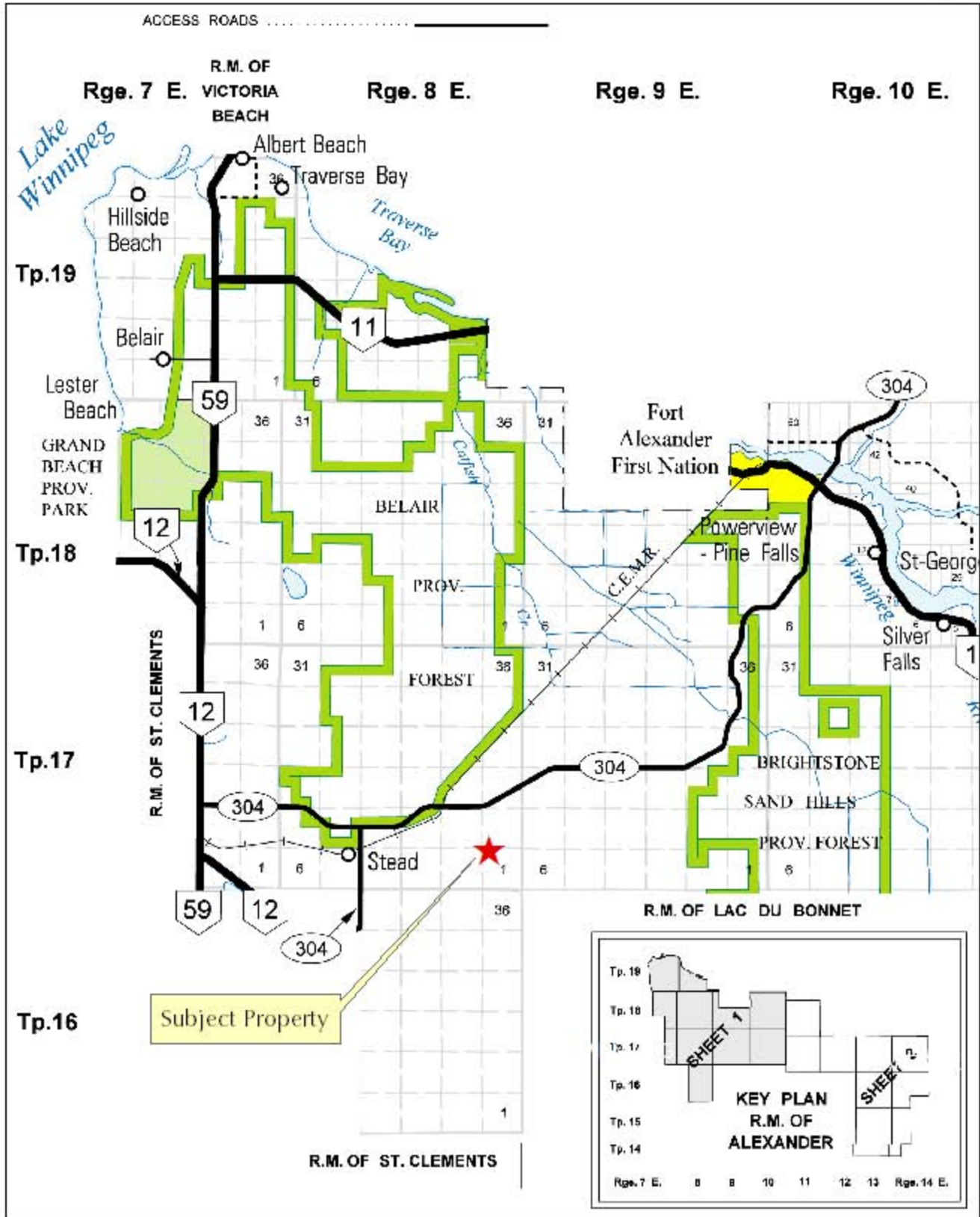
Prepared by: Iain Pimlott, B. Sc.
Environmental Scientist

Reviewed by: Ross Webster, P.Eng.
Manager, Environmental Group



APPENDIX A
Site Location

Greenwald Biomass Pelletizing Plant EAP



Source: Google Earth, 2012

Site Location
NW 01-17-08 EPM

Greenwald Biomass Pelletizing Plant EAP



Source: Google Earth, 2012

Site Location
NW 01-17-08 EPM

Greenwald Biomass Pelletizing Plant EAP



Source: Google Earth, 2012

Site Location
NW 01-17-08 EPM

APPENDIX B

Land Title Search

DATE: 2012/09/04	TITLE SEARCH	PASMWIE
TSTL (1 OF 9)	TITLE DISPLAY - WINNIPEG	PAGE: 01
TITLE NUMBER.....	2247377/1	TITLE STATUS..... ACCEPTED
REGISTRATION DATE..	2007/08/21	ASSESSMENT OFFICE.. ** MANITOBA **
COMPLETION DATE....	2007/08/29	CONSOLIDATION..... NO

LEGAL DESCRIPTION:

GREENWALD HOLDING CO. LTD.

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

NW 1/4 1-17-8 EPM

EXC POWER TRANSMISSION LINE PLAN 5142 WLTO

SUBJECT TO THE RESERVATIONS AND PROVISIOES CONTAINED IN THE GRANT FROM
THE CROWN

TX: _____

DA: _____

DATE: 2012/09/04	TITLE SEARCH	PASMWIE
TSEC (2 OF 9)	TITLE DISPLAY - WINNIPEG	PAGE: 01
TITLE NUMBER.....	2247377/1	TITLE STATUS..... ACCEPTED
REGISTRATION DATE..	2007/08/21	ASSESSMENT OFFICE.. ** MANITOBA **
COMPLETION DATE....	2007/08/29	CONSOLIDATION..... NO

ACTIVE CHARGE LIST: BEGINNING

181412/1 ACCEPTED CAVEAT REG'D: 1961/07/11

DESCRIPTION: N 15 FT. PERP

FROM/BY: MAN. TELEPHONE SYSTEM

TO:

CONSIDERATION: NOTES:

85-99843/1 ACCEPTED CAVEAT REG'D: 1985/10/22

FROM/BY: MAN. TELEPHONE SYSTEM

TO:

CONSIDERATION: NOTES:

TX: _____ REGISTRATION TO DISPLAY

DA: _____ F6-TSTC

*** NO MORE ACTIVE CHARGES FOUND FOR THIS TITLE ***

DATE: 2012/09/04 TITLE SEARCH PASMWIE
 TSTS (3 OF 9) TITLE DISPLAY - WINNIPEG
 TITLE NUMBER..... 2247377/1 TITLE STATUS..... ACCEPTED
 REGISTRATION DATE.. 2007/08/21 ASSESSMENT OFFICE.. ** MANITOBA **
 COMPLETION DATE.... 2007/08/29 CONSOLIDATION..... NO

SUMMARY OF TITLE DATA

SELECT ONE OF THE FOLLOWING:

TITLE NOTES..... MORE? NO _
 ORIGINATING REG. NUMBER.. 3500763/1 MORE? NO _
 FROM TITLE NUMBER..... 1921076/1 TYPE.... ALL MORE? NO _
 RPA/CROWN GRANT NUMBER... MORE? NO _

NAME FOR SERVICE..... GREENWALD HOLDING CO. LTD. MORE? NO _
 ADDRESS..... BOX 3140, R.R. #3
 BEAUSEJOUR MB

POSTAL CODE..... ROEOCO EFFECT... ACTIVE
 DUPLICATE PRODUCED ? MORE? NO _
 ISSUED DATE.....

TX: _____ NEXT TITLE NUMBER... _____
 DA: _____

NO MORE INFORMATION EXISTS REGARDING THIS SCREEN

2011 PROPERTY TAX BILL



RM OF ALEXANDER

BOX 100 ST. GEORGES MB R0E 1V0

Phone : (204) 367 - 6170 Fax : (204) 367 - 2257

Website : www.rmalexander.com E-mail : info@rmalexander.com

MUNICIPALITY # 600

ROLL NUMBER 0020000.000

GREENWALD HOLDING CO LTD R
BOX 3140 RR 3
BEAUSEJOUR MB
R0E 0C0

REAL PROPERTY INFORMATION				
Lot/Section	Blk/Twp	Plan/Range	Frontage/Area	Dwelling Units
DES NW1	17	8E	152.00 A	
Civic Address : 47001 STEAD RD 97N				

ASSESSMENT

Title or Deed	Tax Status	Assessment			Class	Portion %	Portioned Assessment
		Land	Building	Total			
2247377	Taxable	78,300	135,600	213,900	Farm Property	26.00	55,620

MUNICIPAL TAXES

SCHOOL TAXES

	Assessment	Mill Rate	Taxes Owning
GENERAL MUNICIPAL GENERAL MUNICIPAL AT LARGE	55,620	11.230	624.61
By-Law			
End Year			
Levy			
NET MUNICIPAL TAXES →			624.61
SCHOOL DIVISION Inquiries : (204) 268 - 6500 Sunrise	55,620	16.490	917.17
NET SCHOOL DIVISION LEVY			917.17
NET SCHOOL TAXES →			917.17
CURRENT TAXES			1,541.78
BALANCE OWING →			1,541.78

Important Messages:

DUE DATE : Sep 01, 2011

Manitoba Education/Property Tax Credit Advance: Residence must be owner occupied as of January 1. For additional information telephone: Toll Free 1-800-782-0771, Winnipeg 948-2115.

Manitoba Farmland School Tax Rebate : Applications and more information are available at your local MASC and MAFRI offices and www.masc.mb.ca. For additional information telephone Toll Free 1-866-Manitoba (1-866-626-4862).

APPENDIX C

**Correspondence from the Manitoba Historic Resources Branch,
Archaeological Assessment Services Unit, Crown Lands and Property
Agency, RM of Alexander and Manitoba Conservation Wildlife and
Ecosystem Protection Branch**

Date: September 12th, 2012

To: Iain Pimlott

Genivar

10 Prairie Way, The Waters Business Park

Wpg, MB R2J 3J8

From: Jenny Payment

Impact Assessment Archaeologist

Historic Resources Branch

Main Floor 213 Notre Dame Ave

Wpg, MB R3B 1N3

Phone #: (204) 945-4768

Subject: Greenwald Colony Biomass Pelletizing Plant

HRB FILE: AAS-12-4885

Further to your memo regarding the above mentioned development proposal, I have examined the location in conjunction with Historic Resources Branch records for areas of potential concern. The Historic Resources Branch has **no concerns** with the development proposal.

If at any time heritage resources are encountered in association with these lands during any development, the Historic Resources Branch may require that a heritage resource management strategy be implemented by the developer to mitigate the effects of development on any heritage resources.

If you have any questions or comments, please feel free to contact me (Jenny Payment), by phone (see above), or by email: Jen.Payment@gov.mb.ca.

Jenny Payment

Iain Pimlott

From: Little, Karen (CLPA) [Karen.Little@gov.mb.ca]
Sent: Monday, September 10, 2012 1:49 PM
To: Iain Pimlott
Subject: RE: Mineral Rights ~ NW 1-17-8 EPM (Greenwald Colony Biomass Pelletizing Plant - EAP)

Good afternoon Iain, according to The Crown Land Registry System, this date, NW 1-17-8 EPM was originally granted to John Tomasyk October 11, 1921 along with the sand & gravel. The Crown kept ownership to the mines & minerals.

I unable to comment whether or not ownership to the sand & gravel is still with the surface title or if it has been severed, as I was not provided with a copy of the Certificate of Title. Ownership of the mines & minerals remain with the Crown.

If I can be of further assistance, contact me at any of my numbers noted below.

Sincerely,

Karen Little

*Supervisor of Crown Lands Registry
Crown Lands and Property Agency
308 - 25 Tupper Street North
Portage la Prairie MB R1N 3K1
P (204) 239-3805 F (204) 239-3560
Toll Free 1-866-210-9589
karen.little@gov.mb.ca*



An Agency of MB Infrastructure and Transportation

Iain Pimlott

From: Michele Stefaniuk [micheles@rmalexander.com]
Sent: Wednesday, September 12, 2012 9:59 AM
To: Iain Pimlott
Cc: 'Erb, Michelle (MAFRI)'; 'Moir, Kate'
Subject: RE: Greenwald Colony Biomass Pelletizing Plant - EAP

Good Morning Iain,

Please be advised that the land in question is designated "Rural Area" and the Zoning is "A80".

Regards,

Michele Stefaniuk, C.M.M.A.



Assistant CAO
R.M. of Alexander
Box 100
St. Georges MB R0E 1V0
(204) 367-6174

From: Moir, Kate [mailto:Kate.Moir@gov.mb.ca]
Sent: Monday, September 10, 2012 1:25 PM
To: 'Iain.Pimlott@genivar.com'
Cc: Erb, Michelle (MAFRI); 'Michele Stefaniuk'; 'micheles@rmalexander.com'
Subject: RE: Greenwald Colony Biomass Pelletizing Plant - EAP

Good afternoon Iain,

I was forwarded your request by MAFRI. We always encourage applicants/developers to contact the RM directly to confirm land use designations/zoning to ensure that you have the most up to date information. The contact for the RM of Alexander is: Michele Stefaniuk at 204-367-6174. I have cc'd her on this email.

Michele Stefaniuk – my information is stating "Rural Area" and "A80" zone.

I hope this provides the direction you require.

Kate Moir, BA, MEM

Community Planner

Community Regional Planning Services

Manitoba Local Government

Box 50, L01- 20 First Street

Beausejour MB R0E 0C0

p. 268-6064 f. 268-6007

e. kate.moir@gov.mb.ca

Iain Pimlott

From: Friesen, Chris (CON) [Chris.Friesen@gov.mb.ca]
Sent: Thursday, September 13, 2012 9:00 AM
To: Iain Pimlott
Subject: RE: Greenwald Colony Biomass Pelletizing Plant - EAP

Iain

Thank you for your information request. I completed a search of the Manitoba Conservation Data Centre's rare species database and found no occurrences at this time for your area of interest.

The information provided in this letter is based on existing data known to the Manitoba Conservation Data Centre at the time of the request. These data are dependent on the research and observations of CDC staff and others who have shared their data, and reflect our current state of knowledge. **An absence of data in any particular geographic area does not necessarily mean that species or ecological communities of concern are not present;** in many areas, comprehensive surveys have never been completed. Therefore, this information should be regarded neither as a final statement on the occurrence of any species of concern, nor as a substitute for on-site surveys for species as part of environmental assessments. Also, because the Manitoba CDC's Biotics database is continually updated and because information requests are evaluated by type of action, any given response is only appropriate for its respective request.

Please contact the Manitoba CDC for an update on this natural heritage information if more than six months pass before it is utilized.

Third party requests for products wholly or partially derived from Biotics must be approved by the Manitoba CDC before information is released. Once approved, the primary user will identify the Manitoba CDC as data contributors on any map or publication using Biotics data, as follows as: Data developed by the Manitoba Conservation Data Centre; Wildlife and Ecosystem Protection Branch, Manitoba Conservation.

We would be interested in receiving a copy of the results of any field surveys that you may undertake, to update our database with the most current knowledge of the area.

If you have any questions or require further information please contact me directly at (204) 945- 7747.

Chris Friesen
Biodiversity Information Manager
Manitoba Conservation Data Centre
204-945-7747
chris.friesen@gov.mb.ca
<http://www.gov.mb.ca/conservation/cdc/>

APPENDIX D

Project Design Drawings

10/11/12

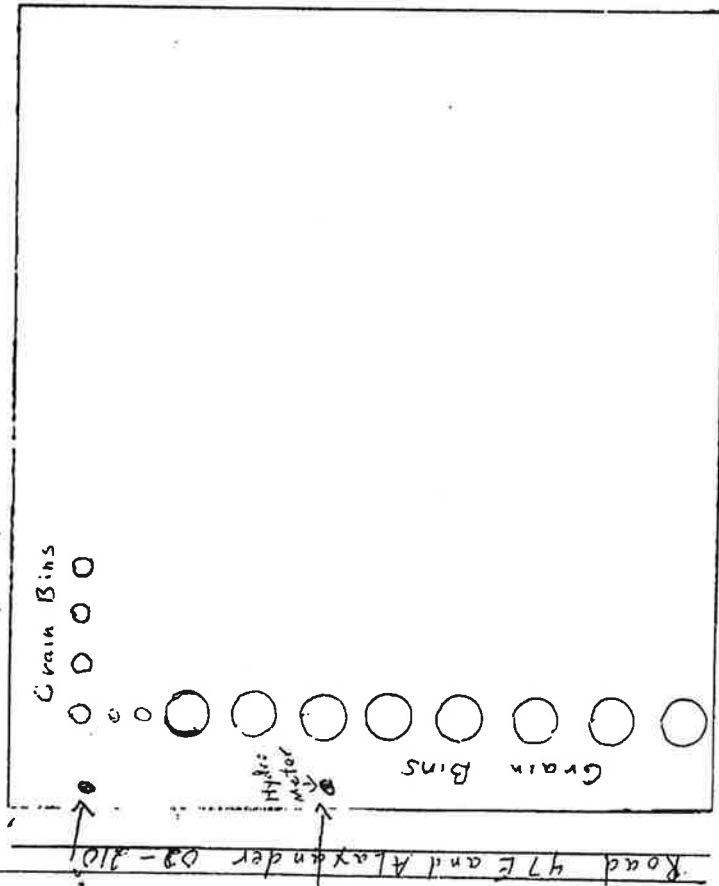


stead

3 miles

SITE PLAN AS IS (NORTH)

Stead Hyway

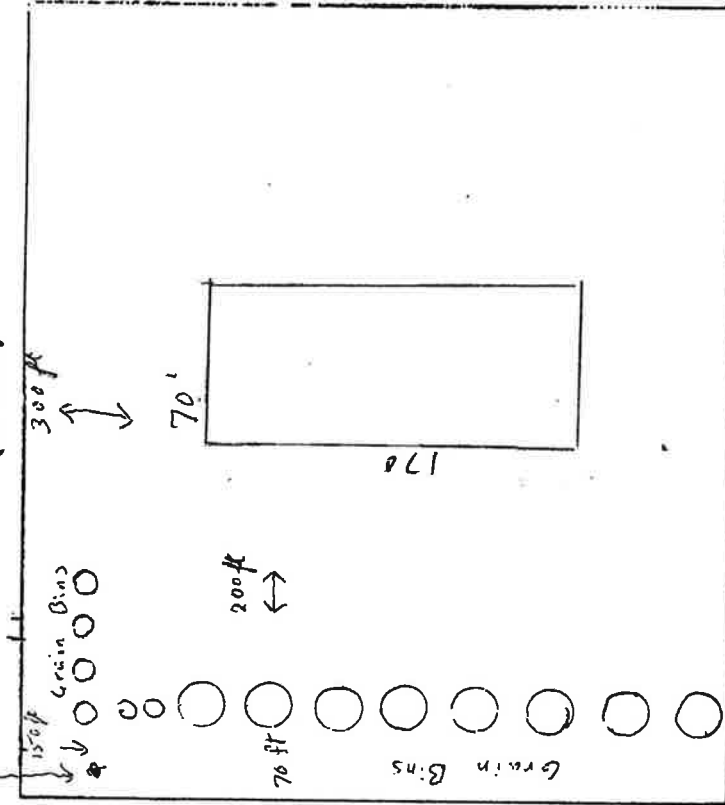


Notes

Meter Tag no.:

615180

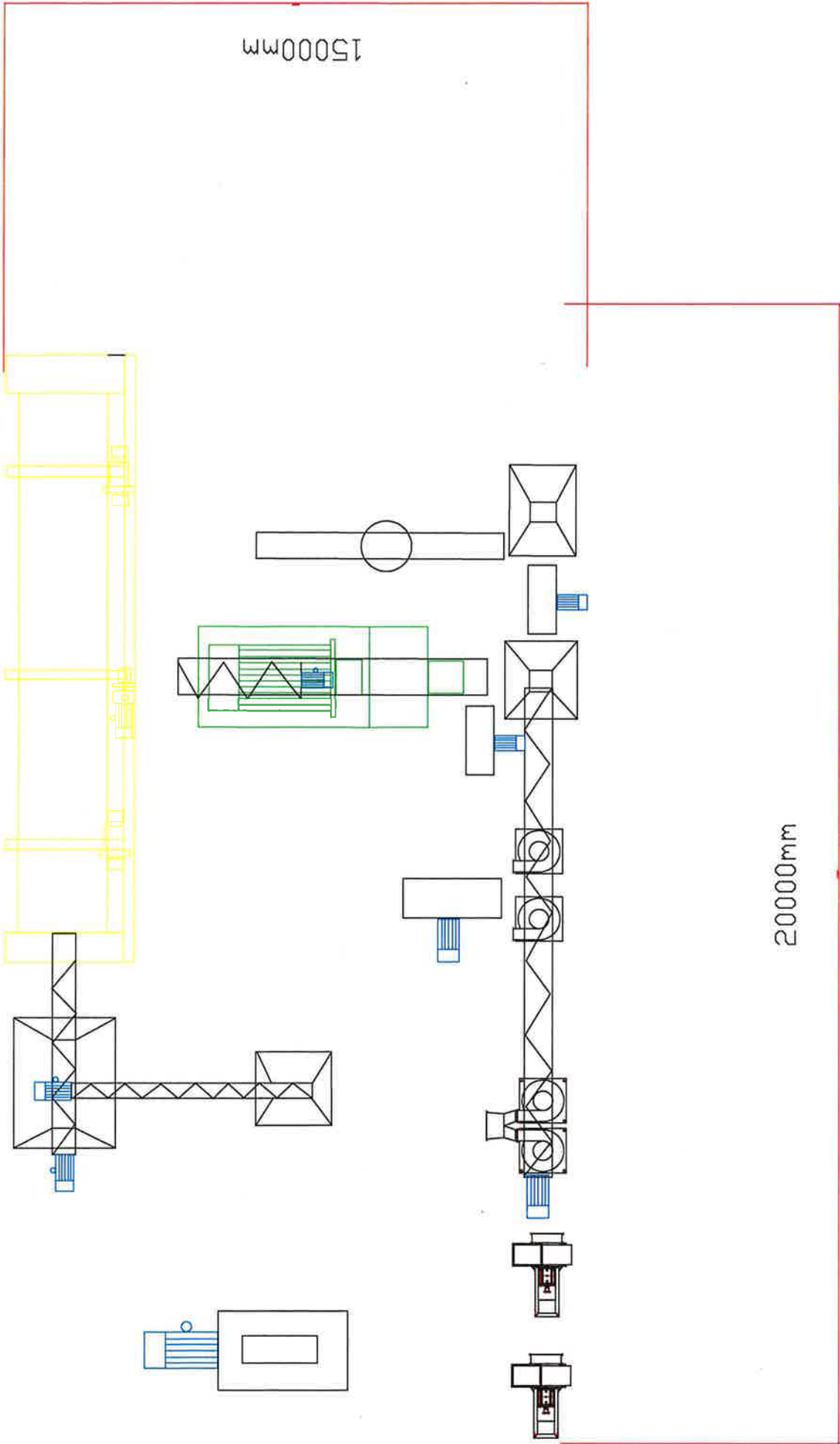
3 Ph Service SITE PLAN WITH CHANGES (NORTH)

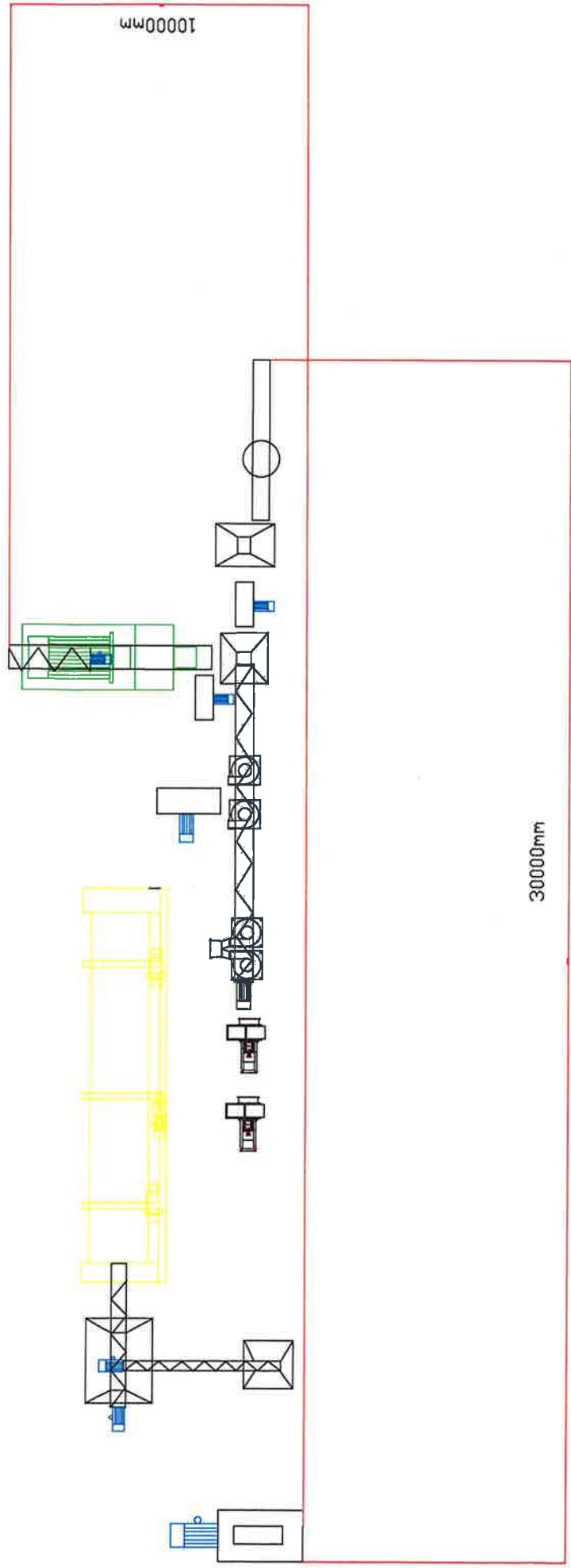


Notes

Meter Tag no.:

15000mm

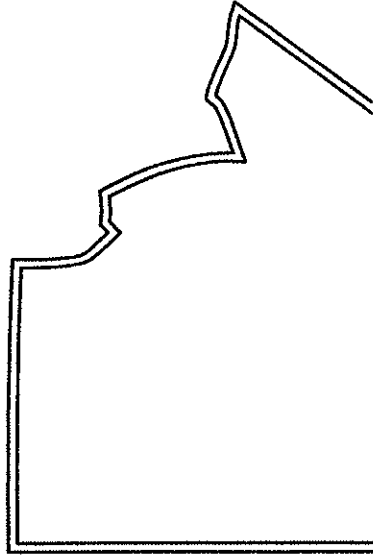




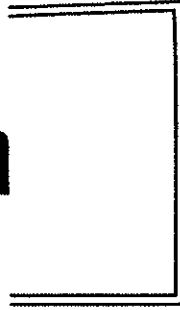
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APPENDIX E

Building Plans



South-Man Engineering



15-1599 Dugald Road | Winnipeg, Manitoba | R2J 0H3
 PH. (204) 668-9652 | FAX (204) 668-9204

PROJECT NAME:
**BRG MFG INC.
 BEAUSEJOUR, MB**



SHT. NO.	SHEET SCHEDULE
CS	COVER SHEET
GN-1	GENERAL NOTES
GN-2	BUILDING CODE DESIGN SUMMARY
S-P	SITE PLAN
S-1A	FLOOR PLAN
S-1B	FOUNDATION PLAN
S-2	BUILDING ELEVATIONS
S-3A	SECTIONS DETAILS
S-3B	SECTIONS DETAILS
PROJECT NAME BRG MFG, INC. BEAUSEJOUR, MB.	
SHEET TOTAL COVER SHEET	
PROJECT AREA 12,776.60 SQ/FT	
DRAWING NO. SOUTH-MAN ENGINEERING R. FLORES	
SHEET NUMBER JULY 2012	
SHEET NAME N/A	
SHEET NUMBER CS	

BUILDING CODE DESIGN SUMMARY
PROJECT: BRG MANUFACTURING INC. - BIOMASS PELLETING FACILITY

SECTION 3.1 GENERAL
3.1.2 MAJOR OCCUPANCY CLASSIFICATION:
 GROUP F, DIVISION 2
 WORKSHOP (COMPARABLE TO WOOD WORKING SHOP)
BUILDING AREA:
 12776.6 SQ. FT. (187.6 M²)
BUILDING HEIGHT:
 NEW 21' AT EAVE (6.40 M)
BUILDING FACING:
 2 STREETS
NUMBER OF STOREYS:
 ONE
BUILDING SPRINKLER:
 NO
FIRE RATED WALLS:
 MECHANICAL ROOM

3.1.16 DESIGN OCCUPANT LOAD:
 BASED ON THE NATURE OF THE MANUFACTURING BUSINESS WHICH IS TO TAKE PLACE AND THE STORAGE OF RAW MATERIALS AND EQUIPMENT INVOLVED, THE OCCUPANCY HAS BEEN CALCULATED BASED ON A STORAGE SPACES/WAREHOUSE (28 M²/PERSON). THIS OCCUPANCY HAS BEEN UTILIZED TO DETERMINE THE LIFE SAFETY REQUIREMENTS.
 FOR PRACTICAL PURPOSES THE OWNER HAS INDICATED THAT OPERATION OF THE ENTIRE FACILITY WILL BE ACCOMPLISHED BY 2 PEOPLE EACH DAY, FOR THE PURPOSE OF HEALTH REQUIREMENTS IN PARTICULAR WASHROOM FACILITIES THIS OCCUPANCY HAS BEEN UTILIZED.

SIZE: 12776.6 SQ. FT. (187.6 M²).
28.0 M² / PERSON
OCCUPANT LOAD: 42 PEOPLE

3.2 BUILDING FIRE SAFETY
CONSTRUCTION ARTICLES:
CONSTRUCTION:
 COMBUSTIBLE OR NON-COMBUSTIBLE CONSTRUCTION
FLOOR ASSEMBLIES ABOVE BASEMENT:
 N/A
FLOOR/CILING ASSEMBLY BETWEEN MAIN FLOOR AND 2ND FLOOR:
 N/A
ROOF ASSEMBLY:
 NO RATINGS REQUIRED
LOAD BEARING ASSEMBLIES:
 NO RATINGS REQUIRED

3.2.3 SPATIAL SEPARATION:
NORTH WALL:
 LIMITING DISTANCE:
 EXPOSED BUILDING FACE:
 RATIO:
 106.68 M
 156.64 M²
 3.33:1
% UNPROTECTED OPENING:
 ALLOWABLE:
 NONE REQUIRED
FRR:
 NONE REQUIRED
CONSTRUCTION:
 NON-COMBUSTIBLE
CLADDING:
 NONE REQUIRED

SOUTH WALL:
 LIMITING DISTANCE:
 EXPOSED BUILDING FACE:
 RATIO:
 64.53 M
 156.64 M²
 3.33:1
% UNPROTECTED OPENING:
 ALLOWABLE:
 NONE REQUIRED
FRR:
 NONE REQUIRED
CONSTRUCTION:
 NON-COMBUSTIBLE
CLADDING:
 NONE REQUIRED

EAST WALL:
 LIMITING DISTANCE:
 EXPOSED BUILDING FACE:
 RATIO:
 674.7 M
 343.6 M²
 8.33:1
% UNPROTECTED OPENING:
 ALLOWABLE:
 UNLIMITED
FRR:
 NONE REQUIRED
CONSTRUCTION:
 NON-COMBUSTIBLE
CLADDING:
 NON-COMBUSTIBLE

WEST WALL:
 LIMITING DISTANCE:
 EXPOSED BUILDING FACE:
 RATIO:
 32.0 M
 343.6 M²
 8.33:1
% UNPROTECTED OPENING:
 ALLOWABLE:
 UNLIMITED
FRR:
 NONE REQUIRED
CONSTRUCTION:
 NON-COMBUSTIBLE
CLADDING:
 NON-COMBUSTIBLE

3.2.4 FIRE ALARM AND DETECTION SYSTEM
FIRE ALARM REQUIRED:
 TYPE OF FIRE ALARM SYSTEM:
 SIGNAL TO FIRE DEPARTMENT REQUIRED:
 NO 3.2.4.1.2(H) OCCUPANT LOAD LESS THAN 75
 N/A
 N/A

3.2.5 PROVISIONS FOR FIRE FIGHTING
ACCESS ROUTE FOR FIRE DEPARTMENT VEHICLES INCLUDING TURNAROUND:
 REQUIRED (GREATER THAN 600 M)
WATER SUPPLY 3.2.5.7
 ADEQUATE WATER SUPPLY SHALL BE PROVIDED FOR FIRE FIGHTING

SPRINKLER OR STANDPIPE CONNECTION: STANDPIPE NOT REQUIRED UNDER 3.2.5.8.(C). AREA OF BUILDING DOES NOT EXCEED 1500 M²

FIRE DEPARTMENT CONNECTION: N/A
3.2.7 EMERGENCY LIGHTING
EMERGENCY LIGHTING IS REQUIRED: YES
PRINCIPLE ROUTES PROVIDING ACCESS TO EXIT: 3.2.7.3.(H)(8)

SECTION 3.3 SAFETY WITHIN FLOOR AREAS
SUITE SEPARATION - FIRE SEPARATION:
 EGRESS DOORWAYS:
 1 FR FRR IN ELECTRICAL/MECHANICAL ROOM
 2 EXITS REQUIRED FROM EACH SUITE 3.3.1.5.(C)
 AREA OF SUITE LESS THAN 500 M², TRAVEL DISTANCE GREATER THAN 10M.
 N/A
BARRIER FREE PROTECTION:
 MECHANICAL/ELECTRICAL ROOM:
 STORAGE/EQUIPMENT ROOMS:
 OTHER CONDITIONS:
 1 HOUR
 N/A
 N/A

3.4 EXITS
MINIMUM NUMBER OF EXITS:
 MAIN FLOOR AREAS MINIMUM 2 EXITS REQUIRED (3.4.2.1.0)
LOCATION OF EXITS:
 SEPARATION BETWEEN EXITS GREATER THAN ONE HALF THE DIAGONAL DIMENSION OF FLOOR AREA.
EXIT WIDTH (6.1 M/PERSON):
 MIN. 100 MM (43.5") (3.4.3.2.8(A))
 YES, FROM MECHANICAL/ELECTRICAL ROOM
SINGLE EXIT PERMITTED:
 MINIMUM 900 MM (3.4.3.2.8(D))
DOOR WIDTH:
 800 MM MINIMUM (3.4.3.2.8(G))
 YES
EXIT SIGNAGE IS REQUIRED:
 YES

3.4.6 TYPES OF EXIT FACILITIES
3.4.6.12 DIRECTION OF DOOR SWING
 DOORS SHALL OPEN IN DIRECTION OF EXIT TRAVEL AND SWING ON VERTICAL AXIS.

3.7 WASHROOMS
OCCUPANT LOAD = 2 (SEE DISCUSSION SECTION 3.1.16)
SINGLE WATER CLOSET TO BE PROVIDED IN ATCO PORTABLE OFFICE TRAILER AS IDENTIFIED ON SITE PLAN.

3.8 BARRIER FREE DESIGN
BARRIER FREE ACCESS PROVIDED TO ALL MAIN FLOOR AREAS: YES
PUBLIC ENTRANCE DOORS EQUIPPED WITH POWER DOOR OPERATORS: NOT REQUIRED UNDER 3.8.3.3.5
BARRIER FREE WASHROOM PROVIDED: NO
OTHER CONDITIONS: ENTRANCE INTO BUILDING AT ALL DOORWAYS AT GRADE LEVEL.



SouthMain Engineering
 1400 Highway 100, Suite 100, Winnipeg, Manitoba, Canada R2L 2Y9
 Tel: (204) 784-1111 Fax: (204) 784-1112
 www.southmaineng.com

PROJECT NAME	BRG MFG. INC. BEAUSEJOUR, MB.	BUILDING AREA	12,776.60 SQ.FT.
SHEET TITLE	BUILDING CODE DESIGN SUMMARY	DATE	JULY 2012
DATE	JULY 2012	SCALE	N/A
THIS DRAWING IS THE PROPERTY OF SOUTHMAIN ENGINEERING, WINNIPEG, MANITOBA, CANADA.			GN-2

GENERAL NOTES AND SPECIFICATIONS

- 1) BUILDING CLASSIFICATION
- A) BIOMASS PELLETING/STORAGE AREA
- B) BUILDING AREA - 12,776.60 SQFT (187.60 #F)

2) GENERAL CONDITIONS

- A) DESIGNED IN ACCORDANCE WITH NBC 2010 & NBC 2000
- B) ALL DESIGN AND CONSTRUCTION SHALL COMPLY WITH THE NATIONAL BUILDING CODE AND THE CSA STANDARD A23.1
- C) CONTRACTOR TO VERIFY ALL DIMENSIONS AND DETAILS PRIOR TO COMMENCING CONSTRUCTION, AND REPORT ERRORS TO THE ENGINEER.
- D) PLACEMENT OF MECHANICAL/ELECTRICAL EQUIPMENT SHALL NOT INTERFERE WITH STRUCTURAL MEMBERS OF THE BUILDING (I.E. ROOF TRUSSES/FLOOR JOISTS)
- E) DESIGN LOADS AS SHOWN ON THE DRAWING.
- F) NO MODIFICATION, SUBSTITUTION OR ALTERATION SHALL BE DONE TO STRUCTURAL DRAWINGS WITHOUT WRITTEN APPROVAL FROM SOUTH-MAN ENGINEERING.
- G) STRUCTURAL DRAWINGS SHOW THE COMPLETED STRUCTURE, THEY DO NOT SHOW COMPONENTS WHICH MAY BE NECESSARY FOR SAFETY DURING CONSTRUCTION.
- H) THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION SITE SAFETY AND TO ENSURE THAT ALL SUBTRADES CONFORM TO THE LATEST REGULATIONS OF THE PROVINCIAL 'BUILDING PROTECTION ACT', TO PROVIDE ALL NECESSARY SAFETY EQUIPMENT AS REQUIRED THEREIN AND TO NOTIFY LOCAL AUTHORITIES AS REQUIRED BY LAW.

3) SITE CONDITIONS

- A) SOIL BEARING CAPACITY BASED ON 1500PSF. OWNER/CONTRACTOR IS REQUIRED TO VERIFY BEARING CAPACITY AT TIME OF CONSTRUCTION
- B) ENGINEERING FIRM ASSUMES NO LIABILITY FOR THIS ASSUMPTION RESULTING IN CONTRARY SOIL CONDITIONS.
- C) STRIP ALL TOPSOIL AND ORGANIC MATERIAL FROM BUILDING AREA. STOCKPILE MATERIALS FOR BACKFILLING AND LANDSCAPING. SOFT OR WET MATERIAL SHALL BE REMOVED AND REPLACED WITH LEAN MIX CONCRETE OR CRUSHED ROCK COMPACTED TO 100% PROCTOR DENSITY.
- D) ALL FINISHED LANDSCAPING IS TO BE SLOPED AWAY FROM BUILDING AND SUIT SITE CONDITIONS AT MINIMUM OF 10%.

4) CONCRETE CONDITIONS

- A) PROVIDE KEYS BETWEEN BREAKS IN CONCRETE POURS. ENSURE REBAR IS CARRIED PAST THE BREAK A MIN. OF ONE SPlice LENGTH.
- B) MIN. COMPRESSIVE STRENGTH (UNLESS OTHERWISE NOTED) TO BE:
 - 25 MPa
 - MAX. AGGREGATE SIZE - 3/4"
 - AIR ENTRAINMENT - 4%-7% (REMOVE AIR ENTRAINMENT ON ALL CONCRETE USED IN HEATED SPACES AND TO BE POWER TROWELLED)
- C) FOR CONCRETE DEPOSITED ON NATIVE SOIL, CEMENT SHALL BE SULPHATE RESISTANT (TYPE 60) AND UNLESS OTHERWISE SPECIFIED, (TYPE 10) NORMAL PORTLAND CEMENT IS TO BE USED THROUGHOUT.
- D) DO NOT ADD WATER TO CONCRETE ON SITE UNLESS THE MIX DESIGN HAS TAKEN THIS INTO ACCOUNT AND WATER/CEMENT RATIO WILL NOT BE EXCEEDED.
- E) CONCRETE PLACED IN COLD WEATHER SHALL BE PROTECTED AND HEATED TO MAINTAIN 10° CELSIUS FOR A MIN. OF 2 DAYS AFTER PLACEMENT. REMOVE INSULATION AND HEATING GRADUALLY TO AVOID THERMAL SHOCK.
- F) TAKE NECESSARY PRECAUTIONS TO PREVENT RAPID DRYING OF CONCRETE PLACED IN HOT, DRY WEATHER. IF POSSIBLE PROVIDE COVER OR SHADING OR CURE WITH WATER.
- G) SLOPE ALL FLOORS TO DRAINS WHERE FLOOR DRAINS PROVIDED.
- H) VIBRATE ALL CONCRETE TO CONSOLIDATE AND REMOVE VOIDS.

GENERAL NOTES AND SPECIFICATIONS CONTINUED

- D) REINFORCING STEEL CONDITIONS
 - A) ALL REINFORCING STEEL TO BE GRADE 600 HIGH BOND, DEFORMED BARS CONFORMING TO CSA G30.18.
 - B) ALL REINFORCING DETAILS SHALL BE IN ACCORDANCE WITH CSA A23.1.
 - C) MINIMUM SPlice LENGTH OF BARS SHALL BE:
 - 10M - 18"
 - 15M - 24"
 - 20M - 30"
- E) REINFORCING STEEL SHALL BE FREE FROM LOOSE RUST, MUD, OIL OR OTHER COATINGS WHICH MAY REDUCE THE BOND OR HARM THE CONCRETE.
- F) REINFORCING STEEL SHALL BE HELD IN PLACE & TIED WITH PROPER ACCESSORIES SUCH AS HI-CHAIRS, SPACERS, TIES, ETC. SUPPLIED BY THE REINFORCING STEEL SUPPLIER.
- G) CONCRETE COVER TO REINFORCING STEEL SHALL BE AS FOLLOWS:
 - CONCRETE CAST IN DIRECT CONTACT WITH SOIL: 75MM (3")
 - FORMED CONCRETE IN CONTACT WITH SOIL OR WEATHER:
 - 30MM (2")
 - 20M OR LARGER 40MM (1 1/2")
 - 15M OR SMALLER 20MM (3/4")
 - FORMED CONCRETE NOT IN CONTACT WITH SOIL OR WEATHER:
 - 40MM (1 1/2")
 - 20MM (3/4")
 - BEAMS & COLUMNS
 - SLABS & WALLS

5) STRUCTURAL STEEL CONDITIONS

- A) STRUCTURAL STEEL SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF CAN/CSA S16.01.
- B) ALL STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF CAN/CSA G40.21 - 350W TO SIZES AND SHAPES INDICATED ON THE DRAWINGS. NO SUBSTITUTIONS IN GRADES OR SIZES ARE PERMITTED WITHOUT WRITTEN APPROVAL OF SOUTH-MAN ENGINEERING.
- C) ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF CSA W59. ALL BASE AND CAP PLATES SHALL BE FULLY WELDED TO COLUMNS.
- D) STRUCTURAL FASTENERS SHALL BE A325 BOLTS. ANCHOR BOLTS SHALL BE A307.
- E) PROVIDE TEMPORARY CURING AND BRACING AS NECESSARY TO PROVIDE STABILITY FOR THE WHOLE STRUCTURE UNTIL DECKINGS AND PERMANENT BRACING ARE SECURED IN PLACE.
- F) PROVIDE STIFFENER PLATES IN ALL BEAMS CONTAINING OVER SUPPORTS, HOLES ARE NOT PERMITTED IN THE TOP FLANGES UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- G) EXPOSED STEEL SHALL BE PAINTED WITH ONE COAT OF RED OXIDE PRIMER AFTER HAVING BEEN CLEANED TO SSPC-SP2.

7) TRUSS NOTES:

- A) ROOF PITCH AS SHOWN ON PLANS
- B) COMPLETE ROOF SYSTEM SUPPLIED BY MANUFACTURER. ALL WEB BRACING, CONNECTIONS AND FASTENING TO MANUFACTURED SPECIFICATIONS.
- C) MANUFACTURER TO SUPPLY ALL NECESSARY HANGERS, BRACKETS ETC. FOR COMPLETE ROOF FRAMING SYSTEM.

DESIGN LOAD SPEC. BY ENGINEER

ROOF LOAD	= 59.79 PSF
GROUND SNOW LOAD	= 4.18 PSF
RAIN LOAD	= 10.00 PSF
T/C DEAD LOAD	= 10.00 PSF
8/C DEAD LOAD	= 10.00 PSF
8/C LIVE LOAD	= 8.57 PSF
WIND LOAD	= 20.90 PSF
COLLATERAL LOAD	= 1.00
SHELTERED CONDITIONS	= 1.00
IN	= 1.00
REQUIRED SOIL BEARING CAPACITY	= 1500 PSF



SECTION/DETAIL NUMBER	A
ORIGINATING AND DRAWN ON SAME PAGE	YES

PROJECT NAME	BAG MFG. INC. BEAUSÉVOUR, MB.
PREP BY	R. FLORES
DATE	JULY 2012
SCALE	N/A
DATE	JULY 2012

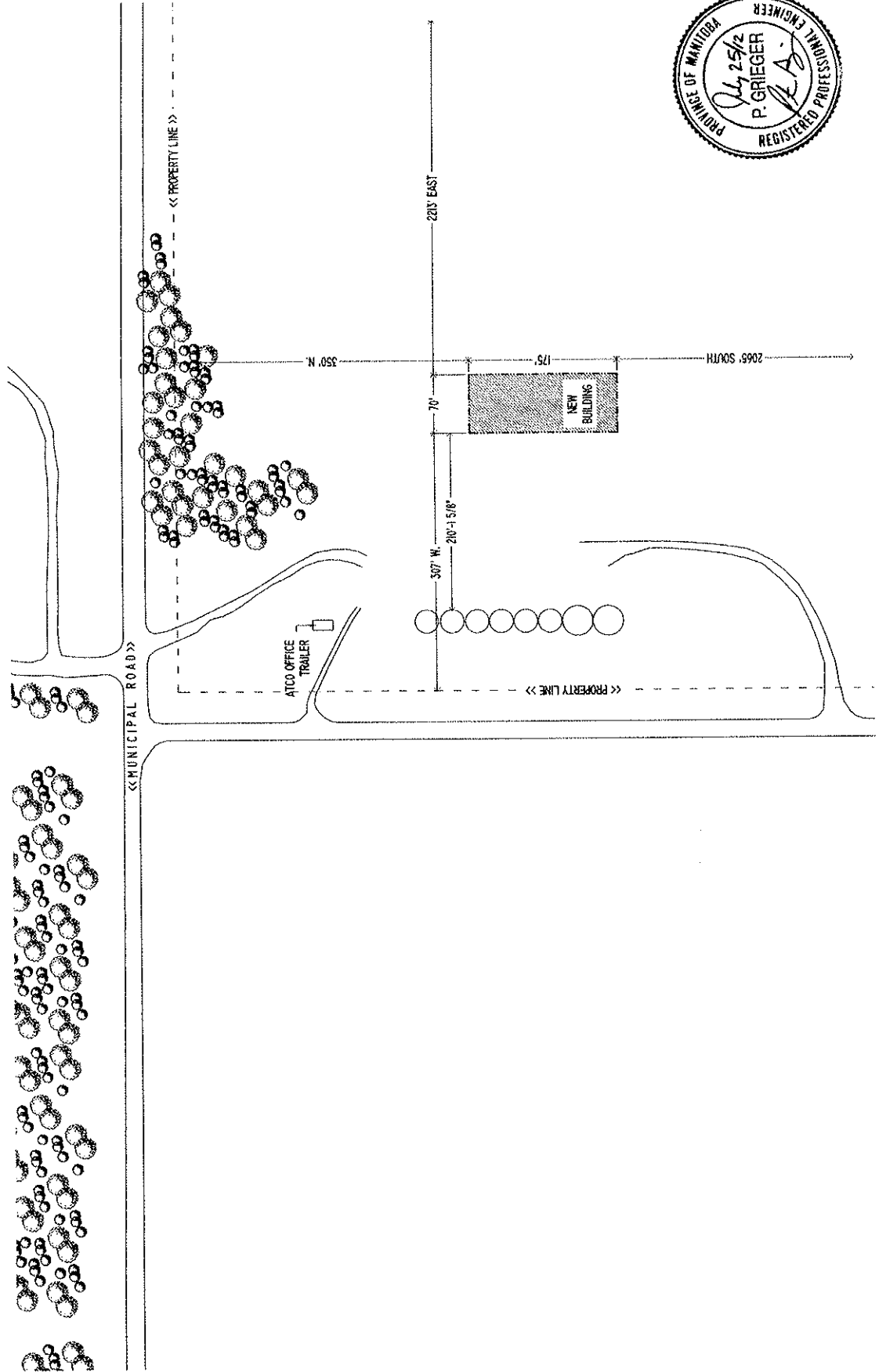
South-Man Engineering
 1000 Highway 101, Suite 100, Beauséjour, MB R0A 1A0
 Tel: (204) 754-1111 Fax: (204) 754-1112



PROJECT NO.	12.776.60 SQFT
DATE	JULY 2012
SCALE	N/A
DATE	JULY 2012

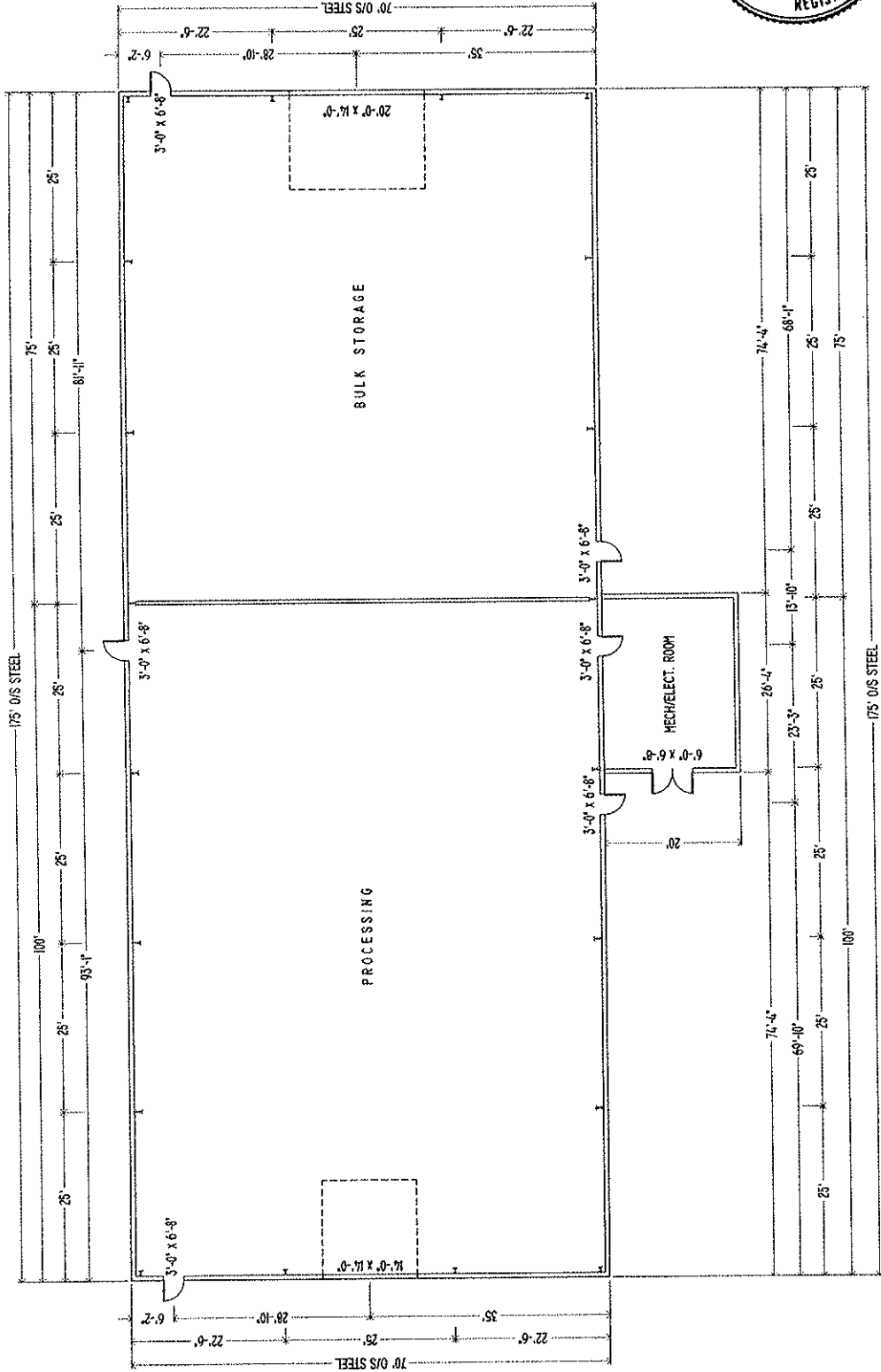
THIS DRAWING IS THE PROPERTY OF SOUTH-MAN ENGINEERING. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS AND NOTES TAKE PRECEDENCE OVER ANY OTHER INFORMATION.

GN-1



PROJECT NO.	BRG MFG, INC. BEAUSÉCUR, MB.	SCALE	12,776.60 S0/FT
DATE	JULY 2012	PROJECT	SOUTH-MAN ENGINEERING R. FLORES
SITE PLAN		DATE	AS NOTED
SOUTH-MAN ENGINEERING		PROJECT NO.	SP

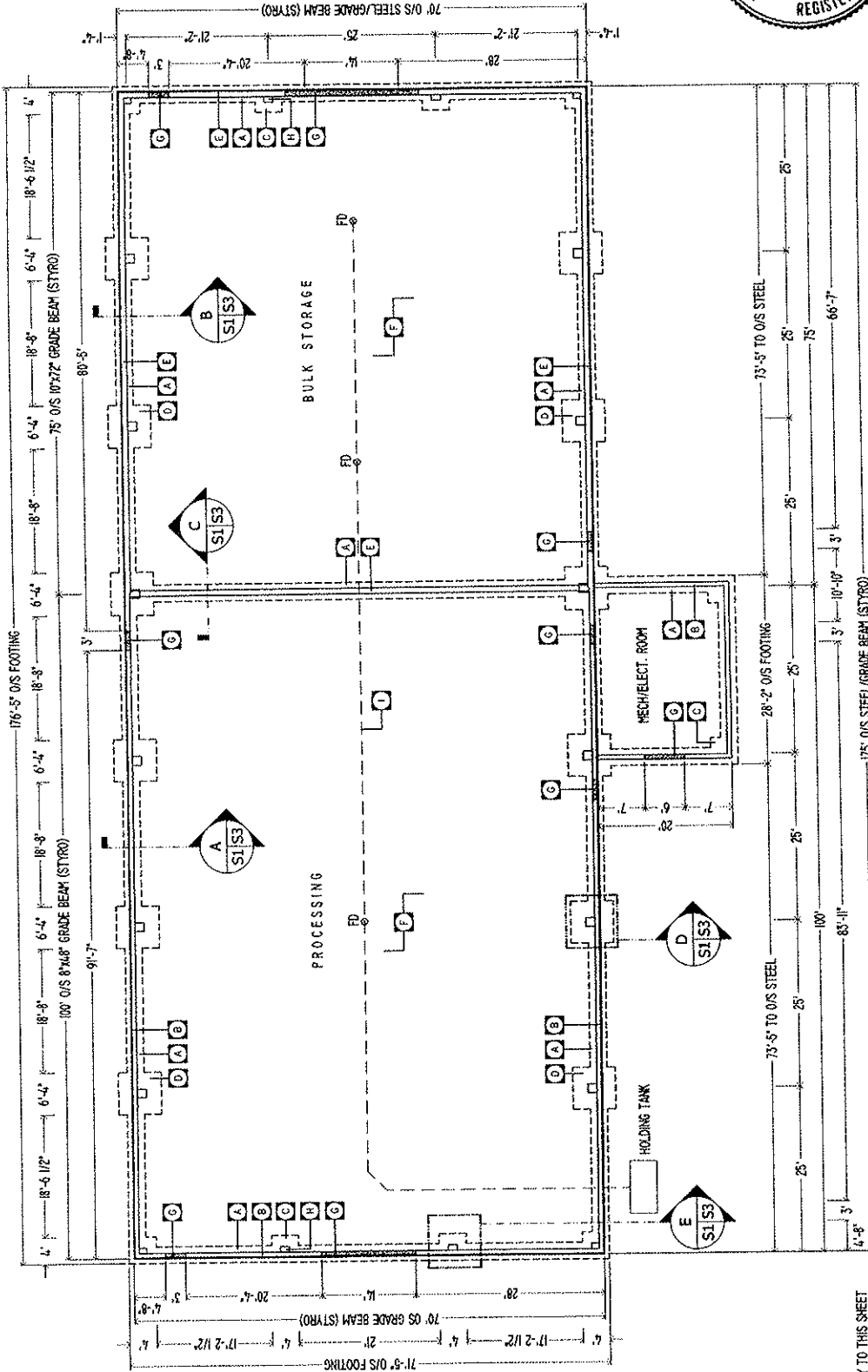




PROJECT NO.	12.776.60 SQ/FT
CLIENT	BRG MFG. INC. BEAUSÉJOUR, NB.
SHEET TITLE	FLOOR PLAN
DATE	JULY 2012
SCALE	AS NOTED
ENGINEER	SOUTH-MAN ENGINEERING R. FLORES
DRAWING NO.	
SHEET NO.	S-1A



FLOOR PLAN
 SCALE 1/8" = 1'



FOUNDATION PLAN
SCALE 1/4" = 1'

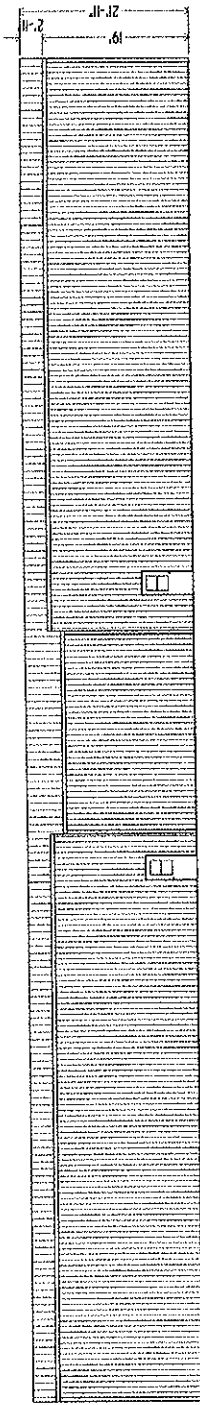
ALPHABETICAL NOTES APPLY ONLY TO THIS SHEET

- A. 12" x 36" FOOTING;
- B. 8" x 48" CONCRETE GRADE BEAM;
- C. 4" x 4" x 16" THK. FOOTING (CENTERED UNDER COLUMNS 'A' & 'B');
- D. 6'-4" x 6'-4" x 16" THK. FOOTING (CENTERED UNDER COLUMN 'C');
- E. 10" x 72" CONCRETE GRADE BEAM;
- F. 6" THK. CONCRETE SLAB;
- G. FLOOR POURED THRU OPENING;
- H. PILASTERS (TYP ALL) REFER TO DETAILS (S-3);

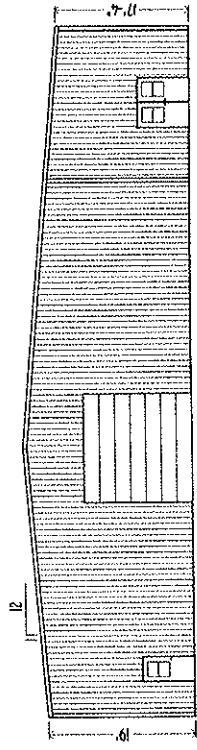


PROJECT NAME	BRG MFG, INC. BEAUBOURN, MB.
PROJECT NO.	FOUNDATION PLAN
DATE	JULY 2012
SCALE	AS NOTED
DATE PLOTTED	

REG. NO.	12,776.60 SQ/FT
ENGINEER	SOUTH-MAN ENGINEERING R. FLORES



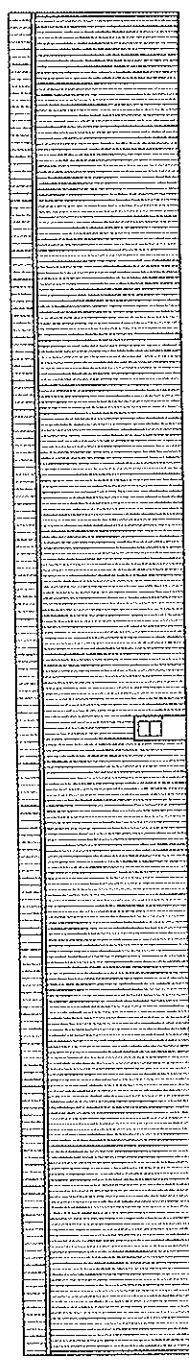
EAST ELEVATION
SCALE $\frac{1}{8}'' = 1'$



SOUTH ELEVATION
SCALE $\frac{1}{8}'' = 1'$



NORTH ELEVATION
SCALE $\frac{1}{8}'' = 1'$



WEST ELEVATION
SCALE $\frac{1}{8}'' = 1'$



PROJECT NAME BRIG MFG. INC. BEAUSÉCOUR, MB.	CLIENT SOUTH-MAN ENGINEERING R. FLORES	AREA 12,776.60 SQ/FT
DATE PLOTTED JULY 2012	DRAWING SCALE AS NOTED	SHEET NUMBER S-2

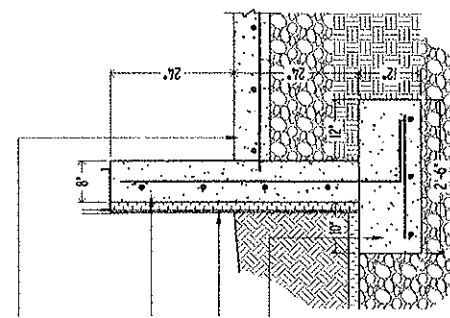


6" THK. CONCRETE FLOOR
C/W 10M @ 12" O/C B/W
MIN. R5 INSULATION
6ML POLY VAPOR BARRIER
COMPACTED GRANULAR FILL (MIN. 12"
UNDER FLOOR SLAB)

8" x 48" GRADE BEAM C/W
15M VERTICAL DOWEL @ 16" O/C &
15M HORIZONTAL @ 12" O/C

1/2" PWF PLYWOOD
1/2" STYROFOAM

30"W x 12"H CONCRETE FOOTING
C/W 3-15M CONTINUOUS
& 15M @ 18" O/C LATERALS



A SECTION DETAIL
SCALE 1/2" = 1'-0"

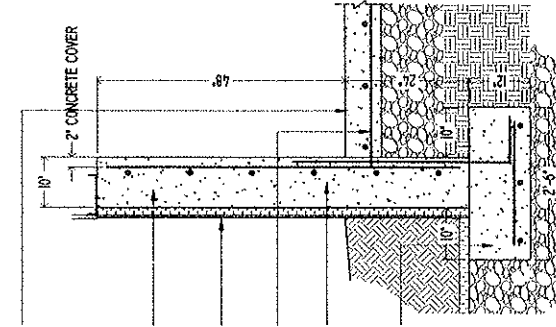
6" THK. CONCRETE FLOOR
C/W 10M @ 12" O/C B/W
MIN. R5 INSULATION
6ML POLY VAPOR BARRIER
COMPACTED GRANULAR FILL (MIN. 12"
UNDER FLOOR SLAB)

10M @ 12" O/C DRILLED & EPOXIED
INTO GRADE BEAM

15M VERTICAL DOWEL @ 12" O/C
& 15M HORIZONTAL @ 12" O/C

1/2" PWF PLYWOOD
1/2" STYROFOAM

30"W x 12"H CONCRETE FOOTING
C/W 3-15M CONTINUOUS
& 15M @ 18" O/C LATERALS



B SECTION DETAIL
SCALE 1/2" = 1'-0"

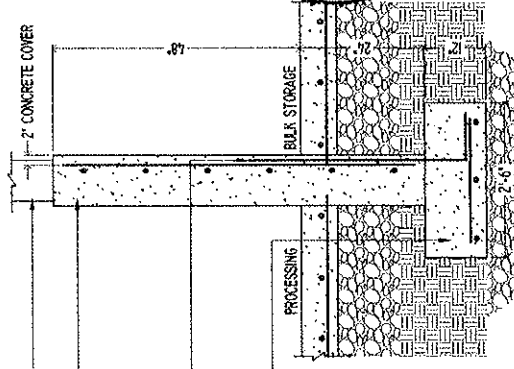
STEEL PARTITION WALL ABOVE
TO US STEEL FRAME

10" x 12" GRADE BEAM C/W
15M VERTICAL @ 12" O/C &
15M HORIZONTAL @ 12" O/C

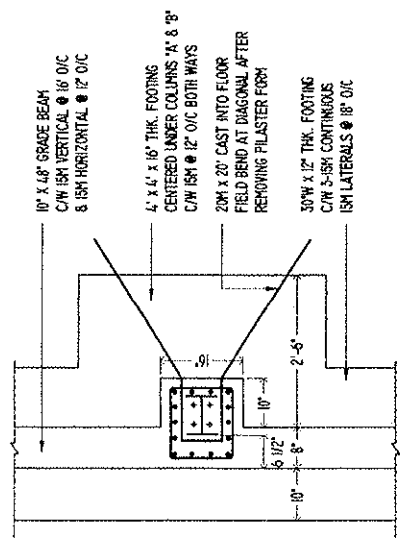
NOTE: REINFORCING ON US FACE OF
WALL TOWARD BULK STORAGE

15M VERTICAL DOWEL @ 12" O/C
ALTERNATING LEGS 42"

30"W x 12"H CONCRETE FOOTING
C/W 3-15M CONTINUOUS
& 15M @ 18" O/C LATERALS



C SECTION DETAIL
SCALE 1/2" = 1'-0"

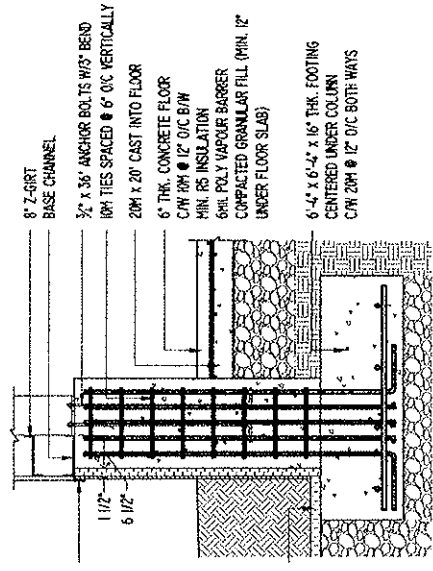


10" x 48" GRADE BEAM
C/W 15M VERTICAL @ 16" O/C
& 15M HORIZONTAL @ 12" O/C

4" x 4" x 16" THK. FOOTING
CENTERED UNDER COLUMNS 'A' & 'B'
C/W 15M @ 12" O/C BOTH WAYS

20M x 20" CAST INTO FLOOR
FIELD BEND AT DIAGONAL AFTER
REMOVING PLASTER FORM

30"W x 12" THK. FOOTING
C/W 3-15M CONTINUOUS
& 15M LATERALS @ 18" O/C



8" Z-SIRT
BASE CHANNEL

1/2" x 3/8" ANCHOR BOLTS W/3' BEND
10M TIES SPACED @ 6" O/C VERTICALLY

20M x 20" CAST INTO FLOOR

6" THK. CONCRETE FLOOR
C/W 10M @ 12" O/C B/W

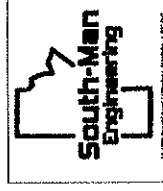
6ML R5 INSULATION
6ML POLY VAPOR BARRIER
COMPACTED GRANULAR FILL (MIN. 12"
UNDER FLOOR SLAB)

6'-4" x 6'-4" x 16" THK. FOOTING
CENTERED UNDER COLUMN
C/W 20M @ 12" O/C BOTH WAYS

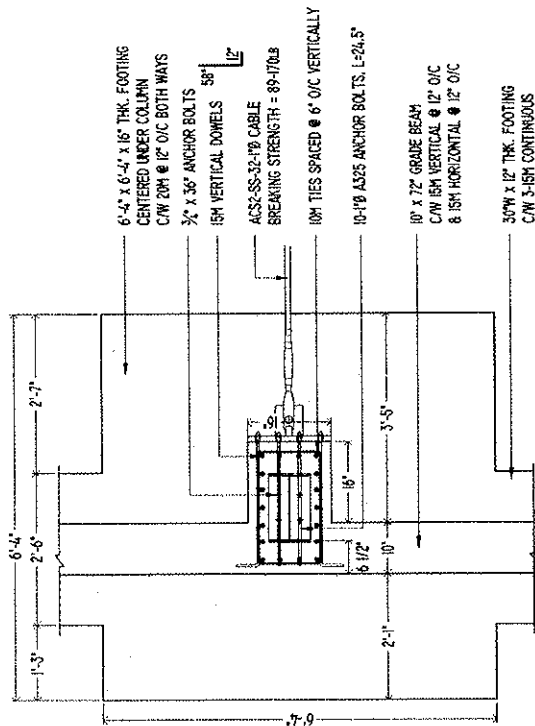
E COLUMNS 'A' & 'B' FOUNDATION DETAIL
SCALE 1/2" = 1'-0"



NOTE: SAW CUT SLAB @ 10" O/C ACROSS WIDTH OF
BUILDING AND 12"-6" O/C ALONG LENGTH OF
BUILDING WITHIN 16 HRS OF PLACING CONCRETE.



PROJECT NO.	12,776.60 SQ/FT
DRAWN BY	R. FLORES
CHECKED BY	AS NOTED
DATE	JULY 2012
SECTION TITLE	SECTION DETAILS
DRAWING SCALE	AS NOTED
PROJECT NAME	BRG HES, INC. BEAUSÉCOUR, NB.
ENGINEER	SOUTH-MAN ENGINEERING
SCALE	AS NOTED
SHEET NUMBER	S-3A



- 6'-4" x 6'-4" x 16" THK. FOOTING
CENTERED UNDER COLUMN
C/W 20# @ 12" O/C BOTH WAYS
- 3/8" x 3/8" ANCHOR BOLTS
- 10# VERTICAL DOWELS 58'
- ACS2-SS-32-1/8" CABLE
BREAKING STRENGTH = 89,470LB
- 10# TIES SPACED @ 6" O/C VERTICALLY
- 10-1/8" ACS2 ANCHOR BOLTS, L=24.5"

- 10' x 72" GRADE BEAM
C/W 15# VERTICAL @ 12" O/C
& 15# HORIZONTAL @ 12" O/C

- 30#W x 12" THK. FOOTING
C/W 3-1/8" CONTINUOUS
15# LATERALS @ 18" O/C

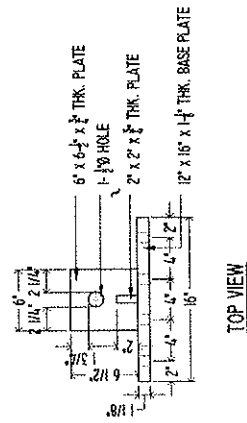
- EXTERIOR METAL SHEETING
Z-GIRTS @ SPACING SPECIFIED
FIBERGLASS BATT INSULATION
10' x 72" GRADE BEAM

- BASE FLASHING
METAL OR PFW PLYWOOD
COVERING STYRO FOAM
PHF 2x4 STRAPPING

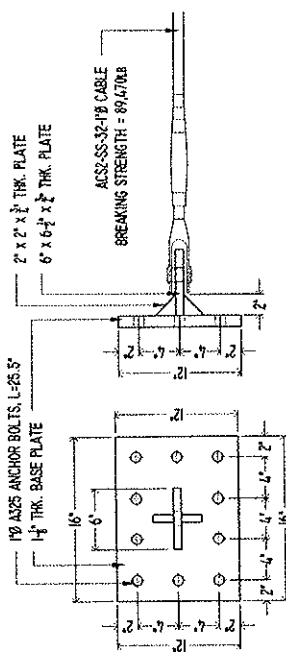
- 2' x 48" STYRO

- BASE CHANNEL
- 3/4" x 3/8" ANCHOR BOLTS W/3" BEND
10# TIES SPACED @ 6" O/C VERTICALLY
- 6" THK. CONCRETE FLOOR
C/W 10# @ 12" O/C R/W
- MIN. R5 INSULATION
- 6# PL POLY VAPOUR BARRIER
COMPACTED GRANULAR FILL (MIN. 12"
UNDER FLOOR SLAB)
- 6'-4" x 6'-4" x 16" THK. FOOTING
CENTERED UNDER COLUMN
C/W 20# @ 12" O/C BOTH WAYS

D COLUMN 'C' FOUNDATION DETAIL
SCALE 1/2" = 1'-0"



TOP VIEW



FRONT VIEW

SIDE VIEW

1 BASE PLATE DETAILS
SCALE 1" = 1'-0"



NOTE: SAW CUT SLAB @ 18" O/C ACROSS WIDTH OF BUILDING AND 12"-5" O/C ALONG LENGTH OF BUILDING WITHIN 16 MRS OF PLACING CONCRETE.

PROJECT NO.	BRG MFG, INC. BEAUSELOUR, MD.	DATE	12.27.60 50/FT
SHEET TITLE	SECTION DETAILS	PROJECT	SOUTH-MAN ENGINEERING R. FLORES
DRAWN BY		DATE	JULY 2012
CHECKED BY		SCALE	AS NOTED



APPENDIX F

Equipment Specifications



徐州东达国际贸易有限公司

Xuzhou Orient Industry Co., LTD

Suite 1218, No.6 Xi'An Road, Xuzhou City, Jiangsu Province, China, Tel. 86-516-82029972 Fax 86-516-82029977 Email: orient-biofuel02@tn-china.com

INVOICE TO:

DATE: 01-Mar-12

Greenwald Farms Ltd.
Box R.R. 3
Beausejour, Manitoba, Canada
R0E 0C0
204-268-5093

PRO FORMA INVOICE #: 120301-2

ATTN: Ben Hofer (Hoferben@yahoo.ca)

<u>QTY</u>	<u>REF #</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>TOTAL</u>
1	SCREENING	Belt Conveyor & Rotary Screen	\$12,300.00	\$12,300.00
1	CRUSHING	Baler Crusher to grind Straw prior to pelletizing	\$86,290.00	\$86,290.00
1	DRYING	Screw Conveyors, Furnace & Rotary Drum Dryer	\$153,730.00	\$153,730.00
1	PELETIZING	Bucket Elevators, Conveyors & Pelletizing Machine	\$112,615.00	\$112,615.00
1	COOLING	Conveyors & Counter Flow Cooler	\$79,262.00	\$79,262.00
1	MISC	Miscellaneous, Hoist, Pump, Bearing, Screws	\$675.00	\$675.00
1	SPARES	1 Year Spare Parts Kit	\$27,514.00	\$27,514.00
1	CONTROL	General Electrical Control Panel	\$11,300.00	\$11,300.00
1	PALLET	Steel Shipping pallets (no fumigation of wood)	\$10,100.00	\$10,100.00
1	DESIGN	System Engineering and Planning	\$2,682.00	\$2,682.00
	DISCOUNT	Specially Negotiated Discount		- \$19,399.95
			=====	
			USD	\$477,068.05

NOTE #1: Startup and Training Extra (Expenses paid by Customer plus \$100 per day per Engineer)

Shipping Terms: FOB Shanghai or Qingdao port.

Payment Terms: 50% Wire Transfer with order , 50% prior to Shipment (Upon factory Acceptance)

Delivery Term: 80 Days from receipt of Deposit

ATT. Unit 6
Dona

204-947-3306

Xuzhou Orient Industry Co., Ltd.

Website: <http://www.orient-biofuel.com>

Tel: 0086 516 82029972

MC 36 Pulse Dust Collector

Pulse Dust Collector is used for Metallurgy, Mining, Machinery, Cement, Pharmaceutical, Light Industry, Electric Power Industry and so on. It can collect drying and small non-fibrous dust.

1. Structure

It include five parts:

- A. Upper Box: cover, outlet.
- B. Middle Box: porous plate, skeleton, filter bags, air intakes, access door.
- C. Lower Box: ash bucket, block plate, gray board.
- D. Ash Discharge System: screw conveyor, ash discharge valve, reducer, motor and manual pumping plate.
- E. Cleaning System: control instrument, electromagnetic pulse valve, air bag, blow tube.

2. working principle

The cleaning process: The control instrument under requirements issued a directive to each pulse, opening the valves in turn, and inject high pressure air to each filter bag in turn. The gas bag compressed air through the perforations of the blowing tube through the venturi tube into the filter bag, this the first wind. When the injection of high-speed air flow through the venturi, much more speed than the first wind goes into the bag, this is the second wind.

The first and second wind make the air bag contraction-expansion-contraction, the reverse effect from airflow can clean down the dust inside of the bag. When clean the bag, blowing high-pressure air successfully, and cleaning the air all the time.

3. Parameter

When the blowing pressure is 0.7mpa, the injection period 30 ± 0.2 seconds, the injection time is 0.1 ± 0.0 seconds, the device resistance $\Delta 120$ mm water column, the other parameters are related as follows:

Speed of Filtration	m/s		2	2.5	3	3.5	4
Load	m ³ / (hm ²)		120	150	180	210	240
Inlet Concentration	g/ m ³		≤15	≤11	≤8	≤5	≤3
De-dusting Efficiency	%		99.5	99.1	99.0	99.0	99.0
Air Consumption m ³ /次	Injection Time	0.1s	0.0119	0.0119	0.0119	0.0119	0.0119
		0.2s	0.0284	0.0284	0.0284	0.0284	0.0284

1, De-dusting Efficiency data is based on the talc and clay powder.

Address: Room1218, Xi' an North Road. Xuzhou, Jiangsu, PRC

Xuzhou Orient Industry Co., Ltd.

Website: <http://www.orient-biofuel.com>

Tel: 0086 516 82029972

Address: Room1218, Xi' an North Road. Xuzhou, Jiangsu, PRC

Xuzhou Orient Industry Co., Ltd.

Website: <http://www.orient-biofuel.com>

Tel: 0086 516 82029972

XCL- Series Cyclone and TGF-Series Air Lock

XCL Series Cyclone, the inlet adopts 270° volute oblique floor, the air inlet cross-section is small and square, pyramidal longer. It includes volute, spiral helical back plane, cone and anti-drag exhaust tubes. It collect particle size about 5μm. It is used for Metallurgy, Mining, Machinery, Cement, Pharmaceutical, Light Industry, Electric Power Industry and so on. It can collect drying and small non-fibrous dust.

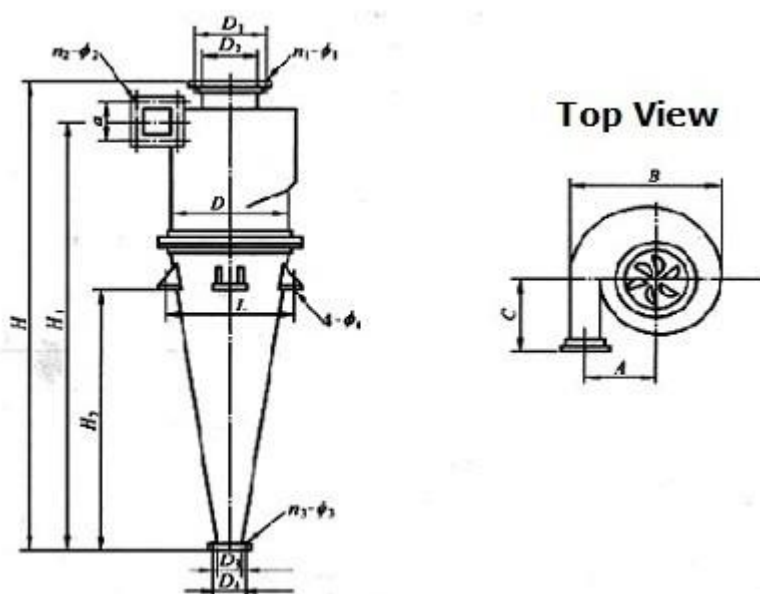
1. Working Principle

XCL Series Cyclone principle: the gas with dust goes into the volute tangentially, the airflow spin into cyclone and the dust will go down along the shell by gravity centrifugation, the air lock will discharge dust in timing. The purified gas will go out from upper vent.

2. Parameter

	Model	Weight (KG)	Blow Flow Speed of inlet (m/s)					
			18	20	22	24	26	28
Air Quantity (m ³ /h)	XCL600	140	1350	1500	1650	1800	1940	2080
	XCL900	300	3020	3360	3700	4040	4370	4700
	XCL1000	470	3740	4150	4580	5000	5400	5840
	XCL1200	660	5380	5980	6540	7150	7780	8380
Resistance (Pa)	Turning vane		539	677	873	971	1137	1313
	No Turning vane		677	833	1010	1200	1411	1637
Efficiency (%)	Φ 200- φ 800		90	92	93	93.5	95	95.81

3. Installation Drawing



Address: Room1218, Xi' an North Road. Xuzhou, Jiangsu, PRC

Xuzhou Orient Industry Co., Ltd.

Website: <http://www.orient-biofuel.com>

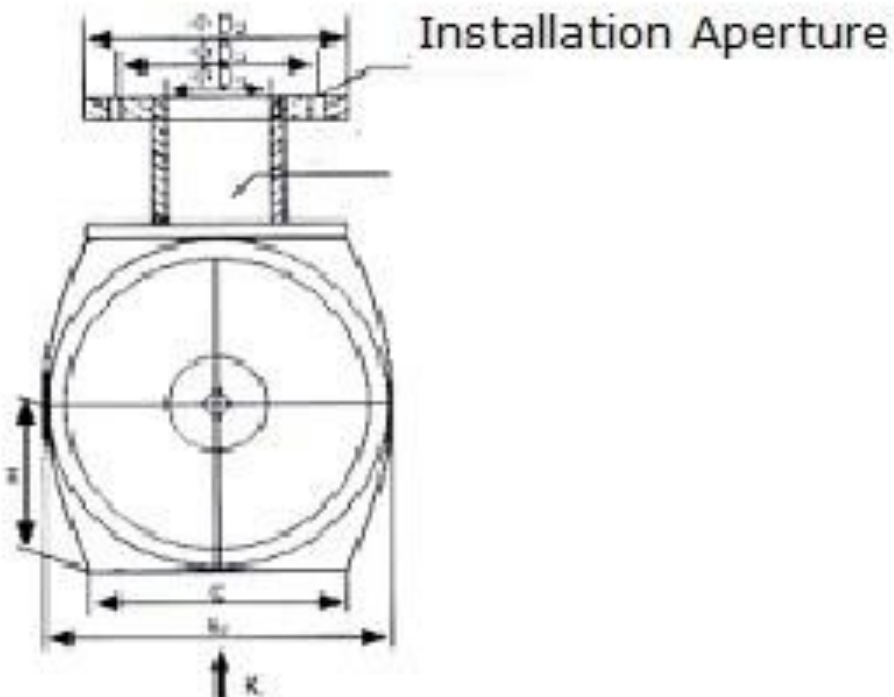
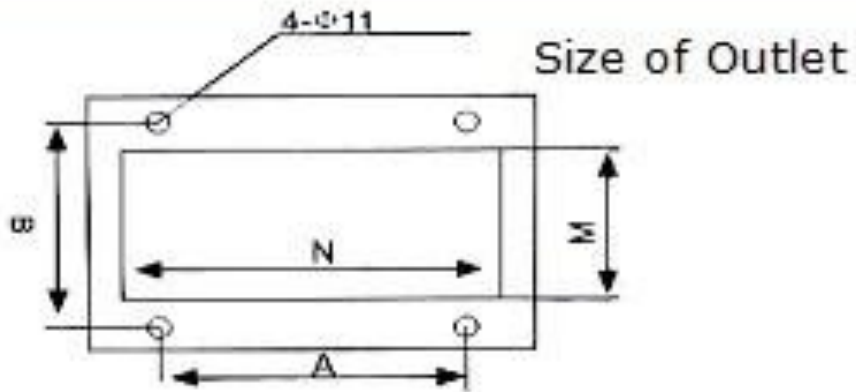
Tel: 0086 516 82029972

TGF-Series Air Lock

1. Parameter

Measure/ Model	A	B	C	L	H	D1	D2	D3	b1	b2	h	M	N	n - @d
9L	250	190	275	255	190	190	260	235	740	360	460	200	220	4 - @9
12L	270	210	310	275	205	210	270	230	780	380	510	220	240	6 - @11
15L	310	250	340	320	225	250	320	300	840	410	550	260	280	6 - @11
20L	345	270	390	320	225	240	320	280	860	410	550	260	260	6 - @11

2. Installation Drawing

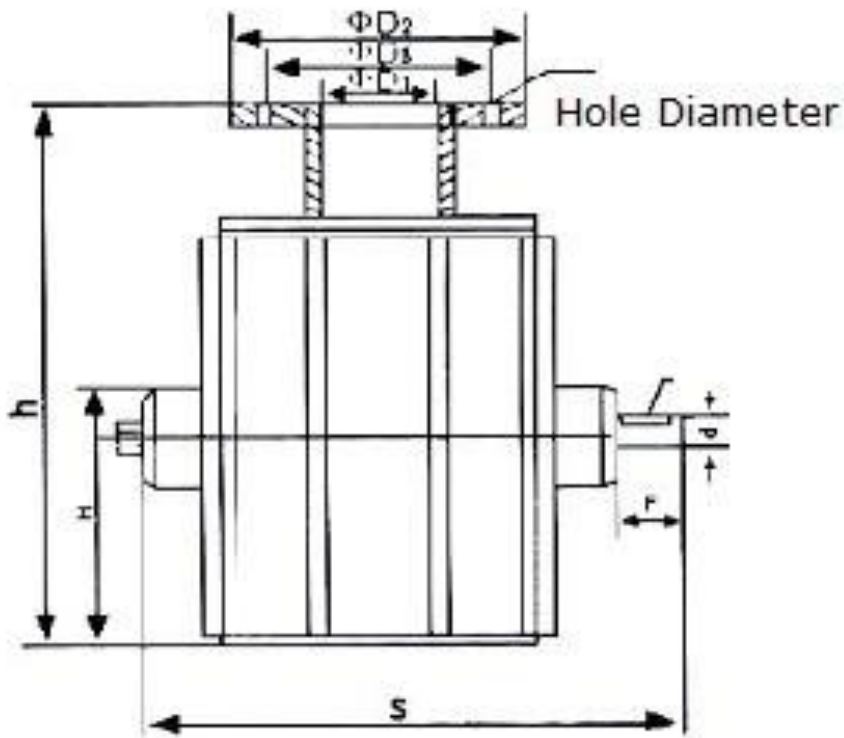
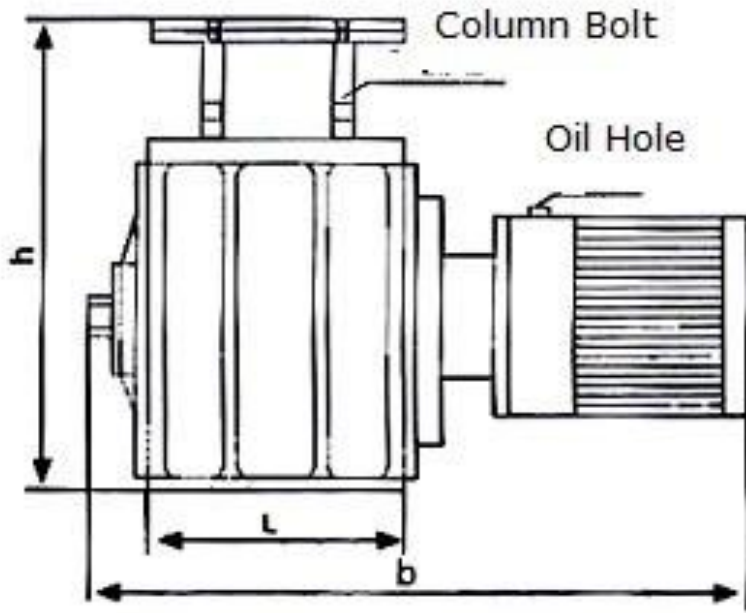


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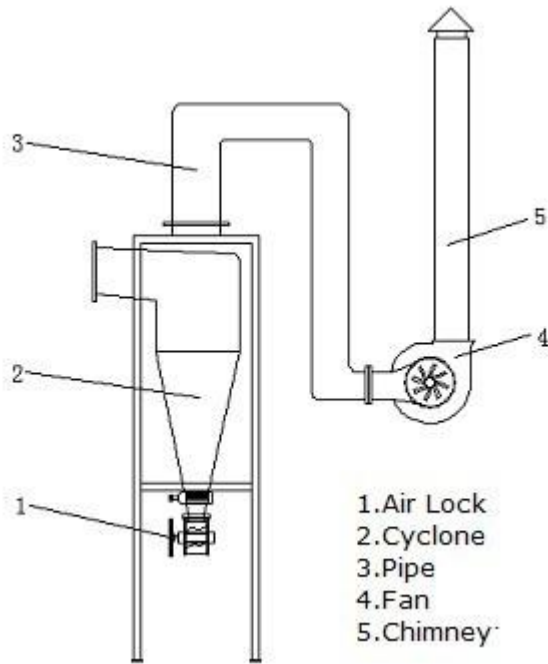


Xuzhou Orient Industry Co., Ltd.

Website: <http://www.orient-biofuel.com>

Tel: 0086 516 82029972

The Drawing of installation Cyclone and Air Lock



Xuzhou Orient Industry Co., Ltd.

Website: <http://www.orient-biofuel.com>

Tel: 0086 516 82029972

High Pressure Blower

The High Pressure Blower are widely used for convey materials, air and non-sticky substance.

The structure include impeller, casing, air inlet and frame.

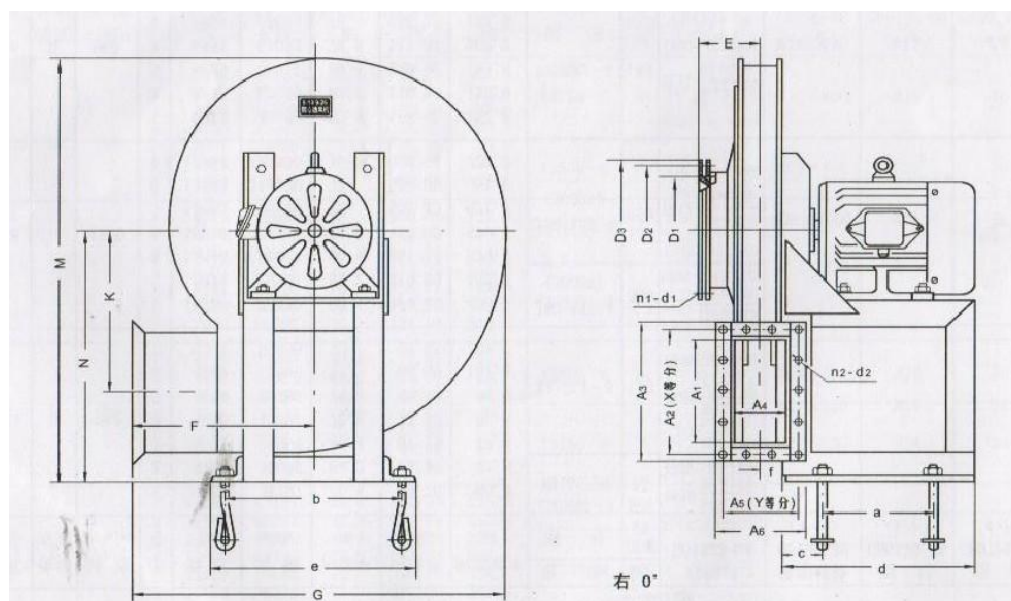
1. Parameter

Model	Kind of Drive	Rotate Speed (r/min)	Full Pressure (Pa)	Quantity of Flow (m ³ /h)	Internal Efficiency (%)	Internal Power kw	Applied Power kw	Motor	
								Model	Power
Y4-72-4	A	2900	4580	1838	77.3	2.98	3.6	Y112	4

Model	Kind of Drive	Rotate Speed (r/min)	Full Pressure (Pa)	Quantity of Flow (m ³ /h)	Internal Efficiency (%)	Internal Power kw	Applied Power kw	Motor	
								Model	Power
Y5-47-15	D	1450	4632	6572	78.2	10.63	12.5	Y160	15

Model	Kind of Drive	Rotate Speed (r/min)	Full Pressure (Pa)	Quantity of Flow (m ³ /h)	Internal Efficiency (%)	Internal Power kw	Applied Power kw	Motor	
								Model	Power
Y5-47-30	D	1450	5891	9445	81.5	18.59	21.8	Y200	30

2. Installation Drawing

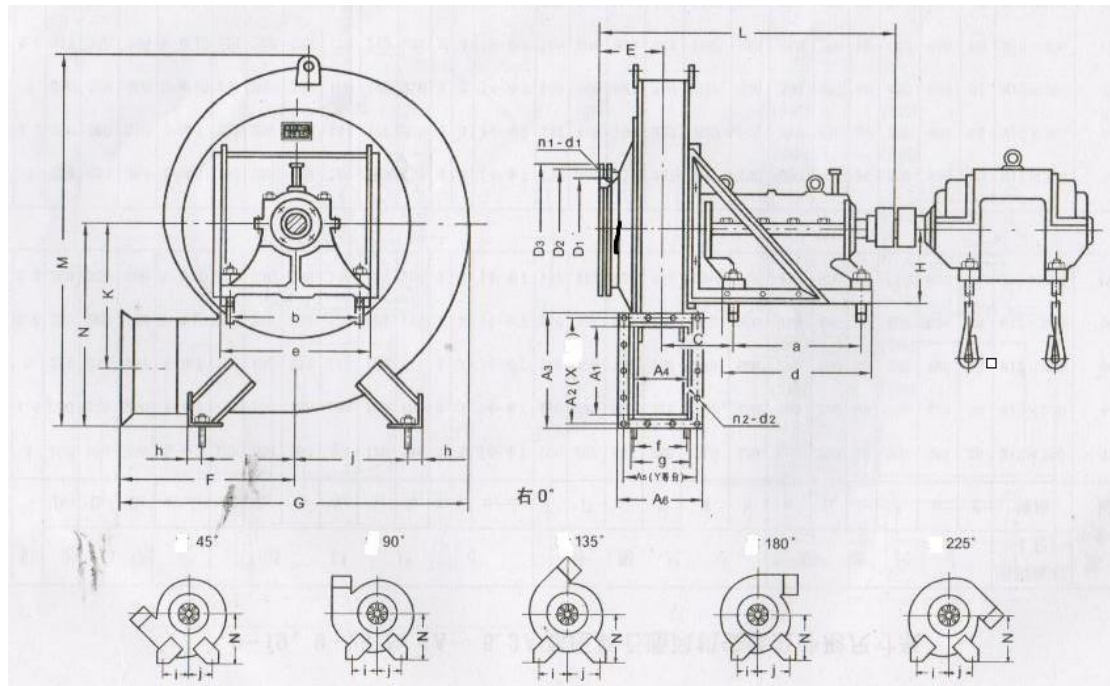


Address: Room1218, Xi' an North Road. Xuzhou, Jiangsu, PRC

Xuzhou Orient Industry Co., Ltd.

Website: <http://www.orient-biofuel.com>

Tel: 0086 516 82029972



Address: Room1218, Xi' an North Road. Xuzhou, Jiangsu, PRC

APPENDIX G

Public Hearing Minutes

MINUTES OF THE REGULAR MEETING OF COUNCIL OF THE RURAL MUNICIPALITY OF ALEXANDER HELD IN THE COUNCIL CHAMBERS IN ST. GEORGES, MANITOBA ON TUESDAY, FEBRUARY 14th, 2012 AT 10:00 A.M.

Council Members:	Reeve:	Ed Arnold
	Councillor:	Cheryhl Corrie
		Alvin Yosyk
		Kim Robertson
		Mac Kinghorn
	CAO:	Scott Spicer
	Assistant CAO:	Michele Stefaniuk

1. Call the Meeting to Order

a) Approval of Agenda

#78/12 Moved by: Alvin Yosyk
Seconded by: Mac Kinghorn

BE IT RESOLVED that the Agenda of February 14th, 2012 Council Meeting be adopted as presented.

(CARRIED)

2. Approval of Minutes

a) Minutes of the Regular Meeting of Council dated January 31st, 2012

#79/12 Moved by: Kim Robertson
Seconded by: Cheryhl Corrie

BE IT RESOLVED that the Minutes of the January 31st, 2012 Regular Meeting of Council be adopted as presented.

(CARRIED)

b) Minutes of the Council Committee Meeting dated January 31st, 2012

#80/12 Moved by: Alvin Yosyk
Seconded by: Mac Kinghorn

BE IT RESOLVED that the Minutes of the January 31st, 2012 Council Committee Meeting be adopted as presented.

(CARRIED)

c) Minutes of the Joint Meeting with the Town of Powerview-Pine Falls dated January 17th, 2012.

#81/12 Moved by: Cheryhl Corrie
Seconded by: Alvin Yosyk

BE IT RESOLVED that the Minutes of the January 17th, 2012 Joint Meeting with the Town of Powerview-Pine Falls be adopted as presented.

(CARRIED)

3. Variations

4. Delegations

5. Public Hearings 11:00 a.m.

a) Conditional Use – 47001 Stead Rd 97 N – Greenwald Colony Farms Ltd 13.3

The notices were mailed out and all requirements of The Planning Act were met.

The proponent was in attendance in favour of the application and made a presentation to Council. Four others attended in favour of the application. Orris Sinavich appeared for information. One written objection was received.

- Ben Hofer, representing Greenwald Colony Farms Ltd., appeared before Council to make a presentation regarding the proposed Biomass Pelleting Plant. The Greenwald Colony, as well as Brightstone, and some other colonies are required to convert from coal to another source of heat by 2015. The current proposal is for two colonies use only. Perhaps in the future there may be a request for expansion; however any future expansion would require another conditional use.

#82/12 Moved by: Cheryl Corrie
Seconded by: Kim Robertson

WHEREAS a Public Hearing has been held in reference to an application for a Conditional Use Permit by the owner Greenwald Colony Farms Ltd:

Roll No. 20000 – 47001 Stead Rd 97N – NW 1-17-8 EPM

THEREFORE BE IT RESOLVED that the request to allow for the construction of a Biomass Pelleting Plant to extract peat moss on site and produce peat moss Pellets, under Zoning By-Law 08/98 be approved on the condition that:

- 1) Prior to obtaining any building permits the owner is required to present a business plan to MB Conservation for approval;
- 2) That the applicant obtains all necessary permits;
- 3) That the operation be for Greenwald and Brightstone colony use and supply only.

(CARRIED)

6. Correspondence

- | | |
|---|--------------|
| a) <u>MB Courts Division – Online Payment Service</u> | 3.1.1.a |
| • Received as Information | |
| b) <u>MB Local Government – Total Municipal Assessment</u> | 3.1.1.a/14.1 |
| • Received as Information | |
| c) <u>AMM – WestJet Petition – Service to and from Brandon</u> | 3.1.2.c |
| • Received as Information | |
| d) <u>AMM News Release – Support for Infrastructure Funding</u> | 3.1.2.c |
| • Received as Information | |
| e) <u>MMSM – 2012 Municipal Payment</u> | 10.5 |
| • Received as Information | |
| f) <u>Town of Powerview-Pine Falls - Public Hearing</u> | 3.1.1.o |
| • Received as Information | |
| g) <u>LdB Clipper – New Office in LdB</u> | 3.1.2.a |
| • Received as Information | |

7. Committee/Administrative Reports

- a) **Legislative and Finance**
 - 1) Approval of Accounts
 - i. *General Cheques*

#83/12 Moved by: Alvin Yosyk
Seconded by: Cheryl Corrie

WHEREAS the General Cheques for the Rural Municipality of Alexander, for the period ending February 14, 2012, have been examined and found to be in order;