

Construction Costs for a 5400 Head Nursery Barn in Manitoba & Saskatchewan

Prepared for: Manitoba Pork Council & Sask Pork

Prepared by:

**DGH Engineering Ltd.
12 Aviation Boulevard
St. Andrews, Manitoba R1A 3N5**

I. Hodgkinson, CEC

**April, 2018
REVISED September 29, 2023**



Introduction

At the request of the Manitoba Pork Council & Sask Pork, DGH Engineering Ltd. has prepared a detailed budget estimate to construct a new hog nursery facility in today's market conditions. A typical 5,400 Head Nursery Barn was designed as a model (see drawing, Appendix A). This facility model would be suitable to provide nursery space for a 1600 head farrowing operation. For a larger 3200 head farrowing operation, two of the model barns would need to be constructed. The facility would house nursery pigs in six rooms. Each room contains 20 pens containing 45 pigs each. Pens are 10' x 18' in size. A load-out chute with pens is provided in the central hallway. Waste collection would be facilitated through slatted nursery flooring above 2' deep manure collection pits drained by underground sewer pipe to a lift station and a two cell HDPE lined earthen manure storage. Feed distribution is provided by typical flex auger system connected to 6 exterior feed bins. All walls in the building are nominally 10' high with the first two feet being concrete and the balance being wood stud clad with painted OSB. Exterior building cladding is 29 gauge pre-painted galvanized steel.

Revisions Made For September 2023

All unit prices were updated to reflect current industry costs.

Methodology

A detailed estimate was prepared presenting all building components along with associated costs organized according to the NMS Masterformat standard numbering system. The detailed budget for Manitoba is presented in Appendix B. The detailed budget for Saskatchewan is presented in Appendix C. The budget is based on the building's design and construction conforming to the 2010 Manitoba Farm Building Code (Note in Saskatchewan, while Farm Buildings are exempt from the Construction Codes Act, local authorities may require farm buildings to comply with certain construction standards through local building bylaws). All unit prices are based on current typical market costs and adjusted where necessary to reflect the differences in labour rates for an agricultural building vs typical commercial building labour costs. A detailed commentary organised according to the NMS divisions follows.

Differences Between Manitoba and Saskatchewan Pricing

For the most part, all building materials and labour costs are for all intents and purposes at the budgetary stage the same, outside of a small variation in concrete costs. The only other major difference is in the Provincial Sales Tax Applicable in each of the provinces. This is due to both a difference in the base PST percentage rate, and more significantly a difference in what items are taxable and what items are exempt in the respective provincial sales tax acts.

Division 1 – General Requirements

General Requirements include cost allowances for engineering design fees, permits, course of construction insurance, overhead and administration of the project, site survey and layout as well as miscellaneous temporary facilities (equipment rentals, construction consumables, sanitary facilities, first aid supplies, etc.)

Note that permits, insurance and overhead & administration are based on percentage values of the overall budget.

Division 3 – Concrete

Concrete includes all costs associated with forming supplies, labour to form, place and pour concrete, reinforcing steel, concrete delivered to site, and precast concrete slats.

Concrete Formwork Labour unit cost rates provided are 60% of the typical unit rate for commercial construction.

Concrete reinforcing steel unit cost rates is based on current market rates for steel bars based on a detailed material take-off.

Concrete unit cost rates are based on the current market cost per yard allowing for typical discounts provided for large quantity orders in high volume pours.

Division 5 – Structural Steel

Structural steel consists of steel beams to support trusses over the central hallway as well as a cash allowance for miscellaneous steel fabrications which may be required during the course of construction.

Division 6 – Woods and Plastics

Woods and plastics contains all components for the framing of the building shell, including pre-fabricated wood trusses, exterior foundation cladding in pressure treated plywood, and interior wall and ceiling cladding in OSB. Also included are attic smoke stops constructed from 3/8" OSB.

All dimensional lumber and sheathing unit costs are based on current market rates in the construction industry taking into account bulk construction package purchasing.

Pre-fabricated wood truss unit cost is based on listed market rate and recent comparable barns built in 2023.

All Labour unit costs are based on 90% of current commercial rates for construction labour.

Division 7 – Thermal & Moisture Protection

Thermal and moisture protection contain all components for provision of building envelope insulation, vapour barriers, acoustical sealants, and 29 gauge pre-painted galvanized exterior metal cladding complete with associated trims and fasteners.

Insulation and metal cladding material unit costs are based on current market rates for agricultural construction.

Insulating labour unit costs are based on standard construction rates. There is no significant difference in terms of labour cost savings in an agricultural vs commercial project for insulation.

Metal cladding installation unit costs are based on 65% of typical commercial construction rates to reflect economies of construction due to simplicity and large surface areas of typical hog facility building layouts.

Division 8 – Doors & Windows

Doors & windows include all pre-fabricated and site built doors, including overhead load-out door and associated door hardware. All unit costs are based on typical construction rates.

Division 9 – Finishes

Finishes includes suspended ceiling and drywall in the staff/service areas, as well as painting of the OSB wall and ceiling cladding through-out the facility. All unit costs based on current typical market rates.

Division 10 – Specialities

Fire protection specialties provided for in the estimate are limited to 12 fire extinguishers only (two in each animal housing room)

Note that depending on local municipal firefighting infrastructure, an additional firefighting water holding pond may need to be constructed. If required, it would need to hold 45,000 gallons of water. See “optional prices” at the end of the report for the estimated cost of constructing a holding pond.

Division 11 – Equipment

The following animal equipment is included in the budget estimate:

Animal Penning:

Animal penning is provided as per plan layout. Building walls in the penning area will be 2' of concrete above the slatted floor. Pen walls and dividers in dry sow areas are constructed of 2" thick PVC panels, 38" high, supported by stainless steel posts and wall straps.

Animal Heating and Ventilation:

All exhaust and recirculation fans are provided including associated hardware (hoods and backdraft dampers, winter closures for stage 3/stage 4 fans).

All ceiling air inlets are included complete with actuators and all connecting hardware, pulleys, and manual hand winches.

Gas unit heaters are to be installed for supplementary winter heating.

Environmental controllers, temperature probes, back-up thermostats and manual fan controls are included in the equipment package.

Watering System

All components to construct a complete watering system are provided including:

Water Meter

1 ½" Main water supply lines with ¾" branch lines, PVC Schedule 40.

1 ½" High Volume wash drops at each end of the nursery rooms and two high volume drops in the central hallway. All high volume drops include quick connect camlock coupler for attachment of wash down fire hose.

Two 75' high volume wash down hoses with connectors and adjustable nozzle.

¾" supply lines with ¼" hose drops to nipple drinkers with room shut off ball-valves.

Clamps, screws, fittings, glue, primer, unions & shut-off valves for maintenance isolation, Teflon tape and all materials required for a complete installation are. all included.

High Pressure Water system

All components are provided for a functional high pressure barn wash system serviced by a centrally located 10 HP high pressure washer including:

½" branch lines to supply high pressure water throughout facility. All pipe and fittings Galvanized Steel Pipe, Schedule 80.

One high pressure wash drop in each room, and the load-out area each complete with high pressure drop hose and shut off valve.

150' Pressure wash hose with wand.

Feed System

All components to construct a complete automated feed delivery system (flex auger type).

Feed Storage (Approx. 8 days storage) : 6 x 11 Tonne Feed Bins

Lift Station

Complete concrete lift station including:

5' diameter concrete well cribbing

7.5HP submersible pump including controls, motor starter, floats, etc.

Stainless steel guide rails and 2,000 lb winch

Sewer Pipe

Complete under floor sewer package for typical under slab IPEX ultra-rib system with rubber pit plugs

Miscellaneous Components

Agri-Alert Alarm system

Load out Ramp

Weigh Scale for single animals.

All animal equipment components are based on current market list prices with a 15% discount applied to represent a typical “package price” reduction when purchasing a complete animal equipment package for construction of a new barn.

Division 15 – Mechanical

Process Piping - Installation of 1" Schedule 40 Steel Pipe in facility to supply propane or natural gas to in room animal unit heaters. Unit costs are based on 85% of typical commercial rates to account for simplicity of surface mounted agricultural gas line layout.

Plumbing Fixtures – Plumbing fixtures for staff are based on “Assemblies” costs which include the fixtures themselves as well as associated supply, waste and vent piping. Assembly unit costs are 85% of typical commercial rates to reflect simplicity of agricultural staff service layouts.

Heat Generating Equipment - Assembly cost for provision of hot water tank to supply domestic hot water requirements. Unit cost is 85% of commercial rate.

HVAC – HVAC includes baseboard heat and washroom exhaust fan. All materials and labour unit costs are based on current rates.

Division 16 – Electrical

Building electrical is based on a “per square foot cost allowance” for typical barns constructed in Manitoba.

Division 31 – Earthworks

Barn pad – estimate includes the following items:

Stripping and stockpiling on-site of all topsoil and excavation to 2' below finished elevation of all floors and pits.

Backfilling of 24" of granular material beneath the entire building footprint.

Trenching and backfilling of all sewer piping below the building including sand bedding around the pipes.

Backfilling three feet around the perimeter of the building and sloping away from the foundation walls for drainage.

Roads and Parking – Requirements will vary depending on site conditions and location of barns. Costs provided are based on typical site works required. Assumptions allow for a ring road around the perimeter of the facility, a 30' x 48' gravel parking area, and a 25' wide entrance driveway 150' long along with a drainage ditch. Costs include earthworks to complete the road, a stabilizing geo-grid over road surfaces, and 18" of compacted road gravel.

Earthen Manure Storage – Costs included are for all earthworks required to construct a 2-cell earthen manure storage with 500 days of storage complete with a High Density Polyethylene Liner for containment. Costs are also included for a 75' run of sewer pipe connecting the EMS to the Manure Lift Station.

NOTE: No provision has been provided in the estimate for an odour control cover over the earthen manure storage. If a cover were to be required on a given site, the cost of a plastic cover is expected to be approximately \$169,000 supplied and installed.

Division 33 – Utilities

Costs for utilities connection will vary depending on site location, available utilities infrastructure, natural gas or propane, and municipal water or water table depth. Cost included for connection of gas, hydro, and water are cash allowances only for an estimated typical cost.

Contingency

A contingency equal to 5% of the total cost of the facility is included for incidentals, unique requirements, and unforeseen issues arising during the course of construction.

Cost Summary

Manitoba : The total estimated cost of the 5,400 head nursery barn including all services, materials, equipment, labour, site development works and contingency is \$2,722,293.00. This total cost translates into \$107.91 per square foot or \$504/per pig place. Separating out site development, earth works, utilities and contingency the nominal construction cost of the facility is \$90.47 per square foot for \$423 per pig place. The project budget does not include any cost for land, considering that the project would be constructed on an existing farm.

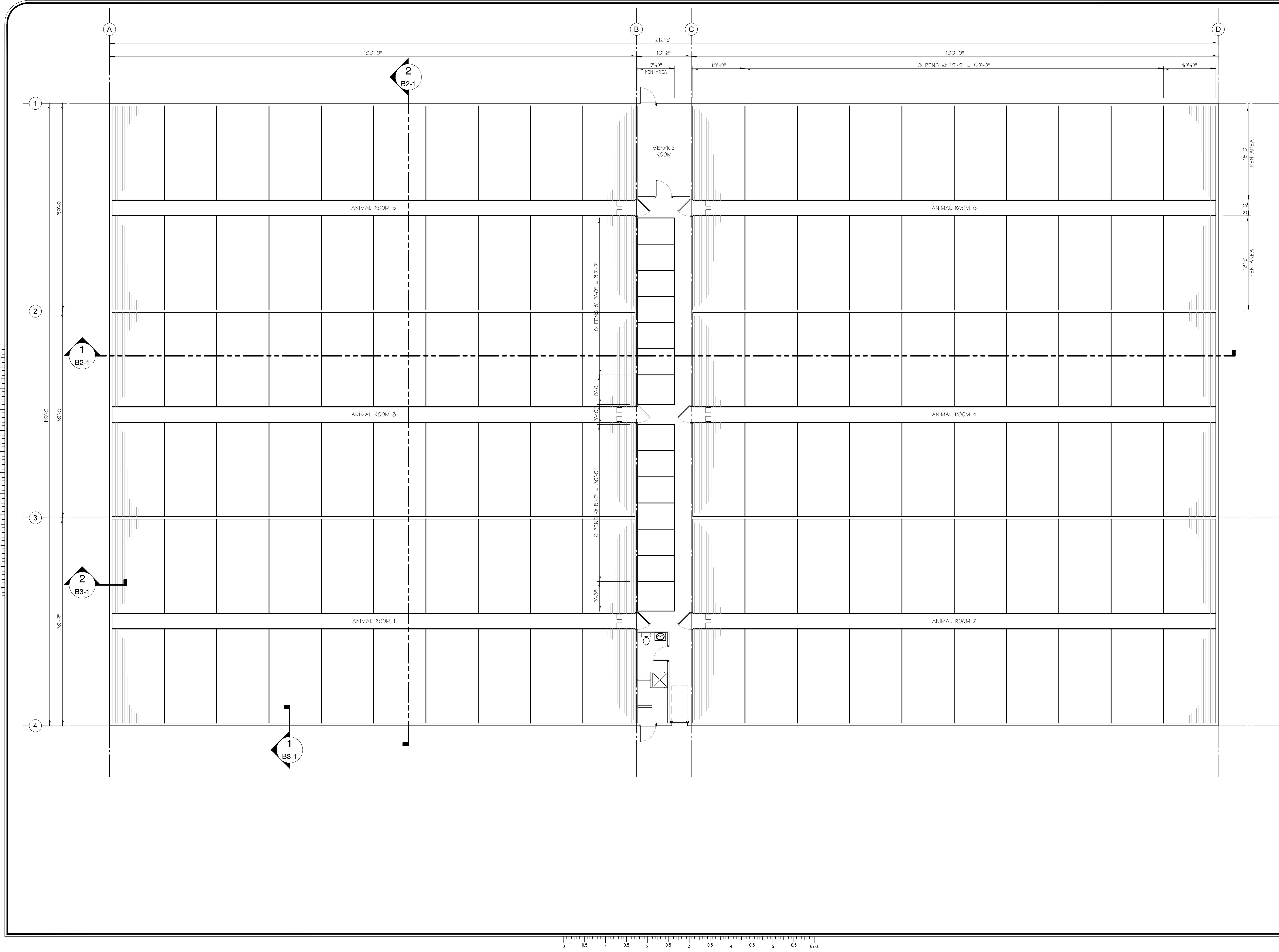
Saskatchewan : The total estimated cost of the 5,400 head nursery barn including all services, materials, equipment, labour, site development works and contingency is \$2,798,229.00. This total cost translates into \$110.92 per square foot or \$518/per pig place. Separating out site development, earth works, utilities and contingency the nominal construction cost of the facility is \$93.40 per square foot for \$436 per pig place. The project budget does not include any cost for land, considering that the project would be constructed on an existing farm.

OPTIONAL PRICES

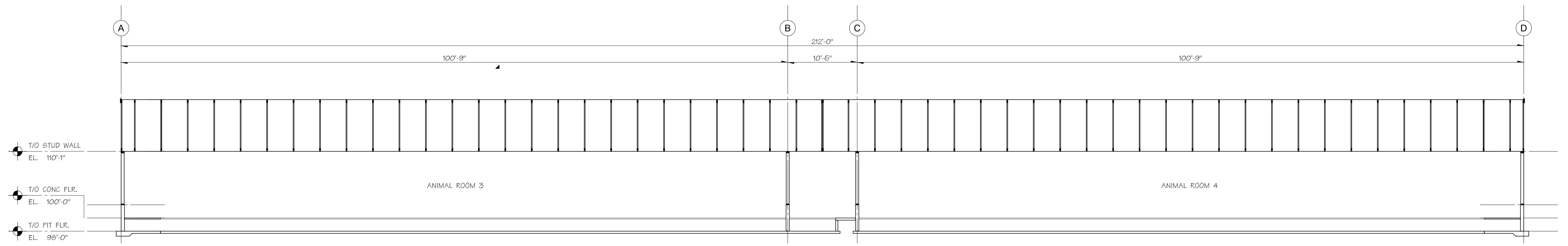
The following items are not included in the base estimate for the barn and would be costs over and above the estimated price of construction:

Add odour control cover to Earthen Manure Storage:
\$169,000

Add 45,000 Gallon Fire Fighting water storage pond:
\$20,300.00



PROJECT TITLE		NURSERY BARN		CLIENT		MANITOBA PORK COUNCIL		ISSUED FOR REVIEW	
PROJECT LOCATION				28 TERRACON PLACE					
PROJECT NUMBER: 6-1306-005-30				WINNIPEG, MB R2J 4G7					
GROUND FLOOR PLAN		DESIGNED	DRAWN	COORDINATOR	DGH ENGINEERING LTD.				
		TRK	IH		Professional Service Practical Solutions				
		DATE	SCALE	XREF PATH(S)	12 Aviation Boulevard St. Andrews MB R1A 3N5 Canada				
		JUNE 7/2017	AS NOTED		T: 204-334-8846 F: 204-334-6985				
		REV. □	R00		COPYRIGHT © 2017 DGH ENGINEERING LTD. AND THE ENGINEER AND DESIGNER DO NOT ISSUE THIS DRAWING TO ANYONE ELSE. THE ENGINEER CONSENTS TOAVING THE CONTRACTOR OR HALL CHECK AND VERIFY ALL DIMENSIONS AND PORTAL INFORMATION ON THIS DRAWING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE DRAWINGS AND MAKE ADJUSTMENTS AS NECESSARY. THIS DRAWING IS FOR THE USE OF THE CONTRACTOR ONLY. DO NOT COPY OR REPRODUCE THIS DRAWING. DO NOT USE CONSTRUCTION BUILDING PERMIT PARAPSEUNT UNLSS SIGNED AND DATED.				
					INITIAL(S) TRK PRINTED DATE: 7/26/2017 5:07:53 PM				

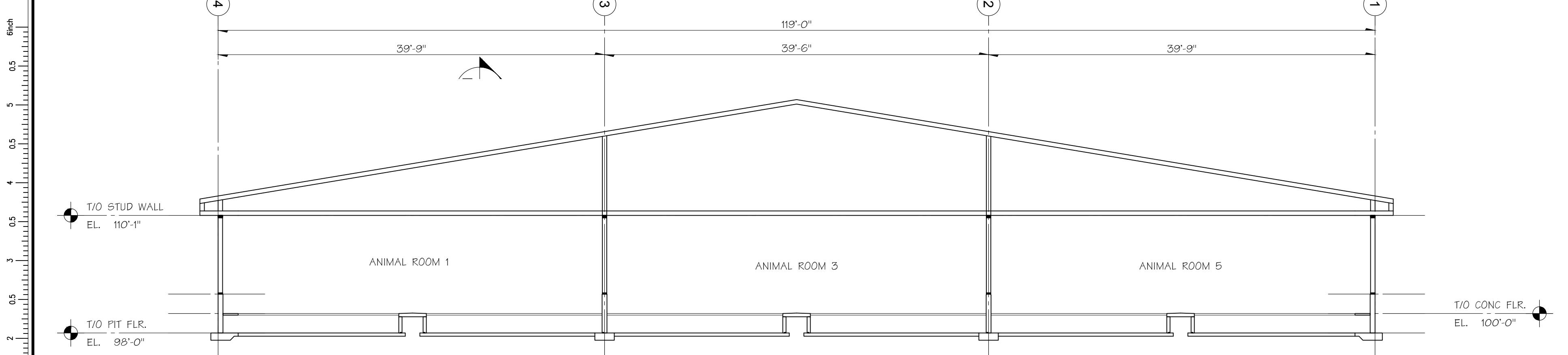


BLDG SECTION

B1-1

1/8" = 1'-0"

SHEET REF. B1-1



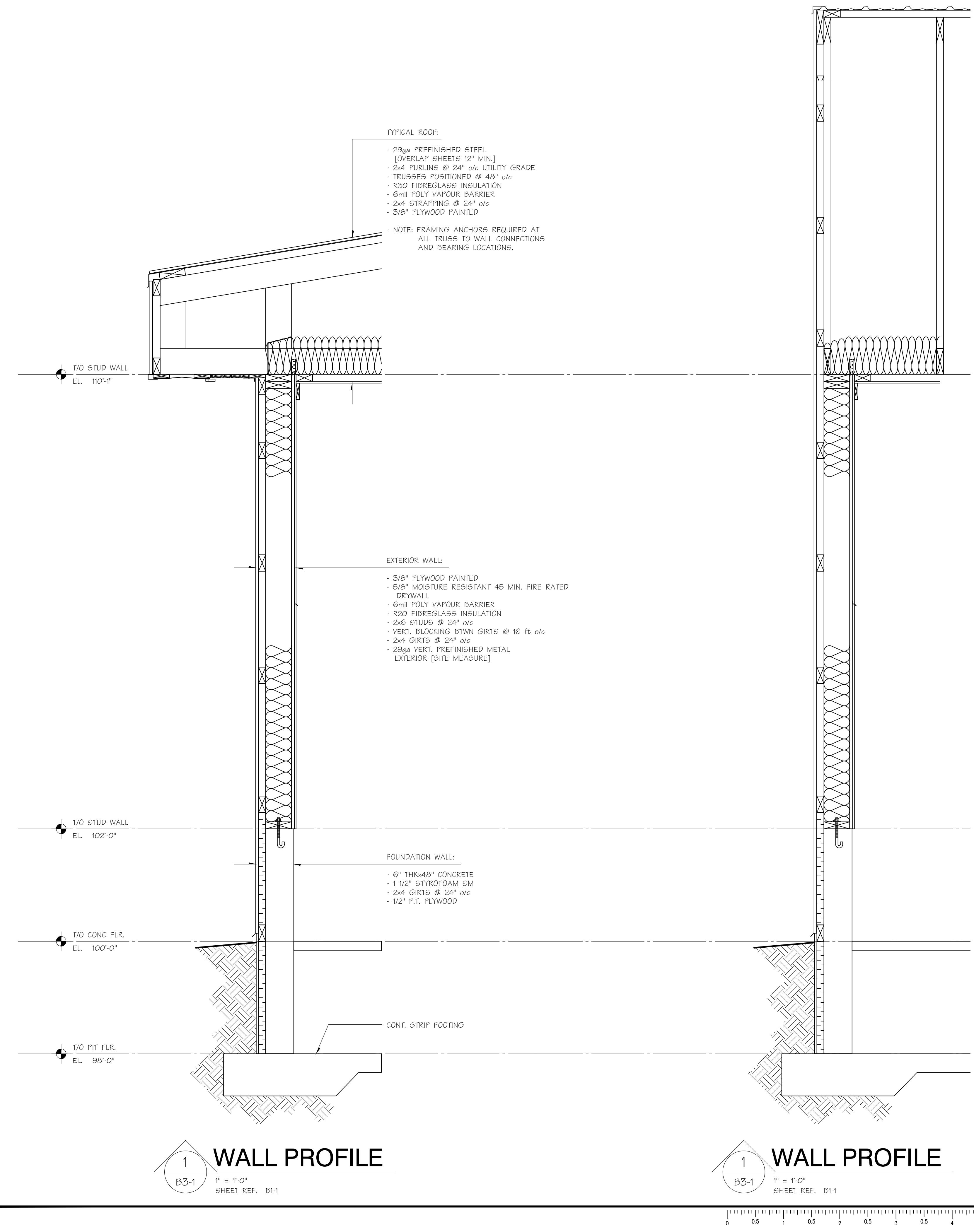
BLDG SECTION

B1-1

1/8" = 1'-0"

SHEET REF. B1-1

PROJECT TITLE		NURSERY BARN		CLIENT		MANITOBA PORK COUNCIL		ISSUED FOR REVIEW	
PROJECT LOCATION									
PROJECT NUMBER:		6-1306-005-30						DGH ENGINEERING LTD. Professional Service Practical Solutions 12 Aviation Boulevard St. Andrews MB R1A 3N5 Canada T: 204-334-8846 F: 204-334-6985	
BUILDING SECTIONS		DESIGNED	DRAWN	COORDINATOR					COPYRIGHT 2017 THE ENGINEER AND DESIGNER AND THE OWNER OF THIS DRAWING ARE THE ONLY PERSONS ENTITLED TO MAKE ANY CHANGES OR ALTERATIONS. THE CONTRACTOR OR CHECKER AND OTHERS ARE NOT AUTHORIZED TO MAKE CHANGES OR ALTERATIONS. THE CONTRACTOR OR CHECKER IS NOT AUTHORIZED TO SIGN OFF ON THIS DRAWING. THIS DRAWING IS THE PROPERTY OF THE ENGINEER AND DESIGNER AND IS TO BE RETURNED UPON COMPLETION OF THE PROJECT. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION OR BUILDING PERMIT PURPOSES UNTIL SIGNED AND DATED.
		DATE	SCALE	PATH(S)					REV. □ R00
		JUNE 7/2017	AS NOTED	XREF					
PROJECT NUMBER: 6-1306-005-30									
PRINTED DATE: 7/26/2017 5:07:55 PM									
ISSUE (AND REVISION)									
C: 2017/07/26 ISSUED FOR REVIEW									
TRK: INITIAL(S)									
NO (REV) DATE DESCRIPTION									



PROJECT TITLE NURSERY BARN	CLIENT MANITOBA PORK COUNCIL	PROJECT LOCATION 28 TERRACON PLACE WINNIPEG, MB R2J 4G7	PROJECT NUMBER: 16-1-306-005-30	ISSUED FOR REVIEW		
		DRAWN TRK	COORDINATOR IH	COPYRIGHT 2017 Copyright Reserved. This drawing and design is and at all times remains the exclusive property of DGH Engineering Ltd. and shall not be used without the engineer's consent in writing. The contractor shall check and verify all dimensions and report all errors and omissions to the engineer in writing. Do not rely on scaled dimensions. Use written dimensions only. Contact engineer for clarifications if necessary. This drawing shall not be used for construction or building permit purposes until sealed and signed.		
WALL PROFILES B3-1 REV. R00		DATE JUNE/2017	SCALE AS NOTED	XREF PATH(S)	NO.(REV.) DATE 01/2017/07/26	DESCRIPTION PRINTED DATE: 7/26/2017 5:08:00 PM
		ISSUE (AND REVISION)	ENGINEER'S SEAL		INITIAL(S) TRK	

Manitoba Pork Council

Appendix B

Nursery Barn Budget

Sample Barn, 5400 Head Nursery, 25228 Square Feet

Prepared by DGH Engineering Ltd.

2018-04-25

REVISED September 19, 2023

Item	Description	Unit	Quantity	Unit Price - Material	Unit Price - Labour	Unit Price - Equipment	Sub-Total Material	Sub-Total Labour & Equipment	Sub-Total Unit	Sub-Toral Category	Division Sub-Total Materials	Division Sub-Total Labour & Equipment	Division Total	Cost/sq. ft.
	Division 1 -General Requirements										\$ 43,375.00	\$ 249,696.37	\$ 293,071.37	\$ 11.62
	Design, Engineering, and Construction Support										\$ 61,400.00			
	Design, Engineering, and Construction Support	fee	1	\$ 42,500.00			\$ -	\$ 42,500.00	\$ 42,500.00					
	EMS Design Fees & Certification	fee	1	\$ 18,900.00			\$ -	\$ 18,900.00	\$ 18,900.00					
1300	Administrative Requirements										\$ 181,796.37			\$ 7.21
	Permits	fee	0.01		2,019,959.71		\$ -	\$ 20,199.60	\$ 20,199.60					
	Insurance	fee	0.03		2,019,959.71		\$ -	\$ 60,598.79	\$ 60,598.79					
	Overhead/Administration	allow	0.05		2,019,959.71		\$ -	\$ 100,997.99	\$ 100,997.99					
1400	Quality Requirements	allow	1	\$ 2,500.00			\$ -	\$ 2,500.00	\$ 2,500.00	\$ 2,500.00				\$ 0.10
1500	Temporary Facilities & Controls										\$ 43,375.00			\$ 1.72
	Miscellaneous Hardware & tools/Office Supplies/First Aid	allow	1	\$ 13,475.00				\$ 13,475.00	\$ -	\$ 13,475.00				
	Equipment Rental	allow	1	\$ 29,900.00				\$ 29,900.00	\$ -	\$ 29,900.00				
1700	Execution Requirements	allow	1	\$ 4,000.00			\$ -	\$ 4,000.00	\$ 4,000.00	\$ 4,000.00				\$ 0.16
	Division 3 - Concrete										\$ 192,562.94	\$ 153,041.11	\$ 345,604.05	\$ 13.70
3101	Concrete Formwork										\$ 179,154.96			\$ 7.10
	Forms in Place													
	Footings (9"x18") (1.5SFCA/lin ft)	lin ft	1304	\$ 1.71	\$ 3.88	\$ -	\$ 2,229.84	\$ 5,058.22	\$ 7,288.06					
	4' Grade Beam w/Flooring Provision One Side	lin ft	472	\$ 7.06	\$ 18.45		\$ 3,330.43	\$ 8,708.40	\$ 12,038.83					
	4' Grade Beam w/Flooring Provision Both Sides	lin ft	400	\$ 7.06	\$ 18.45		\$ 2,822.40	\$ 7,380.00	\$ 10,202.40					
	4' Grade Beam	lin ft	432	\$ 5.62	\$ 12.96		\$ 2,426.11	\$ 5,598.72	\$ 8,024.83					
	Pit Walls (2' x 4") (4SFCA/lin ft)	lin ft	2500	\$ 2.59	\$ 14.58	\$ -	\$ 6,480.00	\$ 36,450.00	\$ 42,930.00					
	Pit Floors	sq ft	24614	\$ 0.44	\$ 2.21	\$ -	\$ 10,899.08	\$ 54,495.40	\$ 65,394.48					
	Floor	sq ft	2458	\$ 0.44	\$ 2.71	\$ -	\$ 1,088.40	\$ 6,651.35	\$ 7,739.75					
	2' Concrete Curb b/t Office and Loadout & Mech Room	lin ft	34	\$ 2.59	\$ 14.58		\$ 88.06	\$ 495.72	\$ 583.78					
	Bin Pads	sq ft	864	\$ 0.82	\$ 6.15	\$ -	\$ 708.48	\$ 5,313.60	\$ 6,022.08					
	Aprons	sq ft	32	\$ 0.82	\$ 6.15	\$ -	\$ 26.24	\$ 196.80	\$ 223.04					
	Pour Concrete													
	Footings (9"x18")	cu yds	55	\$ -	\$ 21.50	\$ 5.90	\$ -	\$ 1,507.00	\$ 1,507.00					
	4' Grade Beam w/Flooring Provision One Side	cu yds	41		\$ 32.50	\$ 8.85	\$ -	\$ 1,695.35	\$ 1,695.35					
	4' Grade Beam w/Flooring Provision Both Sides	cu yds	40	\$ -	\$ 32.50	\$ 8.85	\$ -	\$ 1,654.00	\$ 1,654.00					
	4' Grade Beam	cu yds	16		\$ 32.50	\$ 8.85	\$ -	\$ 661.60	\$ 661.60					
	FIP Pit Walls (2' x 4")	cu yds	62	\$ -	\$ 17.95	\$ 4.93	\$ -	\$ 1,418.56	\$ 1,418.56					
	Pit Floors	cu yds	304	\$ -	\$ 25.00	\$ 6.80	\$ -	\$ 9,667.20	\$ 9,667.20					
	Floor	cu yds	31	\$ -	\$ 25.00	\$ 6.80	\$ -	\$ 985.80	\$ 985.80					
	2' Concrete Curb b/t Office and Loadout & Mech Room	cu yds	1	\$ -	\$ 54.00	\$ 14.80	\$ -	\$ 68.80	\$ 68.80					
	Bin Pads	cu yds	32	\$ -	\$ 25.00	\$ 6.80	\$ -	\$ 1,017.60	\$ 1,017.60					
	Aprons	cu yds	1	\$ -	\$ 25.00	\$ 6.80	\$ -	\$ 31.80	\$ 31.80					
3200	Concrete Reinforcement										\$ 30,997.65			\$ 1.23
	Footings													

15M Rebar	ea	163	\$ 14.65			\$ 2,387.95	\$ -	\$ 2,387.95					
10M Dowels	ea	685	\$ 2.63			\$ 1,801.55	\$ -	\$ 1,801.55					
10M Rebar	ea	55	\$ 7.40			\$ 407.00	\$ -	\$ 407.00					
Grade Beams													
15M Rebar	ea	305	\$ 14.65			\$ 4,468.25	\$ -	\$ 4,468.25					
10M Rebar	ea	172	\$ 7.40			\$ 1,272.80	\$ -	\$ 1,272.80					
10M Dowel	ea	685	\$ 1.82			\$ 1,246.70	\$ -	\$ 1,246.70					
Pit Walls													
10M Rebar	ea	511	\$ 7.40			\$ 3,781.40	\$ -	\$ 3,781.40					
Pit Floors													
10M Rebar	ea	1610	\$ 7.40			\$ 11,914.00	\$ -	\$ 11,914.00					
Floor													
10M Rebar	ea	150	\$ 7.40			\$ 1,110.00	\$ -	\$ 1,110.00					
2' Concrete Curb b/t Office and Loadout & Mech Room													
10M Rebar	ea	4	\$ 7.40			\$ 29.60	\$ -	\$ 29.60					
Bin Pads & Aprons													
15M Rebar	ea	176	\$ 14.65			\$ 2,578.40	\$ -	\$ 2,578.40					
3310 Basic Concrete Materials									\$ 135,451.44				\$ 5.37
Footings (9"x18") (0.0417yds/lin ft)	cu yds	61	\$ 202.88			\$ 6.15	\$ 12,375.68	\$ 375.15	\$ 12,750.83				
4' Grade Beam w/Flooring Provision One Side	cu yds	46	\$ 202.88			\$ 6.15	\$ 9,332.48	\$ 282.90	\$ 9,615.38				
4' Grade Beam w/Flooring Provision Both Sides	cu yds	44	\$ 202.88			\$ 6.15	\$ 8,926.72	\$ 270.60	\$ 9,197.32				
4' Grade Beam	cu yds	18	\$ 202.88			\$ 6.15	\$ 3,651.84	\$ 110.70	\$ 3,762.54				
Pit Walls (2' x 4")	cu yds	69	\$ 202.88			\$ 6.15	\$ 13,998.72	\$ 424.35	\$ 14,423.07				
Pit Floors	cu yds	335	\$ 202.88			\$ 6.15	\$ 67,964.80	\$ 2,060.25	\$ 70,025.05				
Floor	cu yds	35	\$ 202.88			\$ 6.15	\$ 7,100.80	\$ 215.25	\$ 7,316.05				
2' Concrete Curb b/t Office and Loadout & Mech Room	cu yds	2	\$ 202.88			\$ 6.15	\$ 405.76	\$ 12.30	\$ 418.06				
Bin Pads	cu yds	36	\$ 202.88			\$ 6.15	\$ 7,303.68	\$ 221.40	\$ 7,525.08				
Aprons	cu yds	2	\$ 202.88			\$ 6.15	\$ 405.76	\$ 12.30	\$ 418.06				
Division 5 - Structural Steel									\$ 1,576.70	\$ 1,686.30	\$ 3,263.00	\$ 0.13	
5100 Structural Steel Columns and Beams									\$ 2,013.00				
C9x15	lin ft	22	\$ 14.85	\$ 70.05	\$ 6.60	\$ 326.70	\$ 1,686.30	\$ 2,013.00					
5500 Metal Fabrications									\$ 1,250.00				
Misc Fabrications	allow	1	\$ 1,250.00			\$ 1,250.00	\$ -	\$ 1,250.00					
Division 6 - Wood & Plastics									\$ 196,301.25	\$ 126,629.06	\$ 322,930.31	\$ 12.80	
6090 Fasteners									\$ 12,238.52				
1/2" Anchor Bolts w Nut and Washer	ea	700	\$ 1.71			\$ 1,197.00	\$ -	\$ 1,197.00					
Edge Purlin Splice (T&B) 20ga 4"x20" Steel Strap	ea	104	\$ 9.35			\$ 972.40	\$ -	\$ 972.40					
Simpson Strong Tie at Truss Ends	ea	108	\$ 0.64			\$ 69.12	\$ -	\$ 69.12					
Allowance Nails & Screws	allow	1	\$ 10,000.00			\$ 10,000.00	\$ -	\$ 10,000.00					
6110 Structural Wood Framing									\$ 46,685.53				\$ 1.85
2x6 Stud Wall @ 24" o/c 8' ht(incl 2xT.P. & PT B.P.)	lin ft	1300	\$ 9.06			\$ 11,778.00	\$ -	\$ 11,778.00					
2x4 Stud Wall @ 16" o/c 9' ht(incl 2xT.P. & PT B.P.)	lin ft	45	\$ 5.96			\$ 268.20	\$ -	\$ 268.20					
2x4 Girts @ 24"	BF	2210	\$ 1.01			\$ 2,232.10	\$ -	\$ 2,232.10					
2x4 PT Girts, to Concrete	BF	442	\$ 1.82			\$ 804.44	\$ -	\$ 804.44					
2x6 Columns	BF	96	\$ 1.04			\$ 99.84	\$ -	\$ 99.84					
2x6 Header	BF	24	\$ 1.04			\$ 24.96	\$ -	\$ 24.96					
2 ply 2x10 Lintel	BF	66	\$ 1.21			\$ 79.86	\$ -	\$ 79.86					
2x4 Purlins (incl'd Valleys)	BF	8765	\$ 1.01			\$ 8,852.65	\$ -	\$ 8,852.65					
2x4 Lateral Bracing	BF	2262	\$ 1.01			\$ 2,284.62	\$ -	\$ 2,284.62					
2x6 Vertical Sway Bracing	BF	864	\$ 1.01			\$ 872.64	\$ -	\$ 872.64					
2x6 Anchor Bracing	BF	320	\$ 1.01			\$ 323.20	\$ -	\$ 323.20					

	2x6 Blocking under Splice Plates	BF	416	\$ 1.01			\$ 420.16	\$ -	\$ 420.16					
	1x4 Web Nailer	BF	142	\$ 1.22			\$ 173.24	\$ -	\$ 173.24					
	2x4 Ceiling Strapping	BF	8622	\$ 1.01			\$ 8,708.22	\$ -	\$ 8,708.22					
	2x6 Purlins	BF	848	\$ 1.01			\$ 856.48	\$ -	\$ 856.48					
	2x6 Heels	BF	848	\$ 1.01			\$ 856.48	\$ -	\$ 856.48					
	1x4 Soffit Nailer	BF	426	\$ 1.22			\$ 519.72	\$ -	\$ 519.72					
	1x4 Painted Trim Board	BF	678	\$ 1.22			\$ 827.16	\$ -	\$ 827.16					
	Soffit Doors, 8'	ea	52	\$ 66.06			\$ 3,435.12	\$ -	\$ 3,435.12					
	2x6 P.T. rough bucks for doors/windows	BF	54	\$ 1.82			\$ 98.28	\$ -	\$ 98.28					
	2x4 P.T. sill plate for doors/windows	BF	36	\$ 1.82			\$ 65.52	\$ -	\$ 65.52					
	Interior Galv. Drip Flashing	lin ft	1944	\$ 1.10			\$ 2,138.40	\$ -	\$ 2,138.40					
	2x2 Recirc duct	BF	792	\$ 1.22			\$ 966.24	\$ -	\$ 966.24					
6160	Sheathing									\$ 31,419.60				\$ 1.25
	1/2" P.T. Plywood Sheathing	sq ft	1324	\$ 2.06			\$ 2,727.44	\$ -	\$ 2,727.44					
	3/8" OSB Sheathing Recirc duct	sq ft	2800	\$ 0.56			\$ 1,568.00	\$ -	\$ 1,568.00					
	3/8" OSB for Attic Smoke Stops (22)	sq ft	4800	\$ 0.56			\$ 2,688.00	\$ -	\$ 2,688.00					
	3/8" OSB to Wall, P.N.	sq ft	16008	\$ 0.56			\$ 8,964.48	\$ -	\$ 8,964.48					
	3/8" OSB to Gables, P.N.	sq ft	2400	\$ 0.56			\$ 1,344.00	\$ -	\$ 1,344.00					
	3/8" OSB to Ceiling, P.N.	sq ft	25228	\$ 0.56			\$ 14,127.68	\$ -	\$ 14,127.68					
6170	Pre-Fabricated Structural Wood									\$ 105,957.60				\$ 4.20
	Pre-Fabricated Trusses w/ 2' Overhang	sq ft	25228	\$ 4.20			\$ 105,957.60	\$ -	\$ 105,957.60					
6220	Framing Labour									\$ 126,629.06				\$ 5.02
	2x6 Stud Wall @ 24" o/c 9' ht (Incl 2xT.P. & PT B.P.)	lin ft	1300	\$ 6.80			\$ 8,840.00	\$ 8,840.00						
	2x4 Stud Wall @ 16" o/c 9' ht (Incl 2xT.P. & PT B.P.)	lin ft	45	\$ 7.80			\$ 351.00	\$ 351.00						
	2x4 Girts @ 24"	BF	2210	\$ 1.33			\$ 2,943.72	\$ 2,943.72						
	2x4 PT Girts, to Concrete	BF	442	\$ 1.62			\$ 716.04	\$ 716.04						
	2x6 Columns	BF	96	\$ 0.85			\$ 81.22	\$ 81.22						
	2x6 Header	BF	24	\$ 2.34			\$ 56.16	\$ 56.16						
	2 ply 2x10 Lintel	BF	66	\$ 1.60			\$ 105.73	\$ 105.73						
	2x4 Purlins (incl'd Valleys)	BF	8765	\$ 1.33			\$ 11,674.98	\$ 11,674.98						
	2x4 Lateral Bracing	BF	2262	\$ 1.33			\$ 3,012.98	\$ 3,012.98						
	2x6 Vertical Sway Bracing	BF	864	\$ 1.33			\$ 1,150.85	\$ 1,150.85						
	2x6 Anchor Bracing	BF	320	\$ 1.33			\$ 426.24	\$ 426.24						
	2x6 Blocking under Splice Plates	BF	416	\$ 1.83			\$ 761.28	\$ 761.28						
	1x4 Web Nailer	BF	142	\$ 2.82			\$ 400.01	\$ 400.01						
	2x4 Ceiling Strapping	BF	8622	\$ 1.44			\$ 12,415.68	\$ 12,415.68						
	2x6 Purlins	BF	848	\$ 0.95			\$ 801.36	\$ 801.36						
	2x6 Heels	BF	848	\$ 1.69			\$ 1,434.82	\$ 1,434.82						
	1x4 Soffit Nailer	BF	426	\$ 2.81			\$ 1,196.21	\$ 1,196.21						
	1x4 Painted Trim Board	BF	678	\$ 2.00			\$ 1,356.00	\$ 1,356.00						
	Soffit Doors, 8'	ea	52	\$ 30.00			\$ 1,560.00	\$ 1,560.00						
	2x6 P.T. rough bucks for doors/windows	BF	54	\$ 1.95			\$ 105.30	\$ 105.30						
	2x4 P.T. sill plate for doors/windows	BF	36	\$ 1.95			\$ 70.20	\$ 70.20						
	Interior Galv. Drip Flashing	lin ft	1944	\$ 1.17			\$ 2,274.48	\$ 2,274.48						
	2x3 Recirc duct	BF	792	\$ 1.88			\$ 1,488.96	\$ 1,488.96						
	1/2" P.T. Plywood Sheathing	sq ft	1324	\$ 0.83			\$ 1,098.92	\$ 1,098.92						
	3/8" OSB Sheathing Recirc duct	sq ft	2800	\$ 0.69			\$ 1,932.00	\$ 1,932.00						
	3/8" OSB for Attic Smoke Stops	sq ft	4800	\$ 0.63			\$ 3,024.00	\$ 3,024.00						
	3/8" OSB to Wall, P.N.	sq ft	16008	\$ 0.63			\$ 10,085.04	\$ 10,085.04						
	3/8" OSB to Gables, P.N.	sq ft	2400	\$ 0.63			\$ 1,512.00	\$ 1,512.00						
	3/8" OSB to Ceiling, P.N.	sq ft	25228	\$ 0.69			\$ 17,407.32	\$ 17,407.32						

	Pre-Fabricated Trusses w/ 2' Overhang	sq ft	25228		\$ 0.80	\$ 0.72	\$ -	\$ 38,346.56	\$ 38,346.56						
	Division 7 - Thermal & Moisture Protection														
7210	Building Insulation										\$ 55,111.68				\$ 2.18
	R30 blow in Insulation	sq ft	25228	\$ 0.82	\$ 0.64	\$ 0.34	\$ 20,686.96	\$ 24,723.44	\$ 45,410.40						
	Insulation Stops	ea	212	\$ 3.94			\$ 835.28	\$ -	\$ 835.28						
	Perimeter Ins., 1 1/2" Polystyrene (R7.69) around perimeter conc	sq ft	2648	\$ 1.37			\$ 3,627.76	\$ -	\$ 3,627.76						
	6"x23" Fibreglass Batts Unfaced (R20)	sq ft	5296	\$ 0.93			\$ 4,925.28	\$ -	\$ 4,925.28						
7260	Vapour Retarders										\$ 4,135.26				\$ 0.16
	Urethane Sill Gasket	lin ft	1304	\$ 0.24			\$ 312.96	\$ -	\$ 312.96						
	6mil Poly Vapour Barrier	C. sq ft	558	\$ 6.85			\$ 3,822.30	\$ -	\$ 3,822.30						
7400	Roofing & Siding Panels										\$ 73,546.32				\$ 2.92
	10' Wall Metal Cladding	lin ft	2210	\$ 4.38			\$ 9,679.80	\$ -	\$ 9,679.80						
	30' Roof Metal Cladding	lin ft	4260	\$ 4.38			\$ 18,658.80	\$ -	\$ 18,658.80						
	36' Roof Metal Cladding	lin ft	5112	\$ 4.38			\$ 22,390.56	\$ -	\$ 22,390.56						
	12' Wall Gable Metal Cladding	lin ft	756	\$ 4.38			\$ 3,311.28	\$ -	\$ 3,311.28						
	2' Fascia	lin ft	284	\$ 4.90			\$ 1,391.60	\$ -	\$ 1,391.60						
	2' Soffit	sq ft	284	\$ 1.05			\$ 298.20	\$ -	\$ 298.20						
	J Trim	lin ft	400	\$ 1.26			\$ 504.00	\$ -	\$ 504.00						
	Rake Flashing	lin ft	440	\$ 1.94			\$ 853.60	\$ -	\$ 853.60						
	Divider Flashing	lin ft	240	\$ 1.26			\$ 302.40	\$ -	\$ 302.40						
	Box Base	lin ft	440	\$ 3.10			\$ 1,364.00	\$ -	\$ 1,364.00						
	Base Drip Flashing	lin ft	670	\$ 1.26			\$ 844.20	\$ -	\$ 844.20						
	Outside Corner	lin ft	40	\$ 3.20			\$ 128.00	\$ -	\$ 128.00						
	Inside Corner	lin ft	440	\$ 3.10			\$ 1,364.00	\$ -	\$ 1,364.00						
	Fascia	lin ft	284	\$ 1.84			\$ 522.56	\$ -	\$ 522.56						
	Gable Flashing	lin ft	280	\$ 2.99			\$ 837.20	\$ -	\$ 837.20						
	Ridge Cap	lin ft	220	\$ 3.15			\$ 693.00	\$ -	\$ 693.00						
	Butyl Tape, 50' roll	ea	188	\$ 8.95			\$ 1,682.60	\$ -	\$ 1,682.60						
	Foam Closures	ea	284	\$ 4.28			\$ 1,215.52	\$ -	\$ 1,215.52						
	#10 x 1 1/2" Pre-painted Screws w/neoprene washer	ea	37100	\$ 0.13			\$ 4,823.00	\$ -	\$ 4,823.00						
	#12 x 5/8" Pre-painted Stitch Screw w/neoprene washer	ea	14900	\$ 0.18			\$ 2,682.00	\$ -	\$ 2,682.00						
7900	Joint Sealers										\$ 193.31				\$ 0.01
	Accoustical Sealant, 3/4" dia	c. lin ft	13	\$ 14.87			\$ 193.31	\$ -	\$ 193.31						
7990	Installation of Insulation and Cladding										\$ 59,754.10				\$ 2.37
	Insulation Stops	ea	212		\$ 1.50		\$ -	\$ 318.00	\$ 318.00						
	Perimeter Ins., 1 1/2" Polystyrene (R7.69) around perimeter conc	sq ft	2648		\$ 0.64		\$ -	\$ 1,694.72	\$ 1,694.72						
	6"x23" Fibreglass Batts Unfaced (R20)	sq ft	5296		\$ 0.35		\$ -	\$ 1,853.60	\$ 1,853.60						
	Urethane Sill Gasket	lin ft	1304		\$ 0.20		\$ -	\$ 260.80	\$ 260.80						
	6mil Poly Vapour Barrier	C. sq ft	558		\$ 12.65		\$ -	\$ 7,058.70	\$ 7,058.70						
	10' Wall Metal Cladding	lin ft	2210		\$ 4.58		\$ -	\$ 10,121.80	\$ 10,121.80						
	40' Roof Metal Cladding	lin ft	4260		\$ 3.49		\$ -	\$ 14,867.40	\$ 14,867.40						
	35' Roof Metal Cladding	lin ft	5112		\$ 3.49		\$ -	\$ 17,840.88	\$ 17,840.88						
	12' Wall Gable Metal Cladding	lin ft	756		\$ 4.58		\$ -	\$ 3,462.48	\$ 3,462.48						
	2' Fascia	lin ft	284		\$ 4.58		\$ -	\$ 1,300.72	\$ 1,300.72						
	Accoustical Sealant, 3/4" dia	c. lin ft	13		\$ 75.00		\$ -	\$ 975.00	\$ 975.00						
	Division 8 - Doors & Windows										\$ 30,378.15	\$ 6,884.32	\$ 37,262.47	\$ 1.48	
8100	Steel Doors & Frame										\$ 32,304.85				
	Steel Door, Insulated, 18 ga, 3'0" x 6' 8" with Frame/Hardware	ea	8	\$ 2,864.95	\$ 578.50		\$ 22,919.60	\$ 4,628.00	\$ 27,547.60						
	Steel Door, Fire rated, 18 ga, 3'0" x 6' 8" with Frame	ea	1	\$ 2,938.75	\$ 641.00		\$ 2,938.75	\$ 641.00	\$ 3,579.75						
	Interior Office Door c/w Frame and Hardware	ea	1	\$ 1,013.00	\$ 164.50		\$ 1,013.00	\$ 164.50	\$ 1,177.50						
8200	Wood & Plastic Doors										\$ 2,962.62				\$ 0.12

	Site Built Wood Door 3'0" x 6'8"	ea	6	\$ 225.00	\$ 135.00		\$ 1,350.00	\$ 810.00	\$ 2,160.00					
	Wood Frame, 5/4x4 9/16" deep	lin ft	78	\$ 8.10	\$ 2.19		\$ 631.80	\$ 170.82	\$ 802.62					
8300	Specialty Doors									\$ 1,995.00				\$ 0.08
	3'x7' Overhead Door, 24 ga. Steel, chain hoist operated	ea	1	\$ 1,525.00	\$ 470.00		\$ 1,525.00	\$ 470.00	\$ 1,995.00					
	Division 9 - Finishes													
9100	Metal Support Assemblies									\$ 235.20				\$ 0.01
	5/16" T-Bar Support System, 2'x4' grid	sq ft	120	\$ 1.37	\$ 0.59		\$ 164.40	\$ 70.80	\$ 235.20					
9250	Gypsum Board									\$ 1,002.36				\$ 0.04
	5/8" FR Drywall, Moisture Resistant	sq ft	470	\$ 1.09			\$ 512.30	\$ -	\$ 512.30					
	Boarding, Walls	sq ft	348	\$ -	\$ 0.47		\$ -	\$ 163.56	\$ 163.56					
	Boarding, Ceilings	sq ft	122	\$ -	\$ 0.52		\$ -	\$ 63.44	\$ 63.44					
	Tape & Finish, Walls	sq ft	348	\$ -	\$ 0.50		\$ -	\$ 174.00	\$ 174.00					
	Tape & Finish, Ceilings	sq ft	122	\$ -	\$ 0.73		\$ -	\$ 89.06	\$ 89.06					
9500	Ceiling									\$ 412.80				\$ 0.02
	5/8" Mineral Fibre Tiles	sq ft	120	\$ 2.69	\$ 0.75		\$ 322.80	\$ 90.00	\$ 412.80					
9910	Painting									\$ 41,513.36				\$ 1.65
	Paint walls & ceilings	sq ft	41236	\$ 0.76			\$ -	\$ 31,339.36	\$ 31,339.36					
	Paint Doors	ea	9	\$ 20.50	\$ 56.50		\$ 184.50	\$ 508.50	\$ 693.00					
	Oil Primer	5 gal	18	\$ 102.00	\$ -		\$ 1,836.00	\$ -	\$ 1,836.00					
	Latex Paint	5 gal	55	\$ 139.00	\$ -		\$ 7,645.00	\$ -	\$ 7,645.00					
	Division 10 - Specialties													
10520	Fire Protection Specialties									\$ 1,645.80				
	All Purpose 9 1/2 lbs Extinguisher	ea	12	\$ 121.50			\$ 1,458.00	\$ -	\$ 1,458.00					
	Mount Extinguishers	ea	12		\$ 15.65		\$ -	\$ 187.80	\$ 187.80					
	Division 11 - Building Equipment													
11800	Barn Equipment									\$ 595,309.32	\$ 144,363.56	\$ 739,672.88	\$ 29.32	
	<i>Penning, Stalls & Flooring</i>			\$ -						\$ 253,389.57				\$ -
	PVC Plank 1.5" x 30" x 20'	ea	178	\$ 222.71			\$ 39,641.81		\$ 39,641.81					\$ 10.04
	PVC Bullnose, 1.75"x32"	ea	268	\$ 10.86			\$ 2,911.80		\$ 2,911.80					
	PVC Droprod 3/4"x20'	ea	45	\$ 40.45			\$ 1,820.22		\$ 1,820.22					
	1/4" SS Bolt/Washers/Lock Nuts	ea	1100	\$ 0.73			\$ 807.84		\$ 807.84					
	SS 6 Loop U-channel Post 38" w/Plate	ea	120	\$ 87.37			\$ 10,484.48		\$ 10,484.48					
	SS 3 Loop U-channel Post 38" w/Plate	ea	4	\$ 89.79			\$ 359.17		\$ 359.17					
	SS U-Channel Post 38" w/Plate	ea	120	\$ 71.19			\$ 8,542.91		\$ 8,542.91					
	SS Wall U-Channel Post, 38"	ea	124	\$ 63.75			\$ 7,905.00		\$ 7,905.00					
	SS 3-Loop Wall Bracket	ea	24	\$ 57.44			\$ 1,378.65		\$ 1,378.65					
	3/8" SS Lag Bolts	ea	75	\$ 2.18			\$ 163.20		\$ 163.20					
	SS T-Bolt w/nuts and washers	ea	1200	\$ 7.46			\$ 8,950.50		\$ 8,950.50					
	Nursery Flooring	ea	21600	\$ 7.89			\$ 170,424.00		\$ 170,424.00					
	Animal HVAC													
	Exhaust Fan - Better Air LPF-2800	ea	7	\$ 1,071.00			\$ 7,497.00		\$ 7,497.00					\$ 3.29
	Exhaust Fan - Better Air LPF-3800	ea	6	\$ 1,334.70			\$ 8,008.20		\$ 8,008.20					
	Exhaust Fan - Better Air LPF-4800	ea	6	\$ 1,994.40			\$ 11,966.40		\$ 11,966.40					
	Exhaust Fan - Better Air LPF-1600	ea	6	\$ 640.80			\$ 3,844.80		\$ 3,844.80					
	Recirc.Fan LCF-2000	ea	6	\$ 585.90			\$ 3,515.40		\$ 3,515.40					
	Hood	ea	12	\$ 207.90			\$ 2,494.80		\$ 2,494.80					
	Winter Closure	ea	12	\$ 213.30			\$ 2,559.60		\$ 2,559.60					
	White Silicone	ea	25	\$ 5.64			\$ 141.08		\$ 141.08					
	#10 x 1 1/2" SS Screws	ea	2250	\$ 0.18			\$ 405.00		\$ 405.00					
	Air Inlet - Better Air SF 2000	ea	128	\$ 130.05			\$ 16,646.40		\$ 16,646.40					
	Air inlet actuator	ea	7	\$ 535.50			\$ 3,748.50		\$ 3,748.50					
	SS cable	lin. Ft.	1500	\$ 1.17			\$ 1,755.00		\$ 1,755.00					

Galv. Cable Clamp	ea	40	\$ 3.15		\$ 126.00	\$ 126.00					
Azuma nuts	ea	300	\$ 2.30		\$ 688.50	\$ 688.50					
Air inlet counterweight	ea	13	\$ 34.62		\$ 450.10	\$ 450.10					
Hanging pulley	ea	13	\$ 13.50		\$ 175.50	\$ 175.50					
Flush mount pulley	ea	25	\$ 10.80		\$ 270.00	\$ 270.00					
Hand Winch w/bracket and bolts	ea	6	\$ 112.50		\$ 675.00	\$ 675.00					
Space Heater (60/100 MBTU)	ea	13	\$ 900.00		\$ 11,700.00	\$ 11,700.00					
Back-up thermostat	ea	7	\$ 99.00		\$ 693.00	\$ 693.00					
Manual fan control	ea	7	\$ 155.00		\$ 1,085.00	\$ 1,085.00					
Temperature Probe with Cable	ea	7	\$ 665.00		\$ 4,655.00	\$ 4,655.00					
Watering System							\$ 51,362.36				\$ 2.04
Water Meter	ea	1	\$ 1,000.00		\$ 1,000.00	\$ 1,000.00					
1 1/2" camlock coupler FCCxHB	ea	14	\$ 15.27		\$ 213.76	\$ 213.76					
1 1/2" camlock coupler MCCxENT	ea	14	\$ 3.62		\$ 50.65	\$ 50.65					
1 1/2" PVC sch40 end cap	ea	1	\$ 1.11		\$ 1.11	\$ 1.11					
1 1/2" PVC sc40 true union ball valve	ea	8	\$ 61.57		\$ 492.59	\$ 492.59					
1 1/2" PVC sch40 45 degree elbow	ea	18	\$ 2.46		\$ 44.23	\$ 44.23					
1 1/2" PVC sch40 90 degree elbow	ea	18	\$ 1.74		\$ 31.35	\$ 31.35					
1 1/2" PVC sch40 adapter SxMNT	ea	14	\$ 1.32		\$ 18.52	\$ 18.52					
1 1/2" PVC sch40 ball valve	ea	15	\$ 14.82		\$ 222.35	\$ 222.35					
1 1/2" PVC sch40 coupling SxS	ea	12	\$ 2.74		\$ 32.89	\$ 32.89					
1 1/2" PVC sch40 pipe (linear feet)	ea	850	\$ 3.94		\$ 3,350.70	\$ 3,350.70					
1 1/2" PVC sch40 tee	ea	8	\$ 2.34		\$ 18.68	\$ 18.68					
1 1/2" PVC standoff clamp	ea	250	\$ 5.21		\$ 1,302.75	\$ 1,302.75					
1 1/2" x 3/4" PVC sch40 tee	ea	14	\$ 3.81		\$ 53.30	\$ 53.30					
1/4" braided hose (linear feet)	ea	700	\$ 0.54		\$ 378.00	\$ 378.00					
1/4" S.S. hose clamps	ea	300	\$ 0.49		\$ 148.32	\$ 148.32					
3/4" PVC sch40 end cap	ea	18	\$ 1.03		\$ 18.47	\$ 18.47					
3/4" PVC sch40 90 degree elbow	ea	76	\$ 0.55		\$ 42.07	\$ 42.07					
3/4" PVC sch40 ball valve SxS	ea	65	\$ 4.85		\$ 315.02	\$ 315.02					
3/4" PVC sch40 coupling SxS	ea	50	\$ 0.47		\$ 23.63	\$ 23.63					
3/4" PVC sch40 pipe (linear feet)	ea	1350	\$ 1.59		\$ 2,150.55	\$ 2,150.55					
3/4" PVC sch40 SxMT adapter	ea	18	\$ 0.51		\$ 9.23	\$ 9.23					
3/4" PVC sch40 tee	ea	158	\$ 0.68		\$ 106.65	\$ 106.65					
3/4" PVC sch40 true union ball valve	ea	14	\$ 39.69		\$ 555.66	\$ 555.66					
3/4" PVC standoff clamp	ea	350	\$ 2.67		\$ 935.55	\$ 935.55					
PVC glue	ea	5	\$ 22.77		\$ 113.87	\$ 113.87					
PVC primer	ea	5	\$ 15.01		\$ 75.06	\$ 75.06					
Reducing adapter, 1/2" MNT x 1/4" hose barb	ea	134	\$ 4.04		\$ 540.89	\$ 540.89					
Reducing adapter, 3/4" slip x 1/4" hose barb	ea	134	\$ 2.17		\$ 291.25	\$ 291.25					
Fire hose (linear feet)	ea	150	\$ 3.81		\$ 571.05	\$ 571.05					
Spray Nozzle	ea	2	\$ 20.13		\$ 40.26	\$ 40.26					
36" Double Drinker w/Nipples	ea	134	\$ 60.41		\$ 8,095.28	\$ 8,095.28					
Teflon Tape	ea	25	\$ 1.50		\$ 37.46	\$ 37.46					
#8x3" SS Screws	ea	1200	\$ 0.28		\$ 336.00	\$ 336.00					
Medicator	ea	1	\$ 902.37		\$ 902.37	\$ 902.37					
5% allowance for extras & modifications	ea	1	\$ 1,027.90		\$ 1,027.90	\$ 1,027.90					
1/2" sch80 galv steel pipe (linear feet)	ea	275	\$ 5.45		\$ 1,498.75	\$ 1,498.75					
1/2" sch80 galv steel 90 degree elbow	ea	14	\$ 6.96		\$ 97.44	\$ 97.44					
1/2" sch80 galv steel tee	ea	8	\$ 15.90		\$ 127.20	\$ 127.20					
1/2" sch80 galv steel ball valves	ea	8	\$ 39.00		\$ 312.00	\$ 312.00					
1/2" sch80 galv steel coupling	ea	14	\$ 9.66		\$ 135.24	\$ 135.24					
1/2" sch80 galv steel union	ea	4	\$ 32.40		\$ 129.60	\$ 129.60					

1/2" aluminum long shank pipe hangers	ea	70	\$ 5.78		\$ 404.60	\$ 404.60						
1/2" End Cap	ea	2	\$ 7.82		\$ 15.65	\$ 15.65						
Pressure washer drops	ea	7	\$ 75.00		\$ 525.00	\$ 525.00						
#10x3" SS Screws	ea	150	\$ 0.42		\$ 63.00	\$ 63.00						
Teflon Tape	ea	8	\$ 0.81		\$ 6.49	\$ 6.49						
10 HP Pressure Washer	ea	1	\$ 24,500.00		\$ 24,500.00	\$ 24,500.00						
Feed System			\$ -		\$ -	\$ 90,341.81						\$ 3.58
Boot bin	ea	6	\$ 62.26		\$ 373.54	\$ 373.54						
Bin Unloader	ea	6	\$ 466.07		\$ 2,796.44	\$ 2,796.44						
PVC Tubing (10 ft Tube)	ea	140	\$ 32.71		\$ 4,579.09	\$ 4,579.09						
Auger Flighting	lin ft	1400	\$ 4.24		\$ 5,936.49	\$ 5,936.49						
Elbow	ea	6	\$ 27.48		\$ 164.90	\$ 164.90						
Tube Clamp	ea	12	\$ 4.98		\$ 59.78	\$ 59.78						
Flex Auger Tube Spacer Shim	ea	12	\$ 6.90		\$ 82.76	\$ 82.76						
PVC Coupler	ea	140	\$ 6.25		\$ 874.31	\$ 874.31						
Drop Kit	ea	60	\$ 17.52		\$ 1,051.22	\$ 1,051.22						
Galv. Hanger	ea	150	\$ 6.24		\$ 935.55	\$ 935.55						
3/4 HP Feed Motor	ea	12	\$ 647.07		\$ 7,764.87	\$ 7,764.87						
1 HP Feed Motor	ea	2	\$ 733.09		\$ 1,466.19	\$ 1,466.19						
Control Unit	ea	14	\$ 257.29		\$ 3,602.04	\$ 3,602.04						
Proximity Sensor	ea	14	\$ 174.11		\$ 2,437.53	\$ 2,437.53						
3 1/2" Plastic Drop Tubes (12' Length)	ea	20	\$ 31.27		\$ 625.48	\$ 625.48						
Wall Seal Plate and Gasket	ea	4	\$ 69.51		\$ 278.04	\$ 278.04						
PVC glue	ea	8	\$ 16.87		\$ 134.96	\$ 134.96						
PVC primer	ea	8	\$ 11.12		\$ 88.96	\$ 88.96						
3/16" Zinc Plated Chain	lin ft	700	\$ 1.31		\$ 917.00	\$ 917.00						
2" Plated S Hook	ea	16	\$ 0.69		\$ 11.04	\$ 11.04						
1/4" x 3 1/4" SS Screwhook	ea	8	\$ 3.50		\$ 28.00	\$ 28.00						
Feed System Time Clock	ea	1	\$ 514.56		\$ 514.56	\$ 514.56						
Nursery Feeder	ea	60	\$ 349.99		\$ 20,999.25	\$ 20,999.25						
11 Tonne Feed Bin	ea	6	\$ 5,769.97		\$ 34,619.81	\$ 34,619.81						
Lift Station			\$ -		\$ -	\$ 43,476.37						\$ 1.72
5' x 36" Concrete Well Cribbing	ea	3	\$ 583.20		\$ 1,749.60	\$ 1,749.60						
5' Concrete Well Base	ea	1	\$ 704.70		\$ 704.70	\$ 704.70						
5' Concrete Top	ea	1	\$ 324.00		\$ 324.00	\$ 324.00						
ITT Flygt 10HP Submersible Pump w/controls, starter	ea	1	\$ 34,800.00		\$ 34,800.00	\$ 34,800.00						
3/16" SS Cable	lin ft	25	\$ 1.03		\$ 25.75	\$ 25.75						
3/16" SS Clamp	ea	4	\$ 9.24		\$ 36.96	\$ 36.96						
Discharge Elbow for 10HP Pump	ea	1	\$ 2,514.26		\$ 2,514.26	\$ 2,514.26						
Float w/6m cable	ea	2	\$ 292.03		\$ 584.06	\$ 584.06						
SS guide Rails	ea	1	\$ 537.04		\$ 537.04	\$ 537.04						
2000lb Winch on Stand	ea	1	\$ 1,950.00		\$ 1,950.00	\$ 1,950.00						
Bolts and Parts Allowance	ea	1	\$ 250.00		\$ 250.00	\$ 250.00						
Sewer Pipe			\$ -		\$ -	\$ 43,866.58						\$ 1.74
10" Ultra-rib Pipe	lin ft	150	\$ 18.35		\$ 2,752.50	\$ 2,752.50						
10"x8" U-R Wye	ea	13	\$ 768.30		\$ 9,987.90	\$ 9,987.90						
10"x8" U-R Tee	ea	4	\$ 426.30		\$ 1,705.20	\$ 1,705.20						
8" U-R x 6" SDR35 Adapter	ea	13	\$ 305.31		\$ 3,969.03	\$ 3,969.03						
8" Ultra-rib Tee	ea	24	\$ 383.52		\$ 9,204.48	\$ 9,204.48						
8" Ultra-rib 45 Elbow	ea	12	\$ 263.67		\$ 3,164.04	\$ 3,164.04						
8" Ultra-rib pipe	lin ft	650	\$ 11.37		\$ 7,392.45	\$ 7,392.45						
8" Pit Plugs	ea	28	\$ 32.00		\$ 896.00	\$ 896.00						
6" SDR35 Pipe	lin ft	100	\$ 12.27		\$ 1,227.00	\$ 1,227.00						

6" SDR35 45 degree Elbow	ea	13	\$ 56.69		\$ 736.97		\$ 736.97						
6" SDR 35 Union	ea	13	\$ 75.95		\$ 987.35		\$ 987.35						
6" SDR35 90 degree Elbow	ea	26	\$ 70.91		\$ 1,843.66		\$ 1,843.66						
Misc			\$ -				\$ -	\$ 29,772.36					\$ 1.18
Alarm System	ea	1	\$ 4,500.00		\$ 4,500.00		\$ 4,500.00						
Load-out Ramp	ea	1	\$ 2,240.00		\$ 2,240.00		\$ 2,240.00						
Barn Controls System (Ventilation, Heat)	ea	1	\$ 21,250.00		\$ 21,250.00		\$ 21,250.00						
Stationary Weigh Scale	ea	1	\$ 1,717.36		\$ 1,717.36		\$ 1,717.36						
Load Cells, 500lbs	ea	1	\$ 65.00		\$ 65.00		\$ 65.00						
11850 Equipment Installation									\$ 144,363.56				\$ 5.72
Install Penning	lin ft	3560	\$ 7.78		\$ 27,696.80	\$ 27,696.80							
Install Nursery Flooring	sq ft	21600	\$ 2.36		\$ 50,976.00	\$ 50,976.00							
Install Exhaust & Recirculation Fans	ea	31	\$ 9.72		\$ 301.32	\$ 301.32							
Install Air Inlets	ea	128	\$ 9.72		\$ 1,244.16	\$ 1,244.16							
Install Inlet Actuators	ea	7	\$ 9.72		\$ 68.04	\$ 68.04							
Install Heaters	ea	13	\$ 110.16		\$ 1,432.08	\$ 1,432.08							
Install Control System	ea	1	\$ 1,504.65		\$ 1,504.65	\$ 1,504.65							
Install Back-up Thermostats	ea	7	\$ 95.00		\$ 665.00	\$ 665.00							
Install Manual Fan Controls	ea	7	\$ 95.00		\$ 665.00	\$ 665.00							
Install Waterlines	lin ft	2200	\$ 4.08		\$ 8,976.00	\$ 8,976.00							
Install Drinkers	ea	134	\$ 19.44		\$ 2,604.96	\$ 2,604.96							
Install HPW Pipe	lin ft	275	\$ 6.29		\$ 1,729.75	\$ 1,729.75							
Install Pressure Washer	ea	1	\$ 760.00		\$ 760.00	\$ 760.00							
Install Feed Lines	lin ft	1400	\$ 6.80		\$ 9,520.00	\$ 9,520.00							
Install Feed Motors	ea	14	\$ 97.20		\$ 1,360.80	\$ 1,360.80							
Install Feeders	ea	60	\$ 32.40		\$ 1,944.00	\$ 1,944.00							
Install Feed Bins	ea	6	\$ 1,440.00		\$ 8,640.00	\$ 8,640.00							
Install Lift Station	ea	1	\$ 4,440.00		\$ 4,440.00	\$ 4,440.00							
Install Sewer Pipe	lin ft	900	\$ 16.75		\$ 15,075.00	\$ 15,075.00							
Install Alarms	ea	1	\$ 2,600.00		\$ 2,600.00	\$ 2,600.00							
Install Load-out Ramp	ea	1	\$ 960.00		\$ 960.00	\$ 960.00							
Install Scale	ea	1	\$ 1,200.00		\$ 1,200.00	\$ 1,200.00							
Division 15 - Mechanical									\$ 14,073.68	\$ 18,487.43	\$ 32,561.11		\$ 1.29
15200 Process Piping									\$ 23,021.94				\$ 0.91
1" Gas Pipe	lin ft	660	\$ 9.70	\$ 10.90	\$ 6,402.00	\$ 7,194.00	\$ 13,596.00						
Gas Connection to Unit Heater	ea	13	\$ 140.76	\$ 532.02	\$ 1,829.88	\$ 6,916.26	\$ 8,746.14						
Gas Pipe Fittings	allow	5%	\$ 13,596.00		\$ 679.80	\$ -	\$ 679.80						
15400 Plumbing Fixtures & Equipment Including Supply, Waste and Vent Piping									\$ 6,587.10				\$ 0.26
Water Closet, 2-piece, floor mount, Assembly Cost	ea	1	\$ 794.75	\$ 824.50	\$ 794.75	\$ 824.50	\$ 1,619.25						
Shower, 1 piece, Fibreglass, Assembly Cost	ea	1	\$ 1,105.00	\$ 871.25	\$ 1,105.00	\$ 871.25	\$ 1,976.25						
Sink, Single, Assembly Cost	ea	1	\$ 782.00	\$ 871.25	\$ 782.00	\$ 871.25	\$ 1,653.25						
Floor Drain, Assembly Cost	ea	2	\$ 433.50	\$ 86.50	\$ 867.00	\$ 173.00	\$ 1,040.00						
Rough In - Washer, Assembly Cost	ea	1	\$ 64.60	\$ 233.75	\$ 64.60	\$ 233.75	\$ 298.35						
15500 Heat Generating Equipment									\$ 2,316.25				\$ 0.09
Hot Water Heater, Assembly Cost	ea	1	\$ 1,211.25	\$ 1,105.00	\$ 1,211.25	\$ 1,105.00	\$ 2,316.25						
15700 HVAC									\$ 635.82				\$ 0.03
Exhaust Fan, 150 CFM	ea	1	\$ 115.00	\$ 58.00	\$ 115.00	\$ 58.00	\$ 173.00						
6" diameter exhaust ducting	lin ft	22	\$ 5.20	\$ 3.61	\$ 114.40	\$ 79.42	\$ 193.82						
1000W Baseboard Heater	ea	2	\$ 54.00	\$ 80.50	\$ 108.00	\$ 161.00	\$ 269.00						
Division 16 - Electrical									\$ 189,840.70	\$ 123,396.46	\$ 66,444.25	\$ 189,840.70	\$ 7.53
16200 Main Service & Distribution	Flr Sq Ft	25228	\$ 4.89	\$ 2.63	\$ 123,396.46	\$ 66,444.25	\$ 189,840.70						
Division 31 Earthworks									\$ 109,728.68	\$ 181,648.64	\$ 291,377.32		\$ 11.55

Barn Foundation								\$ 84,132.24				\$ 3.33
Strip Top Soil	cu yds	940			\$ 4.96	\$ -	\$ 4,662.40	\$ 4,662.40				
Excavate Foundations	cu yds	1870			\$ 6.44	\$ -	\$ 12,042.80	\$ 12,042.80				
Place & Compact A Base	cu yds	1128	\$ 28.00		\$ 22.68	\$ 31,584.00	\$ 25,583.04	\$ 57,167.04				
Trench Sewer Piping & Backfilling	lin ft	900		\$ 5.60	\$ 2.23	\$ -	\$ 7,047.00	\$ 7,047.00				
Sand Bedding for Sewer Pipe	lin ft	900	\$ 2.45			\$ 2,205.00	\$ -	\$ 2,205.00				
Backfill 3' and slope away from building	cu yds	40		\$ 25.20	\$ -	\$ -	\$ 1,008.00	\$ 1,008.00				
Roads and Parking								\$ 21,429.00				\$ 0.85
Allow for 30' x48' parking pad,150' of driveway, 25' wide w/ditch												
Strip Top Soil	cu yds	200			\$ 4.96	\$ -	\$ 992.00	\$ 992.00				
Excavate/Backfill Road and Ditch	cu yds	400			\$ 6.48	\$ -	\$ 2,592.00	\$ 2,592.00				
Geo-Grid Reinforcement Under Roads	sq ft	5200	\$ 0.29		\$ 0.16	\$ 1,508.00	\$ 832.00	\$ 2,340.00				
18" Gravel topping on roads	cu yds	350	\$ 28.00		\$ 16.30	\$ 9,800.00	\$ 5,705.00	\$ 15,505.00				
Earthen Manure Storage w/HDPE Liner								\$ 185,816.08				\$ 7.37
EMS	gallons	1615792	\$ 0.04	\$ 0.08		\$ 64,631.68	\$ 121,184.40	\$ 185,816.08				
Division 33 Utilities								\$ 38,500.00				\$ 1.53
Utilities								\$ 38,500.00				
Gas	Allow	1	\$ 5,000.00			\$ 5,000.00	\$ -	\$ 5,000.00				
Electrical	Allow	1	\$ 15,000.00			\$ 15,000.00	\$ -	\$ 15,000.00				
Water Well	Allow	1	\$ 18,500.00			\$ 18,500.00	\$ -	\$ 18,500.00				
19000 Contingency (5%)												\$ 110,087.80 \$ 4.36
Sub-Total								\$ 1,531,456.29	\$ 1,110,264.92	\$ 2,641,721.21	\$ 104.71	
PST 7%	Note: Some Elements are PST Exempt											\$ 80,572.23 \$ 3.19
Sub-Total Including PST												\$ 2,722,293.43 \$ 107.91
GST 5%												\$ 132,086.06
TOTAL												\$ 2,854,379.49

Sask Pork

Appendix C

Nursery Barn Budget

Sample Barn, 5400 Head Nursery, 25228 Square Feet

Prepared by DGH Engineering Ltd.

2018-04-25

REVISED September 19, 2023

Item	Description	Unit	Quantity	Unit Price -	Unit Price -	Unit Price -	Sub-Total	Sub-Total	Sub-Total	Sub-Toral	Division Sub-	Division Sub-	Division Total	Cost/sq.
				Material	- Labour	Equipment	Material	Labour & Equipment	Unit	Category	Total Materials	Labour & Equipment	ft.	
Division 1 -General Requirements														
	Design, Engineering, and Construction Support									\$ 65,500.00				
	Design, Engineering, and Construction Support	fee	1	\$ 44,800.00			\$ -	\$ 44,800.00	\$ 44,800.00					
	EMS Design Fees & Certification	fee	1	\$ 20,700.00			\$ -	\$ 20,700.00	\$ 20,700.00					
1300	Administrative Requirements									\$ 184,987.66				\$ 7.33
	Permits	fee	0.01		2,055,418.47		\$ -	\$ 20,554.18	\$ 20,554.18					
	Insurance	fee	0.03		2,055,418.47		\$ -	\$ 61,662.55	\$ 61,662.55					
	Overhead/Administration	allow	0.05		2,055,418.47		\$ -	\$ 102,770.92	\$ 102,770.92					
1400	Quality Requirements	allow	1	\$ 2,500.00			\$ -	\$ 2,500.00	\$ 2,500.00	\$ 2,500.00				\$ 0.10
1500	Temporary Facilities & Controls									\$ 61,369.00				\$ 2.43
	Miscellaneous Hardware & tools/Office Supplies/First Aid	allow	1	\$ 22,869.00				\$ 22,869.00	\$ -	\$ 22,869.00				
	Equipment Rental	allow	1	\$ 38,500.00				\$ 38,500.00	\$ -	\$ 38,500.00				
1700	Execution Requirements	allow	1	\$ 4,000.00			\$ -	\$ 4,000.00	\$ 4,000.00	\$ 4,000.00				\$ 0.16
Division 3 - Concrete														
3101	Concrete Formwork									\$ 179,154.96				\$ 7.10
	<i>Forms in Place</i>													
	Footings (9"x18") (1.5SFCA/lin ft)	lin ft	1304	\$ 1.71	\$ 3.88	\$ -	\$ 2,229.84	\$ 5,058.22	\$ 7,288.06					
	4' Grade Beam w/Flooring Provision One Side	lin ft	472	\$ 7.06	\$ 18.45		\$ 3,330.43	\$ 8,708.40	\$ 12,038.83					
	4' Grade Beam w/Flooring Provision Both Sides	lin ft	400	\$ 7.06	\$ 18.45		\$ 2,822.40	\$ 7,380.00	\$ 10,202.40					
	4' Grade Beam	lin ft	432	\$ 5.62	\$ 12.96		\$ 2,426.11	\$ 5,598.72	\$ 8,024.83					
	Pit Walls (2' x 4") (4SFCA/lin ft)	lin ft	2500	\$ 2.59	\$ 14.58	\$ -	\$ 6,480.00	\$ 36,450.00	\$ 42,930.00					
	Pit Floors	sq ft	24614	\$ 0.44	\$ 2.21	\$ -	\$ 10,899.08	\$ 54,495.40	\$ 65,394.48					
	Floor	sq ft	2458	\$ 0.44	\$ 2.71	\$ -	\$ 1,088.40	\$ 6,651.35	\$ 7,739.75					
	2' Concrete Curb b/t Office and Loadout & Mech Room	lin ft	34	\$ 2.59	\$ 14.58		\$ 88.06	\$ 495.72	\$ 583.78					
	Bin Pads	sq ft	864	\$ 0.82	\$ 6.15	\$ -	\$ 708.48	\$ 5,313.60	\$ 6,022.08					
	Aprons	sq ft	32	\$ 0.82	\$ 6.15	\$ -	\$ 26.24	\$ 196.80	\$ 223.04					
	<i>Pour Concrete</i>													
	Footings (9"x18")	cu yds	55	\$ -	\$ 21.50	\$ 5.90	\$ -	\$ 1,507.00	\$ 1,507.00					
	4' Grade Beam w/Flooring Provision One Side	cu yds	41		\$ 32.50	\$ 8.85	\$ -	\$ 1,695.35	\$ 1,695.35					
	4' Grade Beam w/Flooring Provision Both Sides	cu yds	40	\$ -	\$ 32.50	\$ 8.85	\$ -	\$ 1,654.00	\$ 1,654.00					
	4' Grade Beam	cu yds	16		\$ 32.50	\$ 8.85	\$ -	\$ 661.60	\$ 661.60					
	FIP Pit Walls (2' x 4")	cu yds	62	\$ -	\$ 17.95	\$ 4.93	\$ -	\$ 1,418.56	\$ 1,418.56					
	Pit Floors	cu yds	304	\$ -	\$ 25.00	\$ 6.80	\$ -	\$ 9,667.20	\$ 9,667.20					
	Floor	cu yds	31	\$ -	\$ 25.00	\$ 6.80	\$ -	\$ 985.80	\$ 985.80					
	2' Concrete Curb b/t Office and Loadout & Mech Room	cu yds	1	\$ -	\$ 54.00	\$ 14.80	\$ -	\$ 68.80	\$ 68.80					
	Bin Pads	cu yds	32	\$ -	\$ 25.00	\$ 6.80	\$ -	\$ 1,017.60	\$ 1,017.60					
	Aprons	cu yds	1	\$ -	\$ 25.00	\$ 6.80	\$ -	\$ 31.80	\$ 31.80					
3200	Concrete Reinforcement									\$ 30,997.65				\$ 1.23
	Footings													

15M Rebar	ea	163	\$ 14.65			\$ 2,387.95	\$ -	\$ 2,387.95					
10M Dowels	ea	685	\$ 2.63			\$ 1,801.55	\$ -	\$ 1,801.55					
10M Rebar	ea	55	\$ 7.40			\$ 407.00	\$ -	\$ 407.00					
Grade Beams													
15M Rebar	ea	305	\$ 14.65			\$ 4,468.25	\$ -	\$ 4,468.25					
10M Rebar	ea	172	\$ 7.40			\$ 1,272.80	\$ -	\$ 1,272.80					
10M Dowel	ea	685	\$ 1.82			\$ 1,246.70	\$ -	\$ 1,246.70					
Pit Walls													
10M Rebar	ea	511	\$ 7.40			\$ 3,781.40	\$ -	\$ 3,781.40					
Pit Floors													
10M Rebar	ea	1610	\$ 7.40			\$ 11,914.00	\$ -	\$ 11,914.00					
Floor													
10M Rebar	ea	150	\$ 7.40			\$ 1,110.00	\$ -	\$ 1,110.00					
2' Concrete Curb b/t Office and Loadout & Mech Room													
10M Rebar	ea	4	\$ 7.40			\$ 29.60	\$ -	\$ 29.60					
Bin Pads & Aprons													
15M Rebar	ea	176	\$ 14.65			\$ 2,578.40	\$ -	\$ 2,578.40					
3310 Basic Concrete Materials									\$ 147,031.20				\$ 5.83
Footings (9"x18") (0.0417yds/lin ft)	cu yds	61	\$ 220.75			\$ 6.15	\$ 13,465.75	\$ 375.15	\$ 13,840.90				
4' Grade Beam w/Flooring Provision One Side	cu yds	46	\$ 220.75			\$ 6.15	\$ 10,154.50	\$ 282.90	\$ 10,437.40				
4' Grade Beam w/Flooring Provision Both Sides	cu yds	44	\$ 220.75			\$ 6.15	\$ 9,713.00	\$ 270.60	\$ 9,983.60				
4' Grade Beam	cu yds	18	\$ 220.75			\$ 6.15	\$ 3,973.50	\$ 110.70	\$ 4,084.20				
Pit Walls (2' x 4")	cu yds	69	\$ 220.75			\$ 6.15	\$ 15,231.75	\$ 424.35	\$ 15,656.10				
Pit Floors	cu yds	335	\$ 220.75			\$ 6.15	\$ 73,951.25	\$ 2,060.25	\$ 76,011.50				
Floor	cu yds	35	\$ 220.75			\$ 6.15	\$ 7,726.25	\$ 215.25	\$ 7,941.50				
2' Concrete Curb b/t Office and Loadout & Mech Room	cu yds	2	\$ 220.75			\$ 6.15	\$ 441.50	\$ 12.30	\$ 453.80				
Bin Pads	cu yds	36	\$ 220.75			\$ 6.15	\$ 7,947.00	\$ 221.40	\$ 8,168.40				
Aprons	cu yds	2	\$ 220.75			\$ 6.15	\$ 441.50	\$ 12.30	\$ 453.80				
Division 5 - Structural Steel									\$ 1,576.70	\$ 1,686.30	\$ 3,263.00	\$ 0.13	
5100 Structural Steel Columns and Beams									\$ 2,013.00				
C9x15	lin ft	22	\$ 14.85	\$ 70.05	\$ 6.60	\$ 326.70	\$ 1,686.30	\$ 2,013.00					
5500 Metal Fabrications									\$ 1,250.00				
Misc Fabrications	allow	1	\$ 1,250.00			\$ 1,250.00	\$ -	\$ 1,250.00					
Division 6 - Wood & Plastics									\$ 196,301.25	\$ 126,629.06	\$ 322,930.31	\$ 12.80	
6090 Fasteners									\$ 12,238.52				
1/2" Anchor Bolts w Nut and Washer	ea	700	\$ 1.71			\$ 1,197.00	\$ -	\$ 1,197.00					
Edge Purlin Splice (T&B) 20ga 4"x20" Steel Strap	ea	104	\$ 9.35			\$ 972.40	\$ -	\$ 972.40					
Simpson Strong Tie at Truss Ends	ea	108	\$ 0.64			\$ 69.12	\$ -	\$ 69.12					
Allowance Nails & Screws	allow	1	\$ 10,000.00			\$ 10,000.00	\$ -	\$ 10,000.00					
6110 Structural Wood Framing									\$ 46,685.53				\$ 1.85
2x6 Stud Wall @ 24" o/c 8' ht(incl 2xT.P. & PT B.P.)	lin ft	1300	\$ 9.06			\$ 11,778.00	\$ -	\$ 11,778.00					
2x4 Stud Wall @ 16" o/c 9' ht(incl 2xT.P. & PT B.P.)	lin ft	45	\$ 5.96			\$ 268.20	\$ -	\$ 268.20					
2x4 Girts @ 24"	BF	2210	\$ 1.01			\$ 2,232.10	\$ -	\$ 2,232.10					
2x4 PT Girts, to Concrete	BF	442	\$ 1.82			\$ 804.44	\$ -	\$ 804.44					
2x6 Columns	BF	96	\$ 1.04			\$ 99.84	\$ -	\$ 99.84					
2x6 Header	BF	24	\$ 1.04			\$ 24.96	\$ -	\$ 24.96					
2 ply 2x10 Lintel	BF	66	\$ 1.21			\$ 79.86	\$ -	\$ 79.86					
2x4 Purlins (incl'd Valleys)	BF	8765	\$ 1.01			\$ 8,852.65	\$ -	\$ 8,852.65					
2x4 Lateral Bracing	BF	2262	\$ 1.01			\$ 2,284.62	\$ -	\$ 2,284.62					
2x6 Vertical Sway Bracing	BF	864	\$ 1.01			\$ 872.64	\$ -	\$ 872.64					
2x6 Anchor Bracing	BF	320	\$ 1.01			\$ 323.20	\$ -	\$ 323.20					

	2x6 Blocking under Splice Plates	BF	416	\$ 1.01			\$ 420.16	\$ -	\$ 420.16					
	1x4 Web Nailer	BF	142	\$ 1.22			\$ 173.24	\$ -	\$ 173.24					
	2x4 Ceiling Strapping	BF	8622	\$ 1.01			\$ 8,708.22	\$ -	\$ 8,708.22					
	2x6 Purlins	BF	848	\$ 1.01			\$ 856.48	\$ -	\$ 856.48					
	2x6 Heels	BF	848	\$ 1.01			\$ 856.48	\$ -	\$ 856.48					
	1x4 Soffit Nailer	BF	426	\$ 1.22			\$ 519.72	\$ -	\$ 519.72					
	1x4 Painted Trim Board	BF	678	\$ 1.22			\$ 827.16	\$ -	\$ 827.16					
	Soffit Doors, 8'	ea	52	\$ 66.06			\$ 3,435.12	\$ -	\$ 3,435.12					
	2x6 P.T. rough bucks for doors/windows	BF	54	\$ 1.82			\$ 98.28	\$ -	\$ 98.28					
	2x4 P.T. sill plate for doors/windows	BF	36	\$ 1.82			\$ 65.52	\$ -	\$ 65.52					
	Interior Galv. Drip Flashing	lin ft	1944	\$ 1.10			\$ 2,138.40	\$ -	\$ 2,138.40					
	2x2 Recirc duct	BF	792	\$ 1.22			\$ 966.24	\$ -	\$ 966.24					
6160	Sheathing									\$ 31,419.60				\$ 1.25
	1/2" P.T. Plywood Sheathing	sq ft	1324	\$ 2.06			\$ 2,727.44	\$ -	\$ 2,727.44					
	3/8" OSB Sheathing Recirc duct	sq ft	2800	\$ 0.56			\$ 1,568.00	\$ -	\$ 1,568.00					
	3/8" OSB for Attic Smoke Stops (22)	sq ft	4800	\$ 0.56			\$ 2,688.00	\$ -	\$ 2,688.00					
	3/8" OSB to Wall, P.N.	sq ft	16008	\$ 0.56			\$ 8,964.48	\$ -	\$ 8,964.48					
	3/8" OSB to Gables, P.N.	sq ft	2400	\$ 0.56			\$ 1,344.00	\$ -	\$ 1,344.00					
	3/8" OSB to Ceiling, P.N.	sq ft	25228	\$ 0.56			\$ 14,127.68	\$ -	\$ 14,127.68					
6170	Pre-Fabricated Structural Wood									\$ 105,957.60				\$ 4.20
	Pre-Fabricated Trusses w/ 2' Overhang	sq ft	25228	\$ 4.20			\$ 105,957.60	\$ -	\$ 105,957.60					
6220	Framing Labour									\$ 126,629.06				\$ 5.02
	2x6 Stud Wall @ 24" o/c 9' ht (Incl 2xT.P. & PT B.P.)	lin ft	1300	\$ 6.80			\$ 8,840.00	\$ 8,840.00						
	2x4 Stud Wall @ 16" o/c 9' ht (Incl 2xT.P. & PT B.P.)	lin ft	45	\$ 7.80			\$ 351.00	\$ 351.00						
	2x4 Girts @ 24"	BF	2210	\$ 1.33			\$ 2,943.72	\$ 2,943.72						
	2x4 PT Girts, to Concrete	BF	442	\$ 1.62			\$ 716.04	\$ 716.04						
	2x6 Columns	BF	96	\$ 0.85			\$ 81.22	\$ 81.22						
	2x6 Header	BF	24	\$ 2.34			\$ 56.16	\$ 56.16						
	2 ply 2x10 Lintel	BF	66	\$ 1.60			\$ 105.73	\$ 105.73						
	2x4 Purlins (incl'd Valleys)	BF	8765	\$ 1.33			\$ 11,674.98	\$ 11,674.98						
	2x4 Lateral Bracing	BF	2262	\$ 1.33			\$ 3,012.98	\$ 3,012.98						
	2x6 Vertical Sway Bracing	BF	864	\$ 1.33			\$ 1,150.85	\$ 1,150.85						
	2x6 Anchor Bracing	BF	320	\$ 1.33			\$ 426.24	\$ 426.24						
	2x6 Blocking under Splice Plates	BF	416	\$ 1.83			\$ 761.28	\$ 761.28						
	1x4 Web Nailer	BF	142	\$ 2.82			\$ 400.01	\$ 400.01						
	2x4 Ceiling Strapping	BF	8622	\$ 1.44			\$ 12,415.68	\$ 12,415.68						
	2x6 Purlins	BF	848	\$ 0.95			\$ 801.36	\$ 801.36						
	2x6 Heels	BF	848	\$ 1.69			\$ 1,434.82	\$ 1,434.82						
	1x4 Soffit Nailer	BF	426	\$ 2.81			\$ 1,196.21	\$ 1,196.21						
	1x4 Painted Trim Board	BF	678	\$ 2.00			\$ 1,356.00	\$ 1,356.00						
	Soffit Doors, 8'	ea	52	\$ 30.00			\$ 1,560.00	\$ 1,560.00						
	2x6 P.T. rough bucks for doors/windows	BF	54	\$ 1.95			\$ 105.30	\$ 105.30						
	2x4 P.T. sill plate for doors/windows	BF	36	\$ 1.95			\$ 70.20	\$ 70.20						
	Interior Galv. Drip Flashing	lin ft	1944	\$ 1.17			\$ 2,274.48	\$ 2,274.48						
	2x3 Recirc duct	BF	792	\$ 1.88			\$ 1,488.96	\$ 1,488.96						
	1/2" P.T. Plywood Sheathing	sq ft	1324	\$ 0.83			\$ 1,098.92	\$ 1,098.92						
	3/8" OSB Sheathing Recirc duct	sq ft	2800	\$ 0.69			\$ 1,932.00	\$ 1,932.00						
	3/8" OSB for Attic Smoke Stops	sq ft	4800	\$ 0.63			\$ 3,024.00	\$ 3,024.00						
	3/8" OSB to Wall, P.N.	sq ft	16008	\$ 0.63			\$ 10,085.04	\$ 10,085.04						
	3/8" OSB to Gables, P.N.	sq ft	2400	\$ 0.63			\$ 1,512.00	\$ 1,512.00						
	3/8" OSB to Ceiling, P.N.	sq ft	25228	\$ 0.69			\$ 17,407.32	\$ 17,407.32						

	Pre-Fabricated Trusses w/ 2' Overhang	sq ft	25228		\$ 0.80	\$ 0.72	\$ -	\$ 38,346.56	\$ 38,346.56						
	Division 7 - Thermal & Moisture Protection														
7210	Building Insulation										\$ 55,111.68				\$ 2.18
	R30 blow in Insulation	sq ft	25228	\$ 0.82	\$ 0.64	\$ 0.34	\$ 20,686.96	\$ 24,723.44	\$ 45,410.40						
	Insulation Stops	ea	212	\$ 3.94			\$ 835.28	\$ -	\$ 835.28						
	Perimeter Ins., 1 1/2" Polystyrene (R7.69) around perimeter conc	sq ft	2648	\$ 1.37			\$ 3,627.76	\$ -	\$ 3,627.76						
	6"x23" Fibreglass Batts Unfaced (R20)	sq ft	5296	\$ 0.93			\$ 4,925.28	\$ -	\$ 4,925.28						
7260	Vapour Retarders										\$ 4,135.26				\$ 0.16
	Urethane Sill Gasket	lin ft	1304	\$ 0.24			\$ 312.96	\$ -	\$ 312.96						
	6mil Poly Vapour Barrier	C. sq ft	558	\$ 6.85			\$ 3,822.30	\$ -	\$ 3,822.30						
7400	Roofing & Siding Panels										\$ 73,546.32				\$ 2.92
	10' Wall Metal Cladding	lin ft	2210	\$ 4.38			\$ 9,679.80	\$ -	\$ 9,679.80						
	30' Roof Metal Cladding	lin ft	4260	\$ 4.38			\$ 18,658.80	\$ -	\$ 18,658.80						
	36' Roof Metal Cladding	lin ft	5112	\$ 4.38			\$ 22,390.56	\$ -	\$ 22,390.56						
	12' Wall Gable Metal Cladding	lin ft	756	\$ 4.38			\$ 3,311.28	\$ -	\$ 3,311.28						
	2' Fascia	lin ft	284	\$ 4.90			\$ 1,391.60	\$ -	\$ 1,391.60						
	2' Soffit	sq ft	284	\$ 1.05			\$ 298.20	\$ -	\$ 298.20						
	J Trim	lin ft	400	\$ 1.26			\$ 504.00	\$ -	\$ 504.00						
	Rake Flashing	lin ft	440	\$ 1.94			\$ 853.60	\$ -	\$ 853.60						
	Divider Flashing	lin ft	240	\$ 1.26			\$ 302.40	\$ -	\$ 302.40						
	Box Base	lin ft	440	\$ 3.10			\$ 1,364.00	\$ -	\$ 1,364.00						
	Base Drip Flashing	lin ft	670	\$ 1.26			\$ 844.20	\$ -	\$ 844.20						
	Outside Corner	lin ft	40	\$ 3.20			\$ 128.00	\$ -	\$ 128.00						
	Inside Corner	lin ft	440	\$ 3.10			\$ 1,364.00	\$ -	\$ 1,364.00						
	Fascia	lin ft	284	\$ 1.84			\$ 522.56	\$ -	\$ 522.56						
	Gable Flashing	lin ft	280	\$ 2.99			\$ 837.20	\$ -	\$ 837.20						
	Ridge Cap	lin ft	220	\$ 3.15			\$ 693.00	\$ -	\$ 693.00						
	Butyl Tape, 50' roll	ea	188	\$ 8.95			\$ 1,682.60	\$ -	\$ 1,682.60						
	Foam Closures	ea	284	\$ 4.28			\$ 1,215.52	\$ -	\$ 1,215.52						
	#10 x 1 1/2" Pre-painted Screws w/neoprene washer	ea	37100	\$ 0.13			\$ 4,823.00	\$ -	\$ 4,823.00						
	#12 x 5/8" Pre-painted Stitch Screw w/neoprene washer	ea	14900	\$ 0.18			\$ 2,682.00	\$ -	\$ 2,682.00						
7900	Joint Sealers										\$ 193.31				\$ 0.01
	Accoustical Sealant, 3/4" dia	c. lin ft	13	\$ 14.87			\$ 193.31	\$ -	\$ 193.31						
7990	Installation of Insulation and Cladding										\$ 59,754.10				\$ 2.37
	Insulation Stops	ea	212		\$ 1.50		\$ -	\$ 318.00	\$ 318.00						
	Perimeter Ins., 1 1/2" Polystyrene (R7.69) around perimeter conc	sq ft	2648		\$ 0.64		\$ -	\$ 1,694.72	\$ 1,694.72						
	6"x23" Fibreglass Batts Unfaced (R20)	sq ft	5296		\$ 0.35		\$ -	\$ 1,853.60	\$ 1,853.60						
	Urethane Sill Gasket	lin ft	1304		\$ 0.20		\$ -	\$ 260.80	\$ 260.80						
	6mil Poly Vapour Barrier	C. sq ft	558		\$ 12.65		\$ -	\$ 7,058.70	\$ 7,058.70						
	10' Wall Metal Cladding	lin ft	2210		\$ 4.58		\$ -	\$ 10,121.80	\$ 10,121.80						
	40' Roof Metal Cladding	lin ft	4260		\$ 3.49		\$ -	\$ 14,867.40	\$ 14,867.40						
	35' Roof Metal Cladding	lin ft	5112		\$ 3.49		\$ -	\$ 17,840.88	\$ 17,840.88						
	12' Wall Gable Metal Cladding	lin ft	756		\$ 4.58		\$ -	\$ 3,462.48	\$ 3,462.48						
	2' Fascia	lin ft	284		\$ 4.58		\$ -	\$ 1,300.72	\$ 1,300.72						
	Accoustical Sealant, 3/4" dia	c. lin ft	13		\$ 75.00		\$ -	\$ 975.00	\$ 975.00						
	Division 8 - Doors & Windows										\$ 30,378.15	\$ 6,884.32	\$ 37,262.47	\$ 1.48	
8100	Steel Doors & Frame										\$ 32,304.85				
	Steel Door, Insulated, 18 ga, 3'0" x 6' 8" with Frame/Hardware	ea	8	\$ 2,864.95	\$ 578.50		\$ 22,919.60	\$ 4,628.00	\$ 27,547.60						
	Steel Door, Fire rated, 18 ga, 3'0" x 6' 8" with Frame	ea	1	\$ 2,938.75	\$ 641.00		\$ 2,938.75	\$ 641.00	\$ 3,579.75						
	Interior Office Door c/w Frame and Hardware	ea	1	\$ 1,013.00	\$ 164.50		\$ 1,013.00	\$ 164.50	\$ 1,177.50						
8200	Wood & Plastic Doors										\$ 2,962.62				\$ 0.12

	Site Built Wood Door 3'0" x 6'8"	ea	6	\$ 225.00	\$ 135.00		\$ 1,350.00	\$ 810.00	\$ 2,160.00					
	Wood Frame, 5/4x4 9/16" deep	lin ft	78	\$ 8.10	\$ 2.19		\$ 631.80	\$ 170.82	\$ 802.62					
8300	Specialty Doors									\$ 1,995.00				\$ 0.08
	3'x7' Overhead Door, 24 ga. Steel, chain hoist operated	ea	1	\$ 1,525.00	\$ 470.00		\$ 1,525.00	\$ 470.00	\$ 1,995.00					
	Division 9 - Finishes													
9100	Metal Support Assemblies									\$ 235.20				\$ 0.01
	5/16" T-Bar Support System, 2'x4' grid	sq ft	120	\$ 1.37	\$ 0.59		\$ 164.40	\$ 70.80	\$ 235.20					
9250	Gypsum Board									\$ 1,002.36				\$ 0.04
	5/8" FR Drywall, Moisture Resistant	sq ft	470	\$ 1.09			\$ 512.30	\$ -	\$ 512.30					
	Boarding, Walls	sq ft	348	\$ -	\$ 0.47		\$ -	\$ 163.56	\$ 163.56					
	Boarding, Ceilings	sq ft	122	\$ -	\$ 0.52		\$ -	\$ 63.44	\$ 63.44					
	Tape & Finish, Walls	sq ft	348	\$ -	\$ 0.50		\$ -	\$ 174.00	\$ 174.00					
	Tape & Finish, Ceilings	sq ft	122	\$ -	\$ 0.73		\$ -	\$ 89.06	\$ 89.06					
9500	Ceiling									\$ 412.80				\$ 0.02
	5/8" Mineral Fibre Tiles	sq ft	120	\$ 2.69	\$ 0.75		\$ 322.80	\$ 90.00	\$ 412.80					
9910	Painting									\$ 41,513.36				\$ 1.65
	Paint walls & ceilings	sq ft	41236	\$ 0.76			\$ -	\$ 31,339.36	\$ 31,339.36					
	Paint Doors	ea	9	\$ 20.50	\$ 56.50		\$ 184.50	\$ 508.50	\$ 693.00					
	Oil Primer	5 gal	18	\$ 102.00	\$ -		\$ 1,836.00	\$ -	\$ 1,836.00					
	Latex Paint	5 gal	55	\$ 139.00	\$ -		\$ 7,645.00	\$ -	\$ 7,645.00					
	Division 10 - Specialties													
10520	Fire Protection Specialties									\$ 1,645.80				
	All Purpose 9 1/2 lbs Extinguisher	ea	12	\$ 121.50			\$ 1,458.00	\$ -	\$ 1,458.00					
	Mount Extinguishers	ea	12		\$ 15.65		\$ -	\$ 187.80	\$ 187.80					
	Division 11 - Building Equipment													
11800	Barn Equipment									\$ 595,309.32	\$ 144,363.56	\$ 739,672.88	\$ 29.32	
	<i>Penning, Stalls & Flooring</i>			\$ -						\$ 253,389.57				\$ -
	PVC Plank 1.5" x 30" x 20'	ea	178	\$ 222.71			\$ 39,641.81		\$ 39,641.81					\$ 10.04
	PVC Bullnose, 1.75"x32"	ea	268	\$ 10.86			\$ 2,911.80		\$ 2,911.80					
	PVC Droprod 3/4"x20'	ea	45	\$ 40.45			\$ 1,820.22		\$ 1,820.22					
	1/4" SS Bolt/Washers/Lock Nuts	ea	1100	\$ 0.73			\$ 807.84		\$ 807.84					
	SS 6 Loop U-channel Post 38" w/Plate	ea	120	\$ 87.37			\$ 10,484.48		\$ 10,484.48					
	SS 3 Loop U-channel Post 38" w/Plate	ea	4	\$ 89.79			\$ 359.17		\$ 359.17					
	SS U-Channel Post 38" w/Plate	ea	120	\$ 71.19			\$ 8,542.91		\$ 8,542.91					
	SS Wall U-Channel Post, 38"	ea	124	\$ 63.75			\$ 7,905.00		\$ 7,905.00					
	SS 3-Loop Wall Bracket	ea	24	\$ 57.44			\$ 1,378.65		\$ 1,378.65					
	3/8" SS Lag Bolts	ea	75	\$ 2.18			\$ 163.20		\$ 163.20					
	SS T-Bolt w/nuts and washers	ea	1200	\$ 7.46			\$ 8,950.50		\$ 8,950.50					
	Nursery Flooring	ea	21600	\$ 7.89			\$ 170,424.00		\$ 170,424.00					
	Animal HVAC													
	Exhaust Fan - Better Air LPF-2800	ea	7	\$ 1,071.00			\$ 7,497.00		\$ 7,497.00					\$ 3.29
	Exhaust Fan - Better Air LPF-3800	ea	6	\$ 1,334.70			\$ 8,008.20		\$ 8,008.20					
	Exhaust Fan - Better Air LPF-4800	ea	6	\$ 1,994.40			\$ 11,966.40		\$ 11,966.40					
	Exhaust Fan - Better Air LPF-1600	ea	6	\$ 640.80			\$ 3,844.80		\$ 3,844.80					
	Recirc.Fan LCF-2000	ea	6	\$ 585.90			\$ 3,515.40		\$ 3,515.40					
	Hood	ea	12	\$ 207.90			\$ 2,494.80		\$ 2,494.80					
	Winter Closure	ea	12	\$ 213.30			\$ 2,559.60		\$ 2,559.60					
	White Silicone	ea	25	\$ 5.64			\$ 141.08		\$ 141.08					
	#10 x 1 1/2" SS Screws	ea	2250	\$ 0.18			\$ 405.00		\$ 405.00					
	Air Inlet - Better Air SF 2000	ea	128	\$ 130.05			\$ 16,646.40		\$ 16,646.40					
	Air inlet actuator	ea	7	\$ 535.50			\$ 3,748.50		\$ 3,748.50					
	SS cable	lin. Ft.	1500	\$ 1.17			\$ 1,755.00		\$ 1,755.00					

Galv. Cable Clamp	ea	40	\$ 3.15		\$ 126.00	\$ 126.00					
Azuma nuts	ea	300	\$ 2.30		\$ 688.50	\$ 688.50					
Air inlet counterweight	ea	13	\$ 34.62		\$ 450.10	\$ 450.10					
Hanging pulley	ea	13	\$ 13.50		\$ 175.50	\$ 175.50					
Flush mount pulley	ea	25	\$ 10.80		\$ 270.00	\$ 270.00					
Hand Winch w/bracket and bolts	ea	6	\$ 112.50		\$ 675.00	\$ 675.00					
Space Heater (60/100 MBTU)	ea	13	\$ 900.00		\$ 11,700.00	\$ 11,700.00					
Back-up thermostat	ea	7	\$ 99.00		\$ 693.00	\$ 693.00					
Manual fan control	ea	7	\$ 155.00		\$ 1,085.00	\$ 1,085.00					
Temperature Probe with Cable	ea	7	\$ 665.00		\$ 4,655.00	\$ 4,655.00					
Watering System							\$ 51,362.36				\$ 2.04
Water Meter	ea	1	\$ 1,000.00		\$ 1,000.00	\$ 1,000.00					
1 1/2" camlock coupler FCCxHB	ea	14	\$ 15.27		\$ 213.76	\$ 213.76					
1 1/2" camlock coupler MCCxENT	ea	14	\$ 3.62		\$ 50.65	\$ 50.65					
1 1/2" PVC sch40 end cap	ea	1	\$ 1.11		\$ 1.11	\$ 1.11					
1 1/2" PVC sc40 true union ball valve	ea	8	\$ 61.57		\$ 492.59	\$ 492.59					
1 1/2" PVC sch40 45 degree elbow	ea	18	\$ 2.46		\$ 44.23	\$ 44.23					
1 1/2" PVC sch40 90 degree elbow	ea	18	\$ 1.74		\$ 31.35	\$ 31.35					
1 1/2" PVC sch40 adapter SxMNT	ea	14	\$ 1.32		\$ 18.52	\$ 18.52					
1 1/2" PVC sch40 ball valve	ea	15	\$ 14.82		\$ 222.35	\$ 222.35					
1 1/2" PVC sch40 coupling SxS	ea	12	\$ 2.74		\$ 32.89	\$ 32.89					
1 1/2" PVC sch40 pipe (linear feet)	ea	850	\$ 3.94		\$ 3,350.70	\$ 3,350.70					
1 1/2" PVC sch40 tee	ea	8	\$ 2.34		\$ 18.68	\$ 18.68					
1 1/2" PVC standoff clamp	ea	250	\$ 5.21		\$ 1,302.75	\$ 1,302.75					
1 1/2" x 3/4" PVC sch40 tee	ea	14	\$ 3.81		\$ 53.30	\$ 53.30					
1/4" braided hose (linear feet)	ea	700	\$ 0.54		\$ 378.00	\$ 378.00					
1/4" S.S. hose clamps	ea	300	\$ 0.49		\$ 148.32	\$ 148.32					
3/4" PVC sch40 end cap	ea	18	\$ 1.03		\$ 18.47	\$ 18.47					
3/4" PVC sch40 90 degree elbow	ea	76	\$ 0.55		\$ 42.07	\$ 42.07					
3/4" PVC sch40 ball valve SxS	ea	65	\$ 4.85		\$ 315.02	\$ 315.02					
3/4" PVC sch40 coupling SxS	ea	50	\$ 0.47		\$ 23.63	\$ 23.63					
3/4" PVC sch40 pipe (linear feet)	ea	1350	\$ 1.59		\$ 2,150.55	\$ 2,150.55					
3/4" PVC sch40 SxMT adapter	ea	18	\$ 0.51		\$ 9.23	\$ 9.23					
3/4" PVC sch40 tee	ea	158	\$ 0.68		\$ 106.65	\$ 106.65					
3/4" PVC sch40 true union ball valve	ea	14	\$ 39.69		\$ 555.66	\$ 555.66					
3/4" PVC standoff clamp	ea	350	\$ 2.67		\$ 935.55	\$ 935.55					
PVC glue	ea	5	\$ 22.77		\$ 113.87	\$ 113.87					
PVC primer	ea	5	\$ 15.01		\$ 75.06	\$ 75.06					
Reducing adapter, 1/2" MNT x 1/4" hose barb	ea	134	\$ 4.04		\$ 540.89	\$ 540.89					
Reducing adapter, 3/4" slip x 1/4" hose barb	ea	134	\$ 2.17		\$ 291.25	\$ 291.25					
Fire hose (linear feet)	ea	150	\$ 3.81		\$ 571.05	\$ 571.05					
Spray Nozzle	ea	2	\$ 20.13		\$ 40.26	\$ 40.26					
36" Double Drinker w/Nipples	ea	134	\$ 60.41		\$ 8,095.28	\$ 8,095.28					
Teflon Tape	ea	25	\$ 1.50		\$ 37.46	\$ 37.46					
#8x3" SS Screws	ea	1200	\$ 0.28		\$ 336.00	\$ 336.00					
Medicator	ea	1	\$ 902.37		\$ 902.37	\$ 902.37					
5% allowance for extras & modifications	ea	1	\$ 1,027.90		\$ 1,027.90	\$ 1,027.90					
1/2" sch80 galv steel pipe (linear feet)	ea	275	\$ 5.45		\$ 1,498.75	\$ 1,498.75					
1/2" sch80 galv steel 90 degree elbow	ea	14	\$ 6.96		\$ 97.44	\$ 97.44					
1/2" sch80 galv steel tee	ea	8	\$ 15.90		\$ 127.20	\$ 127.20					
1/2" sch80 galv steel ball valves	ea	8	\$ 39.00		\$ 312.00	\$ 312.00					
1/2" sch80 galv steel coupling	ea	14	\$ 9.66		\$ 135.24	\$ 135.24					
1/2" sch80 galv steel union	ea	4	\$ 32.40		\$ 129.60	\$ 129.60					

1/2" aluminum long shank pipe hangers	ea	70	\$ 5.78		\$ 404.60	\$ 404.60						
1/2" End Cap	ea	2	\$ 7.82		\$ 15.65	\$ 15.65						
Pressure washer drops	ea	7	\$ 75.00		\$ 525.00	\$ 525.00						
#10x3" SS Screws	ea	150	\$ 0.42		\$ 63.00	\$ 63.00						
Teflon Tape	ea	8	\$ 0.81		\$ 6.49	\$ 6.49						
10 HP Pressure Washer	ea	1	\$ 24,500.00		\$ 24,500.00	\$ 24,500.00						
Feed System			\$ -		\$ -	\$ 90,341.81						\$ 3.58
Boot bin	ea	6	\$ 62.26		\$ 373.54	\$ 373.54						
Bin Unloader	ea	6	\$ 466.07		\$ 2,796.44	\$ 2,796.44						
PVC Tubing (10 ft Tube)	ea	140	\$ 32.71		\$ 4,579.09	\$ 4,579.09						
Auger Flighting	lin ft	1400	\$ 4.24		\$ 5,936.49	\$ 5,936.49						
Elbow	ea	6	\$ 27.48		\$ 164.90	\$ 164.90						
Tube Clamp	ea	12	\$ 4.98		\$ 59.78	\$ 59.78						
Flex Auger Tube Spacer Shim	ea	12	\$ 6.90		\$ 82.76	\$ 82.76						
PVC Coupler	ea	140	\$ 6.25		\$ 874.31	\$ 874.31						
Drop Kit	ea	60	\$ 17.52		\$ 1,051.22	\$ 1,051.22						
Galv. Hanger	ea	150	\$ 6.24		\$ 935.55	\$ 935.55						
3/4 HP Feed Motor	ea	12	\$ 647.07		\$ 7,764.87	\$ 7,764.87						
1 HP Feed Motor	ea	2	\$ 733.09		\$ 1,466.19	\$ 1,466.19						
Control Unit	ea	14	\$ 257.29		\$ 3,602.04	\$ 3,602.04						
Proximity Sensor	ea	14	\$ 174.11		\$ 2,437.53	\$ 2,437.53						
3 1/2" Plastic Drop Tubes (12' Length)	ea	20	\$ 31.27		\$ 625.48	\$ 625.48						
Wall Seal Plate and Gasket	ea	4	\$ 69.51		\$ 278.04	\$ 278.04						
PVC glue	ea	8	\$ 16.87		\$ 134.96	\$ 134.96						
PVC primer	ea	8	\$ 11.12		\$ 88.96	\$ 88.96						
3/16" Zinc Plated Chain	lin ft	700	\$ 1.31		\$ 917.00	\$ 917.00						
2" Plated S Hook	ea	16	\$ 0.69		\$ 11.04	\$ 11.04						
1/4" x 3 1/4" SS Screwhook	ea	8	\$ 3.50		\$ 28.00	\$ 28.00						
Feed System Time Clock	ea	1	\$ 514.56		\$ 514.56	\$ 514.56						
Boar Feeder	ea	60	\$ 349.99		\$ 20,999.25	\$ 20,999.25						
11 Tonne Feed Bin	ea	6	\$ 5,769.97		\$ 34,619.81	\$ 34,619.81						
Lift Station			\$ -		\$ -	\$ 43,476.37						\$ 1.72
5' x 36" Concrete Well Cribbing	ea	3	\$ 583.20		\$ 1,749.60	\$ 1,749.60						
5' Concrete Well Base	ea	1	\$ 704.70		\$ 704.70	\$ 704.70						
5' Concrete Top	ea	1	\$ 324.00		\$ 324.00	\$ 324.00						
ITT Flygt 10HP Submersible Pump w/controls, starter	ea	1	\$ 34,800.00		\$ 34,800.00	\$ 34,800.00						
3/16" SS Cable	lin ft	25	\$ 1.03		\$ 25.75	\$ 25.75						
3/16" SS Clamp	ea	4	\$ 9.24		\$ 36.96	\$ 36.96						
Discharge Elbow for 10HP Pump	ea	1	\$ 2,514.26		\$ 2,514.26	\$ 2,514.26						
Float w/6m cable	ea	2	\$ 292.03		\$ 584.06	\$ 584.06						
SS guide Rails	ea	1	\$ 537.04		\$ 537.04	\$ 537.04						
2000lb Winch on Stand	ea	1	\$ 1,950.00		\$ 1,950.00	\$ 1,950.00						
Bolts and Parts Allowance	ea	1	\$ 250.00		\$ 250.00	\$ 250.00						
Sewer Pipe			\$ -		\$ -	\$ 43,866.58						\$ 1.74
10" Ultra-rib Pipe	lin ft	150	\$ 18.35		\$ 2,752.50	\$ 2,752.50						
10"x8" U-R Wye	ea	13	\$ 768.30		\$ 9,987.90	\$ 9,987.90						
10"x8" U-R Tee	ea	4	\$ 426.30		\$ 1,705.20	\$ 1,705.20						
8" U-R x 6" SDR35 Adapter	ea	13	\$ 305.31		\$ 3,969.03	\$ 3,969.03						
8" Ultra-rib Tee	ea	24	\$ 383.52		\$ 9,204.48	\$ 9,204.48						
8" Ultra-rib 45 Elbow	ea	12	\$ 263.67		\$ 3,164.04	\$ 3,164.04						
8" Ultra-rib pipe	lin ft	650	\$ 11.37		\$ 7,392.45	\$ 7,392.45						
8" Pit Plugs	ea	28	\$ 32.00		\$ 896.00	\$ 896.00						
6" SDR35 Pipe	lin ft	100	\$ 12.27		\$ 1,227.00	\$ 1,227.00						

6" SDR35 45 degree Elbow	ea	13	\$ 56.69		\$ 736.97		\$ 736.97						
6" SDR 35 Union	ea	13	\$ 75.95		\$ 987.35		\$ 987.35						
6" SDR35 90 degree Elbow	ea	26	\$ 70.91		\$ 1,843.66		\$ 1,843.66						
Misc			\$ -				\$ -	\$ 29,772.36					\$ 1.18
Alarm System	ea	1	\$ 4,500.00		\$ 4,500.00		\$ 4,500.00						
Load-out Ramp	ea	1	\$ 2,240.00		\$ 2,240.00		\$ 2,240.00						
Barn Controls System (Ventilation, Heat)	ea	1	\$ 21,250.00		\$ 21,250.00		\$ 21,250.00						
Stationary Weigh Scale	ea	1	\$ 1,717.36		\$ 1,717.36		\$ 1,717.36						
Load Cells, 500lbs	ea	1	\$ 65.00		\$ 65.00		\$ 65.00						
11850 Equipment Installation									\$ 144,363.56				\$ 5.72
Install Penning	lin ft	3560	\$ 7.78		\$ 27,696.80	\$ 27,696.80							
Install Nursery Flooring	sq ft	21600	\$ 2.36		\$ 50,976.00	\$ 50,976.00							
Install Exhaust & Recirculation Fans	ea	31	\$ 9.72		\$ 301.32	\$ 301.32							
Install Air Inlets	ea	128	\$ 9.72		\$ 1,244.16	\$ 1,244.16							
Install Inlet Actuators	ea	7	\$ 9.72		\$ 68.04	\$ 68.04							
Install Heaters	ea	13	\$ 110.16		\$ 1,432.08	\$ 1,432.08							
Install Control System	ea	1	\$ 1,504.65		\$ 1,504.65	\$ 1,504.65							
Install Back-up Thermostats	ea	7	\$ 95.00		\$ 665.00	\$ 665.00							
Install Manual Fan Controls	ea	7	\$ 95.00		\$ 665.00	\$ 665.00							
Install Waterlines	lin ft	2200	\$ 4.08		\$ 8,976.00	\$ 8,976.00							
Install Drinkers	ea	134	\$ 19.44		\$ 2,604.96	\$ 2,604.96							
Install HPW Pipe	lin ft	275	\$ 6.29		\$ 1,729.75	\$ 1,729.75							
Install Pressure Washer	ea	1	\$ 760.00		\$ 760.00	\$ 760.00							
Install Feed Lines	lin ft	1400	\$ 6.80		\$ 9,520.00	\$ 9,520.00							
Install Feed Motors	ea	14	\$ 97.20		\$ 1,360.80	\$ 1,360.80							
Install Feeders	ea	60	\$ 32.40		\$ 1,944.00	\$ 1,944.00							
Install Feed Bins	ea	6	\$ 1,440.00		\$ 8,640.00	\$ 8,640.00							
Install Lift Station	ea	1	\$ 4,440.00		\$ 4,440.00	\$ 4,440.00							
Install Sewer Pipe	lin ft	900	\$ 16.75		\$ 15,075.00	\$ 15,075.00							
Install Alarms	ea	1	\$ 2,600.00		\$ 2,600.00	\$ 2,600.00							
Install Load-out Ramp	ea	1	\$ 960.00		\$ 960.00	\$ 960.00							
Install Scale	ea	1	\$ 1,200.00		\$ 1,200.00	\$ 1,200.00							
Division 15 - Mechanical									\$ 15,603.68	\$ 18,742.43	\$ 34,346.11		\$ 1.36
15200 Process Piping									\$ 23,021.94				\$ 0.91
1" Gas Pipe	lin ft	660	\$ 9.70	\$ 10.90	\$ 6,402.00	\$ 7,194.00	\$ 13,596.00						
Gas Connection to Unit Heater	ea	13	\$ 140.76	\$ 532.02	\$ 1,829.88	\$ 6,916.26	\$ 8,746.14						
Gas Pipe Fittings	allow	5%	\$ 13,596.00		\$ 679.80	\$ -	\$ 679.80						
15400 Plumbing Fixtures & Equipment Including Supply, Waste and Vent Piping									\$ 6,587.10				\$ 0.26
Water Closet, 2-piece, floor mount, Assembly Cost	ea	1	\$ 794.75	\$ 824.50	\$ 794.75	\$ 824.50	\$ 1,619.25						
Shower, 1 piece, Fibreglass, Assembly Cost	ea	1	\$ 1,105.00	\$ 871.25	\$ 1,105.00	\$ 871.25	\$ 1,976.25						
Sink, Single, Assembly Cost	ea	1	\$ 782.00	\$ 871.25	\$ 782.00	\$ 871.25	\$ 1,653.25						
Floor Drain, Assembly Cost	ea	2	\$ 433.50	\$ 86.50	\$ 867.00	\$ 173.00	\$ 1,040.00						
Rough In - Washer, Assembly Cost	ea	1	\$ 64.60	\$ 233.75	\$ 64.60	\$ 233.75	\$ 298.35						
15500 Heat Generating Equipment									\$ 4,101.25				\$ 0.16
Hot Water Heater, Assembly Cost	ea	1	\$ 2,741.25	\$ 1,360.00	\$ 2,741.25	\$ 1,360.00	\$ 4,101.25						
15700 HVAC									\$ 635.82				\$ 0.03
Exhaust Fan, 150 CFM	ea	1	\$ 115.00	\$ 58.00	\$ 115.00	\$ 58.00	\$ 173.00						
6" diameter exhaust ducting	lin ft	22	\$ 5.20	\$ 3.61	\$ 114.40	\$ 79.42	\$ 193.82						
1000W Baseboard Heater	ea	2	\$ 54.00	\$ 80.50	\$ 108.00	\$ 161.00	\$ 269.00						
Division 16 - Electrical									\$ 189,840.70	\$ 123,396.46	\$ 66,444.25	\$ 189,840.70	\$ 7.53
16200 Main Service & Distribution	Flr Sq Ft	25228	\$ 4.89	\$ 2.63	\$ 123,396.46	\$ 66,444.25	\$ 189,840.70						
Division 31 Earthworks									\$ 109,728.68	\$ 181,648.64	\$ 291,377.32		\$ 11.55

Barn Foundation								\$ 84,132.24				\$ 3.33
Strip Top Soil	cu yds	940			\$ 4.96	\$ -	\$ 4,662.40	\$ 4,662.40				
Excavate Foundations	cu yds	1870			\$ 6.44	\$ -	\$ 12,042.80	\$ 12,042.80				
Place & Compact A Base	cu yds	1128	\$ 28.00		\$ 22.68	\$ 31,584.00	\$ 25,583.04	\$ 57,167.04				
Trench Sewer Piping & Backfilling	lin ft	900		\$ 5.60	\$ 2.23	\$ -	\$ 7,047.00	\$ 7,047.00				
Sand Bedding for Sewer Pipe	lin ft	900	\$ 2.45			\$ 2,205.00	\$ -	\$ 2,205.00				
Backfill 3' and slope away from building	cu yds	40		\$ 25.20	\$ -	\$ -	\$ 1,008.00	\$ 1,008.00				
Roads and Parking								\$ 21,429.00				\$ 0.85
Allow for 30'x48' parking pad,150' of driveway, 25' wide w/ditch												
Strip Top Soil	cu yds	200			\$ 4.96	\$ -	\$ 992.00	\$ 992.00				
Excavate/Backfill Road and Ditch	cu yds	400			\$ 6.48	\$ -	\$ 2,592.00	\$ 2,592.00				
Geo-Grid Reinforcement Under Roads	sq ft	5200	\$ 0.29		\$ 0.16	\$ 1,508.00	\$ 832.00	\$ 2,340.00				
18" Gravel topping on roads	cu yds	350	\$ 28.00		\$ 16.30	\$ 9,800.00	\$ 5,705.00	\$ 15,505.00				
Earthen Manure Storage w/HDPE Liner								\$ 185,816.08				\$ 7.37
EMS	gallons	1615792	\$ 0.04	\$ 0.08		\$ 64,631.68	\$ 121,184.40	\$ 185,816.08				
Division 33 Utilities								\$ 38,500.00				\$ 38,500.00 \$ 1.53
Utilities								\$ 38,500.00				
Gas	Allow	1	\$ 5,000.00			\$ 5,000.00	\$ -	\$ 5,000.00				
Electrical	Allow	1	\$ 15,000.00			\$ 15,000.00	\$ -	\$ 15,000.00				
Water Well	Allow	1	\$ 18,500.00			\$ 18,500.00	\$ -	\$ 18,500.00				
19000 Contingency (5%)												\$ 112,020.31 \$ 4.44
Sub-Total								\$ 1,564,115.23	\$ 1,118,188.52	\$ 2,682,303.76	\$ 106.32	
PST 6% Note: Some Elements are PST Exempt												\$ 115,925.70 \$ 4.60
Sub-Total Including PST												\$ 2,798,229.45 \$ 110.92
GST 5%												\$ 134,115.19
TOTAL												\$ 2,932,344.64