GATEWAY RECREATION CENTRE
SHOP ADDITION
WINNIPEG, MANITOBA

CLASS 'A' ESTIMATE

October 20, 2015

Hanscomb

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SHOP ADDITION
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October 20, 2015

TABLE OF CONTENTS

1.	Introduction	2
2.	Documentation	4
3.	Cost Considerations	5
4.	Gross Floor and Site Developed Areas	7
5.	Construction Cost Estimate Summary	8

Appendices

A - DETAILED ELEMENTAL COST ESTIMATE
B - DOCUMENTS & DRAWINGS LISTS
C - REPRESENTATIVE DRAWINGS

1. INTRODUCTION

1.1 Purpose:

This Class 'A' Estimate is intended to provide a realistic allocation of direct and indirect construction costs for the Gateway Recreation Centre, Shop Addition, located in Winnipeg, Manitoba, with exceptions of items listed in 1.5 below.

1.2 Methodology:

From the documentation and information provided, quantities of all major elements were assessed or measured where possible and priced at rates considered competitive for a project of this type under a stipulated sum form of contract in Winnipeg, Manitoba.

Pricing shown reflects probable construction costs obtainable in the Winnipeg, Manitoba area on the effective date of this report. This estimate is a determination of fair market value for the construction of this project. It is not a prediction of low bid. Pricing assumes competitive bidding for every portion of the work.

1.3 Description:

The Gateway Recreation Centre, Shop Addition project consists of a new shop addition comprising of 2,741sq ft of GFA (gross floor area) without crawlspace. The building addition is a concrete slab on grade on cast-in-place concrete piles and a steel framed structure supporting the metal deck roofing c/w metal roofing system. Exterior cladding consists of standing seam metal siding with masonry block wall & metal stud walls. Interior finishes are typical of a shop with standard mechanical and electrical systems

1.4 Specifications:

For building components and systems where specifications and design details are not available, quality standards have been established based on discussions with the design team.

1. INTRODUCTION

1.5 Exclusions: This Class 'A' Estimate does not provide for the following, if required:

- Land acquisition costs and impost charges
- Development charges
- Legal fees and expenses
- Right of way charges
- Easement costs
- Financing costs
- Fund raising costs
- Owner's staff and associated management
- Relocation of existing facilities, including furniture and equipment
- Professional fees and expenses
- Cost of contaminated soil removal
- Costs of asbestos removal
- Maintenance equipment
- Special audio, visual, security equipment or installation other than provision of empty conduit systems carried in electrical division
- Loose furniture, furnishings and equipment
- Window treatments
- Third Party Commissioning Costs
- Phased construction premiums
- Preventative maintenance contracts
- Site development
- Building permit
- Value added tax (e.g. Harmonized Sales Tax, Goods and Services Tax)
- **Escalation allowance**
- **Construction allowance**

2. DOCUMENTATION

- This Class 'A' Estimate has been prepared from the documentation included in Appendix B of this report.

All of the above documentation was received from Accutech Engineering and was supplemented with information gathered in meeting(s) and telephone conversations with the design team, as applicable.

Design changes and/or additions made subsequent to this issuance of the documentation noted above have not been incorporated in this report.

3. COST CONSIDERATIONS

3.1 Cost Base:

All costs are estimated on the basis of competitive bids (a minimum of 4 general contractor bids and at least 3 subcontractor bids for each trade) being received in October 2015 from general contractors and all major subcontractors and suppliers based on a stipulated sum form of contract.

If the above minimum conditions are not met, bids received could be expected to exceed this estimate.

3.2 Escalation:

No allowance has been made for construction cost escalation that may occur between October 2015 and the anticipated bid date of the project.

3.3 Contingencies:

An allowance of 2% has been included to cover design and pricing unknowns. This allowance is not intended to cover any program space modifications but rather to provide some flexibility for the designers and cost planners during the remaining contract document stages.

No allowance has been made to cover construction (post contract) unknowns. It is recommended that the owner make separate provision for post contract change-orders in the project budget as applicable.

3.4 Unit Rates:

The unit rates in the preparation of this Class 'A' Estimate include labour and material, equipment, subcontractor's overheads and profits.

3.5 Taxes:

Provincial Sales Tax is included where applicable. No provision has been made for the values added tax (e.g. Harmonized Sales Tax, Goods and Services Tax). It is recommended that the owner make separate provision for HST/GST in the project budget as applicable.

3.6 Statement of Probable Costs:

Hanscomb has no control over the cost of labour and materials, the contractor's method of determining prices, or competitive bidding and market conditions. This opinion of probable cost of construction is made on the basis of experience, qualifications and best judgment of the professional consultant familiar with the construction industry. Hanscomb cannot and does not guarantee that proposals, bids or actual construction costs will not vary from this or subsequent cost estimates.

3. COST CONSIDERATIONS (cont'd)

3.6 Statement of Probable Costs: (continued)

Hanscomb has prepared this estimate in accordance with generally accepted principles and practices. Hanscomb's staff is available to discuss its contents with any interested party.

3.7 Ongoing Cost Control:

Hanscomb recommends that the Owner and design team carefully review this document, including line item description, unit prices, clarifications, exclusions, inclusions and assumptions, contingencies, escalation and mark-ups. If the project is over budget, or if there are unresolved budgeting issues, alternative systems/schemes should be evaluated before proceeding into the next design phase.

Requests for modifications of any apparent errors or omissions to this document must be made to Hanscomb within ten (10) days of receipt of this estimate. Otherwise, it will be understood that the contents have been concurred with and accepted.

It is recommended that a final update estimate be produced by Hanscomb using Bid Documents to determine overall cost changes that may have occurred since the preparation of this estimate. The final updated estimate will address changes and additions to the documents, as well as addenda issued during the bidding process. Hanscomb cannot reconcile bid results to any estimate not produced from bid documents including all addenda.

4. GROSS FLOOR AND SITE DEVELOPED AREAS

GROSS FLOOR AREA:

Description	New (sq.ft.)
Main Floor	2,741
TOTAL	**2,741**

The above areas have been measured in accordance with the Canadian Institute of Quantity Surveyors' Method of Measurement of Buildings by Area and Volume.

5. CONSTRUCTION COST ESTIMATE SUMMARY

COST SUMMARY:

			Amount
- Building Addition		$	781,400
- Site and Ancillary Works		$	14,100
Total- Including Site		$	795,500
- General Requirements	11.5%	$	91,500
- Fee	5.0%	$	44,400
Total- Excluding Contingencies		$	931,400
- Design and Pricing Allowance	2.0%	$	18,600
- Escalation Allowance	0.0%		Excluded
- Construction Allowance	0.0%		Excluded
Total- Including Contingencies		$	950,000
- Goods & Services Tax			Excluded
Total Construction Estimate		$	950,000

Appendix
A - DETAILED ELEMENTAL COST ESTIMATE

Project : **Gateway Recreation Centre**
: **Shop Addition**
Location : **Winnipeg, Manitoba**
Owner :
Consultant : **Accutech Engineering Inc.**

ELEMENTAL COST SUMMARY

Report date : 20 Oct 2015
Page No. : 1
Bldg Type : 220
C.T. Index : 0.0
GFA : 2,741 sf

Element	Ratio to GFA	Elemental Cost Quantity	Elemental Cost Unit rate	Elemental Amount Sub-Total	Elemental Amount Total	Rate per sf Sub-Total	Rate per sf Total	%
A SHELL		2,741 sf			495,300		180.70	53.2
A1 SUBSTRUCTURE					111,300		40.60	11.9
A11 Foundations	1.000	2,741 sf	28.00	76,300		27.80		
A12 Basement Excavation				0		0.00		
A13 Special Conditions	0.010	20 No.	1,750.00	35,000		12.80		
A2 STRUCTURE					161,700		59.00	17.4
A21 Lowest Floor Construction	1.000	2,741 sf	28.00	75,400		27.50		
A22 Upper Floor Construction				0		0.00		
A23 Roof Construction	1.000	2,741 sf	31.00	86,300		31.50		
A3 EXTERIOR ENCLOSURE					222,300		81.10	23.9
A31 Walls Below Grade				0		0.00		
A32 Walls Above Grade	1.070	2,924 sf	36.00	104,500		38.10		
A33 Windows & Entrances	0.210	584 sf	77.00	44,800		16.30		
A34 Roof Coverings	1.000	2,741 sf	24.00	64,700		23.60		
A35 Projections	0.000	1 sum	8,300.00	8,300		3.00		
B INTERIORS		2,741 sf			82,600		30.10	8.9
B1 PARTITIONS & DOORS					32,800		12.00	3.5
B11 Partitions	0.430	1,190 sf	20.00	23,600		8.60		
B12 Doors	0.000	4 No	2,300.00	9,200		3.40		
B2 FINISHES					39,800		14.50	4.3
B21 Floor Finishes	0.900	2,470 sf	1.00	1,900		0.70		
B22 Ceiling Finishes	0.900	2,470 sf	11.00	28,400		10.40		
B23 Wall Finishes	2.080	5,688 sf	2.00	9,500		3.50		
B3 FITTINGS & EQUIPMENT					10,000		3.60	1.1
B31 Fittings & Fixtures	1.000	2,741 sf	4.00	10,000		3.60		
B32 Equipment	1.000	2,741 sf	0.00	0		0.00		
B33 Elevators				0		0.00		
B34 Escalators				0		0.00		
C SERVICES		2,741 sf			203,500		74.20	21.8
C1 MECHANICAL					130,000		47.40	14.0
C11 Plumbing & Drainage	1.000	2,741 sf	7.00	18,700		6.80		
C12 Fire Protection	1.000	2,741 sf	0.00	1,200		0.40		
C13 HVAC	1.000	2,741 sf	31.00	86,200		31.40		
C14 Controls	1.000	2,741 sf	9.00	23,900		8.70		
C2 ELECTRICAL					73,500		26.80	7.9
C21 Service & Distribution	1.000	2,741 sf	8.00	20,900		7.60		
C22 Lighting, Devices & Heating	1.000	2,741 sf	13.00	36,000		13.10		
C23 Systems & Ancillaries	1.000	2,741 sf	6.00	16,600		6.10		
NET BUILDING COST - EXCLUDING SITE				**$**	**781,400**		285.08	83.9
D SITE & ANCILLARY WORK		2,741 sf			14,100		5.10	1.5
D1 SITE WORK					7,500		2.70	0.8
D11 Site Development	0.000	1 m2	7,500.00	7,500		2.70		
D12 Mechanical Site Services				0		0.00		
D13 Electrical Site Services				0		0.00		
D2 ANCILLARY WORK					6,600		2.40	0.7
D21 Demolitions				0		0.00		
D22 Alterations	0.000	1 sf	6,600.00	6,600		2.40		
NET BUILDING COST - INCLUDING SITE				**$**	**795,500**		290.22	85.4
Z1 GENERAL REQUIREMENTS & FEE					135,900		49.60	14.6
Z11 General Requirements		11.5 %		91,500		33.40		
Z12 Fee		5.0 %		44,400		16.20		
TOTAL CONSTRUCTION ESTIMATE - EXCLUDING ALLOWANCES				**$**	**931,400**		339.80	100.0
Z2 ALLOWANCES					18,600		6.80	
Z21 Design & Pricing Allowance		2.0 %		18,600		6.80		
Z22 Escalation Allowance		0.0 %		0		0.00		
Z23 Construction Allowance		0.0 %		0		0.00		
TOTAL CONSTRUCTION ESTIMATE - INCLUDING ALLOWANCES				**$**	**950,000**		346.59	
VALUE ADDED TAX (GST/HST)					0		0.00	
Value Added Tax (GST/HST)		0.0 %		0		0.00		
TOTAL CONSTRUCTION ESTIMATE				**$**	**950,000**	**$**	**346.60**	

A1 SUBSTRUCTURE	Quantity	Unit rate	Amount
A11 Foundations			
1 Strip existing asphalt paving	2,741 sf	2.40	6,580
2 Excavate existing granular fill 12in thick	101 cy	17.00	1,720
3 Reinforced concrete grade beam GB-1 0.8ft x 2ft deep	63 ft	88.70	5,590
- excavation	4 cy	17.00	70
- ditto for workspace	15 cy	17.00	260
- rebar	357 lb	1.00	360
- vertical formwork	252 sf	13.00	3,280
- void form	50 sf	3.70	190
- concrete, 30 mpa	4 cy	225.00	900
- backfill with imported granular fill	15 cy	35.00	530
4 Reinforced concrete grade beam GB-2 0.8ft x 2.5ft deep	134 ft	109.30	14,640
- excavation	10 cy	17.00	170
- ditto for workspace	39 cy	17.00	660
- rebar	1,081 lb	1.00	1,080
- vertical formwork	670 sf	13.00	8,710
- void form	107 sf	3.70	400
- concrete, 30 mpa	10 cy	225.00	2,250
- backfill with imported granular fill	39 cy	35.00	1,370
5 Reinforced concrete grade beam GB-3 1.3ft x 2.5ft deep	30 ft	133.30	4,000
- excavation	4 cy	17.00	70
- ditto for workspace	14 cy	17.00	240
- rebar	207 lb	1.00	210
- vertical formwork	150 sf	13.00	1,950
- void form	39 sf	3.70	140
- concrete, 30mpa	4 cy	225.00	900
- backfill with imported granular fill	14 cy	35.00	490
6 Reinforced concrete pilaster PL1 0.8ft x 2.5ft deep	1 No.	460.00	460
- excavation	1 cy	17.00	20
- ditto for workspace	1 cy	17.00	20
- rebar	44 lb	1.00	40
- vertical formwork	8 sf	13.00	100
- void form	2 sf	3.70	10
- concrete, 30mpa	1 cy	225.00	230
(Continued)			
		Carried Forward :	32,990

A1 SUBSTRUCTURE	Quantity	Unit rate	Amount
A11 Foundations (Continued)		**Brought Forward :**	32,990
6 Reinforced concrete pilaster PL1 0.8ft x 2.5ft deep (Continued)			
- backfill with imported granular fill	1 cy	35.00	40
7 Reinforced concrete Pilaster PI2- 1.3ft x 2.5 ft deep	6 No.	425.00	2,550
- excavation	3 cy	17.00	50
- ditto for workspace	12 cy	17.00	200
- rebar	256 lb	1.00	260
- vertical formwork	63 sf	13.00	820
- void form	33 sf	3.70	120
- concrete, 30mpa	3 cy	225.00	680
- backfill with imported granular fill	12 cy	35.00	420
8 Reinforced concrete PL3- Pilaster 0.8ft x 2.5ft deep	1 No.	550.00	550
- excavation	1 cy	17.00	20
- ditto for workspace	2 cy	17.00	30
- rebar	46 lb	1.00	50
- vertical formwork	10 sf	13.00	130
- void form	5 sf	3.70	20
- concrete, 30mpa	1 cy	225.00	230
- backfill with imported granular fill	2 cy	35.00	70
9 Interior grade beam GB-1 0.8ft x 2ft deep	42 ft	93.30	3,920
- excavation	3 cy	17.00	50
- ditto for work	10 cy	17.00	170
- rebar	328 kg	1.00	330
- vertical formwork	168 sf	13.00	2,180
- void form	43 sf	3.70	160
- concrete, 30mpa	3 cy	225.00	680
- backfill with imported granular fill	10 cy	35.00	350
10 Interior grade beam GB-2 0.8ft x 2ft deep	13 ft	95.40	1,240
- excavation	1 cy	17.00	20
- ditto for workspace	3 cy	17.00	50
- rebar	107 lb	1.00	110
- vertical formwork	52 sf	13.00	680
- void form	10 sf	3.70	40
- concrete, 30 mpa (Continued)	1 cy	225.00	230
		Carried Forward :	41,250

A1 SUBSTRUCTURE		Quantity	Unit rate	Amount
A11 Foundations	(Continued)		**Brought Forward :**	41,250
10 Interior grade beam GB-2 0.8ft x 2ft deep	(Continued)			
- backfill with imported granular fill		3 cy	35.00	110
11 Pile caps PC1- 2ft dia. x 2ft deep		15 No.	157.30	2,360
- excavation		4 cy	17.00	70
- ditto for workspace		4 cy	17.00	70
- rebar		238 lb	1.00	240
- formwork, sonotube		30 lf	30.00	900
- concrete, 30mpa		4 cy	225.00	900
- backfill with imported granular fill		5 cy	35.00	180
12 Pile caps- 2ft x 2 ft x 2 ft		5 No.	412.00	2,060
- excavation		2 cy	17.00	30
- ditto for workspace		6 cy	17.00	100
- rebar		229 lb	1.00	230
- formwork		80 sf	13.00	1,040
- concrete, 30mpa		2 cy	225.00	450
- backfill with imported granular fill		6 cy	35.00	210
13 Sump pits		1 No.	3,000.00	3,000
14 Tie new beam to existing with 20m dowels drilled & grouted to existing beam, allow		10 No.	225.00	2,250
15 Water proofing & rigid insulation to exterior face of grade beams		726 sf	8.90	6,490
- waterproofing		726 sf	4.70	3,410
- 2" rigid insulation		726 sf	3.00	2,180
- ditto but horizontal		300 sf	3.00	900
16 Weeping tile c/w granular surround		150 ft	19.80	2,970
17 Cement parging to exposed of rigid insulation allow,		150 sf	3.50	530
18 Connection to last storm sewer			Allow	1,000
19 Extra over foundations for working near existing foundations			Allow	7,500
			Carried Forward :	69,410

A1 SUBSTRUCTURE		Quantity	Unit rate	Amount
A11 Foundations	(Continued)		**Brought Forward :**	69,410
20 Concrete Consumables		1 sum	6,900.00	6,900
A11 Foundations	TOTAL : $	2,741 sf	27.84	76,300

A1 SUBSTRUCTURE	Quantity	Unit rate	Amount
A13 Special Conditions			
1 Cast in place reinforced concrete pile 16" x 39ft deep	20 No.	1,500.00	30,000
2 Dewatering during construction	1 allow	5,000.00	5,000
3 Rock excavation, assume not required	1 Nil	0.00	0
A13 Special Conditions TOTAL : $	20 No.	1,750.00	35,000

A2 STRUCTURE		Quantity	Unit rate	Amount
A21 Lowest Floor Construction				
1	Cast in place concrete slab on grade, 8"thick c/w 6" thick granular fill	2,741 sf	15.20	41,660
	- excavation and removal offsite, measured in foundation	1 Nil	0.00	0
	- excavation for workspace, measured in foundation	1 Nil	0.00	0
	- granular fill 6" thick	50 cy	35.00	1,750
	- 6mil poly vapour barrier	2,741 sf	0.20	550
	- 2" Hi-40 rigid insulation	2,741 sf	3.00	8,220
	- rebar	3,924 lb	1.00	3,920
	- vertical formwork	169 sf	13.00	2,200
	- concrete 30 mpa	71 cy	225.00	15,980
	- isolation/control joints	2,741 sf	0.60	1,640
	- screed/cure/finish	2,741 sf	0.90	2,470
	- premium for 1-way slope	2,741 sf	1.00	2,740
	- extra over for saw cuts	2,741 sf	0.80	2,190
2	Cast in place concrete walls to drainage pit and trenches	350 sf	26.90	9,420
	- excavation	5 cy	17.00	90
	- workspace	9 cy	17.00	150
	- formwork	408 sf	13.00	5,300
	- rebar	1,870 lbs	1.00	1,870
	- concrete 30 mpa	5 cy	225.00	1,130
	- 6mil poly vapour barrier	204 sf	0.20	40
	- 2" rigid insulation	204 sf	3.00	610
	- backfill to working space	9 cy	25.00	230
3	Tie new slab to existing with 10m dowels drilled & grouted to existing beam, allow	65 ft	36.30	2,360
4	Concrete consumables	1 Sum	10,600.00	10,600
5	Allow for house keeping pads	1 Sum	2,500.00	2,500
6	Metal grating drainage pits	80 sf	37.50	3,000
7	Slab thickening allow	1 Sum	5,000.00	5,000
8	Provide 1/2" asphalt impregnated fiberboard between existing and new concrete	115 sf	7.00	810
A21 Lowest Floor Construction	TOTAL : $	2,741 sf	27.51	75,400

A2 STRUCTURE	Quantity	Unit rate	Amount
A23 Roof Construction			
1 Structural steel framing c/w 38 DP. x 0.76 thick acoustic steel deck	2,741 sf	25.40	69,580
- structural steel framing	20,963 lbs	2.50	52,410
- details/connection	2,096 lbs	2.70	5,660
- 1/2" metal deck	2,741 sf	4.20	11,510
2 Lintels	143 ft	47.60	6,810
- Lintel L1 2-6" stud	55 ft	30.00	1,650
- Lintel L2 8" deep, U-block 20 mpa concrete filled	12 ft	45.50	550
- Lintel L2 8"x 16" 30 mpa concrete C.I.P beam	76 ft	60.60	4,610
3 Tie into existing structure, allow	66 ft	105.00	6,930
4 Framing for roof penetrations, allow		Allow	3,000
A23 Roof Construction TOTAL : $	2,741 sf	31.48	86,300

A3 EXTERIOR ENCLOSURE	Quantity	Unit rate	Amount
A32 Walls Above Grade			
1 Exterior steel stud wall type W1	378 sf	38.40	14,520
- 1 1/2" prefinished metal cladding	378 sf	11.20	4,230
- 7/8" furring channels @ 24" O.C	378 sf	3.70	1,400
- Tyvek building wrap	378 sf	2.80	1,060
- 5/8" type X GWB	378 sf	3.20	1,210
- 5/8" type X GWB	378 sf	3.20	1,210
- 6" x 0.31 steel studs @16" O.C	378 sf	6.00	2,270
- R21 batt insulation	378 sf	1.50	570
- 6mil poly vapour barrier	378 sf	0.30	110
- 5/8" type X GWB	378 sf	3.20	1,210
- 5/8" type X GWB	378 sf	3.30	1,250
2 Exterior masonry wall type W2	448 sf	53.50	23,960
- 1 1/2" prefinished metal cladding	448 sf	11.20	5,020
- 7/8" furring channels @ 24" O.C	448 sf	3.70	1,660
- Tyvek building wrap	448 sf	2.80	1,250
- 8" masonry block (type s mortar)	448 sf	20.90	9,360
- 6" x 0.31 steel studs @16" O.C	448 sf	6.00	2,690
- R21 batt insulation	448 sf	1.50	670
- 6mil poly vapour barrier	448 sf	0.30	130
- 5/8" type X GWB	448 sf	3.30	1,480
- prefinished metal liner	448 sf	3.80	1,700
3 Exterior masonry wall type W3	1,229 sf	20.90	25,690
- 8" masonry block	1,229 sf	20.90	25,690
4 Exterior steel stud wall type W4	195 sf	31.90	6,230
- 1 1/2" prefinished metal cladding	195 sf	11.20	2,180
- 7/8" furring channels @ 24" O.C	195 sf	3.70	720
- Tyvek building wrap	195 sf	2.80	550
- 5/8" type X GWB	195 sf	3.20	620
- 6" x 0.31 steel studs @16" O.C	195 sf	6.00	1,170
- R21 batt insulation	195 sf	1.50	290
- 6mil poly vapour barrier	195 sf	0.30	60
- 5/8" type X GWB	195 sf	3.30	640
5 Exterior steel stud wall type W5	674 sf	35.60	23,990
- 1 1/2" prefinished metal cladding	674 sf	11.20	7,550
- 7/8" furring channels @ 24" O.C	674 sf	3.70	2,490
- Tyvek building wrap	674 sf	2.80	1,890
- 5/8" type X GWB	674 sf	3.20	2,160
- 6" x 0.31 steel studs @16" O.C	674 sf	6.00	4,040
(Continued)			
		Carried Forward :	94,390

A3 EXTERIOR ENCLOSURE		Quantity	Unit rate	Amount
A32 Walls Above Grade	(Continued)		**Brought Forward :**	94,390
5 Exterior steel stud wall type W5	(Continued)			
- R21 batt insulation		674 sf	1.50	1,010
- 6mil poly vapour barrier		674 sf	0.10	70
- 5/8" type X GWB		674 sf	3.30	2,220
- prefinished metal liner		674 sf	3.80	2,560
6 Miscellaneous flashings		1 allow	2,000.00	2,000
7 Wood blocking and backing		1,247 sf	2.30	2,870
8 Firestopping, caulking and sealants		2,924 sf	1.80	5,260
A32 Walls Above Grade	TOTAL : $	2,924 sf	35.74	104,500

A3 EXTERIOR ENCLOSURE	Quantity	Unit rate	Amount
A33 Windows & Entrances			
1 Insulated hollow metal door c/w frame & standard hardware - 1.5hr rating	4 No	1,800.00	7,200
- single 3' x 7'	4 No	1,800.00	7,200
2 Insulated steel overhead door c/w track and standard hardware	4 No	7,500.00	30,000
- single 10' x 10'	4 No	7,500.00	30,000
3 Insulated metal rolling door	1 No	6,000.00	6,000
- single 10' x 10'	1 No	6,000.00	6,000
4 Extra for hardware upgrades	4 No.	400.00	1,600
A33 Windows & Entrances TOTAL : $	584 sf	76.71	44,800

A3 EXTERIOR ENCLOSURE		Quantity	Unit rate	Amount
A34	Roof Coverings			
1	Prefinished standing seam metal roof c/w 2 layers of 4"rigid insulation, poly vapour barrier (metal deck measured elsewhere)	2,741 sf	19.30	52,900
2	Metal gutters, allow	90 ft	23.00	2,070
3	Downspouts to last c/w structural steel protection	3 No.	450.00	1,350
4	Prefinished metal snow guard	80 ft	75.00	6,000
5	Prefinished metal flashing	120 ft	20.00	2,400
A34 Roof Coverings	TOTAL : $	2,741 sf	23.60	64,700

A3 EXTERIOR ENCLOSURE		Quantity	Unit rate	Amount
A35 Projections				
1	6" dia. Steel bollards	10 No.	750.00	7,500
2	Precast splash pads	3 No.	250.00	750
A35 Projections	TOTAL : $	1 sum	8,300.00	8,300

B1 PARTITIONS & DOORS	Quantity	Unit rate	Amount
B11 Partitions			
1 Interior steel stud partition type P1	210 sf	10.30	2,170
- 1/2" type X GWB	210 sf	2.60	550
- 6" x .31 steel studs @ 16" O.C	210 sf	5.10	1,070
- 1/2" type X GWB	210 sf	2.60	550
2 Interior steel stud partition type P2 (1hr. fire rating)	252 sf	10.80	2,710
- 5/8" type X GWB	252 sf	2.80	710
- 6" x .31 steel studs @ 16" O.C	252 sf	5.10	1,290
- 5/8" type X GWB	252 sf	2.80	710
3 Interior steel stud partition type P3 (1hr. fire rating)	728 sf	15.50	11,280
- prefinished metal liner	728 sf	3.80	2,770
- 5/8" type X GWB	728 sf	3.30	2,400
- 6" x .31 steel studs @ 16" O.C	728 sf	5.10	3,710
- 5/8" type X GWB	728 sf	3.30	2,400
4 Column protection c/w 2 layers of GWB and metal stud framing	384 sf	11.80	4,530
5 Plywood blocking and backing, allow	1,190 sf	1.40	1,670
6 Firestopping and sealants, allow	1,190 sf	1.00	1,190
B11 Partitions TOTAL : $	1,190 sf	19.83	23,600

B1 PARTITIONS & DOORS	Quantity	Unit rate	Amount
B12 Doors			
1 Hollow metal door c/w hollow metal frame and standard hardware	4 No	1,800.00	7,200
- single 3' x 7'	4 No	1,800.00	7,200
2 Extra over for fire-rating	3 No	150.00	450
3 Hardware upgrades	1 allow	1,500.00	1,500
B12 Doors TOTAL : $	4 No	2,300.00	9,200

B2 FINISHES		Quantity	Unit rate	Amount
B21 Floor Finishes				
1	Sealed concrete - included in concrete		Nil	
2	Non-slip resilient floor	66 sf	6.00	400
3	Rubber cove base	683 ft	2.20	1,500
B21 Floor Finishes	TOTAL : $	2,470 sf	0.77	1,900

B2 FINISHES	Quantity	Unit rate	Amount
B22 Ceiling Finishes			
1 GWB board ceiling, painted	2,470 sf	11.50	28,410
B22 Ceiling Finishes TOTAL : $	2,470 sf	11.50	28,400

B2 FINISHES		Quantity	Unit rate	Amount
B23 Wall Finishes				
1	Ceramic tile to washroom, 7' high	238 sf	12.50	2,980
2	Paint to interior partition	2,142 sf	1.20	2,570
3	Paint to interior surface of exterior wall	2,924 sf	1.20	3,510
4	Paint to column protection	384 sf	1.20	460
B23 Wall Finishes	TOTAL : $	5,688 sf	1.67	9,500

B3 FITTINGS & EQUIPMENT	Quantity	Unit rate	Amount
B31 Fittings & Fixtures			
1 Washroom accessories	1 Sum	800.00	800
- toilet paper dispenser	1 No	150.00	150
- soap dispenser	1 No	300.00	300
- paper towel dispenser	1 No	350.00	350
2 Vanity counters		Allow	250
3 Mirrors to last		Allow	200
4 Signage, allow		Allow	2,500
5 Interior bollards	8 No.	400.00	3,200
6 Miscellaneous millwork, allow		Allow	3,000
B31 Fittings & Fixtures TOTAL : $	2,741 sf	3.65	10,000

C1 MECHANICAL	Quantity	Unit rate	Amount
C11 Plumbing & Drainage			
1 Fixtures & rough-in	1 Sum	2,600.00	2,600
- Water closet, assume flr. mt'd tank type	1 No.	800.00	800
- Lavatory, wall hung, manual faucet	1 No.	1,000.00	1,000
- Fixture rough-in	2 No.	400.00	800
2 Domestic water - Extend existing, assume tie-in point 30' from face of new building	1 Sum	6,990.00	6,990
- Piping	210 LF	24.00	5,040
- Insulation	210 LF	5.00	1,050
- CTE c/w valve	3 No.	300.00	900
3 Sanitary drainage & vent - assume tie-in point 30' from face of new building	1 Sum	5,140.00	5,140
- Drainage piping below grade c/w trenching & bedding	60 LF	34.00	2,040
- Vent piping, allow	30 LF	28.00	840
- VTR	1 No.	300.00	300
- FCO	2 No.	300.00	600
- FD	1 No.	360.00	360
- CTE	1 No.	1,000.00	1,000
4 Storm drainage - Sloped roof, gutters and downspout by others	1 Nil	0.00	0
5 Natural gas - N/A	1 Nil	0.00	0
6 Miscellaneous	1 Sum	2,600.00	2,600
- Setting out & sleeving and cutting , coring & patching	1 Sum	2,000.00	2,000
- Tagging & identification	1 Sum	200.00	200
- Testing & disinfecting	1 Sum	400.00	400
7 RST	1 Sum	1,400.00	1,400
C11 Plumbing & Drainage TOTAL : $	2,741 sf	6.82	18,700

C1 MECHANICAL		Quantity	Unit rate	Amount
C12 Fire Protection				
1	Fire stand pipe - N/A	1 Nil	0.00	0
2	Sprinkler system - Not shown, as per NBC matrix on drawing B100, non-sprinklered	1 Nil	0.00	0
3	Special fire protection system - N/A	1 Nil	0.00	0
4	Fire extinguishers	2,744 SF	0.40	1,100
5	RST	1 Sum	100.00	100
C12 Fire Protection	TOTAL : $	2,741 sf	0.44	1,200

C1 MECHANICAL	Quantity	Unit rate	Amount
C13 HVAC			
1 Heat generation - Assume from existing	1 Nil	0.00	0
2 Liquid heat transfer - extend from existing, in-floor heating system	2,744 SF	8.70	23,940
- Piping	240 LF	24.00	5,760
- Insulation	240 LF	5.00	1,200
- CTE	2 No.	300.00	600
- Circ. pump	1 No.	1,600.00	1,600
- In-floor heating	2,744 SF	3.20	8,780
- Manifolds	6 No.	1,000.00	6,000
3 Air distribution equipment	2,744 SF	3.30	9,000
- 2,200CFM MAU, assume electric heating only	1 No.	9,000.00	9,000
4 Air distribution ductwork & devices	2,744 SF	5.00	13,630
- Ductwork	890 lbs	8.50	7,570
- Insulation, allow	624 SF	4.00	2,500
- Diffusers	11 No.	160.00	1,760
- 24"X30" intakehood	1 No.	1,000.00	1,000
- MD	1 No.	800.00	800
5 Exhaust & ventilation	1 Sum	10,400.00	10,400
- 1,200CFM EF	2 No.	1,500.00	3,000
- MD	2 No.	800.00	1,600
- Ductwork	2 Set	1,500.00	3,000
- Ceiling fans	3 No.	600.00	1,800
- W/R EF, not shown, allow	1 No.	1,000.00	1,000
6 Relocates	1 Sum	17,400.00	17,400
- Move up existing grille openings incl. provide new opening on wall	2 No.	2,000.00	4,000
- Extend chimney through roof	1 No.	800.00	800
- Extend relief piping for natural gas through roof	1 No.	800.00	800
- Extend combustion air intake through roof	1 No.	800.00	800
- Relocate grille from EF-1 c/w 25' of additiona 24" ductwork	1 Sum	8,000.00	8,000
- Relocate zamboni room exhaust grille incl. additional ductwork , about 17'	1 Sum	2,500.00	2,500
- Remove existing inake and patch wall	1 No.	500.00	500
7 Testing, adjusting & balancing	1 Sum	2,000.00	2,000
		Carried Forward :	76,370

C1 MECHANICAL	Quantity	Unit rate	Amount
C13 HVAC (Continued)		**Brought Forward :**	76,370
8 Miscellaneous	1 Sum	3,400.00	3,400
- Setting out & sleeving and cutting , coring & patching	1 Sum	3,000.00	3,000
- Tagging & identification	1 Sum	400.00	400
9 RST	1 Sum	6,400.00	6,400
C13 HVAC **TOTAL : $**	2,741 sf	31.45	86,200

C1 MECHANICAL	Quantity	Unit rate	Amount
C14 Controls			
1 Controls - Assume stand alone controls	1 Sum	22,100.00	22,100
- In-floor heating	6 No.	1,000.00	6,000
- Pump	1 No.	1,000.00	1,000
- MAU	1 No.	2,500.00	2,500
- EF	2 No.	800.00	1,600
- MD	3 No.	600.00	1,800
- CO/ NO detectors	4 No.	1,800.00	7,200
- Control panel & misc.	1 Sum	2,000.00	2,000
- CF - local switches	1 Nil	0.00	0
2 RST	1 Sum	1,800.00	1,800
C14 Controls TOTAL : $	2,741 sf	8.72	23,900

C2 ELECTRICAL	Quantity	Unit rate	Amount
C21 Service & Distribution			
1 Distribution	1 Sum	11,300.00	11,300
- Modify/add new breaker 60A 3P 600V at existing 200A main distribution panel	1 Sum	1,200.00	1,200
- 60A 600V Distribution panel A1 c/w 1-45A & 1-15A/3P breakers	1 No.	4,100.00	4,100
- 45kVA 600V to 120/208V Transformer	1 No.	3,400.00	3,400
- 125A 120/208V 3P/4W Lighting, power & Mechanical panel A c/w 24ccts	1 No.	2,600.00	2,600
2 Feeders	1 Sum	6,090.00	6,090
- 4/C #1/0 Teck90	5 m	109.00	550
- 4/C #3 Teck90	90 m	58.00	5,220
- 4/C #4 Teck90	6 m	54.00	320
3 Grounding - Modify/extend existing grounding system including bonding of new addition areas	1 Sum	2,000.00	2,000
4 RST	1 Sum	1,550.00	1,550
C21 Service & Distribution TOTAL : $	2,741 sf	7.62	20,900

C2 ELECTRICAL	Quantity	Unit rate	Amount
C22 Lighting, Devices & Heating			
1 Lighting Fixtures - supply, install & wiring	1 Sum	15,970.00	15,970
- Type HB - 1220mmx610mm High bay fluorescent light fixture c/w WG & 4 lamps	14 No.	460.00	6,440
- Type S2 - 1220x250 Surface mount low-profile fluorescent light fixture	10 No.	320.00	3,200
- Type WP - LED exterior wall pack	5 No.	570.00	2,850
- Light fixtures conduit and wiring	29 set	120.00	3,480
2 Exit/Emergency Lighting	1 Sum	4,250.00	4,250
- Exit light	5 No.	280.00	1,400
- Single remote head	2 No.	110.00	220
- Double remote head	4 No.	130.00	520
- Emergency battery unit c/w double remote heads	2 No.	450.00	900
- Branch wiring for exit light & remote heads	11 set	110.00	1,210
3 Lighting Controls	1 Sum	1,510.00	1,510
- Toggle switch	7 No.	130.00	910
- 3-Way toggle switch	4 No.	150.00	600
4 Power Outlets & Connections	1 Sum	7,560.00	7,560
- 15A duplex receptacle	18 No.	135.00	2,430
- 15A duplex receptacle - GFI	1 No.	150.00	150
- 15A duplex receptacle - GFI/WP	2 No.	190.00	380
- 60A, 240V Welding receptacle	1 No.	750.00	750
- O/H Door power connections	4 No.	620.00	2,480
- Branch wiring	2,744 SF	0.50	1,370
5 Mechanical Motor Connections	1 Sum	4,070.00	4,070
- EF-1 & 2 120V/1P Power connection c/w disconnect switch	2 No.	740.00	1,480
- Boiler pump 208V/3P 1HP motor connection c/w magnetic starter by mech.	1 No.	560.00	560
- MUA unit power connection c/w disconnect switch	1 No.	890.00	890
- Ceiling fan power connections	3 No.	380.00	1,140
6 RST	1 Sum	2,670.00	2,670
C22 Lighting, Devices & Heating TOTAL : $	2,741 sf	13.13	36,000

C2 ELECTRICAL	Quantity	Unit rate	Amount
C23 Systems & Ancillaries			
1 Fire Alarm System	1 Sum	7,520.00	7,520
- Modify/extend existing fire alarm system to new addition c/w re-programming & verification	1 Sum	2,000.00	2,000
- CO/NO Detectors c/w wiring	1 No.	420.00	420
- Allow for Fire Alarm devices c/w conduit & wiring	1 Sum	4,500.00	4,500
- Testing & verification	1 Sum	600.00	600
2 Communication/IT - No Work shown	1 Nil	0.00	0
3 Security- Access Control CCTV Systems - No Work shown	1 Nil	0.00	0
4 Miscellaneous Systems, connect to existing building	1 Sum	4,000.00	4,000
5 Construction Items - Permits, inspections, as build drawing, documentation and firestopping	1 Sum	3,800.00	3,800
6 RST	1 Sum	1,230.00	1,230
C23 Systems & Ancillaries TOTAL : $	2,741 sf	6.06	16,600

D1 SITE WORK		Quantity	Unit rate	Amount
D11 Site Development				
1 Make good perimeter resulting from construction, allow 5'-0"		750 sf	10.00	7,500
D11 Site Development	TOTAL : $	1 m2	7,500.00	7,500

D1 SITE WORK	Quantity	Unit rate	Amount
D12 Mechanical Site Services			
1 Assume no works required	1 Nil	0.00	0
D12 Mechanical Site Services	TOTAL : $ Lump sum		0

D2 ANCILLARY WORK	Quantity	Unit rate	Amount
D22 Alterations			
1 Relocate existing door to new location c/w demolition of existing wall and new framing as required	1 No.	3,500.00	3,500
2 Infill framing and finish to relocated door	42 sf	50.00	2,100
3 Remove existing OH door	1 No.	1,000.00	1,000
D22 Alterations TOTAL : $	1 sf	6,600.00	6,600

Appendix
B - DOCUMENTS & DRAWINGS LISTS

APPENDIX B – DOCUMENTS & DRAWINGS LISTS

DRAWINGS

ARCHITECTURAL

Number	Title	Dated	Received
B100	Site Plan	May 20, 2015	Oct 7, 2015
B101	Main Floor & Roof Plans	ditto	ditto
B200	Exterior Elevations	ditto	ditto
B300	Wall Sections	ditto	ditto

STRUCTURAL

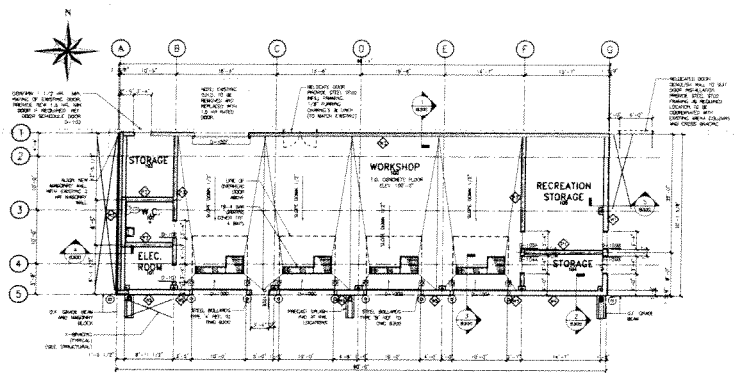
Number	Title	Dated	Received
S100	General Notes	May 20, 2015	Oct 7, 2015
S101	Foundation Plan & Details	ditto	ditto
S102	Main Floor Plan / Roof Framing	ditto	ditto
S300	Wall Sections	ditto	ditto
S301	Sections	ditto	ditto
S302	Sections & Elevations	ditto	ditto
	Existing Joist Additional Upgrade	March 25, 2013	March 25, 2013

MECHANICAL

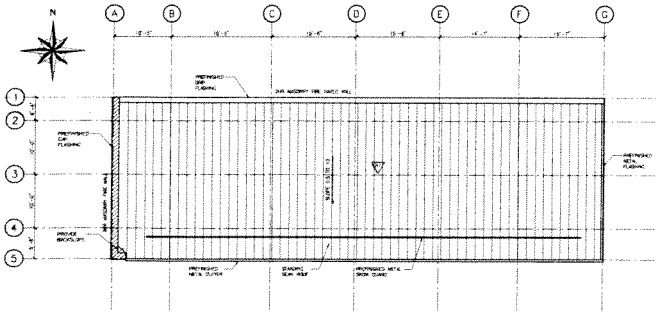
Number	Title	Dated	Received
M101	Plumbing & HVAC Plans	May 20, 2015	Oct 7, 2015
M102	In-Floor Heating Plan	ditto	ditto
M103	Mechanical Elevations	ditto	ditto

ELECTRICAL

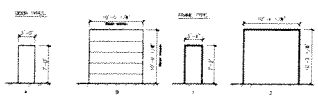
Number	Title	Dated	Received
E.101	Power & Lighting Layout	May 2015	Oct 7, 2015



A B101 FLOOR PLAN



B B101 ROOF PLAN



DOOR SCHEDULE

NO.	DOOR WIDTH	DOOR HEIGHT	DOOR THICK	DOOR MAT'L	DOOR CORE	DOOR FIN	DOOR CLR.	DOOR ARCHIT.	FRAME TYPE	FRAME MAT'L	FRAME FIN	FRAME CLR.	HARDWARE SET	REMARKS
01-001A	1'-0"	7'-0"	1 3/4"	METAL	INSUL	SF	PT2		1	METAL	SF	PT2		1 HOUR INSULATED OVERHEAD DOOR
01-001B	1'-0"	7'-0"	1 3/4"	METAL	INSUL	SF	PT2		1	METAL	SF	PT2		INSULATED H.M. FRAME
01-002	1'-0"	7'-0"	1 3/4"	METAL	INSUL	SF	PT2		1	METAL	SF	PT2		
01-003	1'-0"	7'-0"	1 3/4"	METAL	INSUL	SF	PT2		1	METAL	SF	PT2		
01-004	3'-0"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		STAIR WELL NO ACCESS FROM WORK
01-005	2'-0"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-006	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-007	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-008	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-009	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-010	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-011	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-012	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-013	2'-6"	7'-0"	1 3/4"	H.M.	INSUL	SF	PT2		1	H.M.	SF	PT2		
01-014	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-015	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-016	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-017	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-018	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-019	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-020	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-021	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-022	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-023	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-024	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-025	2'-6"	7'-0"	1 3/4"	H.M.	INSUL	SF	PT2		1	H.M.	SF	PT2		
01-026	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-027	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-028	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-029	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-030	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-031	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-032	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-033	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-034	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-035	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-036	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-037	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-038	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-039	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-040	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-041	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-042	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-043	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-044	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-045	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-046	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-047	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-048	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-049	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-050	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-051	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-052	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-053	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-054	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-055	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-056	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-057	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-058	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-059	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-060	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-061	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-062	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-063	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-064	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-065	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-066	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-067	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-068	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-069	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-070	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-071	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-072	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-073	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-074	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-075	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-076	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-077	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-078	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-079	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-080	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-081	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-082	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-083	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-084	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-085	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-086	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-087	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-088	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-089	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-090	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-091	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-092	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-093	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-094	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-095	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-096	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-097	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-098	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-099	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		
01-100	2'-6"	7'-0"	1 3/4"	H.M.		SF	PT2		1	H.M.	SF	PT2		

GENERAL NOTES:
1. ALL WALLS TO HAVE VAPOUR SEALS AT FLOOR, CEILING, EXPOSURE AND WALL JUNCTIONS.
2. PROVIDE DOUBLE TOP TRACK TO ALLOW FOR 1" DEFLECTION (1/2" FOR SPANS LENGTH OVER 12'-0")
3. ALL EXTERIOR DIMENSIONS ARE TO FACE OF FACE OF CONCRETE UNLESS OTHERWISE NOTED

SEL. TYPES:

EXTERIOR STEEL STUD WALL ASSEMBLY (2HR. FIRE WALL)
1" PREFINISHED METAL CLADDING
7/8" FURRING CHANNELS @ 24" O.C. (HORIZ.)
THICK BUILDING WRAP
5/8" TYPE 'X' G.W.B. (2 LAYERS)
6" x 20 STEEL STUDS @ 16" O.C.
BATT INSULATION
6 MIL POLY VAPOUR BARRIER
5/8" TYPE 'X' G.W.B. (2 LAYERS)

EXTERIOR MASONRY WALL ASSEMBLY (2HR. FIRE WALL)
1 1/2" PREFINISHED METAL CLADDING
7/8" FURRING CHANNELS @ 24" O.C. (HORIZ.)
THICK BUILDING WRAP
4" BRICK VENEER (TYPE 'S' MORTAR)
2" AIR SPACE (TIES @ 16" O.C.)
6" x 20 STEEL STUDS @ 16" O.C.
BATT INSULATION
6 MIL POLY VAPOUR BARRIER
5/8" TYPE 'X' G.W.B.
3/4" PRESTIGE METAL LINER

MASONRY WALL ASSEMBLY (2HR. FIRE WALL)
8" MASONRY BLOCK (TYPE 'S' MORTAR)
LINEAR EXPANSION WALL

EXTERIOR STEEL STUD WALL ASSEMBLY
1 1/2" PREFINISHED METAL CLADDING
7/8" FURRING CHANNELS @ 24" O.C. (HORIZ.)
THICK BUILDING WRAP
5/8" TYPE 'X' G.W.B.
6" x 20 STEEL STUDS @ 16" O.C.
BATT INSULATION
6 MIL POLY VAPOUR BARRIER
5/8" TYPE 'X' G.W.B.

EXTERIOR STEEL STUD WALL ASSEMBLY
1 1/2" PREFINISHED METAL CLADDING
7/8" FURRING CHANNELS @ 24" O.C. (HORIZ.)
THICK BUILDING WRAP
5/8" TYPE 'X' G.W.B.
6" x 20 STEEL STUDS @ 16" O.C.
BATT INSULATION
6 MIL POLY VAPOUR BARRIER
5/8" TYPE 'X' G.W.B.
5/8" TYPE 'X' FINISH LINER

INTERIOR STEEL STUD PARTITION
1/2" TYPE 'X' G.W.B.
6" x 20 STEEL STUDS @ 16" O.C.
1/2" TYPE 'X' G.W.B.

INTERIOR STEEL STUD PARTITION (1HR. FIRE)
5/8" TYPE 'X' G.W.B.
6" x 20 STEEL STUDS @ 16" O.C.
5/8" TYPE 'X' G.W.B.

INTERIOR STEEL STUD PARTITION (1HR. FIRE)
5/8" PREFINISH METAL LINER
5/8" TYPE 'X' G.W.B.
6" x 20 STEEL STUDS @ 16" O.C.
5/8" TYPE 'X' G.W.B.

ROOF DETAILS:
ROOF ASSEMBLY (2HR. FIRE)
1 1/2" PREFINISHED STANDING SEAM ROOF
4" ROOF INSULATION WITH 7" BATT @ 24" O.C.
VAPOUR BARRIER ON UNDERSIDE OF 24" O.C.
5/8" TYPE 'X' G.W.B. ON STEEL DECK
SPELL @ 48" O.C.
7/8" FURRING CHANNELS @ 24" O.C.
5/8" TYPE 'X' G.W.B. (2 LAYERS)

HARDWARE SCHEDULE

HARDWARE GROUP 1				
3	HINGES	CB179 4 1/2"x4"	282	ST
1	LOCKSET	NORMPX RHO	628	SC
1	CLOSER	4011 PRC	689	LC
1	KICK PLATE	K154 12" x WFS	320	SN
1	WALL STOP	5217-1033	260	SN
HARDWARE GROUP 2				
3	HINGES	CB179 4 1/2"x4"	282	ST
1	PRIVACY SET	NDRSD RHO	628	SC
1	KICK PLATE	K154 12" x WFS	320	SN
1	WALL STOP	5217-1033	260	SN
1	PERIMETER SEAL	# 22	BLK	KN
1	AUTO DOOR BOTTOM	DT 82	CA	KN
HARDWARE GROUP 3				
3	HINGES	CB179 4 1/2"x4"	282	ST
1	LOCKSET	NORMPX RHO	628	SC
1	CLOSER	4011 PRC	689	LC
1	KICK PLATE	K154 12" x WFS	320	SN
1	WALL STOP	5217-1033	260	SN
HARDWARE GROUP 4				
	CONTINUOUS HINGE	224HD	628	P
	EXIT DEVICE	NORMA CP + 110XD	626	AD
	MIN. CYLINDER	MK CP. TO SUIT	626	BS
	PULL	3812-2 12" x 12"	622	SN
	CLOSER	4111 EDA	689	LC
	ASSEMBLAGE	K154 12" x WFS	320	SN
	CORE (MARKHAM) STOR	1009	600	CL
	WEATHER STRIP	# 305	CA	KN
	WEATHER STRIP	# 625	CA	KN
	SWEEP	# 135	CA	KN
	THRESHOLD	DT 11	AL	KN
HARDWARE GROUP 5				
	CONTINUOUS HINGE	224HD	628	P
	MORTISE LOCK	NDR 7 L 15 R	626	BS
	CLOSER	4111 EDA	689	LC
	KICK PLATE	K154 12" x WFS	320	SN
	WALL STOP	5217-1033	260	SN
	WEATHER STRIP	# 305	CA	KN
	WEATHER STRIP	# 625	CA	KN
	SWEEP	# 135	CA	KN
	THRESHOLD	DT 11	AL	KN
HARDWARE GROUP 6				
3	HINGES	CB179 4 1/2"x4"	282	ST
1	LOCKSET	NORMPX RHO	628	SC
1	CLOSER	4011 PRC	689	LC
1	KICK PLATE	K154 12" x WFS	320	SN
1	WALL STOP	5217-1033	260	SN

PRELIMINARY DO NOT USE FOR CONSTRUCTION

NO.	DESCRIPTION	BY	APP.	DD MMM YY
A	ISSUED FOR PRICE ESTIMATE	SRC	KBD	MAY 20 2015

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Tomorrow's Technology Today
300-167 Broadway, Winnipeg, Manitoba, Canada R3C 0W8
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SEAL

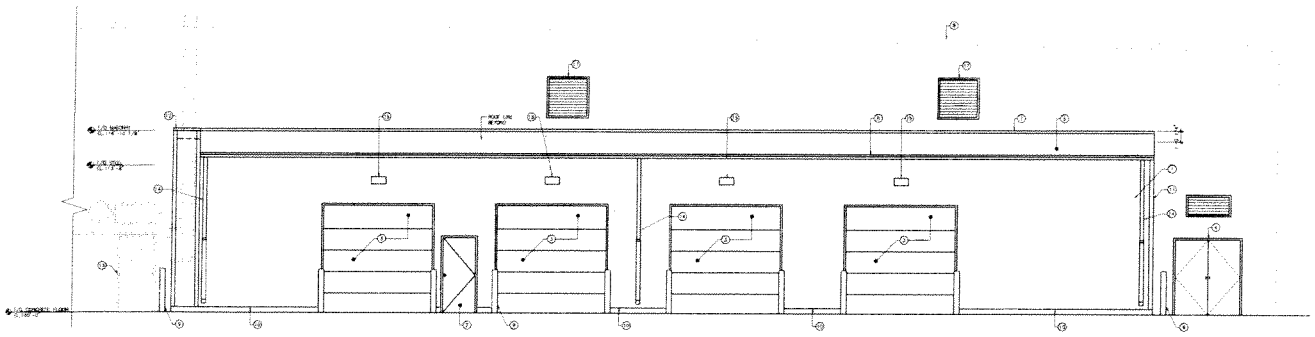
PROJECT
GATEWAY RECREATION CENTRE INC.

PROJECT
SHOP ADDITION

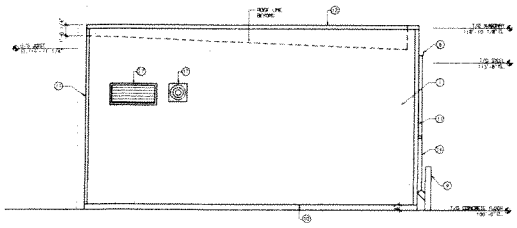
SHEET TITLE
MAIN FLOOR AND ROOF PLANS

DRAWN BY SRC	CHECKED BY KBD	SCALE AS NOTED	SHEET NO. B101
DESIGNED BY KBD	JOB NUMBER 22507	DATE MAY 20 2015	REVISION NO. A

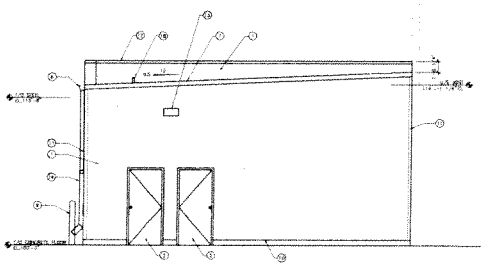
PLOT DATE: May-20-15 14:21:11 PM



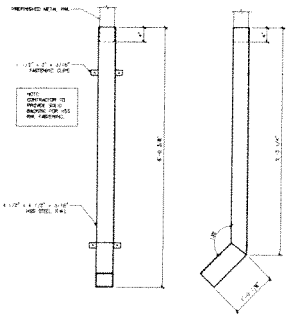
A / B200 NEW NORTH EXTERIOR ELEVATION



B / B200 WEST EXTERIOR ELEVATION



C / B200 EAST EXTERIOR ELEVATION



1 / B200 RWL DETAIL

LEGEND:

1. PREFINISHED 40G METAL CLADDING (TO MATCH EXISTING)
2. INSULATED HOLLOW METAL DOOR & FRAME (TO MATCH EXISTING)
3. INSULATED OVERHEAD DOOR
4. RELOCATED METAL DOOR & FRAME
5. PREFINISHED STANDING SEAM ROOF
6. PREFINISHED METAL GUTTER
7. PREFINISHED METAL FLASHING
8. LINE OF EXISTING BUILDING
9. STEEL PIPE BOLLARD (MIN. REFER TO DETAIL 7 ON A301
10. PREFINISHED BAKE METAL FLASHING
11. PREFINISHED METAL CORNER
12. PREFINISHED METAL CAP FLASHING
13. EXISTING DOOR
14. 4 1/2" x 4 1/2" x 3/16" HSS STEEL POST (REF. 1/ B200)
15. EXTERIOR LIGHTING
16. PREFINISHED METAL SNOW GUARD
17. REFER TO MECHANICAL

PRELIMINARY
DO NOT USE FOR CONSTRUCTION

NO	DESCRIPTION	BY	APP	DD MM YY
1	ISSUED FOR PRICE ESTIMATE	JRC	KBD	MAY 20 2015

Acutech Engineering Inc.
Tomorrow's Technology Today

GATEWAY RECREATION CENTRE INC.

SHOP ADDITION

EXTERIOR ELEVATIONS

DRAWN BY: JRC	CHECKED BY: KBD	SCALE: AS NOTED	SHEET NO: B200
PROJECT NO: KBD	JOB NUMBER: 22507	DATE: MAY 20 2015	REVISION NO: A

PLOT DATE: May-20-15 4:03:14 PM