# NOTRE DAME CATHOLIC ELEMENTARY SCHOOL GYM AND HVAC UPGRADES 6559 CASWELL ST, NIAGARA FALLS, ONTARIO, L2J 1C2

OBC DATA MATRIX

FIRM CER <sup>-</sup> CON	I NAME: TIFICATE TACT: GF	GRGU OF PRACT RGURIC AR	RIC ARC TCE NUM CHITEC	HITECTS MBER: 4 TS INCOF	INCORPO 164 RPORATED	RATED									
28 KI	NG STRE	ET EAST, I	JNIT B, S	STONEY (	CREEK, ON	, ITARIO, L8G 1J8									
NAM	E OF PRC	DJECT: NO	TRE DAM	E CATHOL	IC ELEMEN	TARY SCHOOL RE	NOVATION								
LOC	ATION: 6	559 CASWE	LL ST, NI/	AGARA FA	LLS, ONTAF	RIO, L2J 1C2						000 0.6		_	
Item				C	Ontario's 2 Data Matrix	2012 Building Co A Parts 3 and Pa	ode rt 11			OBC Reference References are to Division B unless noted			_		
1	Project I RENOVA	Description	: YMNASIU	JM AREA T		T AN EXISTING	□ New	Pa	art 11		Part 3		Part 9		
	STORAG EXISTING REPLACE METAL D	E ROOM TO S STORAGE EMENT OF 1 OORS. HV/	A KITCHI ROOM IN THE EXIST AC UPGRA	EN (NO CO ITO THE E TING WOO ADES TO O	DOKING) AN XISTING ME D DOORS V GYMNASIUN	D TO EXTEND AN CHANICAL SPACE VITH HOLLOW	Addition Alteration Change c	n of Use		1.1.2.	. [A]				
2	Major O	ccupancy(	s) Grou	p A, Divis	ion 2 (E	xisting)				3.1.2	2.1.(1)			_	
3	Building	Area (m²)	Existin	ıg 2,29	5m²	1	New 0.0m <sup>2</sup>	Total 2,2	95m²	1.4.1	.2.[A]				
4	Gross A	rea (m²)	Existin Area to	ig 2,29 o be Rene	5m² ovated 3	1 391.3m² r	New 0.0m² New 0.0m²	Total 2,2 Total 391	95m²  1.3m²	1.4.1	.2.[A]			_	
5	Number	of storeys		Abo	ove grade	1	Below grade	0		1.4.1	.2.[A] & 3.2.´	1.1		_	
7	Number	of Streets/	Fire Fig	hter Acce	ss 1					3.2.2	2.10 & 3.2.5			-	
8	Building	Classificat	ion Ex	xisting - 11	.3.3.1					3.2.2	2.2083				
9	Sprinkle	er System F	roposed			entire b	ouilding (existing)	)		3.2.2	2.2083				
						selecte	d floor areas E	XISTING (area of	alteration)	3.2.1	2.17.				
						☐ baseme	ent 🗌 in lie uired 💌 not s	eu of roof rating sprinkled		INDE	EX				
10	Standpi	pe required				Yes	No (I	Existing)		3.2.9	)			_	
11	Fire Ala	rm required	h nlvis Ad	lequate		Yes		Existing) Existing)		3.2.4	57			_	
13	High Bu	ilding				Yes				3.2.6	). <i>r</i> . )			_	
14	Permitte	ed Construc	ction		Combus	tible 🗌	Non-combustib required	ble 🛛	Both	3.2.2	2.2083				
45	Actual C		n 		Combus	tible	Non-combustib		Both	2.24				_	
16	Occupa	nt load bas	ed on		⊡ n Occuţ	n²/person bancy <u>A-2 (GYN</u>	design of /) Load 465	f building 5 (EXISTING)	persons	3.1.1	17				
17	Barrier-f	ree Design	nces			∕es □ No	(Explain)			3.8	2 & 3 3 1 1	<u>م</u>		_	
19	Req Fi Resis	uired ire stance		Horizc	ntal Assen (Existing) RR (Hours	nblies	Liste or De	ed Design No. escription (SG-2	)	3.2.2	2.2083 & 3.	2.1.4			
	Rati See Not	Rating - See Note Below F			1	Hours		N/A							
	(FF	KK)	Roof		0	_ Hours	EXISTING	S, NON COMBUS	TIBLE						
			Mezza	FRR	of Suppor Members	_ Hours	Liste or De	ed Design No.	)						
			Floors	·	1	Hours		N/A							
			Roof		0	Hours		EXISTING							
19	Spatial S	Separation	Mezza	anine uction of	1 Exterior W:	_ Hours alls		N/A		3.2.3	}			-	
	Wall	Area o EBF (m²)	of	L.D. (m)	L/H or H/L	Permitted Max. % of Openings	Proposed % of Openings	FRR (Hours)	Liste Desigi Descrip	ed n or otion	Comb. Constr.	Comb. Constr Nonc. Cladding	Non-comb. Constr.	11.2.	Da Existing Buildin classification:
	North	N/A		-	-	-	-	-	-		-	-	-		
-	South	N/A		-	-	-	-	-	-		-	-	-	11 3	Alteration to Ex
F	West	N/A		-	-	-	-	-	-		-	-			Building is:
20	Sanitary	ν Facility Sι	ummary -	- Element	ary School					3.7.4	4.3.(14)			11.4.	Reduction in Performance Le
														11.4.3.	Compensating
															Construction:
														11.5	Compliance Alternatives Proposed:

Ma	Ontario Buildi trix Part 11 Renova	Building Code Reference			
	Describe Existing Use: Construction Index: Hazard Index:	Group A-2 El Cl-6 Hl-6	ementary :	School	11.2.1 T 11.2.1.1A T 11.2.1.1B to N
	Not Applicable (no ma	jor change of occ	upancy)		
g	Basic Renovation Extensive Renovation				11.3.3.1 11.3.3.2
	Structural: By Increase in occupant loa By change of major occupa Plumbing: Sewage System:	d: ncy:	No No No No No	<ul> <li>☐ Yes</li> <li>☐ Yes</li> <li>☐ Yes</li> <li>☐ Yes</li> <li>☐ Yes</li> <li>☐ Yes</li> </ul>	11.4.2 11.4.2.1 11.4.2.2 11.4.2.3 11.4.2.4 11.4.2.5
					11.4.3
	Structural:		No No	🔲 Yes (explain	11.4.3.2
	Increase in occupant load:		No No	🗌 Yes (explain)	11.4.3.3
	Change of major occupancy	y:	No No	🗌 Yes (explain)	11.4.3.4
	Plumbing:		No	🔲 Yes (explain)	11.4.3.5
	Sewage system:	<b>.</b>	No	🗌 Yes (explain)	11.4.3.6
	■ No □ Yes (give number [s])				11.4.2



ARCHITE	LIURAL
A0.00	COVER SHEET
A0.05	SITE PLAN
A1.00	DEMOLITION FLOOR PLAN
A1.05	DEMOLITION REFLECTED CEILING PLAN
A2.00	FLOOR PLAN- GYMNASIUM
A2.05	REFLECTED CEILING PLAN
A2.10	FLOOR PLAN - LIBRARY
A2.15	ROOF PLAN
A3.00	GYMNASIUM - INTERIOR ELEVATIONS
A4.00	GYMNASIUM COURT LAYOUTS
A5.00	MILLWORK
A8.00	ROOM FINISH AND DOOR SCHEDULE

M1.00	DRAWING LIST, KEY PLAN AND LEGENDS
M2.00	GYM FLOOR PLAN - PLUMBING INSTALLATION
M3.00	GYM FLOOR PLAN - HVAC DEMOLITION
M3.01	GYM FLOOR PLAN - HVAC INSTALLATION
M3.02	GYM ROOF PLAN - HVAC INSTALLATION
M4.00	MECHANICAL DETAILS
ME5.0	MECHANICAL & ELECTRICAL SCHEDULES

0.00	ELECTRICAL LEGENDS, SYMBOLS AND DRAWING L
1.00	OVERALL PLAN
2.00	GYM FLOOR PLAN - LIGHTING DEMO
2.10	GYM FLOOR PLAN- POWER & SYSTEMS DEMO
3.00	GYM FLOOR PLAN - LIGHTING NEW
3.10	GYM FLOOR PLAN - POWER & SYSTEMS NEW
4.00	LIGHTING SCHEDULE AND DETAILS





**KEY LOCATION PLAN** SCALE: NTS

	NIAG	GARA CATHOL	IC
		N	
	EGEND B BAS P BEL B CAT LEC ELE X EXIS H FIE P HYD P LIGH IGH MAN IC NOT /C ON 0 R TRA YP TYP P UTIL /S UND /P WAL	KETBALL NET L PEDESTAL CH BASIN CTRICAL STING HYDRANT NO POLE HT POLE HOLE NHOLE IN CONTRACT CENTRE NSFORMER NFFIC SIGN ICAL LITY POLE DERSIDE OF L PACK RANCE TO BLDG.	
5 4 3 2 1 NO DRA CHE THE	ISSUED FOR ISSUED FOR ISSUED FOR ISSUED FOR ISSUED FOR RE WINGS ARE NOT CK AND VERIFY PROJECT; AND M ARCHITECTS BE	BUILDING PERMIT TENDER ZONING COMPLIANCE CLIENT REVIEW CLIENT REVIEW EVISIONS TO BE SCALED. CONTRACT ALL DIMENSIONS AND CONI MUST REPORT ANY DISCRE FORE PROCEEDING WITH T	2024-01-29 2024-01-23 2024-01-12 2023-12-22 2023-11-03 DATE DATE DATE DATE DATE DATE DATE DATE
WIT	HOUT THE WRITT	EN APPROVAL OF THE ARC	HITECTS.
1	NOTRE ELEME GYI U 65 NIAGAR	DAME CATH NTARY SCH M AND HVAC IPGRADES 59 CASWELL ST 24 FALLS, ON L2J	IOLIC OOL C
	S	ITE PLAN	
	G AR INCC		S ED
S	28 KING STONEY C Tel. 905-66 W CALE: S NOTED	STREET EAST, UN CREEK, ONTARIO, L 4-8735 Fax. 905-66 eb: www.2gai.com PROJECT:	IT B .8G 1J8 54-8737
M D	TART DATE: AY 2023 RAWN	2023 DRAWING:	-13
	HECKED P. RINT DATE	O2/01/24	UD 165drawings\12-Wo

**ISSUED FOR REFERENCE ONLY** 



- $\langle D1 \rangle$  EXTENT SHOWN AND DISPOSED OF. REMOVE AND DISPOSE OF EXISTING COVED TILE BASED ON EXPOSED FACES OF THE WALL. PATCH AND REPAIR EXISTING WALL AND FLOOR TO REMAIN AND MAKE READY TO RECEIVE NEW FINISHES. EXISTING WOOD BENCH, METAL SUPPORT BRACKETS, WOOD  $\langle$  D2  $\rangle$  Shelf and wood rail to be removed and disposed of. PATCH AND REPAIR WALLS AS REQUIRED TO MAKE READY TO
- EXISTING WOOD DOORS AND METAL FRAMES TO BE REMOVED AND DISPOSED OF. PATCH AND REPAIR OPENING AS REQUIRED TO MAKE READY TO RECEIVE NEW DOOR AND
- EXISTING METAL STUD AND PLASTER WALL TO BE REMOVED  $\langle$  D4  $\rangle$  AND DISPOSED OF. PATCH AND REPAIR EXISTING WALLS TO
- CUT NEW DOORWAY OPENING IN EXISTING CONCRETE BLOCK  $\langle$  D6  $\rangle$  Wall. Remove and dispose. Coordinate opening size PER DOOR SCHEDULE. PROVIDE NEW LINTEL OVER OPENING.
- EXCESS ADHESIVE AND MAKE SLAB READY TO RECEIVE NEW
- EXISTING WALL MOUNTED BASKETBALL NETS AND BACKSTOPS TO BE REMOVED AND DISPOSED OF. REMOVED AND DISPOSE ANY EXISTING BLOCKING BEHIND THE BACKSTOPS. PATCH AND REPAIR THE CONCRETE BLOCK WALLS TO REMAIN AND
- EXISTING WALL MOUNTED MECHANICAL UNITS TO BE REMOVED AND DISPOSED OF. REFER TO AND COORDINATE WITH MECHANICAL DRAWINGS. PATCH AND REPAIR EXISTING WALLS
- (D10) EXISTING WOOD SHELVES, CUPBOARD AND WALL MOUNTED WOOD RAILS TO BE REMOVED AND DISPOSED OF. PATCH AND REPAIR EXISTING WALL TO REMAIN AS REQUIRED TO MAKE
- EXISTING MECHANICAL UNIT TO BE REMOVED AND DISPOSED OF. REFER TO AND COORDINATE WITH MECHANICAL AND
- EXISTING WALL PADS TO BE REMOVED AND STORED IN A SAFE (D12) PLACE FOR REUSE. PATCH AND REPAIR HOLES IN WALL AND MAKE READY TO RECEIVE NEW WALL FINISH. EXISTING
- EXISTING SHELVES TO BE REMOVED AND DISPOSED OF. PATCH AND REPAIR WALLS AS REQUIRED TO MAKE READY TO
- REMOVE AND DISPOSE OF EXISTING CONCRETE FLOOR AND GRANULAR MATERIAL BELOW TO ALLOW OF THE INSTALLATION OF NEW SANITARY PIPE (ALLOW FOR 180mm SLAB THICKNESS).
- SHOWN. OPENING TO EXTEND FROM FLOOR SLAB TO 3000mm

NIAC Dis <b>ABBREV</b> BBH B EP E EX E	CARA CATHOL STRICT SCHOOL BOARD VIATION LEC BASE BOARD HEATER ELECTRIC PANEL SXISTING	IC <b>Gend</b> R
	LE NORTH	
4 ISSUED FOR 3 ISSUED FOR 2 ISSUED FOR 1 ISSUED FOR NO RE	BUILDING PERMIT TENDER CLIENT REVIEW CLIENT REVIEW EVISIONS	2024-01-29 2024-01-23 2023-12-22 2023-11-03 DATE
DRAWINGS ARE NOT CHECK AND VERIFY THE PROJECT; AND I THE ARCHITECTS BE THE USE OF THIS DF WITHOUT THE WRIT	TO BE SCALED. CONTRACT ALL DIMENSIONS AND CONI MUST REPORT ANY DISCRE FORE PROCEEDING WITH 1 AWING OR PART THEREOF TEN APPROVAL OF THE ARC	OR MUS I DITIONS ON PANCIES TO 'HE WORK. IS FORBIDDEN CHITECTS.
NOTRE ELEME GYI U	DAME CATH NTARY SCH M AND HVAC IPGRADES	IOLIC OOL C
	TION FLOOR	<sup>1C2</sup> PLAN
CALE CALE CALE	BRGURIC CHITECTS DRPORATI STREET EAST, UN CREEK, ONTARIO, L 4-8735 Fax. 905-66 eb: www.2gai.com	S ED IT B .8G 1J8 34-8737
SCALE: AS NOTED START DATE: MAY 2023 DRAWN DW CHECKED W.P.	PROJECT: 2023 DRAWING: A1.00	-13

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AREA OF WORK PART A



### KEY PLAN SCALE: NTS

- COORDINATE AND VERIFY WITH THE OWNER ALL ITEMS TO BE
- 2. CAUSE NO DAMAGE TO EXISTING CONSTRUCTION TO REMAIN. TAKE CARE NOT TO ENCROACH ON ADJACENT OCCUPIED AREAS OR AREAS NOT WITHIN THE SCOPE OF WORK. PROTECT ALL EXISTING FINISHES, DOORS, FRAMES. ETC. WHICH ARE TO REMAIN. PATCH AND MAKE GOOD ALL EXISTING ADJACENT SURFACES FINISHES & MATERIALS WHERE
- MECHANICAL AND ELECTRICAL ITEMS SHOWN, I.E. DUCTWORK, PIPING, ELECTRICAL CONDUITS, LIGHT FIXTURES, ETC. ARE FOR REFERENCE ONLY AND ARE NOT INCLUSIVE. REFER TO MECHANICAL AND ELECTRICAL DRAWING FOR ALL RELATED NEW AND DEMOLITION WORK
- 4. CONNECTIONS OF ALL NON STRUCTURAL ELEMENTS AND EQUIPMENT TO SUPPORTING STRUCTURE TO BE DESIGNED TO COMPLY WITH ARTICLE 4.1.8.18 OF THE 2012 ONTARIO BUILDING CODE FOR SEISMIC LOADS. CONTRACTOR TO SUBMIT SHOP DRAWINGS SHOWING THESE CONNECTIONS STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER FOR APPROVAL BY ARCHITECT PRIOR TO ANY WORK BEING EXECUTED.
- IF CONTRACTOR ENCOUNTERS ANY SUSPECTED ASBESTOS CONTAINING MATERIALS (ACM) MATERIALS, THEY ARE TO ADVISE ARCHITECT & CLIENT IMMEDIATELY FOR FURTHER CONFIRMATION &
- TRANSITIONS BETWEEN NEW AND EXISTING FLOOR FINISHES TO BE MADE SMOOTH AND CONTINUOUS. GRIND EXISTING FLOOR SLAB ACROSS DOOR THRESHOLDS TO SUIT THICKNESS OF NEW MATERIALS AND ENSURE NEW MATERIAL IS INSTALLED FLUSH WITH EXISTING. ALL PATCHING AND REPAIRING OF SURFACES ARE NOT NECESSARILY SHOWN. PATCH AND REPAIR ALL EXISTING SURFACES SCHEDULED TO
- RECEIVE NEW FINISHES TO THAT ALL SURFACES WHEN COMPLETE 8. CONTRACTOR TO ALLOW FOR PATCHING AND REPAIR AND REFINISHING OF ALL EXISTING ADJACENT MATERIALS, SURFACES & FINISHES.
- 9. CONTRACTOR TO ALLOW FOR PATCHING AND REPAIR OF ADJACENT MATERIALS AT ALL ELECTRICAL LIGHTING, EQUIPMENT, CONDUIT, RACEWAYS, MECHANICAL PLUMBING, PIPING, ETC. TO BE REMOVED, RELOCATED, REPLACED, INSTALLED. REFER TO ELECTRICAL DRAWINGS.
- 10. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING FLOOR FINISHES TO REMAIN, WALLS AND WALL MOUNTED EQUIPMENT FOR THE
- 11. CONTRACTOR IS RESPONSIBLE FOR SWEEPING THE SITE DAILY AND CONDUCTING A FINAL CLEANING AT THE END OF THE PROJECT. THE FINAL CLEANING INCLUDES A COMPLETE PRE-MOVE CLEANING, WIPING DOWN ALL WALLS, ALL NEW FIXTURES AND MILLWORK, ALL NEW DOOR FRAMES AND SILLS, SWEEPING AND MOPPING THE FLOORS. THE CONTRACTOR WILL PROVIDE ALL EQUIPMENT NECESSARY TO CLEAN THE SITE PRIOR TO CLIENT OCCUPANCY. THE CONTRACTOR WILL NOT BE PERMITTED TO USE CLIENTS CARE TAKING TOOLS AND EQUIPMENT;
- 12. COORDINATE WITH MECHANICAL & ELECTRICAL DOCUMENTS FOR FULL EXTENT OF ALTERATIONS TO EXISTING PLUMBING, HEATING, VENTILATION, SPRINKLER SYSTEMS, ELECTRICAL PANELS, FIXTURES, CONDUITS, ETC. WITHIN EXISTING TO REMAIN.
- 13. WHERE EXISTING SURFACES ARE DISTURBED DUE TO DEMOLITION OR ALTERATIONS, AND NOT REQUIRED TO BE COVERED WITH NEW FINISHES, SUCH SURFACES SHALL BE MADE GOOD TO MATCH EXISTING
- 14. MAKE GOOD ALL MATERIALS AND FINISHES WHERE DISTURBED AND WHERE ALTERATIONS OCCUR. REFER TO ALL DOCUMENTS FOR EXTENT OF WORK REQUIRED. MAKING GOOD INCLUDES ALL WORK ASSOCIATED WITH THE REMOVAL OF EXISTING AND INSTALLATION OF NEW SERVICES, ETC. (EXAMPLES: PLUMBING / HEATING MODIFICATIONS IN EXISTING BUILDING, INSTALLATION OF NEW DUCTS IN EXISTING
- 15. WHERE EXISTING WALLS, PARTITIONS / FURRINGS, BUILDING FITMENTS, HOUSEKEEPING PADS, ETC., ARE BEING REMOVED, MAKE GOOD SUBSTRATES TO RECEIVE NEW SPECIFIED MATERIALS AND FINISHES.

- DEMOLITION NOTES
- $\left< D1 \right> \text{ EXISTING LIGHTS TO BE REMOVED AND DISPOSED OF. REFER TO AND COORDINATE WITH ELECTRICAL DRAWINGS. }$
- EXISTING CEILING MOUNTED MECHANICAL UNIT TO BE D2 REMOVED AND DISPOSED OF. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS ELECTRICAL DRAWINGS
- EXISTING GYPSUM BOARD CEILING AND SUSPENSION SYSTEM  $\langle D3 \rangle$ TO BE REMOVED AND DISPOSED OF TO THE EXTENT SHOWN. CONTRACTOR TO SITE VERIFY SIZE OF OPENING REQUIRED TO REMOVE ADJACENT WALL AND ADJUST ACCORDINGLY.
- $\left< D4 \right> \begin{array}{c} \mbox{EXISTING CEILING FAN TO BE REMOVED AND DISPOSED OF.} \\ \mbox{REFER TO AND COORDINATE WITH MECHANICAL AND} \end{array} \right.$ ELECTRICAL DRAWINGS.
- $\left< D5 \right>$  EXISTING GYPSUM BOARD AND ME BE REMOVED AND DISPOSED OF. EXISTING GYPSUM BOARD AND METAL STUD CHASE WALL TO
- CONTRACTOR TO COORDINATE TEMPORARY REMOVAL OF  $\langle$  D6  $\rangle$  EXISTING ACOUSTIC CEILING TILES AND WHERE NEEDED T-BAR TO SUIT MECHANICAL DEMOLITION AND CONSTRUCTION LOCATED ABOVE THE CEILING. REFER TO MECHANICAL DRAWINGS. ALLOW FOR 20 NEW MATCHING REPLACEMENT TILES TO COVER ANY DAMAGED TILES

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4 ISSUED FOR 3 ISSUED FOR	BUILDING PERMIT	2024-01-29 2024-01-23
2 ISSUED FOR 1 ISSUED FOR NO RE	CLIENT REVIEW CLIENT REVIEW EVISIONS	2023-12-22 2023-11-03 DATE
DRAWINGS ARE NOT CHECK AND VERIFY THE PROJECT; AND THE ARCHITECTS BI THE USE OF THIS DF WITHOUT THE WRIT	TO BE SCALED. CONTRACT ALL DIMENSIONS AND CONI MUST REPORT ANY DISCRE FFORE PROCEEDING WITH T RAWING OR PART THEREOF TEN APPROVAL OF THE ARC	TOR MUST DITIONS ON PANCIES TO THE WORK. IS FORBIDDEN SHITECTS
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	JPGRADES	102
DEMOLI CE	TION REFLE	CTED
	GRGURIC	
AR INCC		S ED
28 KING STONEY ( Tel. 905-66	STREET EAST, UN CREEK, ONTARIO, L 64-8735 Fax. 905-66	IT B .8G 1J8 64-8737
SCALE: AS NOTED	PROJECT:	
START DATE: MAY 2023	2023	-13
DRAWN DW CHECKED	A1.05	;
W.P.	1	



NIAGARA CATHOLIC DISTRICT SCHOOL BOARD						
Abbre via ion close controlBB-xBASKETBALL BACKBOARDBBHBASE BOARD HEATEREPELECTRIC PANELEXEXISTINGWBWHITE BOARDWPWALL PADW/WITH# 45 # 45 #EXISTING 45min FIRE RATING(EXISTING)EXISTING 1hr FIRE RATING(EXISTING)						
		TRUE NORTH				
5 4	ISSUED FOR	BUILDING PERMIT TENDER	2024-01-29 2024-01-23			
3 2	ISSUED FOR	ZONING COMPLIANCE	2024-01-12 2023-12-22			
1	ISSUED FOR		2023-11-03			
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THE	PROJECT; AND I ARCHITECTS BE	ALL DIMENSIONS AND CONI MUST REPORT ANY DISCRE FORE PROCEEDING WITH T	PANCIES TO THE WORK.			
	NOTRE	DAME CATH				
	ELEME	NTARY SCH	OOL			
	GYI	MANDHVA	C			
	65	59 CASWELL ST	105			
	NIAGAR	A FALLS, ON L2J	1C2			
FLOOR PLAN - GYMNASIUM						
	G	RGURIC				
	AR	CHITECTS	5			
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	Tel. 905-66	2∩⊂⊏∩, UNTARIO, L 4-8735 Fax. 905-66 eb: www 2dai com	.00 IJ8 64-8737			
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P	RINT DATE	02/01/24				

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CTRICAL DRAWINGS FOR ACTUAL FIXTURE TYPES
ND ELECTRICAL ITEMS SHOWN, I.E. DUCTWORK,
XTURES, ETC. ARE FOR REFERENCE ONLY
CLUSIVE. REFER TO MECHANICAL AND
AWINGS FOR ALL RELATED WORK.





4	ISSUED FOR BUILDING PERMIT	2024-01-29			
3	ISSUED FOR TENDER	2024-01-23			
2	ISSUED FOR CLIENT REVIEW	2023-12-22			
1	ISSUED FOR CLIENT REVIEW	2023-11-03			
NO	REVISIONS	DATE			
DRA CHE THE THE THE WITI	DRAWINGS ARE NOT TO BE SCALED. CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT; AND MUST REPORT ANY DISCREPANCIES TO THE ARCHITECTS BEFORE PROCEEDING WITH THE WORK. THE USE OF THIS DRAWING OR PART THEREOF IS FORBIDDEN WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECTS.				
٩	NOTRE DAME CATH ELEMENTARY SCH GYM AND HVAC UPGRADES 6559 CASWELL ST NIAGARA FALLS, ON 121	IOLIC OOL C			

<b>REFLECTED CEILING</b>
PLAN

GRGURIC
ARCHITECTS
INCORPORATED

28 KING STREET EAST, UNIT B STONEY CREEK, ONTARIO, L8G 1J8 Tel. 905-664-8735 Fax. 905-664-8737 Web: www.2gai.com

SCALE:	PROJECT:
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START DATE:	2023-13
MAY 2023	
DRAWN	DRAWING:
DW	
CHECKED	AZ.U5
W.P.	

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GENERAL NOTES

- COORDINATE AND VERIFY WITH THE OWNER ALL ITEMS TO BE SALVAGED, MOVED & STORED PRIOR TO DEMOLITION.
- 2. CAUSE NO DAMAGE TO EXISTING CONSTRUCTION TO REMAIN. TAKE CARE NOT TO ENCROACH ON ADJACENT OCCUPIED AREAS OR AREAS NOT WITHIN THE SCOPE OF WORK. PROTECT ALL EXISTING FINISHES, DOORS, FRAMES. ETC. WHICH ARE TO REMAIN. PATCH AND MAKE GOOD ALL EXISTING ADJACENT SURFACES FINISHES & MATERIALS WHERE DISTURBED BY NEW CONSTRUCTION AT NO EXTRA COST TO THE PROJECT.
- 3. MECHANICAL AND ELECTRICAL ITEMS SHOWN, I.E. DUCTWORK, PIPING, ELECTRICAL CONDUITS, LIGHT FIXTURES, ETC. ARE FOR REFERENCE ONLY AND ARE NOT INCLUSIVE. REFER TO MECHANICAL AND ELECTRICAL DRAWING FOR ALL RELATED NEW AND DEMOLITION WORK REQUIRED.
- 4. CONNECTIONS OF ALL NON STRUCTURAL ELEMENTS AND EQUIPMENT TO SUPPORTING STRUCTURE TO BE DESIGNED TO COMPLY WITH ARTICLE 4.1.8.18 OF THE 2012 ONTARIO BUILDING CODE FOR SEISMIC LOADS. CONTRACTOR TO SUBMIT SHOP DRAWINGS SHOWING THESE CONNECTIONS STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER FOR APPROVAL BY ARCHITECT PRIOR TO ANY WORK BEING EXECUTED.
- 5. IF CONTRACTOR ENCOUNTERS ANY SUSPECTED ASBESTOS CONTAINING

MATERIALS (ACM) MATERIALS, THEY ARE TO ADVISE ARCHITECT & CLIENT IMMEDIATELY FOR FURTHER CONFIRMATION & INSTRUCTIONS.

- 6. TRANSITIONS BETWEEN NEW AND EXISTING FLOOR FINISHES TO BE MADE SMOOTH AND CONTINUOUS. GRIND EXISTING FLOOR SLAB ACROSS DOOR THRESHOLDS TO SUIT THICKNESS OF NEW MATERIALS AND ENSURE NEW MATERIAL IS INSTALLED FLUSH WITH EXISTING.
- 7. ALL PATCHING AND REPAIRING OF SURFACES ARE NOT NECESSARILY SHOWN. PATCH AND REPAIR ALL EXISTING SURFACES SCHEDULED TO RECEIVE NEW FINISHES TO THAT ALL SURFACES WHEN COMPLETE RESEMBLE A NEW INSTALLATION.
- 8. CONTRACTOR TO ALLOW FOR PATCHING AND REPAIR AND REFINISHING OF ALL EXISTING ADJACENT MATERIALS, SURFACES & FINISHES.
- 9. CONTRACTOR TO ALLOW FOR PATCHING AND REPAIR OF ADJACENT MATERIALS AT ALL ELECTRICAL LIGHTING, EQUIPMENT, CONDUIT, RACEWAYS, MECHANICAL PLUMBING, PIPING, ETC. TO BE REMOVED, RELOCATED, REPLACED, INSTALLED. REFER TO ELECTRICAL DRAWINGS. PREPARE ALL SURFACES FOR NEW FINISHES.
- 10. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING FLOOR



### FINISHES TO REMAIN, WALLS AND WALL MOUNTED EQUIPMENT FOR THE DURATION OF THE PROJECT.

11. CONTRACTOR IS RESPONSIBLE FOR SWEEPING THE SITE DAILY AND CONDUCTING A FINAL CLEANING AT THE END OF THE PROJECT. THE FINAL CLEANING INCLUDES A COMPLETE PRE-MOVE CLEANING; WIPING DOWN ALL WALLS, ALL NEW FIXTURES AND MILLWORK, ALL NEW DOOR FRAMES AND SILLS, SWEEPING AND MOPPING THE FLOORS. THE CONTRACTOR WILL PROVIDE ALL EQUIPMENT NECESSARY TO CLEAN THE SITE PRIOR TO CLIENT OCCUPANCY. THE CONTRACTOR WILL NOT BE PERMITTED TO USE CLIENTS CARE TAKING TOOLS AND EQUIPMENT; MOPS, BROOMS, BAGS, BINS, ETC.

12. COORDINATE WITH MECHANICAL & ELECTRICAL DOCUMENTS FOR FULL EXTENT OF ALTERATIONS TO EXISTING PLUMBING, HEATING, VENTILATION, SPRINKLER SYSTEMS, ELECTRICAL PANELS, FIXTURES, CONDUITS, ETC. WITHIN EXISTING TO REMAIN.

13. WHERE EXISTING SURFACES ARE DISTURBED DUE TO DEMOLITION OR ALTERATIONS, AND NOT REQUIRED TO BE COVERED WITH NEW FINISHES, SUCH SURFACES SHALL BE MADE GOOD TO MATCH EXISTING ADJACENT MATERIALS AND FINISHES.

14. MAKE GOOD ALL MATERIALS AND FINISHES WHERE DISTURBED AND WHERE

### ALTERATIONS OCCUR. REFER TO ALL DOCUMENTS FOR EXTENT OF WORK REQUIRED. MAKING GOOD INCLUDES ALL WORK ASSOCIATED WITH THE REMOVAL OF EXISTING AND INSTALLATION OF NEW SERVICES, ETC. (EXAMPLES: PLUMBING / HEATING MODIFICATIONS IN EXISTING BUILDING, INSTALLATION OF NEW DUCTS IN EXISTING BUILDING, ETC.)

15. WHERE EXISTING WALLS, PARTITIONS / FURRINGS, BUILDING FITMENTS, HOUSEKEEPING PADS, ETC., ARE BEING REMOVED, MAKE GOOD SUBSTRATES TO RECEIVE NEW SPECIFIED MATERIALS AND FINISHES.

### **DEMOLITION NOTES**



- EXISTING WHITEBOARD TO BE REMOVED AND RELOCATED.  $\langle D2 \rangle$  PATCH AND REPAIR EXISTING WALL AS REQUIRED AND MAKE READY TO RECEIVE NEW FINISHES
- EXISTING METAL SHELVES AND WALL MOUNTS TO BE  $\langle$  D3  $\rangle$  REMOVED AND DISPOSED OF. PATCH AND REPAIR EXISTING WALL AS REQUIRED AND MAKE READY TO RECEIVE NEW WALL FINISHES.
- EXISTING NORTH SEGMENT OF 1830mm x 1220mm TACK BOARD  $\langle$  D4  $\rangle$  TO BE REMOVED AND DISPOSED OF. PATCH AND REPAIR WALL AS REQUIRED AND MAKE READY TO RECEIVE NEW WALL FINISH
- EXISTING A/V CONNECTION AND SPEAKERS TO BE REMOVED  $\langle$  D5  $\rangle$  and relocated. Patch and repair walls as required AND MAKE READY TO RECEIVE NEW WALL FINISH
- $\langle D6 \rangle$  EXISTING CEILING FAN TO BE REMOVED AND RELOCATED. REFER TO AND COORDINATE WITH ELECTRICAL DRAWINGS

### CONSTRUCTION NOTES



- RELOCATED A/V CONNECTION AND (C3) SPEAKERS.
- PROVIDE NEW MILLWORK SHELVES. REFER (C4 ) TO DETAILS 4 AND 5 ON A2.10
- RELOCATED CEILING MOUNTED FAN. REFER (C5) TO AND COORDINATE WITH ELECTRICAL DRAWINGS
- DENOTES EXTENT OF EX. EAST WALL TO BE (C6) PAINTED. REFER TO SOUTH ELEVATION FOR EXTENT PAINTING. NEW PAINT TO MATCH EXISTING
- DENOTES NEW PAINTING EXTENT INCLUDES ( C7 ) DOOR ALCOVE WALL. PAINT OUT EXPOSED EMT CONDUITS. EX DOOR AND FRAME TO REMAIN ARE NOT TO BE PAINTED
- DENOTES EXTENT OF EX. SOUTH WALL TO BE ( C8 ) PAINTED. INCLUDES WOOD BASE ON THIS ELEVATION. REFER TO SOUTH ELEVATION FOR EXTENT PAINTING. NEW PAINT TO MATCH EXISTING



MM-2

MM-2

8590± (PAINT)



ELEVATION B



KEY PLAN SCALE: NTS



MM-2

BB-> BBH EP EX WB WP W/ 0 45 (EXIS	NIAC DIS BRE B B B B B B B B B B B B B B B B B B	CARA CATI STRICT SCHOOL BU VIATION BASKETBALL BA BASE BOARD H ELECTRIC PANE WITE BOARD VALL PAD VITH EXISTING 45min EXISTING 1hr FI	HOLIC DARD LEGEN ACKBOARE EATER EL	NG G	
5 IS 4 IS 3 IS 2 IS 1 IS NO DRAWIN CHECK THE PR THE AR	SUED FOR SUED FOR	BUILDING PERMI TENDER ZONING COMPLI CLIENT REVIEW CLIENT REVIEW CLIENT REVIEW EVISIONS	T 2024 ANCE 2024 ANCE 2024 DA DO DO DISCREPANCIE S WITH THE WC	01-29 01-23 01-23 01-12 3-12-22 3-11-03 ATE IST S ON ES TO JRK.	
NC	DTRE LEME GYI L NIAGAF	DAME CANTARY S M AND H JPGRADE 59 CASWELL A FALLS, ON	ATHOL SCHOC VAC ES ST I L2J 1C2	IC JL	
		OOR PLA LIBRARY			
SCAL AS N STAR MAY DRAV DW CHEC W.P. PRIN S:Data12 A2.00-Fr	TONEY ( I. 905-66 W E: DTED T DATE: 2023 VN SKED <u>T DATE</u> 0232023-13 N oor_Plan(2023-13 N	CREEK, ONTA 24-8735 Fax. 9 26: www.2gai.o PROJECT: 2022 DRAWING: A2.	RIO, L8G 1 205-664-873 205-7555 205-7555 205-7555 205-7555 205-7555 205-7555 205-7555 205-7555 205-75555 205-7	J8 37 <b>3</b> ngs\12-Working	J Drawings\



AREA OF WORK ROOF

NEW RIGID INSULATION TO MATCH EX (APPROX 150mm) 

A2.15 SCALE: 1:10 \_ 75 150 2 3

3 DETAIL - ROOF MEMBRANE SPLICE A2.15 SCALE: 1:5





NIAGARA CATHOLIC DISTRICT SCHOOL BOARD

CONTINUOUS

EXISTING

COMPLETE WITH

2024-01-29

2024-01-23

2023-12-22

2023-11-0 DATE

REVISIONS







NIAGARA CATHOLIC								
APPROX A BB-x E BBH E CWT C EX E GL C NIC N PNT F RB F WB V WP V W/ V	EXISTING 1hr FIRE RATING							
4 ISSUED FOR 3 ISSUED FOR 2 ISSUED FOR 1 ISSUED FOR 1 ISSUED FOR NO RE DRAWINGS ARE NOT CHECK AND VERIFY THE PROJECT; AND THE ARCHITECTS BE THE USE OF THIS DF WITHOUT THE WRIT	BUILDING PERMIT TENDER CLIENT REVIEW CLIENT REVIEW SVISIONS TO BE SCALED. CONTRAC ALL DIMENSIONS AND CONI MUST REPORT ANY DISCRE FORE PROCEEDING WITH T RAWING OR PART THEREOF TEN APPROVAL OF THE ARC	2024-01-29 2024-01-23 2023-12-22 2023-11-03 DATE TOR MUST DITIONS ON PANCIES TO HE WORK. IS FORBIDDEN CHITECTS.						
NOTRE ELEME GY L 65 NIAGAF	DAME CATH NTARY SCH M AND HVAC JPGRADES 59 CASWELL ST RA FALLS, ON L2J							
GYMNASIUM - INTERIOR ELEVATIONS GRGURIC ARCHITECTS INCORPORATED 28 KING STREET EAST, UNIT B STONEY CREEK, ONTARIO, L8G 1J8 Tel. 905-664-8735 Fax. 905-664-8737 Web: WWW 20ai com								
SCALE: AS NOTED START DATE: MAY 2023 DRAWN DW CHECKED W.P. PRINT DATE	PROJECT: 2023 DRAWING: A3.00	-13						





KEY PLAN SCALE: NTS







ROOM	ROOM	DOOR	DOO	R/SC	REEN						FRA	ME			
NO	NAME	NO.	WIDTH	HEIGHT	ТНК	FIRE	TYPE	E MAT'L	FIN.	GLASS	TYPE	MAT'L	FIN.	GLASS	REMARKS
GROUN	ND FLOOR														
105	STORAGE	105 A	EX	EX	EX	EX	EX	EX HM	PAINT	EX	EX	EX HM	PAINT	EX	EX HM DOOR AND FRAME TO BE REPAINTED
106	GYMNASIUM	106 A	EX	EX	EX	EX	EX	EX HM	PAINT	EX	EX	EX HM	PAINT	EX	EX HM DOOR AND FRAME TO BE REPAINTED
106	GYMNASIUM	106 B	EX	EX	EX	EX	EX	EX HM	PAINT	EX	EX	EX HM	PAINT	EX	EX HM DOOR AND FRAME TO BE REPAINTED (INTERIOR ONLY
106	GYMNASIUM	106 C	EX	EX	EX	EX	EX	EX HM	PAINT	EX	EX	EX HM	PAINT	EX	EX HM DOOR AND FRAME TO BE REPAINTED (INTERIOR ONLY
106	GYMNASIUM	106 D	EX	EX	EX	EX	EX	EX HM	PAINT	EX	EX	EX HM	PAINT	EX	EX HM DOOR AND FRAME TO BE REPAINTED
106A	GYM EQUIP. ROOM	106A A	2 X 870 (EX)	2082 (EX)	44	3/4 HR	1	НМ	PAINT	-	В	НМ	PAINT	-	CL, LS; NEW HM DOOR AND FRAME IN EX OPENING (FV)
106B	KITCHENETTE	106B A	950	2082	44	3/4 HR	2	НМ	PAINT	WG	А	НМ	PAINT	-	
106B	KITCHENETTE	106B B	950	2082	44	3/4 HR	1	НМ	PAINT	-	А	НМ	PAINT	-	
107	SUPPLY STORAGE ROOM	107 A	EX	EX	EX	EX	EX	EX HM	PAINT	EX	EX	EX HM	PAINT	EX	EX HM DOOR AND FRAME TO BE REPAINTED
111	STORAGE ROOM	111 A	EX	EX	EX	EX	EX	EX HM	PAINT	EX	EX	EX HM	PAINT	EX	EX HM DOOR AND FRAME TO BE REPAINTED

### DOOR/SCREEN SCHEDULE NOTES

1. GENERAL CONTRACTOR TO FIELD VERIFY ALL DOOR & FRAME / SCREEN QUANTITIES & DIMENSIONS PRIOR TO FABRICATION

2. GENERAL CONTRACTOR TO CO-ORDINATE LOCATION & INSTALLATION OF PUSH BUTTON / AUTOMATIC DOOR OPERATIONS AND ALL OTHER RELATED TRADES. TO BE SUPPLIED BY GENERAL CONTRACTOR & INSTALLED BY ELECTRICAL

3. REFER TO DOOR SCHEDULE FOR FIRE RESISTANCE RATINGS FOR DOOR, FRAMES & GLAZED FRAMES / SCREENS.

4. ALL HM. DOORS & FRAMES TO BE PAINTED.

5. REFER TO PLANS / DETAILS & WALL SECTIONS FOR LOCATIONS OF REQUIRED STEEL LINTELS / ANGLES (BY GENERAL CONTRACTOR) AND ANY FORMED ALUMINUM CLOSURE ANGLES OR SUPPORTS FOR DOOR / FRAMES (BY DOOR / FRAME INSTALLER)

6. AT ALL EXTERIOR DOORS PROVIDE CONTINUOUS SEALANT & BACKER ROD AROUND PERIMETER EDGES OF FRAME (TYP. FOR BOTH EXTERIOR & INTERIOR SIDES)

7. REFER TO DOOR HARDWARE SCHEDULE FOR ALL HOLD OPEN DEVICES, STRIKES, SECURITY, DOOR OPENERS, CLOSERS, PANIC HARDWARE, OVERHEAD STOPS, PUSH & KICK PLATES, ETC. & ANY OTHER DOOR HARDWARE REQUIREMENTS.

## **ABBREVIATION LEGEND**



### DOOR/FRAME TYPES

### **ROOM FINISH SCHEDULE**

RM.	ROOM	FLOOR	FINISH	WALLS		CEILING		
NO.	NAME	FINISH	BASE	MAT'L	FINISH	MAT'L	FINISH	HEIGHT
GRO	OUND FLOOR							
105	STORAGE	EX	EX	EX CONC. BLOCK	PAINT	EX GYP. BOARD	PAINT	2745 (EX)
106	GYMNASIUM	SP FLR	RB	EX CONC. BLOCK EX CONC (PANEL)	PAINT PAINT	EXPOSED MTL DECK	PAINT	7350 (EX)
106A	GYM EQUIPMENT ROOM	EX	-	EX CONC. BLOCK	-	EXPOSED	-	3000 (EX)
106B	KITCHEN	VCT	RB	EX CONC. BLOCK CONC BLOCK	PAINT PAINT	ACT-1		2745
107	SUPPLY STORAGE	VCT	RB	EX CONC. BLOCK	PAINT	EX GYP. BOARD	PAINT	2975 (EX)
111	STORAGE	EX	EX	EX CONC. BLOCK	PAINT	EX GYP. BOARD	PAINT	2745 (EX)
120	LIBRARY	EX	EX	EX CONC. BLOCK	PAINT	EX ACT	-	2800 (EX)

### **ROOM FINISH SCHEDULE NOTES**

- 1. SCHEDULES ARE TO BE READ IN CONJUNCTION 4. MAKE GOOD ALL MATERIALS AND FINISHED WHERE WITH ALL DRAWINGS AND SPECIFICATIONS. 2. PAINT ALL EXPOSED MISCELLANEOUS METALS AND MECHANICAL AND ELECTRICAL DOCUMENTS FOR SERVICES (E.G. DUCTS, CONDUITS, PIPING, ETC.) FULL EXTENT OF WORK REQUIRED. NOTE THAT WHERE CEILINGS AND WALLS ARE SCHEDULED TO BE PAINTED.
- 3. EXISTING WALLS SHALL BE CHASED AND OPENINGS DRAWINGS. CREATED AS REQUIRED TO EXECUTE THE WORK.

DISTURBED AND ALTERATIONS OCCUR. REFER TO MAKING GOOD INCLUDES WORK ASSOCIATED WITH THE INSTALLATION OF SERVICES SHOWN ON

UNO VCT VAR UNLESS NOTED OTHERWISE VINYL COMPOSITE TILE VARIES WG WS WIRED GLASS WEATHER STRIPPING W/ WITH

> $\langle \# \rangle$  denotes door number A / DESIGNATION TAG ON PLAN



## TYPICAL HM FRAME PLAN DETAILS





### GENERAL NOTES

- 1. THESE DOCUMENTS ARE TO BE USED ONLY BY THE PARTY WITH WHOM DFE HAS ENTERED INTO A CONTRACT.
- 2. THE USE OF THESE DRAWINGS IS LIMITED TO THAT IDENTIFIED IN THE REVISION COLUMN.
- 3. THE STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2012 ONTARIO BUILDING CODE LATEST EDITION INCLUDING ALL THE LATEST STANDARDS REFERENCED THEREIN, AND ANY APPLICABLE ACTS OF AUTHORITY. CONSTRUCTION PRACTICES SHALL BE ACCORDING TO THE SAME. USE THE LATEST VERSIONS OF STANDARDS AND CODES LISTED BELOW.
- 4. DO NOT SCALE THESE DRAWINGS. ERRORS MADE BECAUSE OF SCALING THESE DRAWINGS ARE RESPONSIBILITY OF THE PARTY WHO USED THE DRAWINGS.
- 5. WHERE DISCREPANCIES EXIST, THE MOST STRINGENT SHALL PREVAIL. NOTIFY THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- 6. STRUCTURAL DRAWINGS TO BE USED TOGETHER WITH ALL OTHER SPECIFICATIONS AND CONTRACT DOCUMENTS.
- 7. REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS AND SIZES OF HOLES, SUMP PITS, TRENCHES, CURBS, BOLTS, SLEEVES, OPENINGS, ETC.
- 8. THE CONTRACTOR SHALL BECOME FAMILIARIZED WITH THE PROJECT ON SITE. INCLUDING EXISTING CONSTRUCTION. ANY ALTERATIONS FROM ASSUMED IN THE DRAWINGS MUST BE REPORTED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- 9. THE ENGINEER MUST APPROVE SUBSTITUTIONS FOR SPECIFIED PRODUCTS AND MATERIALS.
- 10. ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS - 0.REG. 213/91.
- 11. THE CONTRACTOR SHALL PROVIDE DESIGN AND CONSTRUCTION OF HORIZONTAL AND VERTICAL SHORING AND TEMPORARY BRACING AS PER 0.REG 213/91. THE CONTRACTOR SHALL PROVIDE BRACING, SHORING, SHEET PILING ETC. TO PROTECT EXISTING OR ADJACENT STRUCTURES AFFECTED BY THIS WORK.
- 12. AN INDEPENDENT INSPECTION AND TESTING COMPANY SHALL PROVIDE TESTS TO PROVE THAT CONSTRUCTION IS IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS. REQUIRED TESTING SHALL BE AS PER THE TESTING AND INSPECTION TABLE BELOW.
- 13. DOYTCH & FILO ENGINEERING WILL PROVIDE GENERAL REVIEW OF CONSTRUCTION. DOYTCH & FILO ENGINEERING WILL REVIEW SHOP DRAWINGS FOR GENERAL CONFORMITY WITH THE CONTRACT DOCUMENTS PREPARED BY "DOYTCH & FILO". THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PERFORMANCE OF THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. "DOYTCH & FILO" IS NOT RESPONSIBLE FOR THE FAILURE OF THE CONTRACTOR TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. REVIEWED SHOP DRAWINGS DO NOT RELIEVE CONTRACTORS FROM RESPONSIBILITY FOR THEIR MISTAKES.
- 14. SHOP DRAWINGS MUST BE SEALED BY PROFESSIONAL ENGINEER BEFORE BEING SUBMITTED TO DFE FOR REVIEW, U.N.O.
- 15. THE OWNER AND THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF CONSTRUCTION PROGRESS, AND THEY SHALL INVITE THE ENGINEER TO COMPLETE GENERAL REVIEWS.

### OUNDATIONS

- 1. ALL FOOTINGS SHALL BEAR DIRECTLY ON NATURALLY CONSOLIDATED, UNDISTURBED SOIL, WITH A MINIMUM SOIL BEARING CAPACITY OF 100 kPa (SLS) AND 150 kPa (ULS) AT MIN. 1.2m BELOW GROUND.
- 2. BOTTOM OF THE FOOTINGS SHALL BE BELOW THE LEVEL OF FREEZING DEPTH, BUT A MINIMUM 1200 mm (4'-0") BELOW FINISHED EXTERIOR GRADE, UNLESS NOTED OTHERWISE
- 3. PROTECT ALL SOIL FROM FREEZING ADJACENT TO AND BELOW ALL FOUNDATIONS DURING CONSTRUCTION.
- INSULATION IS SHOWN WHERE REQUIRED FOR PROTECTION OF THE FOUNDATIONS FROM DAMAGE DUE TO FROST ACTION ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR FOUNDATION INSULATION NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- 5. THE BEARING SOIL HAS MUST BE APPROVED BY THE GEOTECHNICAL ENGINEER BEFORE POURING THE FOOTINGS.
- 6. ALL ORGANIC TOPSOIL AND LOOSE FILL TO BE REMOVED FROM THE SITE BEFORE CONSTRUCTION.
- WHERE APPROVED, GRANULAR FILL UNDER ALL FOOTINGS ON GRADE SHALL BE COMPACTED IN 150 mm (6") LAYERS TO SPECIFIED IN THE SOILS REPORT STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD).
- 8. PLACE BOTTTOM OF NEW FOOTINGS AT THE SAME ELEVATION AS THE EXISTING ADJACENT FOOTINGS, UNLESS NOTED OTHERWISE. THE LINE OF SLOPE BETWEEN ADJACENT FOOTINGS OR ALONG STEPPED FOOTINGS SHALL NOT EXCEED 1 VERT. TO 2 HOR. (COORD. W/ SOIL'S CONSULTANT), AND MAX HEIGHT OF ONE STEP TO BE 600mm.
- 9. SLABS ON GRADE A. PLACE SLABS ON GRADE ON MATERIAL CAPABLE OF SAFELY SUPPORTING 25 KPa WITHOUT SETTLEMENT RELATIVE TO THE BUILDING FOUNDATIONS B. PROOF-ROLL EXISTING FILL MATERIAL. REMOVE ANY LOOSE OR SOFTENED AREAS BENEATH SLAB-ON-GRADE BEFORE PLACING GRANULAR FILL. C. APPROVED GRANULAR FILL UNDER ALL SLABS ON GRADE SHALL BE COMPACTED IN 150 mm (6") LAYERS TO 100% STANDARD PROCTOR MAXIMUM
- DRY DENSITY (SPMDD) D. BEFORE CASTING THE SLAB PLACE 200 mm (8") OF 19 mm (3/4") CLEAR CRUSHED STONE OVER THE SUB-BASE AND THOROUGHLY ROLL AND CONSOLIDATE TO THE LEVELS REQUIRED.
- 10. FOUNDATION WALLS WITH BACKFILL ON BOTH SIDES TO BE BACKFILLED SYMMETRICALLY, UNLESS TEMPORARY SHORING FOR THE WALL IS PROVIDED
- 11. ANY HORIZONTAL CONSTRUCTION JOINTS IN FOUNDATION WALLS TO BE APPROVED BY THE ENGINEER.
- 12. DO NOT PLACE BACKFILL AGAINST WALLS RETAINING EARTH (OTHER THAN CANTILEVERED RETAINING WALLS) UNTIL THE WALLS AND THE FLOOR CONSTRUCTIONS AT THE TOP AND BOTTOM OF THE WALLS HAVE BEEN CAST AND HAVE ATTAINED 100% OF THEIR DESIGN STRENGTH.

HU.HUCKEDI.D.INSIDE DIAMETERkN.KILOPASCALLANGLEL.H.LONG LEG HORIZONTALL.V.LONG LEG VERTICALL.P.LOW POINTLG.LONGMAX.MAXIMUMMECHMECHANICALMET'LMETALMIN.MINIMUMMISC.MISCELLANEOUSmMETREMPaMEGAPASCALN.I.C.NOT IN CONTRACTN.T.S.NOT TO SCALENo.NUMBERO.C.ON CENTREO.D.OUTSIDE DIAMETERO.H.OVERHEADOWSJOPEN WEB STEEL JOISTPART'NPARTITIONPL.PLATER.C.REINFORCED CONCRETER.D.ROOF DRAINR.O.ROUGH OPENINGREF.REFERENCEREINF.REINFORCEDREG'DREQUIREDS.C.S.C.SAWCUTS.J.F.STEP DOWN FOOTINGSECT.SECTIONS.L.HSHORT LEG VERTICALS.O.G.SLAB ON GRADESTLF.STIFFENERSTIFF.STIFFENERSTIFF.STIFFENERSTURCT.STRUCTURALT/OTOP OFT.LLTOP UPPER LAYERT.VLTUPUPER LAYERT.VLTUPUPER LAYER
TYP     TYPICAL       U.N.O.UNLESS NOTED OTHERWISE       U/S     UNDERSIDE       VERT.VERTICAL       V.E.F.     VERTICAL EACH FACE       V.I.F.     VERTICAL INSIDE FACE       V.O.F.     VERTICAL OUTSIDE FACE       W.P.     WORKING POINT       W.W.M.     WELEDED WIRE MESH       @     SPACED AT

CAST-IN-PLACE CONCRETE AND REINFORCING 1. ALL CONCRETE WORK TO CONFORM TO THE LATEST REQUIREMENTS OF CSA STANDARDS A23.1, A23.2 & A23.3.

CONCRETE MIX PROPERTIES TABLE							
CONCRETE	MIN.28 DAYS STRENGTH (MPa)	SLUMP mm	AIR CONTENT (%)	MAX. AGGREGATE SIZE (in)	EXPOSURE CLASS		
EXPOSED FOUNDATION WALLS, RETAINING WALLS, CAISSONS	25	80 (±30)	4-7	3/4"	F-2		
INTERIOR COLUMNS / WALLS/ PILE CAPS, FOUNDATION WALLS/ BEAMS	35	80 (±30)	0	3/4"	Ν		
INT. S.O.G.	25	80 (±30)	0	3/4"	Ν		
FREEZE THAW EXPOSURE	25	80 (±30)	4-7	3/4"	F-2		
EXTERIOR SLAB (UNREINFORCED)	32	80 (±30)	5-8	3/4"	C-2		
EXTERIOR SLAB (REINFORCED)	35	80 (±30)	5-8	3/4"	C-1		
NON-SHRINKABLE GROUT	30	AS PER MANUF. RECOMEND.	0	-	Ν		
LEAN MIX CONCRETE	4	80 (±30)	0	-	Ν		
SPREAD FOOTINGS	25	80 (±30)	4-7	3/4"	N		
STRIP FOOTINGS, MATT PADS	25	80 (±30)	4-7	3/4"	Ν		

- 2. WELDED WIRE FABRIC SHALL CONFORM TO CAN/CSA G30.5 WITH A MINIMUM YIELD STRENGTH OF FY = 450 MPa. WELDED WIRE FABRICK SHEETS SHALL BE LAPPED A MINIMUM OF 150mm (6") AT JOINTS (U.N.O.).

REINFORCING BARS SHALL CONFORM	1 TO CAN/CSA G30.18 (	GRADE 400W FOR REI	NFORCING STEEL WI	TH MINIMUM YIELD STRENGTH OF FY = 400 MP	a.								
NSTALLATION OF THE REINFORCING	STEEL SHALL CONFOR	RM TO THE REINFORC	ING STEEL INSTITUT	E OF CANADA "MANUAL OF STANDARD PRACTIC	E".		MINIMUN	TABLE 2	NG AND THAWING (mm)				
ALL REINFORCING LAP SPLICES SHAL U.N.O.).	L CONFORM TO THE L	ATEST CSA STANDAR	D A23.3 AND ALL BAF	R SPLICES SHALL BE CLASS "B" TENSION SPLICE	S		EL EMENTS	COMMENTS	RAB SIZE	FIRE R	ATING		
a. NO BAR SPLICES SHALL BE LESS THAN IN THE TABLE BELOW. b. INCREASE HORIZONTAL SPLICE LENGTHS IN THE TABLE BY 1.3 WHERE MORE THAN 300mm (12") OF FRESH CONCRETE IS CAST BELOW THE SPLICE.						ELEMENTS		CONNICENTS	DAITOIZE	<= 3	4		
CONCRETE		TENSION SPI ICE			1		FOUNDATION WALLS, RETAINING WALLS	NOT CAST AGAINST CONC. FORMWORK (CAST AGAINST LAGGING, CAISSON, WALL)	ALL BAR SIZES	Ę	0		
REBAR SIZE	25 MPa	30 MPa	35 MPa	COMPRESSION SPLICE		WALLS	FOUNDATION WALLS,		Ø <= 25M	1	10		
10M	400 (16")	400 (16")	400 (16")	450 (18")			RETAINING WALLS AND MISC. WALLS	RETAINING WALLS	RETAINING WALLS		30M	4	15
10101									35M	Ę	5		
15M	600 (24")	600 (24")	600 (24")	450 (18")		SNI	COLUMNS		Ø <= 30M	45			
20M	800 (32")	800 (32")	800 (32")	600 (24")		COLUN	GOLOWING		35M	55	55		
25M	1200 (48")	1100 (44")	1000 (40")	750 (30")					Ø <= 25M	2	0		
30M	1400 (56")	1300 (52")	1200 (48")	900 (36")	1	BEAMS	SI ARS AND REAMS		30M	4	5		
35M	1650 (66")	1500 (60")	1400 (56")	1050 (42")		S AND E			35M	5	5		
55111	1000 (00 )	1000 (00 )	1400 (00 )	1000 (42.)		ILAB			45M	1 7	0		

- 6. EMBEDMENT OF DOWELS SHALL BE MIN. EQUAL TO TENSION SPLICE LENGTH, UNLESS NOTED OTHERWISE.
- 7. REINFORCING BARS TO BE SYMMETRIC OVER SUPPORTS AND SYMMETRIC IN SPANS, UNLESS NOTED OTHERWISE.
- 8. REINFORCING STEEL SHALL BE FIXED IN PLACE DURING PLACEMENT OF CONCRETE. BAR SUPPORTS SHALL SHALL BE STEEL, CONCRETE OR PLASTIC.
- 9. THE REINFORCING STEEL SHALL BE CLEANED FROM OIL, GREASE, RUST AND DEBRIS BEFORE PLACEMENT OF CONCRETE.
- 10. CONCRETE PROPERTIES: a. ALL CONCRETE SHALL HAVE A 28 DAY MINIMUM COMPRESSIVE STRENGTH OF 35MPa UNLESS OTHERWISE SPECIFIED.
- 11. THE SLUMP SHOWN IN THE TABLE MAY BE INCREASED WHEN SUPER-PLASTICIZER IS USED.
- 12. DO NOT ADD WATER TO CONCRETE UNLESS WRITTEN APPROVAL GIVEN BY THE ENGINEER. IF HIGHER SLUMP CONCRETE IS DESIRED. CONCRETE SUPPLIER SHALL DESIGN AND SUPPLY ACCORDINGLY
- 13. CONCRETE FORMWORK TOLERANCES SHALL CONFORM TO CSA STANDARD A23.1, UNLESS NOTED OTHERWISE.
- 14. CURING OF CONCRETE SHALL BE IN ACCORDANCE WITH CSA A23.1 SECTION 7.4.
- 15. VIBRATE ALL CONCRETE AT THE TIME OF POURING.
- 16. CONTROL JOINTS IN SLABS ON GRADE SHALL BE MIN. 1/3 (SEE TYP DETAIL). MAX. DISTANCE BETWEEN CONTROL JOINTS IN SLABS-ON-GRADE SHALL BE LESS THAN THE GREATER OF 25 x t OR 3000 mm (10'-0") UNLESS NOTED OTHERWISE.
- 17. SUPPLY AND SET ANCHOR BOLTS, P.C. CONNECTIONS, SLEEVES, PIPE HANGERS, JOISTS AND OTHER INSERTS AND OPENINGS AS INDICATED OR SPECIFIED FOR BEAMS AND COLUMNS: NO SLEEVES, DUCTS, PIPES OR OTHER OPENINGS SHALL PASS VERTICALLY OR HORIZONTALLY EXCEPT WHERE EXPRESSLY DETAILED ON STRUCTURAL DRAWINGS OR WHERE APPROVED IN ADVANCE BY ENGINEER. FOR SLABS AND WALLS: ALL SLEEVES AND OPENINGS GREATER THAN 100 mm (4) IN ANY DIMENSION OR REQUIRING THE CUTTING OF ANY REINFORCEMENT, AND NOT INDICATED ON STRUCTURAL DRAWINGS, MUST BE APPROVED BY THE ENGINEER. FOR MULTIPLE OPENINGS OR SLEEVES: IF WITHIN 600mm (24) OF EACH OTHER CONSULT ENGINEER FOR DIRECTION. DO NOT MAKE HOLES IN SLABS CLOSER THAN 24" TO EDGE OF COLUMNS
- 18. CAST IN ANCHOR BOLTS SHALL CONFORM TO THE LATEST CSA STANDARD G40.21 OR ASTM F1554 WITH A MINIMUM YIELD STRENGTH OF 250 MPa AND SHALL BE SET TRUE AS TO LOCATION, ELEVATION AND PROJECTION TO THE FOLLOWING TOLERANCES: ANCHOR BOLT LOCATION = ± 3mm (1/8"). ANCHOR BOLT PROJECTION = ± 6mm (1/4").
- 19. CONSTRUCTION JOINTS FOR WALLS ARE BASED UPON VERTICAL JOINTS AT A MAXIMUM SPACING OF 10000mm (30'-0"). UNLESS CONTROL JOINTS ARE PROVIDED AS PER TYPICAL DETAIL. TOTAL LENGTH OF POUR TO BE DISCUSSED WITH ENGINEER PRIOR TO PROCEEDING.
- 20. CONSTRUCTION JOINTS FOR WALLS, SLABS, AND BEAMS NOT SHOWN ON THE DRAWINGS SHALL BE APPROVED BY THE STRUCTURAL CONSULTANT BEFORE CONSTRUCTION. GENERALLY JOINTS IN SLABS SHALL BE AT RIGHT ANGLES TO THE SPANS, AT MID SPAN IF POSSIBLE AND BE CLEAR OF SUPPORTS AND POINT LOADS.
- 21. INSERTS, FRAME-OUTS, SLEEVES, BRACKETS, CONDUITS AND FASTENING DEVICES, SHALL BE INSTALLED AS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS IN A MANNER THAT SHALL NOT IMPAIR THE STRUCTURAL STRENGTH OF THE SYSTEM, BE SO INSTALLED THAT THEY SHALL NO REQUIRE THE CUTTING, BENDING, OR DISPLACEMENT OF THE REINFORCING OTHER THAN AS SHOWN ON THE TYPICAL DETAILS.
- 22. ELECTRICAL CONDUITS SHALL NOT PASS THROUGH A COLUMN, SHALL NOT BE LARGER IN OUTSIDE DIAMETER THAN 1/3 SLAB THICKNESS OR WALL OR BEAM WHICH IT IS EMBEDDED, SHALL NOT BE SPACED CLOSER THAN 3 DIAMETERS ON CENTER UNLESS APPROVED AND HAVE A MINIMUM CONCRETE COVER OF 25mm (1") AND UNLESS SPECIFICALLY PERMITTED OTHERWISE, SHALL NOT RUN HORIZONTALLY IN A CONCRETE WALL.
- 23. CONFORM TO THE CONCRETE COVER REQUIREMENTS OF CSA A23.1 AND THE FOLLOWING, UNLESS NOTED OTHERWISE: - FOR CONCRETE CAST AGAINST EARTH AND PERMANENTLY EXPOSED TO EARTH - 75mm
- NOTES:
- a. THE SLAB COVERS IN TABLE 1, 2 AND 3 ARE FOR CONCRETE NOT PROTECTED BY A MEMBRANE OR A CORROSION INHIBITOR. FOR PARKING GARAGE SLABS SEE TABLE 4.
- b. FOR COLUMN COVERS (TO MAIN REINFORCEMENT) EXCEEDING 63mm WITH 4 HOUR FIRE RATING PROVIDE WIRE MESH USING 1.57mmØ 100mm EA WAY. c. THE COVER FOR A BUNDLE OF BARS SHALL BE THE SAME AS THAT FOR A SINGLE BAR WITH AN EQUIVALENT AREA.
- d. PROVIDE COVER FOR MINIMUM 2 HOURS FIRE RATING UNLESS OTHERWISE NOTED

e. REINFORCED CONCRETE WALLS WHICH MAY BE EXPOSED TO FIRE ON BOTH SIDES SIMULTANEOUSLY SHALL HAVE THE MINIMUM COVER REQUIREMENTS FOR COLUMNS.

	TABLE 1           MINIMUM CONCRETE COVER FOR ELEMENTS NOT EXPOSED TO CHLORIDES NOR FREEZING AND THAWING (mm)								
		COMMENTS		FIRE RATING					
	ELEMENTS	COMMENTS	DAN SIZE	<= 2	3	4			
	FOUNDATION WALLS, RETAINING WALLS	NOT CAST AGAINST CONC. FORMWORK (CAST AGAINST LAGGING, CAISSON, WALL)	ALL BAR SIZES		50				
VLLS	FOUNDATION WALLS,		Ø <= 25M		25				
WP	SHEAR WALLS (e)	SHEAR WALLS (e)		30					
	AND MISC. WALLS		35M	35					
SNM	COLUMNS	COLUMNS			40				
COLU	COLOMINS		35M	40		00			
			Ø <= 25M	25					
	SLABS		30M	30	35	40			
EAMS			35M	35					
S AND B			Ø <= 25M		0				
SLAB			30M	30 4		40			
	BEAMS		35M	35					
			45M	45					

TABLE 3           MINIMUM CONCRETE COVER FOR ELEMENTS EXPOSED TO CHLORIDES (mm)							
		COMMENTS		FIRE RATING			
	ELEMENTS	COMMENTS	DAN SIZE	<=4			
			Ø <= 25M	60			
ST	FOUNDATION WALLS, SHEAR WALLS AND		30M	60			
WAL	MISC. WALLS (e)		35M	70			
			45M	90			
			Ø <= 30M				
S			35M	60			
NMULOC	COLUMNS		45M	80			
			55M	105			
			Ø <= 25M				
BEAMS			30M	60			
3S AND	SLABS AND BEAMS		35M	70			
SLAI			45M	90			

### SIGN LOAD: ROOF :

- DEAD LOAD = 1.20 kPa
- SNOW LOAD = 2.12kPa 2. SNOW LOAD
- Ss = 1.8 kPa ; Sr = 0.4 kPa ; S = 2.12 kPa FOR SNOW ACCUMULATION SEE PLAN
- 3. WIND HOURLY PRESSURE
- q(<u>1</u>) = 0.43 kPa
- 4. SEISMIC LOAD
- $S_{a(0,2)} = 0.312$ ;  $S_{a(0,5)} = 0.157$
- $S_{a(1,0)} = 0.072$ ;  $S_{a(2,0)} = 0.032$ ;  $S_{a(5,0)} = 0.0076$ ; a(1.0) = 0.003; PGA = 0.207 ; PGV = 0.121
- SEISMIC HAZARD INDEX: IeFaSa (0.2)= 0.48
- SITE CLASSIFICATION : SITE CLASS "D"

### STRUCTURAL STEEL

- 1. ALL STRUCTURAL STEEL AND JOIST DESIGN CONNECTIONS AND DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST CSA STANDARD S16. a. REFER ALSO TO NOTES UNDER PLANS.
- 2. STRUCTURAL STEEL SHALL CONFORM TO CAN/CSA-G40.20, AND CAN/CSA-G40.21
- a. GRADE 350W CLASS C FOR H.S.S. b. GRADE 350W FOR W SHAPES, S SHAPES, AND TEES.
- c. GRADE 300W FOR CHANNELS, ANGLES, PLATES, RODS
- 3. BOLTED CONNECTIONS SHALL USE ASTM A325 BOLTS. ALL BOLTS, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A325. ANCHOR RODS SHALL BE FABRICATED FROM STEEL ROD CONFORMING TO CSA STANDARD G40.21 GRADE 300W.
- 4. SHEAR STUDS TO CONFORM ASTM A108.
- WELDING MATERIALS TO CONFORM TO CSA W48.
- 6. WELDING OF STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF CSA STANDARD W59.
- 7. FILLET WELDS SHALL BE 6mm (1/4") MIN. U.N.O. BOLTS SHALL BE A325 19mm (3/4") MIN. U.N.O. BOLTED CONNECTIONS SHALL HAVE MIN. OF TWO BOLTS IN EACH CONNECTED PIECE. BOLTED CONNECTIONS SHALL BE DESIGNED AS BEARING CONNECTIONS U.N.O.
- 8. STEEL COATINGS STRUCTURAL STEEL SHALL BE CLEANED AND PREPARED TO CONFORM TO CSA STANDARD S16: a. INTERIOR STRUCTURAL STEEL SHALL BE PRIMED AND PAINTED AS PER CSA/CAN-S-16. b. EXPOSED STEEL TO BE HOT DIP GALVANIZED IN ACCORDANCE TO CAN/CSA-G164. TOUCH UP OF WELDS AND CUTS OF GALVANIZED MEMBERS TO BE DONE WITH A MINIMUM OF 3 COATS OF ZINC RICH PAINT. C. INTERIOR STEEL MREMBERS THAT ARE TO BE PROTECTED BY A CEMENTIOUS FIRE PROOFING SHALL BE CLEANED AND REMAIN UNCOATED.
- 9. FABRICATOR SHALL DESIGN CONNECTIONS IN ACCORDANCE WITH THE 2012 OBC FOR THE FORCES SHOWN ON THE DRAWINGS BEAM CONNECTIONS SHALL BE DESIGNED FOR A MINIMUM OF 50% OF THE BEAM SHEAB CAPACITY IF FACTORED DESIGN FORCES ARE NOT SHOWN ON THE DRAWINGS.
- 10. MOMENT FRAMES CONNECTIONS TO BE CONTINUOUS COLUMN / INTERRUPTED BEAM TYPE U.N.O.
- 11. WHERE MOMENT CONNECTIONS ARE CALLED FOR BUT VALUES ARE NOT INDICATED, DESIGN CONNECTIONS FOR 100% SECTION CAPACITY OF THE SMALLER MEMBER JOINED.
- 12. COLUMN CAP PLATES TO BE MIN. 16mm (5/8") THICK U.N.O. COLUMN BASE PLATES TO BE MIN. 20mm (3/4") THICK U.N.O. HSS COLUMNS TO HAVE MIN. 10mm (3/8") THICK CAP PLATE WELDED ALL-AROUND U.N.O.
- 13. ALL BEAMS CANTILEVERED OR CONTINUOUS OR SUPPORTED OVER A COLUMN OR OTHER SUPPORT, AND BEAMS SUPPORTING POINTS OF CONCENTRATED LOAD. SHALL HAVE A MIN. OF 2-10 mm (3/8") STIFFENERS EACH SIDE OF WEB U. N.O.
- 14. TOP OF COLUMNS WHICH ARE NOT BRACED BY JOISTS OR BEAMS SHALL BE BRACED DIAGONALLY TO THE ROOF OR FLOOR BY A MINIMUM OF 4-L76 x 76 x 6.4 mm (L3 x 3 x 1/4") ANGLES FOR INTERIOR COLUMNS: A MINIMUM 2-L76 x 76 x 6.4mm (L3 x 3 x 1/4") ANGLES FOR EXTERIOR COLUMNS. BRACING SHALL BE BETWEEN TOP OF COLUMN AND TOP CHORD OF JOISTS.
- 15. COLUMNS BUILT INTO MASONRY, ABUTTED BY, OR FACED WITH MASONRY WALLS SHALL HAVE ADJUSTABLE ANCHORS AT 400 mm (16") O.C. SPACED VERTICALLY. WHERE STEEL PROVIDES LATERAL BRACING ONLY TO MASONRY, ANCHORS SHALL ALLOW VERTICAL MOVEMENT BETWEEN STEEL MEMBERS AND MASONRY.
- 16. BEARING PLATES ARE TO BE CENTRED BELOW ALL BEAMS OR LINTELS U.N.O ON THE DRAWINGS. WELD TO BEARING PLATE WITH A MINIMUM 50 mm x 5 mm (2" x 3/16") FILLET ON BOTH SIDES OF BEAM.
- 17. STEEL BEAMS AND LINTELS SHALL HAVE 200 mm (8") MINIMUM END BEARING ON MASONRY AND 65 mm (2 1/2") MINIMUM BEARING ON STEEL UNLESS INDICATED OTHERWISE.
- 18. WHERE BACK-TO-BACK ANGLES ARE USED AS LINTELS OR SUPPORTS. STITCH WELD TOGETHER AT A MAXIMUM SPACING OF 300mm (12") 0.C.
- 19. ALL ROOF OPENINGS TO BE REINFORCED BY FRAMES PER TYP. DETAIL UNLESS NOTED OTHERWISE. MAXIMUM SPAN 2000 mm (6'-8"). FOR LARGER OPENING CONSULT STRUCTURAL ENGINEER. COORDINATE WITH MECHANICAL. ELECTRICVAL AND SUB-TRADES TO AVOID INTERFERENCE WITH STRUCTURAL MEMBERS.

20. PROVIDE TEMPORARY BRACING TO KEEP STRUCTURE SAFE AND PLUMB UNTIL PERMANENT BRACING SHOWN ON DRAWINGS INCLUDING FLOORS AND ROOFS IS CONSTRUCTED.

### METAL DECK

- 1. DESIGN METAL DECK IN CONFORMANCE WITH THE REQUIREMENTS OF CSA S136 FOR THE LOADS INDICATED ON THE DRAWINGS
- UNLESS NOTED OTHERWISE, ROOF DECK SHALL BE 38 mm x 0.91 mm (1.5" x .036") VIC WEST STEEL INC. RD 938 (OR APPROVED FOUAL) MINIMUM 3 SPANS CONTINUOUS 3. UNLESS NOTED OTHERWISE, FLOOR DECK SHALL BE 38 mm x 0.76 mm (1.5"x .030") VIC WEST STEEL INC. HB938 (OR APPROVED EQUAL), MINIMUM 3 SPANS CONTINUOUS.
- 4. METAL DECK SHALL BE LIGHT ZINC COATED STRUCTURAL STEEL SHEET FABRICATED AND ERECTED IN ACCORDANCE WITH CSSBI 101M, CAN/CSA-S136, AND CSSBI 101M. THE MINIMUM ZINC COATING DESIGNATION SHALL BE ZF075 (U.N.O.).
- 5. DECK SHALL OVERLAP A MINIMUM OF 50 mm (2") AT ALL END JOINTS AND HAVE A MINIMUM BEARING LENGTH OF 50 mm (2") ON ALL STRUCTURAL STEEL.
- 6. DECK HAS BEEN DESIGNED FOR DIAPHRAGM ACTION AND SHALL BE FASTENED AS FOLLOWS U.N.O.: WELD DECK TO SUPPORTING STEEL WITH 20 mm (3/4") DIAMETER PLUG WELD AT TRANSVERSE WELD SPACING =300 mm (12") O.C. PERIMETER WELD SPACING =300 mm (12") 0.C. SIDE LAP BUTTON PUNCHING =300 mm (12") 0.C LONGITUDINAL WELD SPACING =300 mm (12") 0.C

7. DECK WELDS SHALL BE TOUCHED UP WITH APPROVED PAINT BY THE DECK ERECTOR.

- 8. STEEL DECK WORK SHALL INCLUDE THE SUPPLY AND INSTALLATION OF ALL SHEET STEEL ANGLES, COVER PLATES, CLOSURES, STIFFENERS AND ANY OTHER ACCESSORIES REQUIRED.
- 9. CUT OPENINGS AND REINFORCE EDGES AS REQUIRED FOR PIPES, DUCTS, ETC. A. THE MAXIMUM SIZE OF AN UNREINFORCED OPENING IS 150 mm (6").
- B. REINFORCE ALL OPENINGS LARGER THAN 150mm (6"), BUT NOT EXCEEDING 450 mm (18"), AS INDICATED BY THE METAL DECK SUPPLIER. C. FOR OPENINGS GREATER THAN 450mm (18") NOT SHOWN ON THE DRAWINGS, CONTACT ENGINEER FOR DIRECTION.
- 10. HANGER WIRE FOR SUSPENDED CEILINGS SHOULD PIERCE BOTH SIDES OF THE FLUTE AND BE LOOPED AROUND AND TIED.

- YIELD STRENGTH OF FY = 400 MPa.
- BRICK VENEER OR DECORATIVE NON-LOAD BEARING BLOCK. MORTAR TYPE S: MIN. COMPRESSIVE STRENGTH - 12.0 MPa MORTAR TYPE N: MIN. COMPRESSIVE STRENGTH - 7.5 MPa GROUT SHALL CONFORM TO CAN/CSA A179 GROUT MIN. COMPRESSIVE STRENGTH - 20 MPa
- 4. ALL MASONRY CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF CSA STANDARDS CAN/CSA-A370, CAN/CSA- A371 AND CSA S304.1.
- 5. ALL MASONRY WALLS SHALL BE HORIZONTALLY REINFORCED. MINIMUM REQUIREMENTS WITH (4.76 mm Ø) HEAVY SECOND COURSE (400 mm/16"). a. ALL JOINT REINFORCEMENT SHALL BE HOT-DIPPED GALVANIZED.

- FOLLOWS: - SPANS LESS THAN 1500 mm 200 mm DEEP BOND BEAM c/w 1-15M FULL LENGTH
- SPANS 1500 mm TO 3000 mm 400 mm DEEP BOND BEAM c/w 2-15M FULL LENGTH
- MAXIMUM VERTICAL INTERVALS OF 2400 mm O/C.
- ACCORDANCE WITH CSA STANDARDS S304.1 AND CAN/CSA-A370.
- GROUT.

### THE WALL.

- 11. GROUT 100% SOLID BLOCKS AT PARAPETS.
- REINFORCEMENT.
- PROJECTING A MINIMUM OF 200 mm (8") OR THE LENGTH OF BEARING BEYOND EACH EDGE OF BEARING, UNLESS OTHERWISE NOTED OR SHOWN.
- GAINED TO SAFELY SUPPORT LOADS IMPOSED.
- AS NOTED ABOVE

# ROD AND SHALL NOT BE FILLED WITH MORTAR.

- 19. REINFORCED MASONRY: a. CELLS TO BE REINFORCED SHALL BE KEPT CLEAN OF MORTAR.
- INSERTS PER NOTE #3
- UNLESS OTHERWISE NOTED ON DRAWINGS
- e DOWELS FROM FOUNDATIONS TO MATCH VERTICAL REINFORCEMENT IN WALL
- 10M BARS = 450 mm (18")
- 15M BARS = 600 mm (24")

### - 20M BARS = 900 mm (36")

WITHIN WALL.

20. PROVIDE COLD WEATHER PROTECTION AS REQUIRED BY CAN/CSA-A371.

BRICI	< VENEER	LINTEL SCH	ED.
	<u>(max.4" t</u>	hickness)	
MAX. CLEAR SPAN		SIZE	REMARKS
UP TO 1200 (4'-0)	L89x89x7.9	L3 1/2" x 3 1/2" x 5/16"	
1201 TO 1800 (4'-0 TO 6'-0)	L127x89x8 (LLV)	L5" x 3 1/2" x 5/16" (LLV)	
1801 TO 2400 (6'-0 TO 8'-0)	L152x89x8 (LLV)	L6" x 3 1/2" x 5/16" (LLV)	
NOTES: 1. LINTEL BEARING LENGTH 2. ALL STRUCTURAL STEEL N 3. SEE ARCHITECTURAL DRA	TO BE MIN. 6". Members to be ho Wings for spans	DT DIPPED GALVANIZED. S.	

 <ul> <li>DO NOT SCALE DRAWINGS. CONTRACTORS MUST CHECK AND VERIFY ALL</li> </ul>
DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE
PROCEEDING WITH THE WORK.
ALL DRAWINGS REMAIN THE PROPERTY OF THE ENGINEER AND SHALL NOT
BE REPRODUCED OR REUSED WITHOUT THE ENGINEER'S WRITTEN
 PERMISSION.

1. CONCRETE MASONRY UNITS SHALL CONFORM TO THE CSA CAN/CSA-A165 AND SHALL HAVE A MINIMUM COMPRESIVE STRENGTH OF 15MPa BASED ON NET CROSS-SECTIONAL AREA.

2. REINFORCING BARS SHALL CONFORM TO CAN/CSA G30.18 GRADE 400W FOR REINFORCING STEEL WITH MINIMUM

3. TYPE S MORTAR SHALL BE USED THROUGHOUT FOR LOAD BEARING BLOCK. TYPE N MORTAR SHALL BE USED FOR

DUTY "LADDER" TYPE JOINT REINFORCEMENT (OR APPROVED EQUAL) AND CONTINUOUS REINFORCEMENT AT EVERY

b. REINFORCEMENT SHALL BE LAPPED A MINIMUM OF 300mm (12":) AT ALL JOINTS. c. PREFABRICATED CORNER AND TEE REINFORCEMENT SHALL BE USED AT ALL WALL INTERSECTIONS. d. REINFORCEMENT SHALL BE PLACED AS TO PROVIDE 16 mm (5/8") MORTAR COVER ON THE EXTERIOR FACE OF WALL AND 12 mm (1/2") COVER ON THE INTERIOR FACE OF WALL.

6. UNLESS NOTED OTHERWISE, PROVIDE CONTINUOUS BOND BEAMS (REINFORCED WITH 1-15M) AT UNDERSIDE OF EACH FLOOR, ROOF AND AT TOP OF PARAPETS. ALSO PROVIDE BOND BEAMS AT TOP AND BOTTOM OF OPENINGS AND EXTEND 600mm PAST CORNERS. REINFORCE BOTTOM BOND BEAM WITH 1-15M . REINFORCE TOP BOND BEAM AS

7. IN SEISMIC ZONES, IN ADDITION TO NOTE # 6 PROVIDE CONTINUOUS BOND BEAMS (REINFORCED WITH 1-15M) AT

8. ALL TIES FOR MASONRY VENEER SHALL BE DESIGNED AND SUPPLIED BY THE MASONRY CONTRACTOR IN

9. ALL BLOCK MASONRY UNITS SHALL BE CONSTRUCTED WITH FULL HEAD JOINTS, AND FULL BED JOINTS UNDER THE FULL BEARING AREAS OF THE FACE SHELLS, AND UNDER WEBS SURROUNDING THOSE CELLS TO BE FILLED WITH

10. WHERE MASONRY THICKNESS CHANGES, GROUT 100% SOLID MIN. 200mm (8") THE LOWER/THICKER PORTION OF

12. THE INTERSECTION OF ALL MASONRY WALLS SHALL BE TOOTHED OR CONTINUOUSLY REINFORCED WITH JOINT

13. ALL MASONRY BENEATH CONCENTRATED LOADS (SUCH AS BEAMS, LINTELS, AND JOISTS) SHALL BE SOLID BLOCKS OR 100% GROUTED BLOCKS FOR A MINIMUM DEPTH OF 400 mm (16") OR 3 TIMES THE LENGTH OF BEARING AND

14. MAINTAIN SUPPORT OF MASONRY LINTELS FOR A MINIMUM OF SEVEN DAYS OR UNTIL SUFFICIENT STRENGTH IS

15. WHERE STEEL BEARING PLATES ARE SHOWN ON THE DRAWINGS, THEY SHALL BE ANCHORED WITH A MINIMUM OF TWO 15M X 300mm LONG + 75mm HOOKED ANCHOR RODS WELDED TO THE PLATES AND EMBEDDED INTO GROUT FILL

16. SEE PLANS AND SCHEDULES REGARDING LINTEL SIZES FOR MASONRY WALLS AND VENEER. FOR ALL OPENINGS OR RECESSES IN MASONRY NOT SHOWN ON DRAWINGS GREATER THAN 300mm (12") AND UP TO 1200mm (4 FT.), INCLUDING THOSE FOR MECHANICAL OR ELECTRICAL SERVICES OR EQUIPMENT, PROVIDE ONE L89X89X6.4 (L3 1/2 X 3 1/2 X 1/4") ANGLE FOR EACH 100 mm (4") THICKNESS OF WALL.

17. ALL MASONRY WALLS SHALL BE ADEQUATELY BRACED DURING CONSTRUCTION UNTIL ADEQUATE DIAPHRAGM ACTION CAN BE DEVELOPED BY INSTALLED FLOOR AND ROOF STRUCTURAL COMPONENTS.

18. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF MASONRY CONTROL JOINTS. SPACING OF CONTROL JOINTS IN ALL WALLS SHALL BE CONSTRUCTED AS PER PLAN, BUT SHALL NOT EXCEED 7200 mm (23'-6") O.C. ALL REINFORCING TO BE DISCONTINUOUS AT CONTROL JOINTS. CONTROL JOINTS SHALL BE CAULKED WITH FOAM BACKER

b. GROUT FOR REINFORCED CELLS, BOND BEAMS, LINTELS AND CELLS CONTAINING DOWELS, ANCHOR BOLTS AND

c. PROVIDE MINIMUM 2-15M VERTICALS FULL HEIGHT AT ALL WALL ENDS, CORNERS, INTERSECTIONS AND OPENINGS d. PROVIDE 1-15M VERTICAL FULL HEIGHT EACH SIDE OF MOVEMENT JOINTS.

f. PROVIDE THE FOLLOWING LAPS FOR THE REINFORCEMENT INDICATED:

EMBEDDED ITEMS ARE NOT TO INTERFERE WITH THE INTEGRITY OF THE MASONRY WALL OR LOCATION OF REINFORCEMENT, PROVIDE FULLY GROUTED LINTEL BEAM FOR CONDUITS AND PIPES RUNNING HORIZONTALLY





VEN	TILATION LEGEND
	SOUND INSULATION
	SILENCER
	FLEXIBLE CONNECTION
	DUCT OFFSET
	DUCT OFFSET (SINGLE LINE)
	TURNING VANES
	VECTROL
FSF	FIRE STOP FLAP
	BALANCING DAMPER
FD	FIRE DAMPER
	SPLITTER DAMPER
BDD -	BACKDRAFT DAMPER
- OBD -	OPPOSED BLADE DAMPER
	MOTORIZED DAMPER
$\square$	SUPPLY DUCT SECTION
	RETURN DUCT SECTION
	SUPPLY DIFFUSER
	LINEAR DIFFUSER
	EXHAUST GRILLE
D- XXX	DIFFUSER DESIGNATION AND CFM
G- XXX	GRILLE DESIGNATION AND CFM
~~=	FLEXIBLE ROUND DUCT
	CAPPED END DUCT
	DUCT REDUCER/ENLARGER
	HEAT PUMP
	FAN COIL UNIT
	CABINET BLOWER FAN
	THERMOSTAT w/GUARD THERMOSTAT c/w SUB BASE
DG	DOOR GRILLE
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
CC	CHEMICAL CABINET
мсс	MOTOR CONTROL CENTRE
FH	FUME HOOD
SF	SUPPLY FAN
	RETURN FAN
CBF	CABINET BLOWER FAN
ADF	ALUMINUM DOME FAN
U.H.	UNIT HEATER
CBV	CIRCUIT BALANCING VALVE
RHC	
VT	VOLUME TAPPING
DH-1	DUCT HEATER AND DESIGNATION

PL	JMBING LEGEND
	STORM ABOVE GRADE
	SANITARY ABOVE GRADE
X -	STORM BURIED
	SANITARY BURIED
	WEEPING TILE
P P	PUMPED SANITARY
PX ==	PUMPED STORM
— os —	OIL SUPPLY
— OR —	OIL RETURN
·	DOMESTIC COLD WATER
T	DOMESTIC RECIRCULATED WATER
	VENT LINE
- G	
— D —	EQUIPMENT DRAIN LINE
F	FIRE LINE
—•s —	SOFTENED COLD WATER
co <b>I</b>	CLEANOUT
— I A —	ACID DRAIN
AD 🔲 🗕	AREA DRAIN
O FD	FLOOR DRAIN
O FFD	FUNNEL FLOOR DRAIN
O HD	HUB DRAIN
O PD	PLANTER DRAIN
	RADIOISOTOPE DRAIN
O RD	ROOF DRAIN
HS	HOSE STATION
FHC	FIRE HOSE CABINET
● FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER c/w CABINET
FB	
	KAIN WATER LEADER
WCH	WATER CLOSET (HANDICAPPED)
DWF	DISTILLED WATER FAUCET
U	URINAL
UT	URINAL w/TANK
UFT	URINAL FLUSH TANK
<b>⊲</b> SH	SHOWER
ESH	EMERGENCY SHOWER
L	LAVATORY
LH	LAVATORY (HANDICAPPED)
KS	STAINLESS STEEL SINK
JS	JANITOR SINK
LS	LABORATORY SINK
FW	FYF WASH
FFW	EMERGENCY FYE WASH
 WF	WASH FOUNTAIN
МН	MANHOLE
СВ	CATCHBASIN
Н₩Т	HOT WATER TANK
<b>⊕</b> FH	FIRE HYDRANT
<u>چ</u>	FIRE DEPT. SIAMESE CONNECTION
<b>—</b> F <b>— Ј</b> <sub>р</sub> ТВ	THRUST BLOCK
INV. ELEV.	INVERT ELEVATION
OBV. ELEV.	OBVERT ELEVATION
AFF	ABOVE FINISHED FLOOR
	HAND HOLE TRAP
	RUNNING TRAP
ABFP	
	HOSE BIRR
€ P−1	PUMP AND DESIGNATION
FP	FIRE PUMP
SMV	SHOWER MIXING VALVE

### PIPING LEGEND ----- D ----- EQUIPMENT DRAIN LINE — G — GAS - - v - VENT LINE ELBOW UP - ELBOW DOWN VALVE - SEE SPECIFICATIONS LWCO LOW WATER CUT OFF THERMOMETER ⊘ PG PRESSURE GAUGE ● P-1 PUMP AND DESIGNATION **수** AV AIR VENT **수** AAV AUTOMATIC AIR VENT FLOW SWITCH AFF ABOVE FINISHED FLOOR AHU AIR HANDLING UNIT CIRCUIT BALANCING VALVE CBV GPM GALLONS PER MINUTE REQ'D REQUIRED TCV THERMOSTATIC CONTROL VALVE HC HEATING COIL CC COOLING COIL

GYM MECHANICAL DEMOLITION AND INSTALLATION PLANS

**\_\_\_\_** 

CC	NTROL LEGEND
	THERMOSTAT
(T) <sub>G</sub>	THERMOSTAT w/ GUARD
Ţ	THERMOSTAT c/w SUB BASE
H	HUMIDISTAT
	TEMPERATURE SENSOR
PS	PRESSURE SWITCH OR SENSOR
sv	SOLENOID VALVE
DMD	MOTORIZED DAMPER
Qpg	PRESSURE GAUGE
(Ţ	TEMPERATURE GAUGE
	2-WAY CONTROL VALVE
	3-WAY CONTROL VALVE
HC	HEATING COIL
C C	COOLING COIL
OA	OUTSIDE AIR
RA	RETURN AIR
SA	SUPPLY AIR
EA	EXHAUST AIR
TCV	TEMPERATURE CONTROL VALVE

∥ \	ALVE LEGEND
	VALVE – SEE SPEC
	CHECK VALVE
	STRAINER
	PRESSURE REDUCING VALVE
	CONTROL VALVE
	2-WAY CONTROL VALVE
	3-WAY CONTROL VALVE
R	RELIEF VALVE
	PLUG VALVE
Sv	SOLENOID VALVE
	NORMALLY CLOSED VALVE
<b>_</b>	PET COCK
<b>—</b> НВ	HOSE BIBB
×	CIRCUIT BALANCE VALVE

DF	RAWING LIST
DWG No.	DRAWING TITLE
M1.00	DRAWING LIST, KEY PLAN AND LEGENDS
M2.00	GYM FLOOR PLAN — PLUMBING INSTALLATION
M3.00	GYM FLOOR PLAN – HVAC DEMOLITION
M3.01	GYM FLOOR PLAN – HVAC INSTALLATION
M3.02	GYM ROOF PLAN – HVAC INSTALLATION
M4.00	MECHANICAL DETAILS
ME5.00	MECHANICAL & ELECTRICAL SCHEDULES



![](_page_15_Figure_0.jpeg)

![](_page_15_Picture_1.jpeg)

![](_page_16_Figure_0.jpeg)

![](_page_16_Figure_2.jpeg)

![](_page_17_Figure_0.jpeg)

![](_page_17_Figure_3.jpeg)

![](_page_18_Figure_0.jpeg)

SCALE -

<u>GYM ROOF PLAN – HVAC INSTALLATION</u>

 SCALE - 1:100
 0
 1
 2
 3
 4
 5
 6
 7
 8
 9
 10

![](_page_18_Picture_4.jpeg)

![](_page_19_Figure_0.jpeg)

JOB NAME:													NOTRE DA	ME ELEME	INTARY	SCHO	OL GYI	VI RENOVAT	IONS						
															ME	CHANIC	AL SCHE	EDULE - ROO	OFTOP UNIT EC		Г				
							WEIGHT					COOLING						GAS FURNACE			HEAT	PUMP			
DWG. DESIGNATION	MANUFACTURER / MODEL	SERVIO	SUPPL CE CFM	FAN HF	SEER2 / SEER2	DUCT CONFIGURATION	C/W 24" CURB (LBS)	FRESH AIR (CFM)	ESP (IN WG)	AMBIENT AIR TEMP (°F)	EVAPORATOR EAT (°F)	EVAPORATOR LAT (°F)	GROSS TOTAL CAPACITY (MBh)	GROSS SENSIBLE CAPACITY (MBh)	INPUT 1ST STAGE BTUH	INPUT 2ND STAGE BTUH	AFUE	AIR ENTERING OUTDOOR COIL (°F)	AIR ENTERING INDOOR COIL (°F)	TEMP. RISE MIN/MAX DEG. F	AIR ENTERING OUTDOOR COIL (°F)	AIR ENTERING INDOOR COIL (°F)	MECHANICAL REMARKS	VOLTS / PHASE / HZ	<u>'</u> M
RTAC-1	TRANE IMPACK 4DCZ5060E1115A	GYM	1,778	1	11 / 14.65	VERTICAL SUPPLY VERTICAL RETURN	748	xxx	x	95	80db / 67w b	56.3db / 56.2w b	148.5	114.6	92,000	115,000	81	17db / 15w b	70db	30/60	47db / 43w b	70db	DIRECT DRIVE SUPPLY FAN, INDIRECT FIRED GAS FURNACE / HEAT PUMP, DX COOLING, ECONOMIZER (DRY BULB COMPARISON), CO2 DUCT MOUNTED DEMAND VENTILATION, BAROMETRIC RELIEF, FIELD INSTALLED NON-FUSED DISCONNECT SWITCH, THERMOSTAT, 24" ROOF CURB, FIELD-INSTALLED NON-POWERED GFI, HAILGUARDS.	208-230/1/6	0 4
RTAC-2	TRANE IMPACK 4DCZ5060E1115A	GYM	1,778	1	11 / 14.65	VERTICAL SUPPLY VERTICAL RETURN	748	xxx	×	95	80db / 67w b	56.3db / 56.2w b	148.5	114.6	92,000	115,000	81	17db / 15w b	70db	30/60	47db / 43w b	70db	DIRECT DRIVE SUPPLY FAN, INDIRECT FIRED GAS FURNACE / HEAT PUMP, DX COOLING, ECONOMIZER (DRY BULB COMPARISON), CO2 DUCT MOUNTED DEMAND VENTILATION, BAROMETRIC RELIEF, FIELD INSTALLED NON-FUSED DISCONNECT SWITCH, THERMOSTAT, 24" ROOF CURB, FIELD-INSTALLED NON-POWERED GFI, HAILGUARDS.	208-230/1/6	0 4

					-					
JOB NAME:		NOT	RE DAME EL	EMENTARY	SCHOOL G	M RENOVA	TIONS		JOB No.	ALL-23008484-A0
				MECHAN	NICAL SC	HEDULE -	GRILLES	AND REG	STERS	
DWG		MODEL		SIZ	Έ	CI	FM	SP (IN	I W.G.)	
DESIGNATION	BORDER	FRAME	CORE	Length (mm)	Width (mm)	MIN	МАХ	MIN	MAX	MECHANICAL REMARKS
G-1	F	-	RDR	650	150	270	540	0.006	0.022	SUPPLY, C/W AIR SCOOP, B15 ALUMINUM
G-2	F	D	80DAL	200	200	100	312	0.01	0.085	EXHAUST, C/W ALUMINUM OBD
G-3	-	D	95-L	400	150	208	260	0.024	0.038	RETURN, 14 GA. STEEL, 0° DEFLECTION
G-4	0	D	95-L	400	150	208	260	0.024	0.038	EXHAUST, 14 GA. STEEL, 0° DEFLECTION

ALL GRILLES TO HAVE 'A' FASTENING FINISH B12 WHITE POWDER COAT, U.N.O. OBD: OPPOSED BLADE DAMPER

![](_page_20_Figure_4.jpeg)

				JOB No.	ALL-23008484-A0
	POWER F	REQUIREMEN	TS		
CA	МОСР	STARTER	REMOTE CONTROL DEVICE	DISC. TYPE	ELECTRICAL REMARKS
2A	60A	BUILT-IN	THERMOSTAT	BUILT-IN NON-FUSED	DIV. 26 TO PROVIDE POWER AND WIRE THROUGH THE NON-FUSED DISCONNECT. DIV. 26 TO WIRE TO THE GFI RECEPTACLE. ALL CONTROL WIRING BY MECHANICAL DIVISION.
2A	60A	BUILT-IN	THERMOSTAT	BUILT-IN NON-FUSED	DIV. 26 TO PROVIDE POWER AND WIRE THROUGH THE NON-FUSED DISCONNECT. DIV. 26 TO WIRE TO THE GFI RECEPTACLE. ALL CONTROL WIRING BY MECHANICAL DIVISION.

NIAC	GARA CATHOL	IC
4 ISSUED FOR	TENDER	2024-01-23
<ul><li>3 ISSUED FOR</li><li>2 <b>3</b>ISSUED FOR</li></ul>	PERMIT OWNER REVIEW	2024-01-19 2023-12-19
	REVIEW	2023-10-31
	TO BE SCALED. CONTRACT	
THE PROJECT; AND I THE ARCHITECTS BE	MUST REPORT ANY DISCRE	PANCIES TO HE WORK.
WITHOUT THE WRIT	TEN APPROVAL OF THE ARC	CHITECTS.
exp Services Inc. t: 905.525.6069   f: 905. 1266 South Service Rd,	528.7310 Suite C1-1	xn
Stoney Creek, ON_L8E Canada www.exp.com		
• BUILDINGS • E	ARTH & ENVIRONMENT • E	NERGY•
• INDUSTRIAL • IN	IFRASTRUCTURE • SUSTA	NABILITY∙
	PROFESSIONA	
ENSE		
LIC	M. W. WICKHAM	
272	DUM ARIO	
	ACE OF ON	
NC	DTRE DAME	
ELEME	NTARY SCH M AND HVAC	OOL
. I – V I		
U U	PGRADES	_
GYI 65 NIAGAE	59 CASWELL ST	102
GYI 0 65 NIAGAF	PGRADES 59 CASWELL ST RA FALLS, ON L2J	1C2
GYI 65 NIAGAF	PGRADES 59 CASWELL ST RA FALLS, ON L2J	1C2
GYI 65 NIAGAF MEC EI	PGRADES 59 CASWELL ST A FALLS, ON L2J HANICAL AN LECTRICAL	1C2
GYI 05 NIAGAF MEC EI St	HANICAL AN LECTRICAL	1C2
GYI 05 NIAGAF MEC EI St	PGRADES 59 CASWELL ST A FALLS, ON L2J HANICAL AN LECTRICAL CHEDULES	1C2
G Y I 65 NIAGAF MEC EI St	HANICAL AN LECTRICAL CHEDULES	1C2
GYI U 65 NIAGAF MEC EI SC C AR	HANICAL AN LECTRICAL CHEDULES	1C2
G Y I U 65 NIAGAF MEC EI SC EI SC AR INCC	A FALLS, ON L2J HANICAL AN LECTRICAL CHEDULES RGURIC CHITECTS	IC2 ID S ED
GYI U 65 NIAGAF MEC EI SU O AR INCC	HANICAL AN LECTRICAL CHEDULES	IC2 ID S ED
MEC EI So AR INCC	A FALLS, ON L2J HANICAL AN LECTRICAL CHEDULES RGURIC CHITECTS RPORATI	IC2 ID S ED
	A FALLS, ON L2J HANICAL AN LECTRICAL CHEDULES RGURIC CHITECTS RPORATI	IC2
G Y I U 65 NIAGAF MEC EI SC SC EI S EI S	A FALLS, ON L2J HANICAL AN LECTRICAL CHEDULES BRGURIC CHITECTS PRORATI PRORATI	1C2 ID SED IT B .8G 1J8 54-8737
GYI U 65 NIAGAF MEC EI SCALE:	A FALLS, ON L2J HANICAL AN LECTRICAL CHEDULES CHEDULES CHITECTS ROURIC CHITECTS RPORATI	1C2 ID SED IT B .8G 1J8 54-8737
GYIU 65 NIAGAR MEC EI SC AR INCC 28 KING STONEY O Tel. 905-66 W SCALE: AS NOTED	PGRADES 59 CASWELL ST A FALLS, ON L2J HANICAL AN LECTRICAL CHEDULES BRGURIC CHITECTS PRORATION STREET EAST, UN CREEK, ONTARIO, L 4-8735 Fax. 905-66 eb: www.2gai.com	1C2 ID SED IT B .8G 1J8 34-8737
GYIUU 65 NIAGAR MEC EI SC AR INCC 28 KING STONEY O Tel. 905-66 W SCALE: AS NOTED START DATE: MAY 2023	A FALLS, ON L2J HANICAL AN LECTRICAL CHEDULES BRGURIC CHITECTS RPORATI PROJECT: 2023	1C2 ID SED IT B .8G 1J8 54-8737 - <b>12</b>
GYIU 065 NIAGAR MEC EI SO GAR INCC 28 KING STONEY O Tel. 905-66 W SCALE: AS NOTED START DATE: MAY 2023 DRAWN	PGRADES 59 CASWELL ST A FALLS, ON L2J HANICAL AN ECTRICAL CHEDULES BRGURIC CHITECTS BROURIC CHITECTS BROORATI CHITECTS BROORATI STREET EAST, UN CREEK, ONTARIO, L 44-8735 Fax. 905-66 eb: www.2gai.com PROJECT: 2023	1C2 ID SED IT B .8G 1J8 54-8737 -12
GYIU 65 NIAGAR MEC EI SC AR INCC 28 KING STONEY O Tel. 905-66 W SCALE: AS NOTED START DATE: MAY 2023 DRAWN	PGRADES 59 CASWELL ST A FALLS, ON L2J HANICAL AN ECTRICAL CHEDULES <b>RGURIC</b> CHITECTS <b>ROURIC</b> CHITECTS <b>RPORATI</b> STREET EAST, UN CREEK, ONTARIO, L 4-8735 Fax. 905-66 eb: www.2gai.com PROJECT: <b>2023</b> DRAWING:	1C2 ID SED IT B .8G 1J8 54-8737 -12
GYIU 65 NIAGAR MEC EI SO GAR INCC 28 KING STONEY O Tel. 905-66 W SCALE: AS NOTED START DATE: MAY 2023 DRAWN CHECKED	PGRADES 59 CASWELL ST A FALLS, ON L2J HANICAL AN ECTRICAL CHEDULES <b>RGURIC</b> CHITECTS <b>RFORATIONES</b> STREET EAST, UN CREEK, ONTARIO, L 4-8735 Fax. 905-66 eb: www.2gai.com PROJECT: <b>2023</b> DRAWING: <b>ME5</b>	1C2 ID SED IT B .8G 1J8 34-8737 -12 .00

PO	WER DISTRIBUTIO	N AND S	SMALL POWER	LIGH	ITING, LIGHITNG SV	NITCHI	NG & CONTROLS		TAGS AND CALL OUT SYMBOLS	
Ħ	DUPLEX RECEPTACLE, WALL MOUNTED		DOUBLE DUPLEX RECEPTACLE, WALL MOUNTED	AF10 7ab		GHTING FIXTURE	TYPE		SECTION DESIGNATION	
田	DUPLEX RECEPTACLE, ABOVE BACKSPLASH OF CABINET, COUNTERTOP OR SINK	⊨	DOUBLE DUPLEX RECEPTACLE, ABOVE BACKSPLASH OF CABINET, COUNTERTOP OR SINK		NUMBER INDICATES CIRCUIT NUMBE	ER, LOWER CASE	LETTER	E3.1	DETAIL CALLOUT	
Φ	DUPLEX RECEPTACLE, FLUSH MTD IN	⊕	DOUBLE DUPLEX RECEPTACLE, FLUSH		LIGHTING FIXTURE ON NORMAL BRANCH		LIGHTING FIXTURE ON EMERGENCY	A E3.1	DETAIL DESIGNATION	
⊢ ⊨⊖	HALF SWITCHED DUPLEX RECEPTACLE,	н	SIMPLEX RECEPTACLE, WALL MOUNTED		POWER - CEILING MOUNTED		BRANCH POWER OR EMERGENCY BALLAST - CEILING MOUNTED		REVISION CALLOUT	
Б	SPECIAL PURPOSE RECEPTACLE, WALL	ß	SPECIAL PURPOSE RECEPTACLE, CEILING		LIGHTING FIXTURE ON NORMAL BRANCH		LIGHTING FIXTURE ON EMERGENCY BRANCH POWER OR EMERGENCY BALLAST		KEYNOTE CALLOUT	
TYPE	MOUNTED. NEMA CONFIGURATION AS NOTED ON PLANS	TYPE	> MOUNTED NEMA CONFIGURATION AS NOTED ON PLANS		POWER - WALL MOUNTED		- WALL MOUNTED			
Þ	SHADING REPRESENTS RECEPTACLE ON LIFE SAFETY BRANCH	H	SHADING REPRESENTS RECEPTACLE ON UPS BRANCH		STRIP LIGHTING FIXTURE ON NORMAL BRANCH POWER		STRIP LIGHTING FIXTURE ON EMERGENCY BRANCH POWER OR EMERGENCY BALLAST			
Þ	SHADING REPRESENTS RECEPTACLE ON NON-LIFE SAFETY BRANCH	Þ	SHADING REPRESENTS RECEPTACLE WITH ISOLATED GROUND				PENDANT LINEAR FIXTURE ON	A AFCI	ANALOGMCBMAIN CIRCUIT BREAKERARC FAULT CIRCUIT INTERRUPTORMCCMOTOR CONTROL CENTER	
4	DISCONNECT SWITCH, REFER TO EQUIPME	NT CONNECTION	SCHEDULE FOR DISCONNECT TYPE, UON	<u> </u>	PENDANT LINEAR FIXTURE ON NORMAL BRANCH POWER		EMERGENCY BRANCH POWER OR EMERGENCY BALLAST	AFF ATS	ABOVE FINISHED FLOOR MD MOTORIZED DAMPER	
4	COMBINATION MOTOR STARTER DISCONNE	ECT			DOWNLIGHT LIGHTING FIXTURE ON		DOWNLIGHT LIGHTING FIXTURE ON EMERGENCY BRANCH POWER OR	BM	BEAM MOUNTED NC NORMALLY CLOSED	
$\boxtimes$	MOTOR STARTER			0	MOUNTED		EMERGENCY BALLAST - RECESSED MOUNTED	CK CL	CLOCK HANGER     NO     NORMALLY OPEN       CEILING MOUNTED     OC     OVER THE COUNTER	
	VARIABLE FREQUENCY DRIVE			$\Phi$	PENDANT LIGHTING FIXTURE ON NORMAL	•	PENDANT LIGHTING FIXTURE ON EMERGENCY BRANCH POWER OR	EMT	ELECTRICAL METALLIC TUBING     PL     POLE MOUNTED       EXPLOSION PROOF     PTZ     PAN_TUT_ZOOM	
⊢⊘ <sub>x</sub>	DIRECT CONNECTION, WALL MOUNTED. SU	BSCRIPT 'X' INDIC	ATES UNIQUE IDENTIFIER, REFER TO		BRANCHFOWER	Т	EMERGENCY BALLAST	F	FURNITURE OR MILLWORK MOUNTED     ST     SHUNT TRIP	
$\bigotimes_{\mathbf{x}}$		SUBSCRIPT 'X' IND	ICATES UNIQUE IDENTIFIER, REFER TO	$\bigcirc$	WALL WASH LIGHTING FIXTURE ON NORMAL BRANCH POWER - ARROW INDICATES DIRECTION OF BEAM	●〉	EMERGENCY BRANCH POWER OR EMERGENCY BALLAST - ARROW INDICATES	FL GFCI	FLOOR MOUNTEDTPTAMPER PROOFGROUND FAULT CIRCUIT INTERRUPTERWPWEATHER PROOF	
$\mathcal{O}_{x}$	MOTOR, SUBSCRIPT 'X' DENOTES MOTOR D	ESIGNATION, REF	ER TO EQUIPMENT CONNECTION SCHEDULE		WALL SCONCE LIGHTING FIXTURE ON		DIRECTION OF BEAM WALL SCONCE LIGHTING FIXTURE ON	GFI	GROUND FAULT INTERRUPTER	
	GROUND BUS BAR			<sup>↓</sup>	NORMAL BRANCH POWER - WALL MOUNTED	+∳-	EMERGENCY BRANCH POWER OR EMERGENCY BALLAST - WALL MOUNTED		MISCELLANEOUS DEVICES	
÷	FURNITURE OUTLET, WALL MOUNTED				TRACK LIGHT HEAD ON NORMAL BRANCH	T	TRACK LIGHT HEAD ON EMERGENCY	JB		
	PANELBOARD				POWER		BRANCH POWER OR EMERGENCY BALLAST	B	JUNCTION BOX, CEILING MOUNTED	
$\square$	TRANSFORMER			⊕	BOLLARD LIGHT FIXTURE ON NORMAL BRANCH POWER	•	BOLLARD ON EMERGENCY BRANCH POWER OR EMERGENCY BALLAST	C X	CONTACTOR, SUBSCRIPT 'X' INDICATES UNIQUE IDENTIFIER	
	FLOOR BOX, DUPLEX RECEPTACLE	FB#	SPECIAL FLOORBOX, "#" INDICATES					R	CONTROL RELAY & REQUIRED INPUT/OUTPUT MODULE	
	FLOOR BOX. DOUBLE DUPLEX RECPT		UNIQUE FLOOR BOX TYPE	<u>оф</u>	SITE LIGHTING SINGLE HEAD ON NORMAL BRANCH POWER - POLE MOUNTED	•∳	EMERGENCY BRANCH POWER OR EMERGENCY BRANCH POWER OR EMERGENCY BALLAST - POLE MOUNTED			
							SITE LIGHTING DUAL HEAD ON		DEMOLITION	
		E TYPE ICATES BRANCH (		$\begin{array}{c} \Phi \circ \Phi \end{array}$	BRANCH POWER - POLE MOUNTED	<b>●</b> •●	EMERGENCY BRANCH POWER OR EMERGENCY BALLAST - POLE MOUNTED	< R >		
				×.	EXIT SIGN - SINGLE FACE - CEILING MOUNTED	ţ <b>€</b> ţ	EXIT SIGN - DUAL FACE - CEILING MOUNTED	< RL >	EXISTING TO BE RELOCATED	
	CIRCL	JITING		⊦⊗ŧ	EXIT SIGN - SINGLE FACE - WALL MOUNTED	H	EXIT SIGN - DUAL FACE - WALL MOUNTED	< NL >	EXISTING - NEW LOCATION	
				⊦⊗€	LOW LEVEL EXIT SIGN - SINGLE FACE - WALL OR DOOR MOUNTED	H	SINGLE REMOTE EMERGENCY LIGHT - WALL MOUNTED		- DEMOLITION CONDUIT	
		BER			DUAL HEAD EMERGENCY LIGHT WITH		DUAL REMOTE EMERGENCY LIGHT - WALL	===	DEMOLITION EQUIPMENT	
	PANEL DESIG 3#12.#12G.21mmC	NATION			MOUNTED				- EXISTING TO REMAIN CONDUIT	
		IT SIZE		<b>≸</b> ab	SPST SWITCH, WALL MOUNTED. 'ab' INDICAT	TES INDIVIDUAL (	SANGED SWITCHES AND ASSOCIATED SWITCH		EXISTING TO REMAIN EQUIPMENT	
	GROUN CIRCUI	D CONDUCTOR QU T CONDUCTOR QU	JANTITY AND SIZE IANTITY AND SIZE		2 - DOUBLE POLE	K - KEY OPER	ATED		- RELOCATED / NEW CONDUIT	
					4 - FOUR WAY D - WALL BOX DIMMER	P - PILOT LIGH	TIMER		RELOCATED / NEW EQUIPMENT	
	FIRE ALAR	M SYS	ГЕМ	63	OCCUPANCY SENSOR, CEILING MOUNTED	WP - WEATHER	R PROOF			
				HOS	OCCUPANCY SENSOR, WALL MOUNTED					
	FIRE ALARM STROBE, WALL MOUNTED	×	FIRE ALARM STROBE, CEILING MOUNTED.	V9	VACANCY SENSOR, CEILING MOUNTED					
	FIRE ALARM HORN, WALL MOUNTED			HS	VACANCY SENSOR, WALL MOUNTED					
$\boxtimes \subset$	MOUNTED		MOUNTED	DCP X	DIMMING CONTROL PANEL, SUBSCRIPT 'X' II	NDICATES TYPE				
⊢SP	FIRE ALARM SPEAKER, WALL MOUNTED	SP	FIRE ALARM SPEAKER, CEILING MOUNTED	DIM X	DIMMING CONTROL STATION, SUBSCRIPT 'X	" INDICATES TYP	E OR UNIQUE IDENTIFIER			
⊢Ś₽	FIRE ALARM SPEAKER/STROBE, WALL MOUNTED	SP	FIRE ALARM SPEAKER/STROBE, CEILING MOUNTED	LCP	LIGHTING CONTROL PANEL					
	FIRE ALARM BELL, WALL MOUNTED		FIRE ALARM PULL STATION	▶	SHUNT TRIP PUSH BUTTON					
$\vdash \checkmark$	HEAT DETECTOR, WALL MOUNTED		HEAT DETECTOR, CEILING MOUNTED	TC X	TIME CLOCK, SUBSCRIPT 'X' INDICATES UNIO	QUE IDENTIFIER				
$\vdash $	SMOKE DETECTOR, WALL MOUNTED	•	SMOKE DETECTOR, CEILING MOUNTED	DS X	DAYLIGHT SENSOR, CEILING MOUNTED					
	SMOKE DETECTOR, DUCT MOUNTED	₩.	FIRE/SMOKE DAMPER	PC X	PHOTOCELL					
$\bigotimes$	CARBON MONOXIDE DETECTOR	<del>0</del> -	SMOKE DAMPER							
FF	FIREFIGHTERS TELEPHONE OUTLET	SA	SMOKE ALARM							
	REMOTE INIDICATOR LIGHT	SACO	COMBINATION SMOKE ALARM AND CARBON MONOXIDE DETECTOR							
FACP	FIRE ALARM CONTROL PANEL	TPS	TAMPER SWITCH							
FAA	FIRE ALARM REMOTE ANNUNCIATOR	RT	REMOTE TEST STATION							
	DATA GATHERING PANEL	FS	FLOW SWITCH							
		SV	SUPERVISORY VALVE							

# DRAWING LIST

DRAWING TITLE
ELECTRICAL LEGENDS, SYMBOLS AND DRAWING LIST
OVERALL PLAN
GYM FLOOR PLAN - LIGHTING DEMO
GYM FLOOR PLAN - POWER & SYSTEMS DEMO
GYM FLOOR PLAN - LIGHTING NEW
GYM FLOOR PLAN - POWER & SYSTEMS NEW
LIGHTING SCHEDULE AND DETAILS

NIAC	NIAGARA CATHOLIC DISTRICT SCHOOL BOARD								
<ol> <li>ISSUED FOR</li> <li>ISSUED FOR</li> </ol>	TENDER         2024-01-23           PERMIT         2024-01-19								
2 ISSUED FOR 1 ISSUED FOR	OWNER REVIEW         2023-12-19           REVIEW         2023-10-31           WISIONS         DATE								
DRAWINGS ARE NOT CHECK AND VERIFY THE PROJECT; AND I	TO BE SCALED. CONTRACTOR MUST ALL DIMENSIONS AND CONDITIONS ON MUST REPORT ANY DISCREPANCIES TO								
THE ARCHITECTS BE THE USE OF THIS DR WITHOUT THE WRITT	FORE PROCEEDING WITH THE WORK. RAWING OR PART THEREOF IS FORBIDDEN FEN APPROVAL OF THE ARCHITECTS.								
exp Services Inc. t: 905.525.6069   f: 905.5 1266 South Service Rd, i Stoney Creek, ON L8E S Canada	528.7310 Suite C1-1 SR9 <b>EXP.</b>								
• BUILDINGS • EARTH & ENVIRONMENT • ENERGY•									
INDUSTRIAL      INFRASTRUCTURE      SUSTAINABILITY									
100153872 H									
OLINCE OF ONTHE									
NOTRE DAME CATHOLIC ELEMENTARY SCHOOL									
GYM AND HVAC UPGRADES									
65 NIAGAR	59 CASWELL ST RA FALLS, ON L2J 1C2								
ELECT	RICAL LEGENDS,								
SY DR	MBOLS AND AWING LIST								
G	RGURIC								
AR	CHITECTS								
INCC	TREUKATED								
28 KING STONEY ( Tel. 905-66 W	STREET EAST, UNIT B CREEK, ONTARIO, L8G 1J8 4-8735 Fax. 905-664-8737 eb: www.2gai.com								
SCALE: AS NOTED									
START DATE: MAY 2023	2023-12								
DRAWN ABS									
CHECKED JP									

![](_page_22_Figure_0.jpeg)

# ELECTRICAL GENERAL DEMOLITION NOTES

- THE ELECTRICAL CONTRACTOR SHALL, AS PART OF HIS WORK, PERFORM ALL RELATED DEMOLITION, MODIFICATIONS, RELOCATION OF ELECTRICAL DISTRIBUTION AND OTHER EQUIPMENT AND RELATED WORK, INCLUDING NEW WORK NECESSARY TO COMPLETE THE PROJECT THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS AND DIMENSIONS PRIOR TO SUBMITTING BIDS. REFER TO EXISTING DRAWINGS AND VISIT THE SITE TO DETERMINE THE EXTENT OF THE DEMOLITION AND NEW WORK REQUIRED. THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL TECHNICAL DETAILS OF EQUIPMENT TO BE REMOVED. WHERE THERE IS A DISCREPANCY WITH THE TENDER DOCUMENTS, CONTRACTOR SHALL ENGAGE CONSULTANTS FOR DIRECTIONS. ELECTRICAL CONTRACTOR SHALL MAKE A LIST OF ALL EQUIPMENT TO BE REMOVED. THIS LIST SHALL BE WITH ALL FOLLOWING INFORMATION. MAKE/MODEL# \*\* MANUFACTURER \*\* TECHNICAL DETAILS \*\* LOCATION THIS LIST SHALL BE SUBMITTED TO THE OWNER FO RECORD PURPOSES. 4. THE ELECTRICAL CONTRACTOR SHALL NOT DISCONNECT EQUIPMENT AND ELECTRICAL CIRCUITS IN THE RENOVATION AREA OR ANY PART OF THE BUILDING WITHOUT PRIOR NOTIFICATION AND PERMISSION FROM THE OWNER. EXTREME CARE SHALL BE TAKEN TO MINIMIZE DISTURBANCE TO THE SURROUNDING AREA. 5. ITEMS REMOVED AND NOT SCHEDULED TO BE RELOCATED SHALL BE OFFERED TO THE OWNER FOR THEIR USE AND IF NOT ACCEPTED BY THE OWNER, THE ELECTRICAL CONTRACTOR SHALL DISPOSE OF THE MATERIAL FROM THE SITE IN ACCORDANCE WITH LOCAL REGULATIONS, THE ELECTRICAL CONTRACTOR SHALL DELIVER ITEMS ACCEPTED BY THE OWNER TO THE DESIGNATED LOCATIONS AS DIRECTED BY THE OWNER. IN ALL CASES WHERE WORK IS REMOVED, THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS, EQUIPMENT AND LABOR TO SUSTAIN OPERATION OF ALL PARTS OF THE SYSTEMS CONNECTING TO OR FROM THE PART REMOVED, COMPLETING ALL WORK IN STRICT ACCORDANCE WITH APPLICABLE CODES.
- ALL WIRING, CABLES AND FEEDERS INCLUDING BOTH CONNECTED TO DEVICES AND EQUIPMENT TO BE DEMOLISHED AND EXISTING THAT WERE ABANDONED IN PLACE SHALL BE REMOVED BACK TO THEIR SOURCES. UNLESS NOTED OTHERWISE, CONDUITS AND/OR WIRING SHALL, WHERE NECESSARY, BE RE-CIRCUIT AROUND THE REMOVED PART, KEEPING OCCUPIED PARTS OF THE BUILDING SYSTEM IN FULL SERVICE.
- 8. ALL EXISTING CONDUITS WHICH HAVE BEEN ABANDONED OR ARE UNUSED SHALL BE REMOVED.
- 9. PROVIDE BLANK METAL COVER PLATES FOR ALL JUNCTION/DEVICE BOXES NO LONGER IN USE THAT ARE EMBEDDED IN FLOOR SLAB OR MASONRY WALLS. PROVIDE PLUGS FOR ALL PANELS WHERE CONDUIT HAS BEEN REMOVED. COVER PLATES SHALL BE PAINTED TO MATCH EXISTING CONDITIONS.
- 10. WHERE REQUIRED COORDINATE WITH THE CONSULTANTS/OWNER FOR EXISTING PARTITIONS TO BE REMOVED TO FACILITATE WORK. DISCONNECT EXISTING BRANCH CIRCUITS SERVICING DEVICES IN PARTITIONS TO BE REMOVED. MAINTAIN CONTINUITY OF CIRCUITS SERVICING EXISTING DEVICES IN OTHER AREAS TO REMAIN.
- 11. LIGHTING FIXTURES: REMOVE LIGHTING FIXTURES AND SWITCH CONTROL WHEN THE FIXTURE TO BE REMOVED IS SERVED BY A CIRCUIT, THAT SUPPLIES FIXTURES IN OTHER, AREAS THAT ARE TO REMAIN, THE ELECTRICAL CONTRACTOR SHALL MAINTAIN THE CONTINUITY OF THE CIRCUIT TO THE REMAINING FIXTURES.
- 12. POWER RECEPTACLES: REMOVE RECEPTACLES. WHEN THE RECEPTACLE TO BE REMOVED IS SERVED BY A CIRCUIT THAT SUPPLIES RECEPTACLES IN OTHER AREAS, THAT ARE TO REMAIN, THE ELECTRICAL CONTRACTOR SHALL MAINTAIN THE CONTINUITY OF THE CIRCUIT TO THE REMAINING RECEPTACLES.
- 13. FIRE ALARM SYSTEM: COORDINATE AND CONSULT WITH CURRENT F/A SYSTEM SERVICE CONTRACTOR OR THEIR QUALIFIED REPRESENTATIVE FOR ALL FIRE ALARM DEMOLITION AND MODIFICATIONS. OPERATION SHALL BE MAINTAINED OF EXISTING FIRE ALARM SYSTEM SPECIFICALLY AS IT RELATES TO ADJACENT AREAS WHICH ARE NOT INCLUDED IN THE SCOPE OF THIS PROJECT.
- 14. ELECTRICAL CONTRACTOR SHALL PROVIDE UPDATED TYPE WRITTEN PANEL DIRECTORIES FOR ALL PANELS AFFECTED BY THE DEMOLITION AND/OR NEW WORK. CIRCUIT BREAKERS NOT USED FOR NEW WORK SHALL BE LABELED AS SPARE.
- 15. FOR EXISTING DEVICES/CIRCUITRY THAT ARE INDICATED TO BE REMOVED BACK TO POINT OF ORIGIN-THESE ITEMS ARE TO BE REMOVED BACK TO POINT OF ORIGIN UNLESS THERE WILL BE EXISTING DEVICES ON THE SAME CIRCUIT THAT ARE LOCATED OUTSIDE AREA OF WORK THAT ARE TO REMAIN. IN THAT CASE, REMOVE THE EXISTING DEVICES/CIRCUITRY IN AREA OF WORK BACK TO THESE EXISTING DEVICES TO REMAIN. ALL DEVICES/CIRCUITRY IN SURROUNDING AREAS THAT ARE TO REMAIN ARE TO BE KEPT ENERGIZED. FOR REMOVAL OF CONDUIT AND WIRING OUTSIDE OF AREA OF WORK COORDINATE AND SCHEDULE WITH OWNER PRIOR TO PERFORMING WORK.

**GENERAL NOTES** 

- A. PRIOR TO BIDDING, ELECTRICAL CONTRACTOR SHALL VISIT SITE AND BE FAMILIAR WITH ALL EXISTING CONDITIONS INCLUDING BUT NOT LIMITED TO EQUIPMENT LOCATIONS AND OTHER POSSIBLE INSTALLATION DIFFICULTIES. PAY AND OBTAIN ANY PERMITS REQUIRED INCLUDING ESA.
- B. ALL CONDUIT ROUTES SHOWN ON DRAWINGS ARE APPROXIMATE AND NOT FINAL. CONTRACTOR SHALL VERIFY ROUTES AND DO A WALKTHROUGH BEFORE BID. CONTRACTOR SHALL ACCOUNT FOR POSSIBLE DAMAGE AND REPAIR TO EXISTING CEILING AND LIGHT FIXTURES. ALL MAIN CONDUIT RUNS SHALL BE IN CORRIDOR CEILING SPACE.
- C. EXTEND/PROVIDE NEW WIRING/CONDUIT FOR ALL DEVICES THAT ARE RELOCATED.D. ALL NEW RECEPTACLES IN THE SCHOOL SHALL BE TAMPER RESISTANT TYPE.
- E. REMOVE AND RE-INSTATE ALL REQUIRED T-BAR OR DRY TYPE CEILINGS TO FACILITATE ELECTRICAL INSTALLATIONS. ANY DAMAGES TO T-BAR SHALL BE RE-INSTATED.
  F. UNLESS OTHERWISE NOTED WITH A CIRCUIT NUMBER, RE-USE EXISTING CIRCUIT BREAKERS THAT HAD BECOME SPARE FROM THE DEMOLITION TO FEED NEW RECEPTACLES. MAXIMUM 6
- DUPLEX RECEPTACLES PER CIRCUIT UNLESS OTHERWISE NOTED.
   G. FOR EACH PANEL BOARD, PROVIDE AN UPDATED, TYPE WRITTEN DIRECTORY INDICATING ROOM AND ROOM NUMBER, EQUIPMENT IDENTIFICATIONS, SPARE OR SPACE AS APPLICABLE. DIRECTORY SHALL BE MOUNTED INSIDE PANEL BOARD.
- H. ALL EMPTY CONDUITS SHALL CONTAIN PULL WIRES.I. EQUIPMENT OR DEVICES THAT ARE LOCATED ABOVE OPENINGS SUCH AS DOORS, LOUVERS, ETC., SHALL BE CENTERED ABOVE OPENING. THIS NOTE REFERS TO, BUT IS NOT LIMITED TO
- EXIT LIGHTS, EXTERIOR LIGHT FIXTURES, ETC. J. CONCEAL ALL CONDUIT IN FINISHED SPACES, IN UNFINISHED SPACES, ALL OUTLET BOXES SHALL BE RECESSED, AND ALL CONDUIT SHALL BE CONCEALED TO THE HIGHEST EXTENT
- POSSIBLE. K. PROVIDE CONDUIT BUSHINGS FOR ALL CONDUIT NIPPLES, SLEEVES, AND STUBS FROM WALL
- BOXES TO ABOVE CEILING. L. FLEXIBLE METALLIC CONDUIT SHALL BE USED FOR ALL CONNECTIONS TO MOTORS AND VIBRATING EQUIPMENT, TRANSFORMERS AND LIGHT FIXTURES, THE MAXIMUM ALLOWABLE LENGTH IS 3' FOR MOTORS /TRANSFORMERS AND 4' FOR LIGHT FIXTURE WHIPS. PVC JACKETED FLEX SHALL BE USED IN OUTDOOR AND POTENTIALLY WET LOCATION AREAS. THE

USE OF FLEXIBLE CONDUIT OTHER THAN AS SPECIFIED IS PROHIBITED.

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EXISTING PROJECTOR AT NEW LOCATION. MODIFY TO EXISTING FAN AT NEW LOCATION. MODIFY TO SUIT. EXISTING AV BOX AND SPEAKERS AT NEW LOCATION. DRAWING A2.10 FOR MORE DETAILS. LECTRICAL DEVICES AS INDICATED. MODIFY TO SUIT. D/120V, 200A, 1PH 3W (FEDERAL PACIFIC TYPE NALP 42- LBOARD. REFER TO E4.00 FOR PANEL SCHEDULE TED AND UPDATE PANEL DIRECTORY TO REFLECT THE AS SPARES: ENOVATION: ~15kW UIT ALONG U/S OF CEILING FOR NEW HVAC UNIT AND FOR EACH OF NEW HVAC UNITS RTAC-1 AND RTAC-2. T, FOR CONVENIENCE RECEPTACLE. NITRACTOR SHALL DETERMINE BEST ROUTING ON SITE KES AND RISER LOCATION ALONG INNER GYMNASIUM CONNECT SWITCHES AND GFCI CONVENIENCE ACTOR). THIS CONTRACTOR SHALL MOUNT THESE PER MANUFACTURER INSTRUCTIONS AND PER OESC VE MIN. 1m WORKING CLEARANCE WITH SECURE .750mm ABOVE FINISHED ROOF.	<text><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></text>	NAGARA CATHOLIC   DISTRICT SCHOOL BOARD
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ComparisonImage:		ELEMENTARY SCHOOL GYM AND HVAC UPGRADES 6559 CASWELL ST NIAGARA FALLS, ON L2J 1C2 GYM FLOOR PLAN - POWER & SYSTEMS NEW GRGURIC ARCHITECTS INCORPORATED 28 KING STREET EAST, UNIT B STONEY CREEK, ONTARIO, L8G 1J8 Tel. 905-664-8735 Fax. 905-664-8737 Web: www.2gai.com
		AS NOTED START DATE: MAY 2023 DRAWN ABS CHECKED JP PRINT DATE AS NOTED 2023-12 DRAWING: E3.10

	LIGHTING F	IXTURE	E SCI	HEDULE
TYPE	DESCRIPTION / REQUIREMENTS	MOUNTING	INPUT WATTS	MANUFACTURER
A10	- 8" WIDTH 4' LENGTH - 18GA. STEEL HOUSING - POLYCARBONATE LENS - VANDAL RESISTANT - 4000 LUMEN OUTPUT - 4000K COLOUR TEMPERATURE, 80 CRI - 120V LED DRIVER	PENDANT MOUNTED	125.9 W	COOPER - FAILSAFE HVSL8 OR APPROVED EQUALS
R10	- 2' X 4' LED TROFFER - STEEL HOUSING - ACRYLIC PRISMATIC LENS - 4800 NOMIAL LUMNES - 4000K COLOUR TEMPERATURE, 80 CRI - 120V LED DRIVER , 0-10V DIMMABLE	RECESSED ACOUSTICAL TILE CEILING	35W	COOPER LIGHTING - METALUX 24GR LED OR APPROVED EQUALS
S10	- 4'-0" LED STRIP ROUND - SEMI FROST LENS-NARROW - 3500 LUMEN OUTPUT - 4000K COLOUR TEMPERATURE, 80 CRI - 120V LED DRIVER	SURFACE MOUNTED	55W	COOPER LIGHTING - METALUX SNLED LENSED OR APPROVED EQUALS

NOTE:

 FIXTURE DESCRIPTION AND REQUIREMENTS LISTED ARE RECOMMENDATIONS FOR THE FIXTURE TYPE UTILIZED IN THIS PROJECT AND MAY NOT INCLUDE ALL OPTIONS AVAILABLE FOR EVERY MANUFACTURERS FIXTURE SERIES LISTED. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A COMPLETE FIXTURE INSTALLED WITH ALL NECESSARY HARDWARE.

PANEL LOCATION VOLT		AGE	PHASE	WIRE	M	AINS	AMPS	A.I.C.	ENCLOSURE	MOUNTING	FED FR	NOX	
	B GYM 120 /		240	1	3	M	LO	225A		NEMA 1	SURFACE	SWB	D
CCT LOAD DESCRIPTION		VA	CB OPT	СВ	PH	СВ	СВ ОРТ	VA	LOA	D DESCRIPTIC	N	ССТ	
1	1 WASHROOM LIGHTS				15	Α	15			STORAGE & STAGE LIGHTS			2
3	3 CORRIDOR LIGHTS				15	В	15			LIGHTS - AIR H			4
5	5 INSTRUCTORS & CHANGE ROOM				15	Α	15			STAGE WALL RECEPTS.			6
7	CORRIDOR LIGHTS				15	В	15			OUTSIDE STORAGE ROOM			8
9	WALL RECEPTS				15	Α	15			MAIN GYM LIGHTS			10
11	MAIN GYM LIGHTS				15	В	15			MAIN GYM LIG	HTS		12
13	MAIN GYM LIGHTS				15	Α	15			FANS			14
15	GYM SPOT LIGHT				15	В	15			CAMERAS			16
17	T.V. RECEPTS				15	A	15			EXISTING BRA	NCH CIRCUIT	(NOTE:3)	18
19	HONEYWELL PANEL				15	В	15			WASHROOM E	XHAUST FAN		20
21	EMERGENCY LIGHTS				15	Α	15				BOYS		22
23	HAND DRYFR GIRLS				15	В	15			DITER			24
25						A	15				BOYS		26
27	27 HAND DRYER GIRLS				15	В	15						28
29						A	15			GYM EXHAUST	FAN		30
31					20	В	15						32
33						A	15			DOOR OPERA	TOR GYM		34
35	EXISTING BRANCH CIRCUIT (NOTE:3)				15	B	60	60	RTAC-1				36
37	EXISTING BRANCH CIRCUIT (	NOTE:3)			15	A							38
39					15	B	60			RTAC-2			40
41		NOTE:3)			15	A							42
43	SPARE				15	B	20					ECEPTS	44
45	SPARE SDADE				15	A	15						40
47	47 SPARE				15		20					CEDTS	40
49	49 SPARE				15		20					CLF13	50
53	SPACE												54
55	SPACE					R							56
57	SPACE									SPACE			58
59	SPACE					B				SPACE			60
00	017102		1										00
СВ	3 OPT: ST - SHUNT TRIP								Р	HASE TOTALS	KVA	AMPS	
	AF - ARC FAULT CIRC		JPTER						-	PHASE-A	0.0	0.0	7
	<b>GF - GROUND FAULT</b>	<b>CIRCUIT INT</b>	ERRUPTI	ER						PHASE-B	0.0	0.0	1
	FR - 100% RATED									ľ			_
	L - LOCKABLE												
									TOTAL	CONNECTED	0.0	0.0	7
	NOTES:												_
	<b>1.CONTRACTOR TO M</b>	ATCH EXIST	ING BRE	AKERS C	IRCUIT	RAT	ING W	ITH NEW	BREAKE	RS RATING.			
	2.MATCH KAIC RATIN	G OF NEW P	ANEL AN	D BREAK	ERS W	ІТН Е	EXISTI	NG PANEI	AND BF	REAKERS.			
	<b>3.CONTRACTOR TO T</b>	RACE EXISTI	NG UNKI		RANCH	CIRC		ND UPDA <sup>.</sup>	TE PANE	L SCHEDULE A	S REQUIRED.		

NIAGARA CATHOLIC DISTRICT SCHOOL BOARD								
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DRAWINGS ARE NOT TO BE SCALED. CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT; AND MUST REPORT ANY DISCREPANCIES TO THE ARCHITECTS BEFORE PROCEEDING WITH THE WORK. THE USE OF THIS DRAWING OR PART THEREOF IS FORBIDI WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECTS.	I O DEN							
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