



2300, 411 - 1st Street SE, Calgary, AB Canada T2G 4Y5 norr.com

NORR ARCHITECTS ENGINEERS PLANNERS A Partnership of Limited Companies

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ARCHITECTURAL

SUITE 2300, 411 - 1st STREET S.E. CALGARY, ALBERTA T2G 4Y5

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ARCHITECTURA	AL DRAWINGS
A00-00-01	COVER SHEET/DRAWING LIST
A00-01-02	GENERAL NOTES, BUILDING CONSTRUCTION
	TYPES & WINDOW SCHEDULE
A01-00-01	BUILDING CODE REVIEW & LIFE SAFETY PLAN
A10-00-00	SITE PLAN
A20-00-01	PLANS FLOOR PLANS REFLECTED
	CEILING PLANS
A20-01-01	ROOF PLANS - EXISTING & PROPOSED
A30-00-01	BUILDING ELEVATIONS
A31-00-01	BUILDING SECTIONS
A33-00-01	INTERIOR ELEVATIONS
A40-00-01	ENLARGED PLAN
A51-00-01	SECTION DETAILS

GOVERNMENT OF CANADA ADDITION

INNISFAIL, ALBERTA, CANADA

NORR JOB NO: NCCA-17-0228

ISSUED FOR TENDER - MARCH 29, 2018

STRUCTURAL

NORR ARCHITECTS ENGINEERS PLANNERS

NORR ARCHITECTS ENGINEERS PLANNERS SUITE 2300, 411 - 1st STREET S.E. CALGARY, ALBERTA T2G 4Y5

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STRUCTURAL DRAWINGS GENERAL NOTES S-01 S-02 GENERAL NOTES S-03 TYPICAL DETAILS

TYPICAL DETAILS TYPICAL DETAILS

MECHANICAL

NORR ARCHITE SUITE 2300, 41 CALGARY, ALBE

PHONE: 403.264.4000 FAX: 403.269.7215

MECHANICAL DRAWINGS M-00-01 MECHANICAL LEGE SPECIFICATIONS M-20-01 PIPING DEMOLITIO M-50-01 VENTILATION DEM PLANS

S-04 S-05 S-06 PLANS AND SECTIONS FOUNDATION

PLAN, FRAMING PLAN AND SECTIONS

	ELEC	CTRICAL
ECTS ENGINEERS PLANNERS 1 - 1st STREET S.E. ERTA T2G 4Y5	NO SL C/	ORR ARCHITECTS ENGINEERS PLANNERS JITE 2300, 411 - 1st STREET S.E. ALGARY, ALBERTA T2G 4Y5
	PHO	ONE: 403.264.4000
	FAک	X: 403.269.7215
	ELECTRIC	CAL DRAWINGS
ND, SCHEDULE, DRAWING LIST,	E00-00	ELECTRICAL COVER SHEET
	E00-01	DEMOLITION AND NEW POWER & SYSTEM PLANS
N AND CONSTRUCTION PLANS	E10-00	LIGHTING PLANS, SCHEDULES AND SINGLE
OLITION AND CONSTRUCTION		LINE DIAGRAM
	E20-00	ELECTRICAL SPECIFICATIONS
	E20-01	ELECTRICAL SPECIFICATIONS





M MISCELLANEOUS HARDWARE

M4 WEDGE TO PREVENT SPREAD

DOOR SCHEDULE

ABBREVIATION

HCWD HOLLOW CORE WOOD

HMI HOLLOW METAL INSULATED

MCI METAL CLAD INSULATED

SCWD SOLID CORE WOOD

SG SINGLE GLAZED

TG TEMPERED GLASS

WG WIRED GLASS (6mm)

M2 WEATHERSTRIP AND DOOR SWEEP

M1 THRESHOLD

M3 STRIKE BUCKET

ALUM ALUMINUM

DG DOUBLE GLAZED FROSTED GLASS

FLG FIRELITE GLASS

hm hollow Metal

PF PREFINISHED PS PRESSED STEEL

M METAL

PT PAINT

WD WOOD

ST STAINED

IRE LA	BELS	HARDWARE	REMARKS
R.R.	TEMP. RISE	GROUP	
	(250° C after)		
			EXISTING DOOR
		B1 L1 C1 S1 M1 M2 M3 M4	
		B1 L1 C1 S1 M1 M2 M3 M4	RE-LOCATED DOOR, ENSURE DOOR MEETS
			ALL DOOR AND HARDWARE REQUIREMENTS.

GENERAL NOTES

- ALL CONSTRUCTION TO COMPLY WITH NATIONAL BUILDING CODE, REGULATIONS, RULES AND BY-LAWS SET BY THE AUTHORITY HAVING IURISDICTION.
- PROVIDE AND MAINTAIN CONTINUOUS FIRE/SMOKE SEPARATIONS. EACH TRADE 2. IS TO FIRE STOP ALL SERVICE PENETRATIONS ASSOCIATED WITH THEIR WORK WITH APPROVED AND U.L.C. LISTED FIREPROOF SYSTEMS.
- PROVIDE AND MAINTAIN CONTINUOUS AIR/VAPOUR BARRIER SYSTEM. CAULK AROUND OPENINGS AND GAPS WITH SEALANT TO ACHIEVE A CONTINUOUS BARRIER.
- PROVIDE AND MAINTAIN CONTINUOUS ACOUSTIC BARRIER SYSTEM. AVOID SOUND TRANSMISSION THROUGH DIRECT CONTACT AT ACOUSTICALLY TREATED SURFACES. COMPLETELY SEAL ALL PENETRATIONS WITH ACOUSTIC SEALANT, TAPE AND INSULATION AS REQUIRED TO PREVENT SOUND TRANSFER AND MAINTAIN THE REQUIRED STC RATINGS OF THE WALL SYSTEMS. PROVIDE APPROVED ISOLATION METHODS TO ALL NOISE GENERATING AND MOVING EQUIPMENT.
- VERIFY ALL CONDITIONS AND DIMENSIONS ON SITE PRIOR TO FABRICATION. PROMPTLY NOTIFY THE ARCHITECT OF ANY ERRORS OR OMISSIONS.
- DIMENSIONS ARE TAKEN TO GRID LINES, TO FACE OF STUD, TO FACE OF 6. CONCRETE AND / OR BLOCK WALLS AND TO FACE OF CONCRETE SLAB.
- 7. THE GENERAL CONTRACTOR SHALL ARRANGE FOR AND COORDINATE ALL INCOMING AND OUTGOING MECHANICAL AND ELECTRICAL SERVICES FOR THIS PROJECT.
- 8. THE GENERAL CONTRACTOR SHALL COORDINATE ALL ACTIVITIES AS REQUIRED TO ENSURE EFFICIENT, CORRECT AND ORDERLY INSTALLATION OF EACH PART OF THE WORK TO AVOID CONFLICT IN THE TRADE WORK AND SCHEDULE.
- 9. REFER TO STRUCT. DWGS FOR COLUMN SIZES, LOCATIONS AND REINFORCEMENT.
- 10. ALL DOORS AND WINDOWS REFERENCED ON THE PLANS AND SCHEDULES ARE SHOWN NOMINAL SIZE. CONFIRM AND VERIFY ALL ROUGH OPENING SIZE REQUIREMENTS WITH THE SELECTED PRODUCT MANUFACTURER AND SITE SITE CONDITIONS PRIOR TO FABRICATION. REFER TO MANUFACTURERS INSTALLATION MANUAL.
- 11. ALL INTERIOR DOOR OPENINGS IN STUD FRAMING WALLS TO BE SPACED A MINIMUM OF 100mm (4") FROM THE ADJACENT WALL, UNLESS NOTED NOTED OTHERWISE.
- 12. PROVIDE AND INSTALL SOLID BLOCKING AND BACKING WITHIN THE WALLS FOR ALL WALL MOUNTED CABINETS AND ACCESSORIES, HANDRAILS, GUARDS, LADDERS, MECHANICAL AND ELECTRICAL FIXTURES AND EQUIPMENT, ETC. AS REQUIRED FOR PROPER ANCHORING.
- 13. ALL CONSTRUCTION TO COMPLY WITH INDUSTRY TRADE STANDARDS, AS WELL AS MANUFACTURERS' RECOMMENDATIONS, TO THE EXTENT THAT THOSE INSTRUCTIONS AND RECOMMENDATIONS ARE MORE EXPLICIT OR STRINGENT THAN THE REQUIREMENTS CONTAINED IN THESE CONTRACT DOCUMENTS.
- 14. MECHANICAL LINES ARE NOT TO BE IN CONTACT WITH THE STUD WALLS OR CONCRETE WALL OR FLOOR ASSEMBLIES. ISOLATE ALL PIPES TO AVOID SOUND TRANSMISSION. INSTALL NEOPRENE RUBBER PAD ON TOP OF SUBSTRATE SURFACE (BOTTOM PLATE, CONCRETE ETC.) BEFORE ALL MECHANICAL CLAMPS ARE TIGHTENED INTO PLACE.
- 15. CONFIRM ALL ROUGH OPENING SIZES AND CONNECTION REQUIREMENTS FOR MECHANICAL, ELECTRICAL AND OWNER SUPPLIED EQUIPMENT. ADJUST ROUGH OPENING SIZES TO SUIT.
- 16. INSTALL & CONNECT OWNER SUPPLIED EQUIPMENT OR APPLIANCES AS DIRECTED, CENTERED, LEVEL AND TRUE.
- 17. PROVIDE ALL WARRANTIES, BONDS AND MANUFACTURERS' OPERATING INSTRUCTION AND SERVICE MANUALS AS WELL AS PARTS LISTS AT THE COMPLETION OF THE PROJECT.
- 18. EXTERIOR WALL CONSTRUCTION TO COMPLY WITH "ALBERTA WALL & CEILING BUREAU" DETAILS AND REQUIREMENTS.
- 19. INTERIOR AND EXTERIOR STEEL STUDS TO BE DESIGNED BY A PROFESSIONAL ENGINEER. FOR STUD SPACING AND STUD GAUGE, REFER TO STEEL STUD ENGINEERS DESIGN / DRAWINGS.
- 20. DOOR DETAILS, TYPE, AND HARDWARE SCHEDULE PER PROVIDED SPECIFICATION DOCUMENT - DIVISION 08.

WALL AND PARTITION NOTES

- A. ALL INTERIOR WALLS EXTEND TO U/S OF STRUCTURE UNLESS NOTED OTHERWISE.
- B. REFER TO STRUCTURAL DRAWINGS FOR SHEAR WALL REQUIREMENT & LOCATION.
- C. WALL FRAMING MAXIMUM 400mm O.C. ALL FRAMING TO BE SECURED TO FLOOR.
- D. TO MINIMIZE GAPS, CEILING BOARD TO BE INSTALLED FIRST, THEN WALLS, THEN FLOORS.
- STAGGER ALL JOINTS. USE SCREWS TO ATTACH WALL BOARD / CEILING BOARD / PLYWOOD COVER TO STUDS , AS WELL AS TOP AND BOTTOM PLATES.
- AROUND SINK CUPBOARD STATION, PROVIDE ADDITIONAL LAYER OF MOISTURE RESISTANT OSB TO FACE OF WALL ASSEMBLY, SUITED FOR BACKSPLASH INSTALLATION (AS NOTED ON PLANS). WALL ASSEMBLY BEHIND TO MAINTAIN INTEGRITY AS SPECIFIED IN WALL TYPES SCHEDULE.
- WHERE A WALL IS MADE UP OF DIFFERENT PARTITION TYPES, PROVIDE RESILIENT G. CHANNEL (IF REQUIRED) & ADDITIONAL LAYER OF GYPSUM BOARD (IF REQUIRED), SO THAT FINISHED GYPSUM BOARD FACE IS SMOOTH, ALIGNED & CONTINUOUS UNLESS NOTED OTHERWISE.
- H. NON-COMBUSTIBLE MINERAL WOOL INSULATION TO BE USED THROUGHOUT.
- ADDITIONAL ACOUSTIC INSULATION TO BE INSTALLED AT ALL PLUMBING AND FAN COIL WALL LOCATIONS.

			DATE ISSUED
WINDOW SCHEDULE			2018-02-14 ISSUED FOR DP 2018-03-02 ISSUED FOR 95% F
EXISTING TO BE CONFIRMED	EXISTING TO BE CONFIRMED	3045	2018-03-29 ISSUED FOR TEND
WINDOW HEAD		EQ. TO EQ.	
		MATCH W1	
€ 100 860 WINDOW SILL			
LOCATION: MAIN FLOOR FRAME: TO BE RELOCATED	W2 LOCATION: MAIN FLOOR FRAME: TO BE RELOCATED	W3 LOCATION: MAIN FLOOR FRAME: TO MATCH EXISTING WINDOW FRAMES	
REFER TO FLOOR PLAN GLASS TYPE: REPLACE EXISTING GLAZII WITH CLEAR GLAZING. (REFER TO NOTES BELOW	NG GLASS TYPE: REPLACE EXISTING GLAZING WITH CLEAR GLAZING. (REFER TO NOTES BELOW)	GLASS TYPE: CLEAR GLAZED. (REFER TO NOTES BELOW)	
COLUMN & BEAM RATING	WINDOW NOTES:		
COVIDE F.R.R. TO ALL COLUMNS, LOAD BEARING WALLS AND BEAMS QUAL TO THE STRUCTURE BEING SUPPORTED (REFER TO BUILDING CODE	 DESIGN WINDOWS TO NBC AND CSA STANDARDS I DESIGN WINDOWS TO MEET OR EXCEED NECB DIVIDUAL ROUGH OPENING O CONFIRM FACH & INDIVIDUAL ROUGH OPENING O 	FOR WINDOWS: WATER TIGHTNESS B3 & WIND-LOAD RESISTANCE C3. SION B 3.1 REQUIREMENTS FOR GLAZED FENESTRATION N SITE PRIOR TO FABRICATION	
STRUCTURAL	4. CONFIRM ALL UNIT WINDOWS WITH BUILDING ELEM 5. ALL WINDOWS TO BE MIN. DOUBLE GLAZING C/W 6. APPLY SF9 ACE SECURITY LAMINATE OR APPROVE	VATIONS. LOW E COATING AND ARGON FILLED. D EQUIVALENT TO ALL GLAZING UNITS WIDER THAN 150mm TYPICAL.	
AD THESE DRAWINGS IN CONJUNCTION WITH THE STRUCTURAL IGINEER'S DRAWINGS. WHERE STRUCTURAL DRAWINGS CONFLICT WITH HE REQUIREMENTS OF THE BUILDING CODE, THE STRUCTURAL ENGINEEF IALL BE CONSULTED FOR DIRECTION. NO CHANGE TO THE STRUCTURA ESIGN SHALL BE IMPLEMENTED WITHOUT WRITTEN CONSENT FROM THE	EXTERIOR WALL TYPES SCI No. ILLUSTRATION	HEDULE ASSEMBLY (from exterior to interior)	This drawing has been prepared the CLIENT and there are no re kind made by NORR Architects E
CABINETS		EXTERIOR WALL TYPE 1 -WOOD FIBRE SIDING -19 x 67 WOOD STRAPPING @ 400mm O.C. VERTICALLY	any party with whom NORR A Planners has not entered into a co This drawing shall not be us
HE ARCHITECTURAL PLANS INDICATE PLANNING & LAYOUT OF A		 -Z-BARS SPACED @ 1200mm O.C. HORIZONTALLY -75mm RIGID INSULATION -AIR/VAPOUR BARRIER MEMBRANE 	purposes until the seal appearing dated by the Architect or Engineer
ATIONARY CABINET WITH SINK. IS THE INTENTION OF THE OWNER THAT THE CABINET CASEWORK & AL LATED COUNTERTOPS & MILLWORK BE PROVIDED ON A DESIGN/BUILD		-13mm OSB SHEATHING -38 x 140 WOOD STUDS @ 400mm O.C. -13mm GYPSUM BOARD	Project Component LUNCHROOM EXPAN
ASIS, WITH ALL WORK INCLUDED TO PROVIDE COMPLETE, CODE OMPLIANT & FUNCTIONAL INSTALLATION COORDINATED WITH OWNER JPPLIED APPLIANCES & THE WORK OF OTHER TRADES INCLUDING	FLOOR ASSEMBLY TYPES S	CHEDULE	Keyplan
MECHANICAL & FLECTRICAL	No. ILLUSTRATION	ASSEMBLY <u>CONCRETE FLOOR</u>	
HE ARCHITECTURAL DRAWINGS INDICATE GENERAL DESIGN INTENT FOR	R IS F01	-REINFORCED CONCRETE SLAB, REFER TO STRUCT. DWGS -10mil POLY VAPOUR BARRIER, SEALED TO EXISTING -50mm RIGID INSULATION (R8.5) -CRUSHED GRAVEL BASE C/W DRAINAGE SYSTEM	
ECTRICAL PANEL LOCATIONS, POWER & COMMUNICATION OUTLETS, GHTING & RELATED SWITCHING.		>	Consultants
IS THE INTENTION OF THE OWNER THAT THE MECHANICAL & ECTRICAL SYSTEMS BE PROVIDED ON A DESIGN CONSULTANT BASIS, ITH ALL WORK INCLUDED TO PROVIDE COMPLETE, CODE COMPLIANT (STEMS FOR HEATING, PLUMBING, FLECTRICAL POWER			Architectural: NORR Architects E
THE STEMS FOR HEATING, FLOMBING, ELECTRICAL FOWER, DMMUNICATIONS & LIGHTING. FER TO DRAWINGS &/or ADDITIONAL SPECIFICATIONS ISSUED BY THE	INTERIOR PARTITION TYPE	ES SCHEDULE	Mechanical: NORR Architects E Electrical: NORR Architects E
DNSTRUCTION MANAGER.	No. ILLUSTRATION	ASSEMBLY	Seal(s)
		-LOAD BEARING - TO U/S OF TRUSS CHORD -GYPSUM BOARD TO U/S OF TRUSSES -13mm GYPSUM BOARD -38 x140 WOOD STUDS @ 400mm O.C. -13mm GYPSUM BOARD	
	P1b	INTERIOR PARTITION TYPE 1 -LOAD BEARING - TO U/S OF TRUSS CHORD	
SYMBOLS LEGEND		-GYPSUM BOARD TO U/S OF TRUSSES -13mm GYPSUM BOARD -38 x140 WOOD STUDS @ 400mm O.C. -140mm BATT INSULATION - SURROUNDING THIS ROOM ONLY	
——————— AIR RETARDER		-13mm GYPSUM BOARD	
	P2	MODIFIED EXISTING WALL -REMOVE EXISTING WOOD FIBRE SIDING -REMOVE EXISTING WOOD STRAPPING	2300, 411 - 1st Street SE, Calgary, AB Canada T2G 4Y5 norr.com
REFERS TO DETAIL NUMBER		 -REMOVE EXISTING Z-BARS -REMOVE EXISTING RIGID INSULATION -REMOVE EXISTING AIR/VAPOUR BARRIER MEMBRANE -REMOVE EXISTING OSB SHEATHING 	NORR ARCHITECTS ENGINEE A Partnership of Limited Compa Poon McKenzle Architects (Alberta) Inc. Poon McKenzle Holdings Inc. NORR is a trademark owned by Ingenium Group Inc. and is used und
		-NEW 13mm GYPSUM BOARD -EXISTING 38 x 140 WOOD STUDS @ 400mm O.C. -EXISTING AIR SPACE	Victor Smith, Architect, AAA, B.Arch, MAIBC Bruce G. McKenzle, Architect, AAA, M.Arch, MAIBC A. Silvio Baldassarra, Architect, AAA, B.Arch, MAIBC Adrian Todella, P.Eng., APEGA Chris Pal, P.Eng., APEGA
A*.* REFERS TO SECTION NUMBER REFERS TO DRAWING NUMBER			- Project Manager Draw
	No.ILLUSTRATION	ASSEMBLY (from top to bottom)	Project Leader Check D. HIDER
ROOM NAME DENOTES ROOM NUMBER AND ROOM TYPE	R1	ROOF ASSEMBLY TYPE 1 -2 PLY SBS ROOFING MEMBRANE	RCMP
		 -25mm FIBRE BOARD -RIGID INSULATION (REFER TO ROOF PLAN FOR SLOPES) -VAPOUR BARRIER MEMBRANE -19mm T & G PLYWOOD SHEATHING 	
existing elevation		-FLAT TRUSS (REFER TO STRUCTURAL) -13mm GYPSUM BOARD TO U/S OF TRUSS	Project INNISFAIL PDS
FINISH ELEVATION (ARCH.)			LUNCHROOM EXPAN
HATCH LEGEND			Drawing Title GENERAL NOTE BUILDING CONSTRUCT
CONCRETE	FIRE RETARDANT PLYWOOD	MINERAL WOOL BATT INSULATION	& WINDOW SCHEDULE
GYPSUM BOARD	ORIENTED STRAND BOARD (OSB)		
DIMENSIONAL LUMBER	CEMENT BOARD COMPOSITE PANEL		Check Scale (may be photo reduction of the check Scale (may be photo
	<u>илтикликалика</u>		Project No. NCCA17-022
			Drawing No.

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		E RFV	IEW:				SPECIFIC CODE
EVIEW BASED ON			CODE				AKTICLE
- THE FOLLOW	ING NOTES PRO		ATION HIGHLI		NG DESIGN CE	RITERIA. IT IS	
SHALL CONF	RM TO ALL AP	e all design PLICABLE SECT		IUN KEQUIREM BUILDING CODI	ENT. ALL CON: E.	STRUCTION	
- CONSTRUCTE	D UNDER PAR	f "3" of Build	ING CODE				
ENERAL INFORM	ATION						
BUILDING AR	EA:	746.01 sq.m.					
BUILDING HEI	GHT:	1 STOREYS A 0 LEVEL OF P	BOVE GRADE ARKADE BELOV	V GRADE			
		0/ 1/					
	OPENINGS THR	OUGH FLOOR	ASSEMBLIES				2 2 0
CONFIRMING	TO ARTICLE A	BC 3.2.8.2.				OK STACE	J.2.0
	CY						
A) GROUP/DIV.	D	BUSINESS AN	d personal s	ERVICES	1 STOREY		
ZE AND CONSTR A) GROUP D	RUCTION RELAT	IVE TO OCCU	PANCY				3.2.2.62
1) a)	NOT MORE TH	IAN 2 STOREY	′S				1 STOREY
b)	BUILDING ARE	A NOT MORE	THAN 1000 s	q. m			746.01 sq.m
DCATION OF AC	CESS ROUTE &	PROVISION FC	R FIRE FIGHTI	NG			
	TRANCE AND		opening are	E LOCATED MIN	I. 3m, & MAX.	15m FROM	3.2.5.5.(1)
- IF FIRE DEPAF	TMENT CONN	ECTION IS PRO	 VIDED, MAX. 4	15m FROM FIR	E DEPARTMEN	Т	3.2.5.15.
CONNECTION - IF FIRE DEPAT	IU HYDRANT RTMENT CONN	ECTION IS NOT	r provided, m	AX. 90m FRO	M HYDRANT T	O VEHICLE	3.2.5.5.(2) (b)
PLUS UNOBST		OF TRAVEL		256			3256
,							······································
CCUPANCY LOAI	<u>) (BY LEVEL / R</u> CES	<u>.00M)</u> 746.01.som	@ 9 30 cam	/ PERSON - 91	PERSONS		3.1.17.1
- POSTED MA		ANCY AS STA	TED BY OWNER	R = 25 PERSON	S		
	MIN. 2	EGRESS DOC	RWAY	CORRIDOR	WIDTH (mm)	MAX. TRAV	/EL DIST. (m)
LEVEL / ROOM		3.3.1.5.		3.3.1.9. /	3.3.1.17.	3.4	.2.5
MAIN FLR	REQU	лкеD 2	PROVIDED 3	кеQUIRED (MIN. 1100)	РКОVIDED 1500mm	кеQUIRED 40m	РКОVIDED 37.3m
	-		8 		•		
XIT WINTH							3432
			RFOLLIRFD (mm	1)		PROVIDED (mr	אניד. כ n)
FLOOR	LOAD	EXIT CORR.	STAIRS	DOORWAYS	EXIT CORR.	STAIRS	, DOORWAYS
MAIN FIP	25	(MIN. 1100)	(MIN. 900)	(MIN. 800)	1500mm	N/A	900mm
			1	1			
	RANCE	2050					2 4 2 4 /1
EADROOM CLEA - EXITS (STAIRS - DOORWAYS	RANCE 5 & LANDING)	2050mm (Mil 2030mm (Mil	N. 2050mm) N. 2030mm)				3.4.3.4 (1) 3.4.3.4 (4)
EADROOM CLEA - EXITS (STAIRS - DOORWAYS	RANCE & LANDING)	2050mm (Mil 2030mm (Mil	N. 2050mm) N. 2030mm)				3.4.3.4 (1) 3.4.3.4 (4)
EADROOM CLEA - EXITS (STAIRS - DOORWAYS RE SEPARATION - PUBLIC CORR	RANCE & LANDING) IDOR	2050mm (MII 2030mm (MII 45min F.R.R.	N. 2050mm) N. 2030mm)				3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2)
EADROOM CLEA - EXITS (STAIRS - DOORWAYS RE SEPARATION - PUBLIC CORR - SERVICE ROO - STORAGE RO	RANCE & LANDING) IDOR M OM	2050mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F R R	N. 2050mm) N. 2030mm)				3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3)
EADROOM CLEA - EXITS (STAIRS - DOORWAYS RE SEPARATION - PUBLIC CORR - SERVICE ROO - STORAGE RO - JANITOR'S RC	RANCE 5 & LANDING) IDOR M OM DOM	2050mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R.	N. 2050mm) N. 2030mm)				3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2)
EADROOM CLEA - EXITS (STAIRS - DOORWAYS RE SEPARATION - PUBLIC CORR - SERVICE ROO - STORAGE RO - JANITOR'S RC RE CLOSUPES	RANCE & LANDING) IDOR M OM OM	2050mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R.	N. 2050mm) N. 2030mm)				3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4
EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROO - STORAGE RO - JANITOR'S RC RE CLOSURES F.R.R. OF FIR	RANCE & LANDING) IDOR M OM OM OM	2050mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R.	N. 2050mm) N. 2030mm) F CLOSURE				3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4.
EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROO - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min	RANCE & LANDING) IDOR M OM OM OM E SEPARATION (0.75 hr) (1.00 hr)	2050mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. RATING O 45 min. 45 min.	N. 2050mm) N. 2030mm) F CLOSURE (0.75 hr) (0 75 hr)	_			3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4.
EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROO - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min. 90 min.	RANCE 5 & LANDING) IDOR M OM OOM E SEPARATION (0.75 hr) (1.00 hr) (1.50 hr)	2050mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. RATING O 45 min. 45 min. 60 min.	N. 2050mm) N. 2030mm) F CLOSURE (0.75 hr) (0.75 hr) (1.00 hr)	_			3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4.
EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROO - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min. 90 min. 120 min.	RANCE 5 & LANDING) IDOR M OM OM OM E SEPARATION (0.75 hr) (1.00 hr) (1.50 hr) (2.00 hr)	2050mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. RATING O 45 min. 45 min. 60 min. 90 min.	N. 2050mm) N. 2030mm) F CLOSURE (0.75 hr) (0.75 hr) (1.00 hr) (1.50 hr)	<u>.</u>			3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4.
EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROO - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min. 90 min. 120 min. 20 MINUTE D	RANCE 5 & LANDING) IDOR M OM OM E SEPARATION (0.75 hr) (1.00 hr) (1.50 hr) (2.00 hr)	2050mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. RATING O 45 min. 45 min. 60 min. 90 min.	N. 2050mm) N. 2030mm) F CLOSURE (0.75 hr) (0.75 hr) (1.00 hr) (1.50 hr)	_			3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4. 3.1.8.4.
EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROO - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min. 90 min. 120 min. 20 MINUTE D A DOOR ASS PER MITTED T	RANCE S & LANDING) IDOR M OM OM OM E SEPARATION (0.75 hr) (1.00 hr) (1.50 hr) (2.00 hr) (2.00 hr) OOR EMBLY HAVING	2050mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. 45min F.R.R. (A5min, 45min, 60min, 90min, 5 A FIRE-PROT	N. 2050mm) N. 2030mm) F CLOSURE (0.75 hr) (0.75 hr) (1.00 hr) (1.50 hr) ECTION RATIN A FIRE SEDAD	G OF NOT LES	S THAN 20 mi	n. IS VEAFIRE	3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4. 3.1.8.10.(1)
EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROO - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min. 90 min. 120 min. 120 min. 20 MINUTE D A DOOR ASS PERMITTED TO RESISTANCE I	RANCE S & LANDING) IDOR M OM OM OM OM E SEPARATION (0.75 hr) (1.00 hr) (1.50 hr) (1.50 hr) (2.00 hr) (2.00 hr) COOR EMBLY HAVING O BE USED AS A RATING MORE	2050mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. 45min F.R.R. (A5min, 45min, 60min, 90min, 5 A FIRE-PROT A CLOSURE IN THAN 1 hr LO	N. 2050mm) N. 2030mm) F CLOSURE (0.75 hr) (0.75 hr) (1.00 hr) (1.50 hr) ECTION RATIN A FIRE SEPARA CATED BETWEI	G OF NOT LES ATION NOT REC EN A CORRIDO	S THAN 20 mi QUIRED TO HA R AND A SUIT	n. IS VE A FIRE E.	3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4. 3.1.8.4.
EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROC - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min. 90 min. 120 min. 120 min. 20 MINUTE D A DOOR ASS PERMITTED TO RESISTANCE I	RANCE S & LANDING) IDOR M OM OM OM OM E SEPARATION (0.75 hr) (1.00 hr) (1.50 hr) (2.00 hr) (2.00 hr) COOR EMBLY HAVING O BE USED AS A RATING MORE E LIMIT FOR DO	2050mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. (A5min, 45min, 60min, 90min, 5 A FIRE-PROT A CLOSURE IN THAN 1 hr LO	N. 2050mm) N. 2030mm) F CLOSURE (0.75 hr) (0.75 hr) (1.00 hr) (1.50 hr) ECTION RATIN A FIRE SEPAR/ CATED BETWEI	G OF NOT LES	S THAN 20 mi QUIRED TO HA R AND A SUIT	n. IS VE A FIRE E.	3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4. 3.1.8.4.
EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROC - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min. 90 min. 120 min. 120 min. 20 MINUTE D A DOOR ASS PERMITTED TO RESISTANCE I EMPERATURE RIS - ALL STAIRWE	RANCE S & LANDING) IDOR M OM OM OM OM E SEPARATION (0.75 hr) (1.00 hr) (1.50 hr) (1.50 hr) (2.00 hr) OOR EMBLY HAVING O BE USED AS A RATING MORE E LIMIT FOR DO LL DOORS ANE	2050mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. 45min F.R.R. 45min. 60 min. 90 min. 5 A FIRE-PROT A CLOSURE IN THAN 1 hr LO DORS D ELEVATOR A	N. 2050mm) N. 2030mm) F CLOSURE (0.75 hr) (0.75 hr) (1.00 hr) (1.50 hr) ECTION RATIN A FIRE SEPAR/ CATED BETWEI CCESS AREAS	G OF NOT LESA ATION NOT REC EN A CORRIDO SHALL BE INST	S THAN 20 mi QUIRED TO HA R AND A SUIT TALLED WITH A	n. IS VE A FIRE E.	3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4. 3.1.8.10.(1) 3.1.8.15.
EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROC - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min. 90 min. 120 min. 120 min. 20 MINUTE D A DOOR ASS PERMITTED TO RESISTANCE I EMPERATURE RIS - ALL STAIRWE TRANSPAREN FIRE CLOSURE	RANCE S & LANDING) IDOR M OM OM OM OM E SEPARATION (0.75 hr) (1.00 hr) (1.50 hr) (2.00 hr) OOR EMBLY HAVING O BE USED AS A RATING MORE E LIMIT FOR DA LL DOORS ANE IT PANEL FOR MENT	2050mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. 45min F.R.R. 60 min. 90 min. 5 A FIRE-PROT A CLOSURE IN THAN 1 hr LO DORS D ELEVATOR A /ISIBILITY BY C G TO ARTICLE	N. 2050mm) N. 2030mm) F CLOSURE (0.75 hr) (0.75 hr) (1.00 hr) (1.50 hr) ECTION RATIN A FIRE SEPARA CATED BETWEN CCESS AREAS ITY BYLAW. DE 3.1.8.15	G OF NOT LES ATION NOT REC IN A CORRIDO SHALL BE INST ISIGN OF REST	S THAN 20 mi QUIRED TO HA R AND A SUIT ALLED WITH A RICTED GLAZIN	n. IS VE A FIRE E. IG AREA FOR	3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4. 3.1.8.10.(1) 3.1.8.15.
EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROC - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min. 90 min. 120 min. 120 min. 20 MINUTE D A DOOR ASSI PERMITTED TO RESISTANCE I EMPERATURE RIS - ALL STAIRWE TRANSPAREN FIRE CLOSURI	RANCE S & LANDING) IDOR M OM OM OM OM OM E SEPARATION (0.75 hr) (1.00 hr) (1.50 hr) (2.00 hr) (2.00 hr) OOR EMBLY HAVING O BE USED AS A RATING MORE E LIMIT FOR DO LL DOORS ANE IT PANEL FOR MES CONFIRMING	2050mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. 45min F.R.R. 60 min. 90 min. 5 A FIRE-PROT A CLOSURE IN THAN 1 hr LO DORS 0 ELEVATOR A /ISIBILITY BY C G TO ARTICLE	N. 2050mm) N. 2030mm) F CLOSURE (0.75 hr) (0.75 hr) (1.00 hr) (1.50 hr) ECTION RATIN A FIRE SEPARA CATED BETWEN CCESS AREAS ITY BYLAW. DE 3.1.8.15	G OF NOT LES ATION NOT REC EN A CORRIDO SHALL BE INST SIGN OF REST	S THAN 20 mi QUIRED TO HA R AND A SUIT ALLED WITH A RICTED GLAZIN	n. IS VE A FIRE E. IG AREA FOR	3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4. 3.1.8.10.(1) 3.1.8.15.
EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROC - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min. 90 min. 120 min. 120 min. 120 min. 20 MINUTE D A DOOR ASSI PERMITTED TO RESISTANCE I EMPERATURE RIS - ALL STAIRWE TRANSPAREN FIRE CLOSURI ARRIER-FREE DES - BARRIER-FREE DES	RANCE S & LANDING) IDOR M OM OM OM OM OM E SEPARATION (0.75 hr) (1.00 hr) (1.00 hr) (1.50 hr) (2.00 hr) OOR EMBLY HAVING OOR EMBLY HAVING OOR EMBLY HAVING OOR EMBLY HAVING OOR EMBLY HAVING SIGN REQUIREM E PARKING STA	2050mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. 45min F.R.R. 45min. 60min. 90min. 5 A FIRE-PROT A CLOSURE IN THAN 1 hr LO <u>OORS</u> 0 ELEVATOR A /ISIBILITY BY C G TO ARTICLE	N. 2050mm) N. 2030mm) F CLOSURE (0.75 hr) (0.75 hr) (1.00 hr) (1.50 hr) FECTION RATIN A FIRE SEPARA CATED BETWEN CCESS AREAS ITY BYLAW. DE 3.1.8.15	G OF NOT LES ATION NOT REC EN A CORRIDO SHALL BE INST SIGN OF REST	S THAN 20 mi QUIRED TO HA R AND A SUIT ALLED WITH A RICTED GLAZIN	n. IS VE A FIRE E. IG AREA FOR	3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4. 3.1.8.10.(1) 3.1.8.15.
EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROC - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min. 90 min. 120 min. 120 min. 20 MINUTE D A DOOR ASSI PERMITTED TO RESISTANCE I EMPERATURE RIS - ALL STAIRWE TRANSPAREN FIRE CLOSURI ARRIER-FREE DES - BARRIER-FREE - DOORWAYS T	RANCE S & LANDING) IDOR M OM OM OM E SEPARATION (0.75 hr) (1.00 hr) (1.00 hr) (1.50 hr) (2.00 hr) COOR EMBLY HAVING OBE USED AS A RATING MORE E LIMIT FOR DA LL DOORS ANE IT PANEL FOR N ES CONFIRMING SIGN REQUIREM E PARKING STA THAT IS LOCAT	2050mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. 45min F.R.R. 45min. 60min. 90min. 5 A FIRE-PROT A CLOSURE IN THAN 1 hr LO <u>OORS</u> 0 ELEVATOR A /ISIBILITY BY C G TO ARTICLE EDIN A BARR	N. 2050mm) N. 2030mm) F CLOSURE (0.75 hr) (0.75 hr) (1.00 hr) (1.50 hr) ECTION RATIN A FIRE SEPARA CATED BETWEN CCESS AREAS ITY BYLAW. DE 3.1.8.15 ## STALLS IER-FREE PATH	G OF NOT LES ATION NOT REC N A CORRIDO SHALL BE INST SIGN OF REST OF TRAVEL SI	S THAN 20 mi QUIRED TO HA R AND A SUIT FALLED WITH A RICTED GLAZIN HALL HAVE A	n. IS VE A FIRE E. IG AREA FOR CLEAR WIDTH	3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4. 3.1.8.4. 3.1.8.10.(1) 3.1.8.15.
EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROC - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min. 90 min. 120 min. 120 min. 20 MINUTE D A DOOR ASS PERMITTED TO RESISTANCE I EMPERATURE RIS - ALL STAIRWE TRANSPAREN FIRE CLOSURI ARRIER-FREE DES - BARRIER-FREI - DOORWAYS T NOT LESS TH. - COMPLY WITH	RANCE S & LANDING) IDOR M OM OM OM OM E SEPARATION (0.75 hr) (1.00 hr) (1.50 hr) (2.00 hr) (2.00 hr) OOR EMBLY HAVING OOR EMBLY HAVING OOR EMBLY HAVING OOR EMBLY HAVING OOR EMBLY HAVING OOR EMBLY HAVING SIGN REQUIREM E SCONFIRMING SIGN REQUIREM E PARKING STA THAT IS LOCAT AN 850mm IN 1 THE BARRIER	2050mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. 45min F.R.R. 45min. 60min. 90min. 5 A FIRE-PROT A CLOSURE IN THAN 1 hr LO DORS 0 ELEVATOR A /ISIBILITY BY C G TO ARTICLE ED IN A BARR OPEN POSITIO FREE RAMP D	N. 2050mm) N. 2030mm) N. 2030mm) F CLOSURE (0.75 hr) (0.75 hr) (1.00 hr) (1.50 hr) ECTION RATIN A FIRE SEPARA CATED BETWEI CCESS AREAS ITY BYLAW. DE 3.1.8.15 P ## STALLS IER-FREE PATH N ESIGN TO ART	G OF NOT LES ATION NOT REC EN A CORRIDO SHALL BE INST SIGN OF RESTI	S THAN 20 mi QUIRED TO HA R AND A SUIT ALLED WITH A RICTED GLAZIN HALL HAVE A	n. IS VE A FIRE E. IG AREA FOR CLEAR WIDTH	3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4. 3.1.8.4. 3.1.8.10.(1) 3.1.8.15. 3.8.2.2. 3.8.3.3. 3.8.3.4.
EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROC - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min. 90 min. 120 min. 120 min. 20 MINUTE D A DOOR ASS PERMITTED TO RESISTANCE I EMPERATURE RIS - ALL STAIRWE TRANSPAREN FIRE CLOSURI ARRIER-FREE DES - BARRIER-FREI - DOORWAYS TO NOT LESS TH. - COMPLY WITH	RANCE S & LANDING) IDOR M OM OM OM OM E SEPARATION (0.75 hr) (1.00 hr) (1.50 hr) (2.00 hr) (2.00 hr) COOR EMBLY HAVING OOR EMBLY HAVING OOR EMBLY HAVING OOR EMBLY HAVING OOR EMBLY HAVING OOR EMBLY HAVING OOR EMBLY HAVING OOR EMBLY HAVING SIGN REQUIREM E SCONFIRMING SIGN REQUIREM E PARKING STA THAT IS LOCAT AN 850mm IN 1 THE BARRIER	2050mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. 45min F.R.R. 45min. 60min. 90min. 5 A FIRE-PROT A CLOSURE IN THAN 1 hr LO DORS 0 ELEVATOR A /ISIBILITY BY C G TO ARTICLE ED IN A BARR OPEN POSITIO FREE RAMP D	N. 2050mm) N. 2030mm) F CLOSURE (0.75 hr) (0.75 hr) (1.00 hr) (1.50 hr) ECTION RATIN A FIRE SEPAR/ CATED BETWEI CCESS AREAS ITY BYLAW. DE 3.1.8.15 ## STALLS IER-FREE PATH N ESIGN TO ART	G OF NOT LESA ATION NOT REC EN A CORRIDO SHALL BE INST SIGN OF REST OF TRAVEL SI ICLE 3.8.3.4.	S THAN 20 mi QUIRED TO HA R AND A SUIT ALLED WITH A RICTED GLAZIN HALL HAVE A	n. IS VE A FIRE E. IG AREA FOR CLEAR WIDTH	3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4. 3.1.8.4. 3.1.8.10.(1) 3.1.8.15. 3.8.2.2. 3.8.3.3. 3.8.3.4.
EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROC - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min. 90 min. 120 min. 120 min. 20 MINUTE D A DOOR ASS PERMITTED TO RESISTANCE I EMPERATURE RIS - ALL STAIRWE TRANSPAREN FIRE CLOSURI ARRIER-FREE DES - BARRIER-FREE DOORWAYS TO NOT LESS TH. - COMPLY WITH RE ALARM & DE	RANCE S & LANDING) IDOR M OM OM OM OM OM E SEPARATION (0.75 hr) (1.00 hr) (1.50 hr) (2.00 hr) OOR EMBLY HAVING O BE USED AS A RATING MORE E LIMIT FOR DO LL DOORS ANE IT PANEL FOR N ES CONFIRMING SIGN REQUIREM E PARKING STA THAT IS LOCAT AN 850mm IN 1 THE BARRIER TECTION SYSTE	2050mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. 45min F.R.R. 60 min. 90 min. 60 min. 90 min. 5 A FIRE-PROT A CLOSURE IN THAN 1 hr LO DORS D ELEVATOR A /ISIBILITY BY C G TO ARTICLE ED IN A BARR OPEN POSITIO FREE RAMP D	N. 2050mm) N. 2030mm) F CLOSURE (0.75 hr) (0.75 hr) (1.00 hr) (1.50 hr) ECTION RATIN A FIRE SEPARA CATED BETWEN CCESS AREAS ITY BYLAW. DE 3.1.8.15 ## STALLS IER-FREE PATH N ESIGN TO ART	G OF NOT LESA ATION NOT REC EN A CORRIDO SHALL BE INST SIGN OF REST OF TRAVEL SI ICLE 3.8.3.4.	S THAN 20 mi QUIRED TO HA R AND A SUIT ALLED WITH A RICTED GLAZIN HALL HAVE A	n. IS VE A FIRE E. IG AREA FOR CLEAR WIDTH	3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4. 3.1.8.10.(1) 3.1.8.15. 3.8.2.2. 3.8.3.3. 3.8.3.4.
EADROOM CLEA - EXITS (STAIR: - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROC - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min. 90 min. 120 min. 120 min. 20 MINUTE D A DOOR ASS PERMITTED TO RESISTANCE I EMPERATURE RIS - ALL STAIRWE TRANSPAREN FIRE CLOSURI ARRIER-FREE DES - BARRIER-FREE DOORWAYS TO NOT LESS TH. - COMPLY WITH RE ALARM & DE - REQUIRE FIRE - FIRE ALARM	RANCE S & LANDING) IDOR M OM OM OM OM OM E SEPARATION (0.75 hr) (1.00 hr) (1.50 hr) (2.00 hr) OOR EMBLY HAVING O BE USED AS A RATING MORE E LIMIT FOR DA LL DOORS ANE IT PANEL FOR M ES CONFIRMING SIGN REQUIREM E PARKING STA THAT IS LOCAT AN 850mm IN 1 THE BARRIER TECTION SYSTE ALARM SYSTE SYSTEM TO BE	2050mm (MII 2030mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. 45min 45min. 60min. 90min. 5 A FIRE-PROT A CLOSURE IN THAN 1 hr LO DORS 0 ELEVATOR A /ISIBILITY BY C G TO ARTICLE ED IN A BARR OPEN POSITIO FREE RAMP D EM M IN AN AUTO A SINGLE- OR	N. 2050mm) N. 2030mm) F CLOSURE (0.75 hr) (0.75 hr) (1.00 hr) (1.50 hr) FECTION RATIN A FIRE SEPARA CATED BETWEN CCESS AREAS ITY BYLAW. DE 3.1.8.15 ## STALLS IER-FREE PATH N ESIGN TO ART OMATIC SPRINI 2-STAGE SYST	G OF NOT LESA ATION NOT REG EN A CORRIDO SHALL BE INST SIGN OF REST OF TRAVEL SI ICLE 3.8.3.4. KLER SYSTEM EM	S THAN 20 mi QUIRED TO HA R AND A SUIT FALLED WITH A RICTED GLAZIN HALL HAVE A	n. IS VE A FIRE E. IG AREA FOR CLEAR WIDTH	3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4. 3.1.8.4. 3.1.8.10.(1) 3.1.8.15. 3.8.2.2. 3.8.3.3. 3.8.3.4. 3.2.4.1. 3.2.4.3.
EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROC - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min. 90 min. 120 min. 120 min. 120 min. 20 MINUTE D A DOOR ASS PERMITTED TO RESISTANCE I EMPERATURE RIS - ALL STAIRWE TRANSPAREN FIRE CLOSURI ARRIER-FREE DES - BARRIER-FREE - DOORWAYS T NOT LESS TH. - COMPLY WITH RE ALARM & DE - REQUIRE FIRE - FIRE ALARM 3	RANCE S & LANDING) IDOR M OM OM OM E SEPARATION (0.75 hr) (1.00 hr) (1.50 hr) (2.00 hr) COOR EMBLY HAVINO O BE USED AS A RATING MORE E LIMIT FOR DA IL DOORS ANE IT PANEL FOR N ES CONFIRMING SIGN REQUIREM E PARKING STA THAT IS LOCAT AN 850mm IN 1 THE BARRIER TECTION SYSTE ALARM SYSTE SYSTEM TO BE DETECTOR TO	2050mm (MII 2030mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. 45min F.R.R. 45min. 60min. 90min. 5 A FIRE-PROT A CLOSURE IN THAN 1 hr LO DORS 0 ELEVATOR A /ISIBILITY BY CC G TO ARTICLE ED IN A BARR OPEN POSITIO FREE RAMP D ED IN A BARR OPEN POSITIO FREE RAMP D	N. 2050mm) N. 2030mm) N. 2030mm) F CLOSURE (0.75 hr) (0.75 hr) (1.00 hr) (1.50 hr) FECTION RATIN A FIRE SEPARA CATED BETWEN CCESS AREAS ITY BYLAW. DE 3.1.8.15 F ## STALLS IER-FREE PATH N ESIGN TO ART CMATIC SPRINI 2-STAGE SYST ED TO THE FIRE	G OF NOT LES ATION NOT REG N A CORRIDO SHALL BE INST SIGN OF REST OF TRAVEL SI ICLE 3.8.3.4. KLER SYSTEM EM E ALARM SYST	S THAN 20 mi QUIRED TO HA R AND A SUIT FALLED WITH A RICTED GLAZIN HALL HAVE A	n. IS VE A FIRE E. IG AREA FOR CLEAR WIDTH	3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4. 3.1.8.4. 3.1.8.10.(1) 3.1.8.15. 3.8.3.4. 3.8.3.4. 3.2.4.1. 3.2.4.1. 3.2.4.1. 3.2.4.1.
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EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROC - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min. 90 min. 120 min. 120 min. 20 MINUTE D A DOOR ASS PERMITTED TO RESISTANCE I EMPERATURE RIS - ALL STAIRWE TRANSPAREN FIRE CLOSURI ARRIER-FREE DES - BARRIER-FREI DOORWAYS TO NOT LESS TH. - COMPLY WITH REQUIRE FIRE - REQUIRE FIRE - REQUIRE FIRE - REQUIRE FIRE - REQUIRE FIRE - REQUIRE TO S - REQUIRE ANN - REQUIRE ANN - REQUIRE D SM	RANCE S & LANDING) IDOR M OM OM OM OM E SEPARATION (0.75 hr) (1.00 hr) (1.50 hr) (2.00 hr) (2.00 hr) OOR EMBLY HAVING OOR EMBLY HAVING OOR ELIMIT FOR DO SIGN REQUIREM TO OOR EMBLY HAVING OOR ELIMIT FOR DO ON ENTRY OOR ELIMIT FOR DO ON ENTRY OOR ELIMIT FOR DO ON ENTRY ON EMBLY HAVING ON ENTRY ON ENTRY ON EMBLY EMBLY ON EMBLY EM	2050mm (MII 2030mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. 45min F.R.R. 45min. 60min. 90min. 5 A FIRE-PROT A CLOSURE IN THAN 1 hr LO DORS 0 ELEVATOR A /ISIBILITY BY C G TO ARTICLE ED IN A BARR OPEN POSITIO FREE RAMP D EM M IN AN AUTO A SINGLE- OR BE CONNECTE DEPARTMENT AND ZONE IN R IN PUBLIC CO	N. 2050mm) N. 2030mm) N. 2030mm) F CLOSURE (0.75 hr) (0.75 hr) (1.00 hr) (1.50 hr) ECTION RATIN A FIRE SEPAR/ CATED BETWEN CCESS AREAS ITY BYLAW. DE 3.1.8.15 F CCESS AREAS ITY BYLAW. DE 3.1.8.15 F ## STALLS IER-FREE PATH N ESIGN TO ART CATED SPRINT 2-STAGE SYST D TO THE FIRE DICATION DRRIDOR FOR (1)	G OF NOT LES ATION NOT REC EN A CORRIDO SHALL BE INST SIGN OF REST OF TRAVEL SI ICLE 3.8.3.4. KLER SYSTEM EM E ALARM SYST GROUP C	S THAN 20 mi QUIRED TO HA R AND A SUIT ALLED WITH A RICTED GLAZIN HALL HAVE A	n. IS VE A FIRE E. IG AREA FOR CLEAR WIDTH	3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4. 3.1.8.4. 3.1.8.10.(1) 3.1.8.15. 3.8.2.2. 3.8.3.3. 3.8.3.4. 3.2.4.1. 3.2.4.1. 3.2.4.8. 3.2.4.1. 3.2.4.9. 3.2.4.12.
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EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROC - SERVICE ROC - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min. 90 min. 120 min. 120 min. 20 MINUTE D A DOOR ASS PERMITTED TO RESISTANCE I EMPERATURE RIS - ALL STAIRWE TRANSPAREN FIRE CLOSURI ARRIER-FREE DES - BARRIER-FREE DOORWAYS TO NOT LESS TH. - COMPLY WITH IRE ALARM & DE - REQUIRE FIRE - REQUIRE FIRE - REQUIRE FIRE - REQUIRE FIRE - REQUIRE FIRE - REQUIRE ANN - REQUIRED SM - REQUIRED SM - NOT REQUIRE	RANCE S & LANDING) IDOR M OM OM OM OM OM E SEPARATION (0.75 hr) (1.00 hr) (1.50 hr) (2.00 hr) OOR EMBLY HAVING O BE USED AS A RATING MORE E LIMIT FOR DO IL DOORS AND IT PANEL FOR A ES CONFIRMING SIGN REQUIREM E PARKING STA THAT IS LOCAT AN 850mm IN 1 THE BARRIER IT PANEL FOR A SIGN REQUIREM E PARKING STA THAT IS LOCAT AN 850mm IN 1 THE BARRIER TECTION SYSTE ALARM SYSTE SYSTEM TO BE DETECTOR TO SIGNAL TO FIRE IUNCIATOR TO IOKE ALARM IN D VOICE COM	2050mm (MII 2030mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. 45min F.R.R. 45min. 60min. 90min. 5 A FIRE-PROT A CLOSURE IN HAN 1 hr LO DORS 0 ELEVATOR A /ISIBILITY BY C G TO ARTICLE DEVATOR A /ISIBILITY BY C G TO ARTICLE ED IN A BARR OPEN POSITIO FREE RAMP D MIN AN AUTO A SINGLE- OR BE CONNECTE DEPARTMENT AND ZONE IN R IN PUBLIC CO S SUITE MUNICATION S	N. 2050mm) N. 2030mm) N. 2030mm) F CLOSURE (0.75 hr) (0.75 hr) (1.00 hr) (1.50 hr) FECTION RATIN A FIRE SEPAR/ CATED BETWEN CCESS AREAS ITY BYLAW. DE 3.1.8.15 F ## STALLS IER-FREE PATH N ESIGN TO ART DMATIC SPRINI 2-STAGE SYST D TO THE FIRE DICATION ORRIDOR FOR SYSTEMS	G OF NOT LESA ATION NOT REC EN A CORRIDO SHALL BE INST SIGN OF REST OF TRAVEL SI ICLE 3.8.3.4. KLER SYSTEM EM E ALARM SYST GROUP C	S THAN 20 mi QUIRED TO HA R AND A SUITI ALLED WITH A RICTED GLAZIN HALL HAVE A	n. IS VE A FIRE E. IG AREA FOR CLEAR WIDTH	3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4. 3.1.8.4. 3.1.8.15. 3.1.8.15. 3.8.3.4. 3.8.3.4. 3.2.4.1. 3.2.4.3. 3.2.4.11. 3.2.4.8. 3.2.4.12. 3.2.4.22.(7) 3.2.4.22.(7)
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EADROOM CLEA - EXITS (STAIRS - DOORWAYS IRE SEPARATION - PUBLIC CORR - SERVICE ROC - STORAGE RO - JANITOR'S RC IRE CLOSURES F.R.R. OF FIR 45 min. 60 min. 90 min. 120 min. 120 min. 120 min. 20 MINUTE D A DOOR ASS PERMITTED TI RESISTANCE I EMPERATURE RIS - ALL STAIRWE TRANSPAREN FIRE CLOSURI ARRIER-FREE DES - ALL STAIRWE TRANSPAREN FIRE CLOSURI ARRIER-FREE DES - BARRIER-FREE - DOORWAYS T NOT LESS TH. - COMPLY WITH IRE ALARM & DE - REQUIRE FIRE - FIRE ALARM 12 - REQUIRE FIRE - REQUIRE D SM - NOT REQUIRE AME SPREAD RA 'ASHROOM FACI	RANCE S & LANDING) IDOR M OM OM OM OM E SEPARATION (0.75 hr) (1.00 hr) (1.50 hr) (2.00 hr) OOR EMBLY HAVING OOR EMBLY HAVING SIGN REQUIREM TOR EMAT IS LOCAT AN 850mm IN 1 THE BARRIER INCIATOR TO IOKE ALARM SYSTE SYSTEM TO BE IDETECTOR TO IOKE ALARM IN D VOICE COMM ATING AND SM	2050mm (MII 2030mm (MII 2030mm (MII 45min F.R.R. 1 hr F.R.R. 45min F.R.R. 45min F.R.R. 45min F.R.R. 45min. 60min. 90min. 5 A FIRE-PROT A CLOSURE IN THAN 1 hr LO <u>OORS</u> 0 ELEVATOR A /ISIBILITY BY CC DORS 0 ELEVATOR A /ISIBILITY BY CC G TO ARTICLE ED IN A BARR OPEN POSITIO FREE RAMP D ED IN A BARR OPEN POSITIO FREE RAMP D M IN AN AUTO A SINGLE- OR BE CONNECTE ED EPARTMENT AND ZONE IN R IN PUBLIC CO N SUITE MUNICATION S	N. 2050mm) N. 2030mm) N. 2030mm) F CLOSURE (0.75 hr) (0.75 hr) (1.00 hr) (1.50 hr) ECTION RATIN A FIRE SEPARA CATED BETWEN CCESS AREAS ITY BYLAW. DE 3.1.8.15 ## STALLS IER-FREE PATH N ESIGN TO ART DMATIC SPRINI 2-STAGE SYST ED TO THE FIRE F DICATION ORRIDOR FOR SYSTEMS ED CLASSIFICA	G OF NOT LES ATION NOT REC N A CORRIDO SHALL BE INST SIGN OF REST OF TRAVEL SI ICLE 3.8.3.4. KLER SYSTEM EM E ALARM SYSTI GROUP C	S THAN 20 mi QUIRED TO HA R AND A SUIT FALLED WITH A RICTED GLAZIN HALL HAVE A	n. IS VE A FIRE E. IG AREA FOR CLEAR WIDTH	3.4.3.4 (1) 3.4.3.4 (4) 3.3.1.4 (2) 3.6.2.1 (1) 3.3.4.3 (3) 3.3.1.21 (2) 3.1.8.4. 3.1.8.4. 3.1.8.10.(1) 3.1.8.15. 3.8.3.4. 3.8.3.4. 3.8.3.4. 3.2.4.11. 3.2.4.3. 3.2.4.11. 3.2.4.8. 3.2.4.9. 3.2.4.12. 3.2.4.22.(7) 3.1.12.1

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EXISTING REFLECTED CEILING PLAN INNISFAIL PDSTC LUNCHROOM EXPANSION 1:100



610 x 1220 RECESSED FLUORESCENT LIGHT -FIXTURE TO BE REMOVED -REFER TO ELECTRICAL

MECHANICAL SUPPLY AIR -DIFFUSER TO REMAIN - REFER TO MECHANICAL DRAWINGS.

CEILING TILES TO BE REMOVED AND REPLACED WITH FULL-SIZED (610 x 1220mm) CEILING TILES TO FACILITATE CONTINUITY OF CEILING. - WALL TO BE DEMOLISHED

	COLOUR	REMARKS
NGLES	BURGUNDY	
METAL GUTTER	BURGUNDY	
METAL DOWNSPOUT	BURGUNDY	LEADING TO CONCRETE SPLASH PAD.
METAL TRIM	BURGUNDY	UNDER SIDING OVER SHINGLES.
METAL GABLE WALL TRIM	BURGUNDY	UNDER SHINGLES OVER SIDING.
METAL GABLE END TRIM	BURGUNDY	WRAPPED AROUND END OF METAL DECK.
BEAM		ENCASED WITHIN PLYWOOD.
OWSJ		AS ARCHITECTURAL ACCENT.
EXTERIOR STRUCTURAL BEAM.		PAINT TO MATCH METAL DECK ABOVE.
COLUMN	BURGUNDY	SUPPORTING CANOPY
HORIZONTAL WOOD FIBRE SIDING	SEE ELEV. FOR COLOUR	TO BACK OF CANOPY. ALTERNATE JOINTS UNTIL FULL PIECE CAN SPAN.
HORIZONTAL WOOD FIBRE SIDING	SEE ELEV. FOR COLOUR	ALL JOINTS TO LINE UP VERTICALLY.
HORIZONTAL WOOD FIBRE SIDING	SEE ELEV. FOR COLOUR	TO SIDE OF CANOPY.
HORIZONTAL WOOD FIBRE SIDING	SEE ELEV. FOR COLOUR	ALL JOINTS STAGGERED.
VERTICAL WOOD FIBRE SIDING	SEE ELEV. FOR COLOUR	ABSOLUTELY NO JOINTS. TYPICAL.
OUTSIDE CORNER POST	BURGUNDY	CONTINUOUS THROUGH HORIZONTAL AND VERTICAL TRANSITIONS. INSIDE CORNER POSTS AS WELL. TYPICAL.
BELT LINE	BEIGE	TO TRANSITION FROM HORIZONTAL TO VERTICAL. TRANSITION PORTION TO LINE UP WITH WINDOW HEAD DRIP CAP.
BELT LINE	BEIGE	TO TRANSITION FROM VERTICAL TO HORIZONTAL. BOTTOM OF BELT LINE TO BE 840mm ABOVE START OF SIDING.
J-MOULDING	BURGUNDY	TO JAMBS OF ALL WINDOWS AND DOORS.
DRIP CAP	BURGUNDY	OVER OPENING. TYPICAL OF ALL WINDOWS.
WINDOW SILL FLASHING	BURGUNDY	ALWAYS SLOPING AWAY FROM WINDOW. TYP. ALL WINDOWS.
J-MOULDING	BURGUNDY	TO HEAD OF DOOR OPENING, AS WELL AS JAMBS.
RECEPTACLE	BURGUNDY	MOUNTS 300mm A.F.F. APPLY J-MOULDING TRIM TO ALL 4 SIDES AND SEAL WITH CAULKING.
CT	BRUSHED ALUMINUM	THROUGH WALL TO HOOD WITH SCREEN. APPLY J-MOULDING TRIM TO ALL 4 SIDES AND SEAL WITH CAULKING.
		THROUGH WALL C/W WALL CAP. CUT SIDING TO FIT TIGHT AND CAULK
METAL LOUVRE		TO COLD AIR TRAP. APPLY J-MOULDING TRIM TO ALL 4 SIDES AND SEAL WITH CAULKING.
ED LUMINAIRE	BURGUNDY	SEAL ANY PENETRATIONS THROUGH SIDING USING CAULKING. REFER TO ELECTRICAL.
ED LUMINAIRE	BURGUNDY	SEAL ANY PENETRATIONS THROUGH SIDING USING CAULKING. BOTTOM OF FIXTURE TO ALIGN WITH BOTTOM OF SIDING COLOUR BAND. REFER TO ELECTRICAL.
DECK FENCING		ENCASING ENTIRE CORNER.
IS BOARD	BURGUNDY (TBC)	HORIZONTAL ORIENTED TO A MINIMUM OF 300mm BELOW GRADE, ALONG ALL GRADE BEAMS. TYPICAL & CAULK ALL JOINTS.
IG CEMENTITIOUS BOARD		HORIZONTAL TO COVER BOTH LEVELS OF JOISTS.
AD		ARCHITECTURALLY FINISHED.
ULAR STEEL HANDRAIL		
LEADER		
OTTOM OF LOWER WINDOWS TO MATCH 'COLOUR 1'	(ТВС)	
BEIGE (PROPOSED TO MATCH EXISTING) BURGUNDY (PROPOSED TO MATCH EXISTING)		

ISSUED FOR DATE 2018-02-07 ISSUED FOR 60% REVIEW 2018-02-14 ISSUED FOR DP 2018-03-02 ISSUED FOR 95% REVIEW 2018-03-29 ISSUED FOR TENDER

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This drawing shall not be used for construction purposes until the seal appearing hereon is signed and dated by the Architect or Engineer.

Project Component LUNCHROOM EXPANSION Keyplan

Consultants	

Architectural: NORR Architects Engineers Planners Structural: NORR Architects Engineers Planners Mechanical: NORR Architects Engineers Planners Electrical: NORR Architects Engineers Planners

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INNISFAIL PDSTC LUNCHROOM EXPANSION

Drawing Title BUILDING ELEVATIONS

Check Scale (may be photo reduced) 0 1inch Project No. NCCA17-0228 Drawing No. A30-00-01

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γ γ		LIGHTING		MECHANICAL		COMMUNICATION SYSTEMS		FIRE ALARM	Sheet Number E00-00-00	Sheet Title ELECTRICAL COVER SHEET
1 1 1 Notarian (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)		RECESSED LED / INCANDESCENT / COMPACT FLUORESCENT LUMINAIRF		MOTOR		VOICE OUTLET	→ A	SMOKE ALARM	E00-00-01	DEMOLITION AND NEW POWER & SYSTEMS PLANS
No. No. <td>0 0</td> <td>SURFACE LED / INCANDESCENT / COMPACT FLUORESCENT</td> <td></td> <td>MOTOR C/W DISCONNECT SWITCH</td> <td></td> <td>ΔΑΤΑ ΟΙΙΤΙ ΕΤ</td> <td>AC</td> <td>SMOKE ALARM/CARBON MONOXIDE ALARM</td> <td>E10-00-00</td> <td>LIGHTING PLAN, SCHEDULES AND SINGLE</td>	0 0	SURFACE LED / INCANDESCENT / COMPACT FLUORESCENT		MOTOR C/W DISCONNECT SWITCH		ΔΑΤΑ ΟΙΙΤΙ ΕΤ	AC	SMOKE ALARM/CARBON MONOXIDE ALARM	E10-00-00	LIGHTING PLAN, SCHEDULES AND SINGLE
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A market of a second mean and a second mean	Control Control <t< td=""><td>WASHER</td><td></td><td>UNFUSED DISCONNECT SWITCH</td><td></td><td>TELEVISION OUTLET</td><td></td><td>SMOKE DETECTOR</td><td></td><td></td></t<>	WASHER		UNFUSED DISCONNECT SWITCH		TELEVISION OUTLET		SMOKE DETECTOR		
 Mathematical and a server and a se	Image: Control and	RECESSED LED / INCANDESCENT / COMPACT FLUORESCENT LUMINAIRE ON EMERGENCY POWER		FUSED DISCONNECT SWITCH		COMBINATION VOICE/TELEVISION OUTLET		SMOKE DETECTOR IN CEILING PLENUM		
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Normal of the media 1 Normal	No. No. <td>WALL LED / INCANDESCENT / COMPACT FLUORESCENT</td> <td></td> <td>MAGNETIC STARTER</td> <td></td> <td>FLOOR MOUNTED DATA OUTLET</td> <td>RR R</td> <td>RATE OF RISE HEAT DETECTOR</td> <td></td> <td></td>	WALL LED / INCANDESCENT / COMPACT FLUORESCENT		MAGNETIC STARTER		FLOOR MOUNTED DATA OUTLET	RR R	RATE OF RISE HEAT DETECTOR		
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No.2002 PTUALNOS NO.2002 PTUALNOS<	Instrumentation Image: Second Construmentation Image: Second Construm	FLUORESCENT STRIP LUMINAIRE		⊠ BASEBOARD HEATER	Μ	MICROPHONE OUTLET	PS	FIRE ALARM PULL STATION		
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N N	Image: Control Contro Control Contro Control Control Control Control Control Control Co	LIGHTING LUMINAIRE TYPE TAG		SPLIT/SWITCHED CIRCUIT RECEPTACLE		PAC-PULE		FIKE ALAKM HORN		
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N Number Seense Control Contro	9 National Distribution Control Contro Control Control Contro Control Contro Control Control Control Con	EMERGENCY POWER BATTERY PACK C/W R. HEADS & EXIT LIGHT		COMPUTER FOURPLEX RECEPTACLE (FED W/ DEDICATED NEUTRAL)		SECURITY SYSTEMS		FIRE ALARM MINI SPEAKER WITH SILENCE BUTTON		
	Nom Nom <td>SINGLE REMOTE EMERGENCY LIGHTING HEAD - CEILING MOUNT</td> <td>Ш Ф</td> <td>FLOOR MOUNTED RECEPTACLE</td> <td>S</td> <td>SECURITY HORN</td> <td> F</td> <td>FIRE ALARM SPEAKER - CEILING MOUNTED</td> <td></td> <td></td>	SINGLE REMOTE EMERGENCY LIGHTING HEAD - CEILING MOUNT	Ш Ф	FLOOR MOUNTED RECEPTACLE	S	SECURITY HORN	F	FIRE ALARM SPEAKER - CEILING MOUNTED		
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Image: Part with the second of the second	T Volume	SWITCH - SINGLE, TWO, AND THREE GANG	\square	CEILING MOUNTED SINGLE/SPECIAL PURPOSE RECEPTACLE	ES	ELECTRIC STRIKE	F	FIRE PHONE		
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V VIII 11 LOV VILLAL VIIII 11 LOV VILLAL VIII 11 LOV VILLAL	- - <td>SWITCH - 3 WAY</td> <td></td> <td>CEILING MOUNTED JUNCTION/SLAB BOX</td> <td>(REX)</td> <td>REQUEST TO EXIT SENSOR</td> <td></td> <td>SUITE AUDIBLE ISOLATOR</td> <td></td> <td></td>	SWITCH - 3 WAY		CEILING MOUNTED JUNCTION/SLAB BOX	(REX)	REQUEST TO EXIT SENSOR		SUITE AUDIBLE ISOLATOR		
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C SWITCH - DMW/R SWITCH Image: Reference SUSTER Image: Refe	····································	SWITCH - MANUAL STARTER		ELECTRICAL PANELBOARD - SURFACE MOUNTED		2-WAY VOICE/PANIC		GENERAL		
SWTCH-OCCURATOR SWSGES WITCH IC CONTACTOR IC SCURPT STRORF CONTACTOR IC CONTACTOR CONTACTOR IC CONTACT		SWITCH - DIMMER SWITCH		ELECTRICAL PANELBOARD - RECESSED	• S	INTERCOM		CONDUIT CONCEALED IN WALL OR CEILING		
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P PHOTO ELECTR CELL NO SIRLE PHASE DIRECT CONNECTION N KePpA N Conduit stude Obset CCUPANCY SHAGR - CELLING MOUNTED N TREE PHASE DIRECT CONNECTION N NERCOM N Conduit stude Obset DATIGET HARRY STING LIGHT SENSOR Obset Direct Status N R N	Priod Priod No.Let	SWITCH - TIMER SWITCH	TC	TIME CLOCK	G	GLASS BREAKAGE SENSOR	•	CONDUIT DOWN		
Image: Seland	Image: Sensor - GELING MOUNTED	P PHOTO ELECTRIC CELL		SINGLE PHASE DIRECT CONNECTION	К	KEYPAD		CONDUIT STUB		
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Image: Constraint of the constraint	Image: Constraint of the second of the se	(PP) LIGHTING CONTROL POWER PACK					RL	DENOTES RELOCATED DEVICE		
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DEMOLITION POWER & SYSTEMS PLAN 1:50

SINGLE LINE DIAGRAM

			DATE	ISS
SINGLE LINE - LE	GEND OF SYN	MBOLS	2018-02-07	ISSUED
			2018-03-02	ISSUED
<	CT	CURRENT TRANSFORMER	2018-03-29	ISSUE
C C DRAW OUT CELL ONLY FOR FUTURE	XXXA IC	CALCULATED SHORT CIRCUIT IC RATING TAG		
• • MEDIUM VOLTAGE LOAD BREAK		PHASE 1 INSTALLATION (SHOWN SOLID DARK)		
• • • MEDIUM VOLTAGE ISOLATION SWITCH		EXISTING EQUIPMENT (SHOWN SOLID GREY)		
$\ll \widehat{\circ \circ} \gg$ LOW VOLTAGE DRAW-OUT AIR CIRCUIT BREAKER		FUTURE EQUIPMENT (SHOWN DASHED GREY)		
$\frac{1}{2} \frac{1}{1} $		MOTOR		
$ \downarrow^{\triangle} \underbrace{ }_{\downarrow} \\ f \\ \downarrow \\ \hline f \hline \hline f \\ \hline f \hline \hline f \\ \hline f \hline \hline f \\ \hline \hline f \hline \hline $		MOTOR WITH DISCONNECT		
FUSE	M	UTILITY METER		
K KIRK KEY	•	AUTOMATIC TRANSFER SWITCH		
GENERATOR	(EF-1)	MOTOR IDENTIFICATION TAG		
$ \rightarrow $ o ightning arrestor	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION	This drawing h the CLIENT a kind made by any party wit	has been pr nd there ar NORR Arch th whom N
✓ш-] E=>> VOLTAGE TRANSFORMER	·	GROUND CONNECTION	Planners has n This drawing purposes until	shall not the seal ap
PT 3E POTENTIAL TRANSFORMER	100A	MEDIUM VOLTAGE FUSED DISCONNECT NUMBER DENOTES FUSE SIZE	Project Compo	onent
BUSDUCT/BUSWAY)	POWER FACTOR CORRECTION CAPACITOR	Keyplan	

Load		Vo	lt-Amper	res	Brea	ker	Wi	re	Bre	aker	Vc	lt-Amper	res	Load		С
Description		А	В	С	Pole	A	Siz	ze	Α	Pole	А	В	С	Description	*	N
RECEPTACLES		1200			1	15			15	1	400			LIGHTING		2
RECEPTACLES			800		1	15			30	2		3000		RANCE		4
FRIDGE				1400	1	15			50	2			3000	IVINGE		6
FRIDGE		1400			1	15			15	1	1400			DISHWASHER		8
MICROWAVE			1000		1	15			20	1		800		T-SLOT GFCI		1(
MICROWAVE				1000	1	15			15	1			400	EXTERIOR RECEPTACLE		12
									15	1	100			FF-4		14
																16
																18
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																24
Odd Circuit Nu	mber Subtotals	2600	1800	2400	Feat	ures:					1900	3800	3400			
Rating (A): SLD	Total Phase A L	_oad:	4.5	kVA							Remark	(S:				
reaker Rating (A): SLD	Total Phase B L	_oad:	5.6	kVA												
er IC Rating (kA): SLD	Total Phase C I	_oad:	5.8	kVA												
3	Total Connecte	d Load:	15.9	kVA												
4	Demand Factor	ſ:	100	%							Project	Title: So	uth Calga	ry Orthodontics & Pediatric Dentistry		
oltage (V): 208	Demand Load:		15.9	kVA							Project	Number:	NCCA1	5-0145		
l Voltage (V): 120	Future Load:		0.0	kVA							Plan Dr	awing Nu	umber:			
les: 42	Total Demand L	_oad:	15.9	kVA							Date: 20)17-02-2	8	Revision: 1		
	Total Demand (Current:	44.1	A				P	ar	ne	bo	ard		PANEL D		

221-10th Avenue SE Suite 100, Calgary AB Canada T2G 0V9

	LUMINAIRE SCHEDULE														
			Lamps												
РНОТО	DESCRIPTION	TYPE	WATTS	NO.	VOLTS	MANUFACTURER	MOUNTING	REMARKS							
	2' x 2' FIXTURE	LED	29		120	CORELITE MODEL#: E3X-WL-2L35-1D-UNV-22-T1-STD	RECESSED								
C 29	REMOTE HEADS	LED	6		12	STANPRO MODEL#: S2-12-4W-LA-WH	WALL	- MOUNTING HEIGHT TO MATCH EXISTING							

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1	GENERAL			
2.	THE GENERAL REQUIREMENTS, INSTRUCTIONS TO BIDDERS, THIS SPECIFICATION AND ANY ADDENDA	14.1.	(MEASUREMENTS ARE TO CENTER OF DEVICE BOX):	20.4.
	HERETO FORM PART OF THE CONTRACT DOCUMENTS AND SHALL BE READ IN CONJUNCTION WITH THEM. WORK SHALL INCLUDE THE FURNISHING OF ALL LABOR AND MATERIALS UNLESS SPECIFICALLY NOTED		LOCAL LIGHT SWITCHES, DIMMERS; 1200MM	20.0.
	OTHERWISE TO COMPLETE AND PUT INTO OPERATING CONDITION ALL ELECTRICAL SYSTEMS AS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN.		GENERAL WALL RECEPTACLES; 300MM	
2.1.	THE SCOPE OF WORK IS AS DESCRIBED HEREIN AND SHOWN ON THE DRAWINGS.		RECEPTACLES ABOVE COUNTERS AND BACK SPLASH; 175MM	
3.	STANDARD OF MATERIAL AND WORKMANSHIP		(REFER TO DETAILS ON ARCHITECTURAL)	
3.1.	ALL MATERIALS SHALL BE NEW UNLESS SPECIFICALLY NOTED ON DRAWINGS AND BE OF THE QUALITY SPECIFIED AND SHALL CONFORM TO THE STANDARDS OF THE CANADIAN STANDARDS ASSOCIATION. WHERE		RECEPTACLES IN MECHANICAL / JANITOR ROOMS; 1000MM	
	EQUIPMENT OR MATERIALS ARE SPECIFIED BY TECHNICAL DESCRIPTION ONLY, THEY SHALL BE OF THE BEST COMMERCIAL QUALITY OBTAINABLE FOR THE PURPOSE.		HANDICAP DOOR PUSHBUTTON: 1067MM	20.6.
3.2.	ALL WORK SHALL BE EXECUTED IN A NEAT AND WORKMANLIKE MANNER BY QUALIFIED TRADESMEN.		CARD READER; 1150MM	20.7.
	ELECTRICAL CONTRACTOR SHALL KEEP A COMPETENT FOREMAN AND NECESSARY ASSISTANTS, ALL SATISFACTORY TO THE ENGINEER, ON THE JOB DURING THE PROGRESS OF THE WORK.		SECURITY KEYPAD; 1400MM	
3.3.	WORKMANSHIP SHALL BE OF THE HIGHEST STANDARDS THROUGHOUT AND SHALL BE MINIMUM OF THE	44.0		20.8.
4.	UNIFORMITY OF EQUIPMENT	14.2.	ARCHITECTURAL DRAWINGS SUPERSEDE HEIGHTS AND LOCATIONS INDICATE ON ELECTRICAL DRAWINGS	20.9.
4.1.	UNLESS OTHERWISE SPECIFICALLY CALLED FOR IN THE SPECIFICATIONS, UNIFORMITY OF MANUFACTURE	14.0.	AND SPECIFICATIONS.	
42	SHALL BE MAINTAINED FOR ANY PARTICULAR ITEM THROUGHOUT THE BUILDING.	15.	SHOP DRAWINGS	
	THROUGHOUT THE BUILDING.	15.1.	THE ELECTRICAL CONTRACTOR MUST REVIEW AND STAMP ACCEPTABLE ALL SHOP DRAWINGS PRIOR TO SUBMITTING TO THE ENGINEER.	
	4.2.1. SPECIFICATIONS, UNIFORMITY OF MANUFACTURE SHALL BE MAINTAINED FOR ANY PARTICULAR ITEM THROUGHOUT THE BUILDING.	15.2.	ELECTRICAL CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW, ONE (1) SET OF ELECTRONIC	
5.	DRAWINGS AND SPECIFICATIONS		OCCUPANCY SENSORS, BATTERY PACKS, FIRE ALARM EQUIPMENT AND TELECOMMUNICATIONS EQUIPMENT	21.
5.1.	THE DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY, EACH TO THE OTHER, AND WHAT IS CALLED FOR BY ONE, SHALL BE BINDING AS IF CALLED FOR BY BOTH. WHERE INFORMATION IS CONFLICTING THE	45.0		21.1.
	SPECIFICATIONS TRUMP THE DRAWINGS.	15.3.	SCANNED SHOP DRAWINGS MUST BE LEGIBLE SHOP DRAWINGS WHICH ARE UNCLEAR WILL BE REJECTED	
5.2.	SHOULD ANY DISCREPANCY APPEAR BETWEEN THE DRAWINGS AND SPECIFICATIONS WHICH LEAVES THE ELECTRICAL CONTRACTOR IN DOUBT AS TO THE TRUE INTENT AND MEANING OF THE PLANS AND		AND RETURNED FOR RESUBMISSION.	
	SPECIFICATIONS, A RULING SHALL BE OBTAINED FROM THE ENGINEER. IF THIS IS NOT DONE, IT WILL BE ASSUMED THAT THE MOST EXPENSIVE ALTERNATE HAS BEEN ALLOWED FOR.	15.5.	SHOP DRAWING SHALL BE SPECIFIC TO THIS PROJECT ONLY. GENERIC DRAWINGS WILL NOT BE ACCEPTED. INDICATING ARROWS SHALL HIGHLIGHT THE PRODUCT FOR REVIEW. GENERIC DRAWINGS, DRAWINGS	
6.	CODES, PERMITS AND INSPECTION		WITHOUT INDICATING ARROWS AND DRAWINGS WITHOUT CONTRACTOR REVIEWED STAMP WILL BE RETURNED REJECTED FOR RESUBMISSION.	
6.1.	THE INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF THE CURRENT EDITION OF THE CANADIAN ELECTRICAL CODE.	15.6.	THE ENGINEER'S REVIEW OF SHOP DRAWINGS SHALL BE FOR GENERAL DESIGN ONLY AND SHALL NOT	
6.2.	THE ELECTRICAL CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED AT THEIR EXPENSE AND DISPLAY		RELIEVE THE ELECTRICAL CONTRACTOR OR SUPPLIER FROM THEIR RESPONSIBILITY FOR ERRORS, PROPER FITTING, AND CONSTRUCTION OF THE WORK AND FURNISHING OF MATERIALS. THE REVIEW SHALL NOT BE	
	THEM IN THE ELECTRICAL ROOM, AND COORDINATE INSPECTIONS AS REQUIRED AND OBTAIN A FINAL INSPECTION CERTIFICATE.		CONSTRUED AS APPROVING DEPARTURES FROM THE CONTRACT DOCUMENT REQUIREMENTS IF SUCH DEPARTURES ARE NOT SPECIFICALLY NOTED IN A COVERING LETTER ACCOMPANYING SUCH DRAWINGS.	
7.	EXAMINATION OF THE SITE	15.7.	ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS.	
7.1.	PRIOR TO SUBMITTING THEIR TENDER, THE ELECTRICAL CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE AND ASCERTAIN ALL CONDITIONS, WHICH SHALL AFFECT HIS TRADE. NO EXTRAS WILL BE ALLOWED FOR	15.8.	ANY WORK PERFORMED PRIOR TO THE RETURN OF REVIEWED SHOP DRAWINGS IS DONE AT THE RISK OF	21.2.
	WORK RESULTING FROM CONDITIONS THAT WOULD HAVE BEEN EVIDENT UPON A THOROUGH EXAMINATION OF THE SITE.	16	RECORDS PLANS	
8.	CLEAN UP	16.1.	THE ENGINEER WILL FURNISH TO THE ELECTRICAL CONTRACTOR ONE SET OF WHITE PRINTS TO BE USED	
8.1.	THE ELECTRICAL CONTRACTOR AND THEIR SUB-TRADES SHALL AT ALL TIMES DURING CONSTRUCTION, KEEP THE SITE FREE OF ALL DEBRIS, BOXES, PACKING, ETC., RESULTING FROM WORK OF THIS TRADE.		FOR RECORD WORK AS ACTUALLY INSTALLED. ELECTRICAL CONTRACTOR SHALL ACCURATELY RECORD ON THIS SET OF PLANS, DAY BY DAY, ALL OUTLETS, CONDUIT, LUMINAIRES EQUIPMENT BREAKER CHANGES IN	21.3
8.2.	AT THE COMPLETION OF THE WORK, THE ELECTRICAL INSTALLATION SHALL BE LEFT IN A CLEAN FINISHED		PANELS, ETC. AS ACTUALLY INSTALLED ON THE JOB. ANY CHANGES TO THE CONTRACT WORK SHALL BE SIMILARLY RECORDED.	21.3.
83	CONDITION TO THE SATISFACTION OF THE ENGINEER.	16.2.	AS-BUILT DRAWINGS SHALL BE CLEARLY MARKED IN RED INCLUDING ALL CHANGES TO THE ORIGINAL	
	REQUIRED.	10.0	TENDER DRAWINGS COVERED BY ADDENDA, CHANGE ORDERS, FIELD CHANGES, JOB CONDITIONS, ETC.	
8.4.	ALL HANDLING OF LUMINAIRES AND LAMPS SHALL BE DONE WITH CLEAN GLOVES. TO ENSURE CLEANLINESS AND LAMP LIFE.	16.3.	THE ENGINEER. AS-BUILT DRAWINGS ARE TO BE TURNED OVER TO THE ENGINEER AT TIME OF FINAL	
8.5.	RECYCLE PACKING MATERIAL AND OTHER SUCH ITEMS THAT CAN BE DIVERTED FROM LANDFILL.	17		
9.	SETTING OUT OF THE WORK	17.1.	CLEARLY IDENTIFY ALL ELECTRICAL EQUIPMENT USING PRINTED PTOUCH LABELS OR LAMACOIDS.	
9.1.	THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ALL WORK COMPLETED CONTRARY TO THE INTENT OF THE DRAWINGS AND SPECIFICATIONS AND SHALL BEAR ALL COSTS FOR SAME.		HAND-WRITTEN LABELS ARE UNACCEPTABLE.	21.4.
	WHERE THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS NOT CLEAR, HE SHALL OBTAIN THE CLARIFICATION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.	17.2.	ALL ELECTRICAL DISTRIBUTION EQUIPMENT SHALL HAVE A LAMACOID NAMEPLATE FASTENED TO THE OUTSIDE FRONT OF THE EQUIPMENT.	
9.2.	THE ELECTRICAL CONTRACTOR SHALL GIVE THE WORK THEIR PERSONAL SUPERVISION, LAY OUT HIS OWN WORK, DO ALL NECESSARY LEVELLING AND MEASURING OR EMPLOY A COMPETENT ENGINEER TO DO SO. FIGURES, FULL SIZE AND DETAIL DRAWINGS SHALL TAKE PRECEDENCE OVER SCALE MEASUREMENTS.	17.3.	EQUIPMENT TAG NUMBER SHALL CONTAIN A MINIMUM OF; THE EQUIPMENT NAME, VOLTAGE, PHASE, WIRE (3 OR 4), AMPERAGE, SOURCE: XXXX, LOAD: XXXX. SUBMIT PROPOSED TAGGING FOR ENGINEER'S APPROVAL PRIOR TO FABRICATION.	
9.3.	WHERE ANY EQUIPMENT SUPPLIED BY THE ELECTRICAL CONTRACTOR MUST BE BUILT IN WITH THE WORK OF	17.4.	PROVIDE TYPEWRITTEN CIRCUIT INDEXES FOR ALL PANELS.	21.5.
	EQUIPMENT TO BE BUILT IN OR MEASUREMENTS TO ALLOW NECESSARY OPENINGS TO BE LEFT SO AS NOT	17.5.	JUNCTION BOXES SHALL ALL BE LABELED INDICATING THE SYSTEM AND OR CIRCUITS CONTAINED WITHIN.	
9.4.	ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE OWNER OR ANY OF	17.6.	ALL RECEPTACLES SHALL BE LABELED WITH THE CIRCUIT NUMBERS AND PANEL IDENTIFICATION. UTILIZE	22
10	THE OTHER TRADES BY IMPROPER LOCATION OR CARRYING OUT OF HIS WORK.	17.7.	ALL COMMUNICATIONS AND OTHER SYSTEMS CABLES AND DEVICES ARE TO BE IDENTIFIED AS PER THE	22.1.
10.	ENGINEER RESERVES THE RIGHT TO CHANGE LOCATION OF OUTLETS TO WITHIN 3.0 METRES OF POINTS		EIA/TIA 606 STANDARDS. CONFIRM PROTOCOL WITH OWNER OR ENGINEER PRIOR TO COMMENCEMENT OF LABELS.	
	INDICATED ON PLANS WITHOUT EXTRA CHARGE PROVIDING ELECTRICAL CONTRACTOR IS ADVISED PRIOR TO INSTALLATION.	17.8.	ALL LUMINAIRES CONNECTED TO EMERGENCY CIRCUITS TO BE LABELLED WITH P-TOUCH LABEL INDICATING	22.2.
11.	CORING, CUTTING AND PATCHING	40	PANEL AND CIRCUIT DESIGNATION. LABEL TO BE VISIBLE FROM BELOW AFTER INSTALLATION.	00.0
11.1.	THE GENERAL TRADE WILL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED FOR THE ELECTRICAL INSTALLATION. STRUCTURAL MEMBERS SHALL NOT BE CUT WITHOUT THE CONSENT OF THE	18.1.	ALL PORTIONS OF THE ELECTRICAL WORK SHALL BE TESTED AND CHECKED FOR SATISFACTORY OPERATION.	22.3.
	STRUCTURAL ENGINEER.	18.2.	BEFORE ENERGIZING ANY PORTION OF THE ELECTRICAL SYSTEM, PERFORM MEGGER TESTS ON ALL	22.4.
11.2.	WHERE WORK BY THE ELECTRICAL CONTRACTOR DAMAGES WORK OF OTHER TRADES, THE ELECTRICAL CONTRACTOR SHALL REPAIR AND MAKE GOOD SUCH DAMAGE TO THE SATISFACTION OF THE TRADE		FEEDERS. RESULTS OF SUCH TESTS SHALL CONFORM TO THE REQUIREMENTS OF THE CANADIAN ELECTRICAL CODE AND SHALL BE TO THE SATISFACTION OF THE AUTHORIZED INSPECTION AGENCY AND THE	22.5.
11.2			ENGINEER.	22.6.
11.5.	FITTINGS THE FLOOR SHALL BE DRY CORE DRILLED. AFTER CONDUIT INSTALLATION, THE OPENING SHALL BE	18.3.	SUBMIT ALL TEST RESULTS TO THE ENGINEER FOR APPROVAL	22.7.
	X-RAY COSTS, STRUCTURAL ENGINEER REVIEW, ETC.	10.4.	ELECTRICAL CODE, AUTHORIZED INSPECTION AGENCY AND THE ENGINEER SHALL BE REPAIRED IN A METHOD	22.8.
12.	ACCESS DOORS	18 5	UPON COMPLETION OF THE WORK AND IMMEDIATELY PRIOR TO FINAL INSPECTION AND TAKEOVER. CHECK	22.9.
12.1.	NUMBER OF ACCESS DOORS TO BE KEPT TO AN ABSOLUTE MINIMUM. DOOR LOCATIONS WILL BE COORDINATED WITH THE ENGINEER PRIOR TO INSTALLATION.		THE LOAD BALANCE OF ALL FEEDERS AND AT DISTRIBUTION CENTER, PANELS, ETC. THE TESTS SHALL BE	00.44
12.2.	WHERE ACCESS IS REQUIRED TO PULLBOXES AND JUNCTION BOXES, THESE BOXES ARE TO BE LOCATED IN REMOVABLE TYPE CEILING AREAS WHERE POSSIBLE OR ADJACENT TO RECESSED LUMINAIRES.		BALANCE. IF LOAD UNBALANCE EXCEEDS 15 PERCENT, RECONNECT CIRCUITS TO BALANCE THE LOAD.	22.10
12.3.	WHERE IT IS ABSOLUTELY IMPOSSIBLE TO SERVICE CERTAIN EQUIPMENT THROUGH REMOVABLE TYPE			22.11
	CEILINGS OR RECESSED LUMINAIRES AND WHERE SPECIAL PERMISSION HAS BEEN OBTAINED FROM THE ENGINEER, ELECTRICAL CONTRACTOR TO SUPPLY AND INSTALL ACCESS DOORS REQUIRED FOR SERVICING	19. 10 1	GUARANTEE/WARRANTY	22.12
12 4	OF SUCH WORK.	10.1.	WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE FROM ENGINEER (C2	
12.7.	THAN 14 GAUGE STEEL, PRIME COATED AND PAINTED ON THE JOB TO MATCH THE WALL OR CEILING FINISH	19.2.	THE ABOVE PARTIES FURTHER AGREE TO, AT THEIR OWN EXPENSE, REPAIR AND REPLACE ALL SUCH	23.
12.5.	WHERE ACCESS PANELS WILL BE USED, PROPER SHOP DRAWINGS ARE TO BE SUBMITTED FOR APPROVAL,		DEFECTIVE WORK AND OTHER WORK DAMAGED THEREBY WHICH FAILS OR BECOMES DEFECTIVE DURING THE TERM OF THE WARRANTY PROVIDED THAT SUCH FAILURE IS NOT DUE TO IMPROPER USAGE.	23.1.
10	PRIOR TO INSTALLATION.	19.3.	THE PERIOD OF THE GUARANTEE SPECIFIED SHALL IN NO WAY SUPPLANT ANY OTHER GUARANTEE OF A	
13. 13.1.	ALL ELECTRICAL FITTINGS, SUPPORTS, HANGER RODS, PULLBOXES, CHANNEL FRAMES, CONDUIT RACKS,	40.4	LONGER PERIOD BUT SHALL BE BINDING ON WORK NOT OTHERWISE COVERED.	
	OUTLET BOXES, BRACKETS, CLAMPS, ETC., SHALL HAVE GALVANIZED FINISH OR PAINT FINISH OVER CORROSION-RESISTANT PRIMER.	19.4. 20.	BUILDING WIRING	23.2.
13.2.	ALL PANELS OR SIMILAR FACTORY FINISHED UNITS THAT ARE SCRATCHED OR MARKED DURING	 20.1.	ALL WIRING SHALL BE COPPER WITH RW90 X-LINK INSULATION IN ELECTRICAL METALLIC TUBING UNLESS	23.3
	INSTALLATIONS SHALL BE TOUCHED UP WITH MATCHING SPRAY OR DRY LACQUER AND IF REQUIRED TO PROVIDE SATISFACTORY JOB SHALL BE COMPLETELY REFINISHED.	-	INDICATED OTHERWISE ON DRAWINGS.	_0.0.
14.	MOUNTING HEIGHTS	20.2. 20.2	NU WIRE SMALLER THAN NO. 12 AWG GAUGE SHALL BE USED FOR BRANCH CIRCUIT WIRING.	23.4.
		20.3.	20.3.1. WITHIN NEW DRYWALL PARTITIONS WITHIN ONE ROOM TO INTERCONNECT ELECTRICAL DEVICES	23.5.
			EXCEPT THAT THE CONNECTION FROM THE JUNCTION BOX ABOVE THE SUSPENDED CEILING DOWN TO THE FIRST ELECTRICAL DEVICE IN THE DRYWALL SHALL BE WIRED IN THE FMT CONDUIT	00 e
			20.3.2. INDIVIDUAL DROPS FROM JUNCTION BOXES IN CEILING SPACES TO LUMINAIRES TO A MAXIMUM OF	20.0.
			I HREE (3) METRES. ("DAISY-CHAINING" OF LUMINAIRES IS NOT PERMITTED).	23.7.
			CONDUIT.	23.8.

GENERALLY MAXIMUM BRANCH CIRCUIT CONDUCTOR DISTANCE DROP ARE AS FOLLOWS: 20.9.1. 15A-1P BREAKER - #12AWG WIRING - 80 FEET (24 MET) 20.9.2. 15A-1P BREAKER - #10AWG WIRING - 125 FEET (39 MET 20.9.3. 20A-1P BREAKER - #12AWG WIRING - 60 FEET (18 MET 20.9.4. 20A-1P BREAKER - #10AWG WIRING - 95 FEET (29 MET DEMOLITION GENERAL 21.1.1. ALL UNUSED AND ABBANDONNED CONDUIT, WIRE, HAN CEILING SPACE. 21.1.2. ABANDONED BREAKERS IN PANEL BOARDS SHALL E SERVICE ANY LOAD. 21.1.3. AS NOTED ON DRAWINGS THE CONTRACTOR SHALL T BUILDING MANAGEMENT. EQUIPMENT NOT REQUIR REMOVED FROM SITE BY THE CONTRACTOR. 21.1.4. THE CONTRACTOR SHALL SEAL ALL UNUSED OPENI ENSURE THAT FIRE-RESISTANCE RATING IS MAINTAINE THIS SPEC. 21.1.5. IF INDICATED ON DRAWINGS, PROVIDE BLANK COVER F REMAIN. LIGHTING 21.2.1. ALL UNUSED AND ABANDONED CONDUIT, WIRE, HANC CEILING SPACE. 21.2.2. EXISTING BUILDING LUMINAIRES SHALL BE REMOVED A DISPOSED OF. POWER 21.3.1. ALL CIRCUITS ORIGINATING FROM PANELBOARDS LOC BEING RE-USED SHALL BE PULLED BACK TO THE PANEL. 21.3.2. THE ELECTRICAL CONTRACTOR SHALL INFORM THE E ENCOUNTERED DURING THE DEMOLITION. 21.3.3. ALL ELECTRICAL DEVICES ON EXISTING WALLS BEING D 21.3.4. ENSURE THAT ALL EXISTING RECEPTACLES LEFT ISOL SAME RUN SHALL BE RE-FED TO BECOME FULLY ENGINEER. COMMUNICATIONS 21.4.1. ALL UNUSED AND ABANDONED CONDUIT, WIRE, HANC CEILING SPACE. 21.4.2. EXISTING COMMUNICATIONS CABLING AND CONNEC DEMOLISHED ARE TO BE REMOVED. COMMUNICATIO SHALL BE BLANKED OFF WITH BLANK COVER PLATES, IF SYSTEMS 21.5.1. SECURITY DEVICES AND ASSOCIATED WIRING NOT RETURNED TO OWNER WIRING DEVICES BOXES, EXCEPT WHERE OTHERWISE NOTED, SHALL BE PRE STANDARDS. ALL OUTLETS FOR FLUSH WALL-MOUNTING SWITCHES, RECEPT BE NO.52151 BOX WITH APPROPRIATE PLASTER COVER FOR OUTLETS. FLUSH MOUNTING VOICE/DATA WALL OUTLETS SHALL BE NO. 521 WITH APPROPRIATE PLASTER OR EXTENSION RING). USE A SINGLE COVER PLATE FOR RECEPTACLE OUTLET BOXED V GANG BOXES AND WIRING DEVICES ARE GROUPED. ELECTRO-GA BE USED WHERE MORE THAN 2 DEVICES ARE GANGED TOGETHE SECTIONAL TYPE BOXES OR HANDY BOXES SHALL NOT BE USED. RECEPTACLES SHALL BE WHITE DECORA TO MATCH EXISTING. DECORA. SPECIAL RECEPTACLES WILL BE AS SHOWN ON THE DRAWINGS. RECEPTACLES TO BE OF SPECIFICATION GRADE AND MANUFACTURES ARE LEVITON, THOMAS AND BETTS, COOPER WI PLATES FOR ALL FLUSH MOUNTING DEVICES SHALL BE WHITE ARE TO BE REPLACED WITH NEW. P-TOUCH ADHESIVE LABEL COMPLETE WITH A MINIMUM 5MM L AND NEW RECEPTACLES INDICATING CIRCUIT AND PANEL DESIG TRACE CIRCUITS FOR EXISTING RECEPTACLES AND ENSURE EXI SUPPORTING DEVICES CONDUIT SUPPORTS 23.1.1. SINGLE RUNS - TO BE GALVANIZED CONDUIT STRAPS O 23.1.2. MULTIPLE RUNS (THREE OR MORE) - CONDUIT RACK 23.1.3. VERTICAL RUNS - CHANNEL SUPPORT WITH CONDUIT F INSTALL TO MAINTAIN HEADROOM, NEAT MECHANICAL APPEAR REQUIRED. WHERE INSERTS ARE REQUIRED IN CONCRETE, EXPANSION IN MAY BE USED IN DRILLED HOLES. WOOD OR FIBRE PLUGS NOT P ALL ELECTRICAL DISTRIBUTION INCLUDING CABLE TRAY AND SUSPENDED CEILING, SHALL BE SUPPORTED DIRECTLY AND INDE

20.3.4. WIRING SHALL BE COLOUR CODED TO MATCH EXISTING INSTALLATION.

			DATE ISSU
CONDUIT TO BE SIZED IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE.	24.	GROUNDING	2018-02-07 ISSUED FO
WIRING SHALL BE COLOUR CODED AS FOLLOWS: 120/208V 277/480V 347/600V	24.1.	SUPPLY AND INSTALL COMPLETE GROUNDING SYSTEM AS INDICATED AND AS REQUIRED BY CANADIAN ELECTRICAL CODE AND ELECTRICAL INSPECTION DEPARTMENT.	2018-03-02 ISSUED FO
A PHASE RED ORANGE ORANGE	24.2.	ALL COMPONENTS SHALL BE SECURELY AND ADEQUATELY GROUNDED AND WHERE REQUIRED TO	
B PHASE BLACK BROWN BROWN		ACCOMPLISH THE GROUNDING STUDS AND BUSHINGS SHALL BE USED. ENSURE THAT ALL RACEWAYS, TERMINAL PANELS, ETC., FOR TELEPHONE, LOW VOLTAGE, FIRE ALARM, CABLE TRAY, SOUND, ETC., ARE SECURELY AND ADEQUATELY GROUNDED.	
NEUTRAL WHITE WHITEWHITE	24.3.	PROVIDE 1#6 INSULATED GROUND TO EACH DATA RACK AND TELEPHONE SWITCH.	
GROUND GREEN GREEN GREEN	25		
ALUMINUM CONDUCTORS MAY ONLY BE USED WHERE INDICATED ON DRAWINGS. APPLY ZINC JOINT	25. 25.1.	FIRE ALARM AND EMERGENCY VOICE COMMUNICATION SYSTEM ELECTRICAL CONTRACTOR SHALL EXTEND AND MODIFY EXISTING FIRE ALARM SYSTEM AS INDICATED ON	
COMPOUND ON ALL ALUMINUM CONDUCTORS PRIOR TO INSTALLATION OF CONNECTORS OR TERMINATING CONDUCTORS.	25.2	DRAWINGS AND SPECIFIED HEREIN.	
COMPUTER RECEPTACLES SHALL BE COMPLETE WITH A DEDICATED NEUTRAL CONDUCTOR PER PHASE.	۷۵.۲.	BY SAME MANUFACTURER.	
COLTAGE DROP FOR WIRING SHALL MEET REQUIREMETNS AS LAID OUT IN THE CANADIAN ELECTRICAL CODE. GENERALLY MAXIMUM BRANCH CIRCUIT CONDUCTOR DISTANCES (120VAC) TO MAINTAIN MAX. 3% VOLTAGE	25.3.	ELECTRICAL CONTRACTOR SHALL INSTALL AND OR MODIFY FIRE ALARM SYSTEM IN ACCORDANCE WITH CAN/ULC-S524-06.	
20.9.1. 15A-1P BREAKER - #12AWG WIRING - 80 FEET (24 METRES)	25.4.	ALL SIGNALING WIRING SHALL BE MIN. #14 AWG WITH CHARACTERISTICS AS PER MANUFACTURER'S RECOMMENDATIONS.	
20.9.2. 15A-1P BREAKER - #10AWG WIRING - 125 FEET (39 METRES)	25.5.	ALL WIRE TO BE INSTALLED IN EMT CONDUIT.	
20.9.3. 20A-1P BREAKER - #12AWG WIRING - 60 FEET (18 METRES)	25.6.	ALL EXISTING AND NEW FIRE ALARM DEVICES AND ZONE WIRING WITHIN THE LEASEHOLD SPACE UNDER CONSTRUCTION SHALL BE VERIFIED IN ACCORDANCE WITH CAN/ULC-S537-04 STANDARD FOR THE	
DEMOLITION	25.7	VERIFICATION OF FIRE ALARM SYSTEM INSTALLATIONS.	
GENERAL	20.7.	THROUGHOUT THIS SPACE.	
21.1.1. ALL UNUSED AND ABBANDONNED CONDUIT, WIRE, HANGERS, ETC. SHALL BE REMOVED FROM THE CEILING SPACE.	25.8.	ELECTRICAL CONTRACTOR TO PROVIDE MANUFACTURER WITH ASSISTANCE DURING THE CERTIFICATION PROCEDURE AND TO ENSURE THAT THE MANUFACTURER IS INVOLVED IN, AND APPROVES ALL ALTERATIONS	
21.1.2. ABANDONED BREAKERS IN PANEL BOARDS SHALL BE MARKED AS SPARE IF THEY NO LONGER SERVICE ANY LOAD.	25.9.	TO THE SYSTEM. THE ELECTRICAL CONTRACTOR SHALL EMPLOY THE SERVICES OF A PROFESSIONAL ENGINEER TO WITNESS	
21.1.3. AS NOTED ON DRAWINGS THE CONTRACTOR SHALL TURN OVER EQUIPMENT BEING REMOVED TO		THE VERIFICATION AND SHALL PROVIDE ALL REQUIRED ASSISTANCE AND EQUIPMENT FOR THE VERIFICATION.	
REMOVED FROM SITE BY THE CONTRACTOR.	25.10.	A COMPLETE TEST OF THE FIRE ALARM SYSTEM WILL BE COMPLETED PRIOR TO ENGAGING THE VERIFICATION ENGINEER. INABILITY TO COMPLETE THE FIE ALARM VERIFICATION DUE TO WIRING OR	
21.1.4. THE CONTRACTOR SHALL SEAL ALL UNUSED OPENINGS DUE TO ELECTRICAL DEMOLITION TO ENSURE THAT FIRE-RESISTANCE RATING IS MAINTAINED. REFER TO "FIRE STOPPING" SECTION OF	05.44	PROGRAMMING ISSUES MAY RESULT IN ADDITIONAL FEES FOR FIRE ALARM VERIFICATION BEING REQUIRED.	
THIS SPEC. 21.1.5. IF INDICATED ON DRAWINGS, PROVIDE BLANK COVER PLATE MATCHING WALL FINISH FOR BOXES TO	25.11.	IF THE ELECTRICAL CONTRACTOR CHOOSES TO HIRE THE PROFESSIONAL SERVICES OF NORR ARCHITECTS ENGINEERS PLANNERS TO COMPLETE THE FIRE ALARM VERIFICATION, THE ELECTRICAL CONTRACTOR SHALL CARRY A P.C. SUM OF \$XXXX 00 PLUS G.S.T. FOR PAYMENT TO NORP MORP ENGINEERING REQUIRES A	
REMAIN.		MINIMUM OF FIVE (5) WORKING DAYS NOTICE PRIOR TO FIRE ALARM VERIFICATION. THE ELECTRICAL CONTRACTOR IS NOT OBLIGATED TO HIRE NORR ARCHITECTS ENGINEERS PLANNERS FOR THE WITNESS OF	
21.2.1. ALL UNUSED AND ABANDONED CONDUIT, WIRE, HANGERS, ETC. SHALL BE REMOVED FROM THE		THE FIRE ALARM VERIFICATION AND MAY CHOOSE TO HIRE AN ALTERNATE PROFESSIONAL ENGINEER IF SO DESIRED.	This drawing has been prena
CEILING SPACE.	26.	COMMUNICATION CABLING RACEWAY SYSTEM	the CLIENT and there are n kind made by NORR Archited
DISPOSED OF.	26.1.	SUPPLY AND INSTALL CABLE TRAY, CONDUIT, JUNCTION AND OUTLET BOXES TO FORM A COMPLETE EMPTY RACEWAY SYSTEM AS DESCRIBED HERE AND INDICATED ON THE DRAWINGS. ALL EMPTY CONDUITS SHALL	any party with whom NOR Planners has not entered into
POWER 21.3.1. ALL CIRCUITS ORIGINATING FROM PANELBOARDS LOCATED IN ELECTRICAL ROOM WHICH ARE NOT	26.2.	BE COMPLETE WITH PULL WIRE. AT EACH COMMUNICATIONS DATA, TELEPHONE OR COMBINATION DATE/TELEPHONE OUTLET PROVIDE AN	This drawing shall not be
BEING RE-USED SHALL BE PULLED BACK TO THE PANEL.		APPROPRIATELY SIZED BOX, WITH PLASTER RING FOR SINGLE GANG FACEPLATE AND ASSOCIATED COMMUNICATIONS CONNECTORS. FROM EACH OUTLET BOX, STUB A CONDUIT INTO THE ABOVE CEILING	dated by the Architect or Engin
21.3.2. THE ELECTRICAL CONTRACTOR SHALL INFORM THE ENGINEER OF ANY DEFICIENCIES THAT ARE ENCOUNTERED DURING THE DEMOLITION.		SPACE TO A HEIGHT OF 150 MM ABOVE THE CEILING; PROVIDE A CONNECTOR COMPLETE WITH PLASTIC BUSHING IN EACH CONDUIT TO PREVENT CABLE DAMAGE. REFER TO INSTALLATION DETAILS ON DRAWINGS	Project Component
21.3.3. ALL ELECTRICAL DEVICES ON EXISTING WALLS BEING DEMOLISHED ARE TO BE REMOVED.	27.	FOR ADDITIONAL INFORMATION. SEALING AND FIRE PROTECTION	LUNCHROOM EXP
SAME RUN SHALL BE RE-FED TO BECOME FULLY FUNCTIONAL TO THE SATISFACTION OF THE ENGINEER	27.1.	WHERE CABLES OR CONDUITS PASS THROUGH FIRE RATED ASSEMBLIES SUCH AS FLOORS, WALLS, CEILINGS,	Keyplan
COMMUNICATIONS	27.2.	USE APPROVED AND ULC LISTED FIRE STOP MATERIAL AND METHODS.	
21.4.1. ALL UNUSED AND ABANDONED CONDUIT, WIRE, HANGERS, ETC. SHALL BE REMOVED FROM THE CEILING SPACE.	27.3.	SUBMIT ULC LISTED DETAILS AS REQUIRED TO THE AUTHORITY HAVING JURISDICTION.	
21.4.2. EXISTING COMMUNICATIONS CABLING AND CONNECTORS SHOWN ON EXISTING WALLS BEING	27.4.	CARRY ALL COST ASSOCIATED WITH SUBMISSION OF DETAILS AND INSTALLATIONS OF SUCH PRODUCTS AND ASSEMBLIES.	
SHALL BE BLANKED OFF WITH BLANK COVER PLATES, IF INDICATED ON DRAWINGS.	28	COMMUNICATION CABLE SYSTEM	
SYSTEMS	28.1.	A COMPLETE AND FUNCTIONING TELECOMMUNICATIONS SYSTEM WILL BE PROVIDED UNDER THIS CONTRACT.	
RETURNED TO OWNER		THE SYSTEM WILL CONSIST OF 28.1.1. All raceways, back boxes and cover plates and associated hardware.	Consultants
WIRING DEVICES BOXES, EXCEPT WHERE OTHERWISE NOTED, SHALL BE PRESSED SHEET STEEL GALVANIZED TO CSA		28.1.2. horizontal cabling from i.t. room to data jacks. cabliing will be fully terminated and tested.	Architectural: NORR Architec
STANDARDS.		28.1.3. service loop for all horizontal cabling in i.t. room of 2m for final connection to patch equipment.	Structural: NORR Architect Mechanical: NORR Architect
BE NO.52151 BOX WITH APPROPRIATE PLASTER COVER FOR SINGLE OR 2-GANG OUTLETS OR 4-GANG OUTLETS	28.2.	28.1.4. telecom rack, patching equipment and servers will be by others. SYSTEM DESCRIPTION	
FLUSH MOUNTING VOICE/DATA WALL OUTLETS SHALL BE NO. 52151 SERIES (4-INCH SQUARE, 1.5 INCHES DEEP		HORIZONTAL COPPER CABLING SYSTEM CONSISTS OF CATEGORY 6 CABLES WITH FOUR UNSHIELDED	Seal(s)
WITH APPROPRIATE PLASTER OR EXTENSION RING). USE A SINGLE COVER PLATE FOR RECEPTACLE OUTLET BOXED WHERE SHOWN GANGED.		PLENUM RATED JACKET. CONNECTORS ARE PLACED INTO NEMA RATED FACEPLATES AT THE WORK AREA AND PLACED INTO RACK MOUNTED PATCHING PANELS IN THE EQUIPMENT / NETWORKING ROOMS.	NAL ENG
GANG BOXES AND WIRING DEVICES ARE GROUPED. ELECTRO-GALVANIZED STEEL MULTI GANG BOXED SHALL		HORIZONTAL CABLE AND ITS CONNECTING HARDWARE PROVIDE THE MEANS OF TRANSPORTING SIGNALS	Sea S
SECTIONAL TYPE BOXES OR HANDY BOXES SHALL NOT BE USED.		LOCATED IN THE COMMUNICATIONS OUTLET/CONNECTOR AND THE HORIZONTAL CROSS-CONNECT	2 ame
RECEPTACLES SHALL BE WHITE DECORA TO MATCH EXISTING. COMPUTER RECEPTACLES SHALL BE GREY DECORA.		1) HORIZONTAL CABLING WILL CONTAIN NO MORE THAT ONE TRANSITION POINT OR CONSOLIDATION POINT BETWEEN THE HORIZONTAL CROSS-CONNECT AND THE TELECOMMUNICATIONS OUTLET/CONNECTOR	AS OF
SPECIAL RECEPTACLES WILL BE AS SHOWN ON THE DRAWINGS.		2) BRIDGED TAPS AND SPLICES WILL NOT BE INSTALLED IN THE HORIZONTAL CABLING.	PP-119
RECEPTACLES TO BE OF SPECIFICATION GRADE AND OF ONE MANUFACTURER. ACCEPTABLE MANUFACTURES ARE LEVITON, THOMAS AND BETTS, COOPER WIRING DEVICES.		THE MAXIMUM ALLOWABLE HORIZONTAL CABLE LENGTH IS 295 FEET (90 M). THIS MAXIMUM ALLOWABLE	2018-03
PLATES FOR ALL FLUSH MOUNTING DEVICES SHALL BE WHITE DECORA. EXISTING DAMAGED FACEPLATES		EENGTH DOES NOT INCLUDE AN ALLOWANCE FOR THE LENGTH OF 16 FEET (4.9 M) TO THE WORKSTATION EQUIPMENT. THE MAXIMUM ALLOWABLE LENGTH DOES NOT INCLUDE AN ALLOWANCE FOR THE LENGTH OF 16 FEET (4.9 M) IN THE HORIZONTAL CROSS-CONNECT.	
P-TOUCH ADHESIVE LABEL COMPLETE WITH A MINIMUM 5MM LETTERS TO BE PROVIDED ON ALL EXISTING	0		
AND NEW RECEPTACLES INDICATING CIRCUIT AND PANEL DESIGNATION.	28.3	MANUFACTURER QUALIFICATIONS 1.) THE CONTRACTOR SHALL BE A BELDEN CERTIFIED SYSTEM VENDOR (CSV) EXPERIENCED AND TRAINED	2300, 411 - 1st Street SE,
		BY THE MANUFACTURING COMPANY, IN ALL ASPECTS OF THE PLACEMENT, TERMINATING CONNECTING AND TESTING OF PRODUCTS DESCRIBED HEREIN AND PROVIDE A CERTIFICATE OF PROOF PRIOR TO START OF WORK.	Calgary, AB Canada T2G 4 norr.com
		2.) THE CONTRACTOR SHALL HAVE A MINIMUM OF ONE (1) RCDD "REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER" RECOGNIZED BY BICSI "BUILDING INDUSTRY CONSULTING SERVICES	NORR ARCHITECTS ENGI A Partnership of Limited Co
23.1.1. SINGLE RUNS - TO BE GALVANIZED CONDUIT STRAPS OR RING BOLT RANGE 1 TYPE HANGERS		INTERNATIONAL" ON STAFF AT LOCAL OFFICES (THE TERM 'LOCAL OFFICES" AS APPLIED TO RCDD, REGISTERED COMMUNICATIONS DISTRIBUTIONS DESIGNERS, REFER TO ANYWHERE IN THE PROVINCE	Poon McKenzie Architects (Alberta) Inc. Poon McKenzie Hol NORR is a trademark owned by Ingenium Group Inc. and is
23.1.2. MULTIPLE RUNS (THREE OR MORE) - CONDUIT RACK		3.) COMMUNICATIONS CONTRACTOR SHALL SUPPLY A COMPLETE SYSTEM FOR VOICE AND DATA.	victor Smith, Architect, AAA, B.Arch, MAIBC Bruce G. McKenzie, Architect, AAA, M.Arch, MAI A. Silvio Baldassarra, Architect, AAA, B.Arch, MA Adrian Todeila, P.Eng., APEGA
23.1.3. VERTICAL RUNS - CHANNEL SUPPORT WITH CONDUIT FITTINGS.		4.) THE CONTRACTOR SHALL BE EXPERIENCED IN ALL ASPECTS OF THIS WORK AND SHALL BE REQUIRED TO DEMONSTRATE DIRECT EXPERIENCE ON RECENT SYSTEMS OF SIMILAR TYPE AND SIZE. THE CONTRACTOR SHALL DEMONSTRATE PROVEN EXPERTISE IN THE IMPLEMENTATION OF NETWORK	Chris Pal, P.Eng., APEGA
		CABLING. EXPERTISE CAN BE ILLUSTRATED THOUGH THE INCLUSION OF DETAILS OF AT LEAST THREE PROJECTS INVOLVING THE DESIGN AND INSTALLATION OF A CAT 5e, CAT 6, OR AUGMENTED CAT 6 (CAT	Project Manager D. HIDER
WHERE INSERTS ARE REQUIRED IN CONCRETE, EXPANSION INSERTS, LEAD INSERTS OR PLASTIC INSERTS MAY BE USED IN DRILLED HOLES. WOOD OR FIBRE PLUGS NOT PERMITTED.		6A) BALANCED TWISTED-PAIR CABLING SYSTEM WITHIN THE PAST TWO YEAR PERIOD. NAMES AND CONTACT INFORMATION FOR EACH OF THE THREE PROJECTS SHALL BE INCLUDED. THE CONTRACTOR SHALL OWN AND MAINTAIN TOOLS AND EQUIPMENT NECESSARY FOR SUCCESSFUL INSTALLATION AND	Project Leader C
ALL ELECTRICAL DISTRIBUTION INCLUDING CABLE TRAY AND CONDUIT, WHICH IS MOUNTED ABOVE THE SUSPENDED CEILING, SHALL BE SUPPORTED DIRECTLY AND INDEPENDENTLY FROM THE CONCRETE SLAB.		TESTING OF OPTICAL AND PROPOSED AUGMENTED CAT 6A METALLIC PREMISE DISTRIBUTION SYSTEMS AND HAVE PERSONNEL WHO ARE ADEQUATELY TRAINED IN THE USES OF SUCH TOOLS AND	D. HIDER D. Client
THE USE OF ANY PART OF THE CEILING SUSPENSION SYSTEM AS A SUPPORT OR FOUNDATION FOR THE SUSPENSION OF CABLE TRAY, CONDUIT OR FLEXIBLE CONDUIT IS FORBIDDEN		EQUIPMENT. 5.) THE COMMUNICATIONS INSTALLER SHALL BE A COMMUNICATION CABLING SPECIALIST CERTIFIED BY THE DEPARTMENT OF LAROUR AND OPTAIN ALL REQUIRED DEPARTS.	RCMP
THE USE OF ANY DRYWALL OR WALL PARTITION AS A SUPPORT OR FOUNDATION FOR CABLE TRAY OR	0.5		
CONDULT ROUTED HORIZONTALLY THROUGH THE CEILING SPACE IS FORBIDDEN. SUPPORT HANGERS AND OTHER TRADES TO SUPPORT NON-ELECTRICAL SERVICES OR DEVICES SHALL NOT	28.4	1.) THE WARRANTY PERIOD WITH REGARD TO THE PROJECT IS FOR 25 YEARS FROM THE DATE OF	
USE TRAYS INSTALLED BY THE ELECTRICAL CONTRACTOR.		SUBSTANTIAL PERFORMANCE OF THE WORK OR THOSE PERIODS SPECIFIED IN THE CONTRACT DOCUMENTS FOR CERTAIN PORTIONS OF THE WORK OF PRODUCTS.	
SUITABLE METHODS TO PREVENT THE TRANSMISSION OF THE VIBRATIONS TO THE BUILDING STRUCTURES IS TO BE INSTALLED USING SUITABLE METHODS TO PREVENT THE TRANSMISSION OF THE VIBRATIONS TO THE BUILDING STRUCTURE.		2.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PERFORMANCE OF THE WORK.	
		DEFICIENCIES IN THE WORK WHICH APPEAR PRIOR TO AND DURING THE WARRANTY PERIODS SPECIFIED IN THE CONTRACT DOCUMENTS.	

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	4.) THE OWNER, SHALL PROMPTLY GIVE THE CONTRACTOR NOTICE IN WRITING OF OBSERVED DEFECTS	32.1.	INSTALLATION	35.5.	REPLACE BURNT-OUT LAMPS FOR FLUORESCENT, INCANDESCENT, AND LOW VOLTAGE LUMINAIRES WHERE	DATE ISSU
	AND DEFICIENCIES THAT OCCUR DURING THE WARRANTY PERIOD.		32.1.1. HORIZONTAL CABLING WILL BE RUN IN CONDUIT AND CABLE TRAY PROVIDED UNDER THIS CONTRACT	35.6.	REQUIRED. ALL FLUORESCENT LUMINAIRES TO BE SUPPLIED COMPLETE WITH LAMPS AND ELECTRONIC BALLAST <10%	2018-02-07 ISSUED FC 2018-03-02 ISSUED FC
	UNDER THE REQUIREMENTS OF PARAGRAPH 1.8.3.		32.1.2. THE INSTALLATION OF EXPOSED CABLES SHALL BE MANAGED TO PROVIDE A NEAT INSTALLATION	35.7	THD, RAPID START OR PROGRAMMED START.	2018-03-29 ISSUED
	YEAR ON BEHALF OF THE OWNER FROM THE MANUFACTURER. THESE PRODUCT WARRANTIES SHALL BE ISSUED BY THE MANUFACTURER TO THE BENEFIT OF THE OWNER.		32.1.3. EXPOSED CABLE IN RETURN AIR PLENUM ARE TO BE ATTACHED TO THE CEILING EVERY 3 FEET BY		85.	
	7.) THE CONTRACTOR SHALL PROVIDE A TWENTY FIVE (25) YEAR EXTENDED PRODUCT WARRANTY OF LIFETIME APPLICATION ASSURANCE WARRANTY FOR THE COMMUNICATIONS NETWORK. THE		J-HOOKS OR HILLI HOOKS. BUNDLES OF MULTIPLE CABLES ARE TO BE NEATLY SECURED WITH VELCRO STRIPS.	35.8. 35.9.	SPECIAL LAMPS TO BE USED WHERE INDICATED WITH THE LONGEST LIFE AVAILABLE IN EACH CATEGORY.	
	WARRANTY SHALL BE BACKED UP BY THE MANUFACTURER AND TAKEN OVER BY THE MANUFACTURER OR HIS REPRESENTATIVE IF THE CONTRACTOR FAILS TO FOLLOW THROUGH WITH THE REQUIREMENTS		32.1.4. ALL CABLES BETWEEN WALL OR FURNITURE OUTLETS AND TERMINATION ROOMS SHALL BE CONTINUOUS WITHOUT ANY BREAKS OR SPLICES TO MINIMIZE POTENTIAL FAULT LOCATIONS.	35.10.	ACCEPTABLE LAMP MANUFACTURER'S: SYLVANIA, GE, PHILLIPS.	
	OF THE WARRANTY. 8.) THE COMMUNICATIONS NETWORK IS DEFINED AS ALL REQUIRED PASSIVE EQUIPMENT AND CABLING, INCLUDING HARDWARE, TERMINATIONS, AND JACKS, CONFIGURED TO PROVIDE DATA AND VOICE CONVECTIVITY FROM FACH DATA OR VOICE OUT FT PROVIDED BY THE CONTRACTOR IN THIS		32.1.5. PLENUM RATED FT4/FT6 CABLES MAY BE ROUTED EXPOSED ABOVE THE SUSPENDED CEILING IN THE RETURN AIR PLENUM. PLENUM RATED CABLES SHALL BE LABELLED FT4 OR FT6 ALONG THE LENGTH OF THE CABLE JACKET. CABLES NOT CARRYING ONE OF THESE DESIGNATIONS MUST BE ROUTED IN ENCLOSED RACEWAYS.	35.11. 35.12.	ACCEPTABLE BALLAST MANUFACTURER'S: GE, PHILLIPS, LUTRON. LUMINAIRE SCHEDULE - REFER TO DRAWINGS.	
	9.) THE SYSTEM ASSURANCE SHALL COVER THE APPLICATIONS THAT THE INSTALLED SYSTEM IS DESIGNED TO SUPPORT FOR A TWENTY FIVE (35) YEAR PERIOD.		32.1.6. PROVIDE IDENTIFICATION TAGS AT ALL OUTLETS BLOCKS AND TERMINATION CABINETS. IDENTIFICATION TAGS TO BE KROY TYPE 200 LABELS. PROVIDE CIRCULAR CABLE IDENTIFICATION TAGS AT EACH END OF EACH CABLE; IDENTIFICATION CODES ARE TO BE SPECIFIED BY JOB NAME.	36.0. 36.1.	MECHANICAL EQUIPMENT WIRING ELECTRICAL CONTRACTOR TO PROVIDE ALL CONNECTIONS, STARTERS, DISCONNECT, ETC., REQUIRED FOR MECHANICAL EQUIPMENT.	
	10.)THE COPPER SYSTEM SHALL BE CONSTRUCTED TO CONFORM TO ANSI/TIA-568-B.2-10-2008 - TRANSMISSION PERFORMANCE SPECIFICATIONS FOR 4 PAIR 1000 AUGMENTED CAT 6 CABLING		32.1.7. INSTALL ALL PATCH CORDS IN ACCORDANCE WITH THE OWNERS I.T. DEPARTMENT OR THE PERSON IN CHARGE OF THE TELECOMMUNICATIONS INFRASTRUCTURE	36.2.	ALL LOW VOLTAGE CONTROLS AND CONTROL WIRING WILL BE THE RESPONSIBILITY OF THE MECHANICAL TRADE AND/OR HIS CONTROL SUB-TRADE. 120V CONNECTION FOR CONTROLS CONTRACTOR SHALL BE	
	COMMERCIAL BUILDING TELECOMMUNICATIONS CABLING STANDARDS.		32.1.8. BEND RADIUS OF CABLES SHALL BE MAINTAINED AS RECOMMENDED BY THE MANUFACTURER AND PER TIA AND BICSI STANDARDS.	36.3	PROVIDED BY ELECTRICAL CONTRACTOR. COORDINATE WITH CONTROLS CONTRACTOR FOR LOCATION.	
	FIBER CABLING COMPONENTS STANDARD AND ANSI/TIA/EIA-568-B.3-1-2002 - OPTICAL FIBER CABLING COMPONENTS STANDARD ADDENDUM 1 - ADDITIONAL TRANSMISSION PERFORMANCE SPECIFICATIONS		32.1.9. LOCATIONS AND QUANTITY OF OUTLETS AS SHOWN ON DRAWINGS.		AND LOCATIONS OF ALL MECHANICAL EQUIPMENT BEFORE INSTALLATION OF CONDUITS, OUTLETS, HEATERS ETC.	
	FOR 50 /125 (m OPTICAL FIBER CABLES) 12.) THE EXTENDED PRODUCT WARRANTY AND THE SYSTEMS ASSURANCE TOGETHER COMPRISE THE		32.1.10. RACK LOCATION AND PANEL INSTALLATION AS SHOWN IN DETAIL DRAWINGS.	37.0.	ENGINEER'S INSPECTIONS	
	STRUCTURED CABLING SYSTEM QUALITY ASSURANCE PROGRAM. 13.)UPON SUCCESSFUL COMPLETION OF THE STRUCTURED CABLING INSTALLATION AND SUBSEQUENT	33.0.	TESTING PROCEDURES	57.1.	COMPLETION.	
	TESTING BY CERTIFIED TECHNICAL PERSONNEL THE CONTRACTOR SHALL PROVIDE TO THE OWNER A NUMBERED CERTIFICATE REGISTERING THE INSTALLATION.		CHARACTERISTICS OF THE SYSTEMS SPECIFIED.	37.2.	THE ELECTRICAL CONTRACTOR SHALL ADVISE THE ENGINEER WHEN ALL WORK HAS BEEN COMPLETED ABOVE THE SUSPENDED CEILING, EITHER DRYWALL OR T-BAR.	
29.0.	COMMUNICATION WIRING SYSTEM		23.0.2. CABLE SEGMENTS AND LINKS SHALL BE TESTED FROM BOTH ENDS OF THE CABLE FOR EACH OF THE CONSTRUCTION PHASES. (VERIFY THAT CABLE LABELING MATCHES AT BOTH ENDS).	37.3.	FAILURE TO NOTIFY THE ENGINEER IN TIME WILL NECESSITATE THE REMOVAL OF ALL CEILING FOR INSPECTION PURPOSES.	
29.1.	GENERAL		33.0.3. THE SYSTEM SHALL NOT BE CONSIDERED CERTIFIED UNTIL THE TESTER HAS ACKNOWLEDGED THAT THE PERFORMANCE OF THE PHYSICAL LAYER OF THE SYSTEM HAS BEEN FULLY TESTED AND IS	37.4.	THE ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER AND SHALL ALLOW AT LEAST 3 WORKING DAYS NOTICE OF THE INSTALLATION OF CEILING.	
20.11	THE ELECTRICAL CODE REFERRED TO IN THESE SPECIFICATIONS IS THE NATIONAL ELECTRICAL CODE AS		OPERATIONAL AT THE COMPLETION OF THE INSTALLATION PHASE.			
	COMPLIANCE WITH THE ELECTRICAL CODE AND ALL REGULATIONS THAT MAY APPLY.		TO BE UTILIZED ON THIS PROJECT. THE INSTALLER SHALL TEST ALL CABLES INSTALLED UNDER THIS SECTION.			
	WHERE STANDARDS EXIST, FOR A PARTICULAR CATEGORY, PRODUCTS USED ON THIS PROJECT WILL BE LISTED BY AN APPROVED NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL), AND BE APPROVED OR LISTED FOR THE INTENDED SERVICE AND APPLICATION.		1) UNSHIELDED TWISTED PAIR TESTING EQUIPMENT:			
	THESE SPECIFICATIONS DO NOT UNDERTAKE TO REPEAT THE REQUIREMENTS OF CODES, REGULATIONS OR		a.) THE CABLE TESTER SHALL HAVE A WIDE VARIETY OF PREPROGRAMMED CABLE TYPES AS AN INTEGRAL PART OF ITS TESTING SYSTEM AND HAVE THE ABILITY TO TEST CABLES LESS THAN 6 FEET (6FT.) FROM THE TEST POINT.			
	WORK BEYOND THE REQUIREMENTS OF APPLICABLE CODES OR REGULATIONS. THE STRICTER, HIGHER QUALITY, GREATER QUANTITY OR HIGHER COST WILL BE PROVIDED. IT IS INCUMBENT ON THE INSTALLER,		b.) TESTING SHALL BE ACCOMPLISHED USING LEVEL III OR HIGHER FIELD TESTER THAT IS LOADED WITH THE MOST CURRENT VERSION OF TEST SOFTWARE BY THE MANUFACTURER OF THE TEST			This drawing has been prep the CLIENT and there are kind made by NORP Archite
	MATERIAL AND EQUIPMENT SUPPLIERS TO MEET THESE SPECIFICATIONS, APPLICABLE CODES, REGULATIONS, AND NRTL LISTING AGENCY RESTRICTIONS.		EQUIPMENT.			any party with whom NO Planners has not entered into
29.2.	MANUFACTURER THE COPPER CABLING SYSTEM AND OPTICAL FIBER CABLING SYSTEM DESIGN USES LEVITON CONNECTORS					This drawing shall not b
	AND SUPERIOR ESSEX CABLES. THE WORD "MANUFACTURER" WILL INCLUDE THE MANUFACTURER. THE MANUFACTURER'S REPRESENTATIVE.		1) THE TEST RESULTS INFORMATION FOR EACH LINK SHALL BE RECORDED IN THE MEMORY OF THE FIELD TESTER UPON COMPLETION OF THE TEST. THE TESTER SHALL BE CAPABLE OF STORING TEST DATA IN			dated by the Architect or Eng
	THE DISTRIBUTOR, THE FABRICATOR, AND THE SUPPLIER OF THE PARTICULAR CLASSIFICATION OF EQUIPMENT, SYSTEM, PRODUCT, AND MATERIAL.		EITHER INTERNAL OR EXTERNAL MEMORY. THE EXTERNAL MEDIA USED SHALL BE LEFT TO THE DISCRETION OF THE USER.			Project Component
	ALL WORK, EQUIPMENT, AND SYSTEMS WILL BE MANUFACTURED, PROVIDED, REPAIRED, INSTALLED, AND TESTED IN ACCORDANCE WITH THE LATEST EDITION AND ALL CURRENT AMENDMENTS OF THE APPLICABLE		2) THREE (3) PRINTED COPIES OF THE TEST RESULTS SHALL BE PROVIDED UPON COMPLETION OF THE			Keyplan
	PUBLICATIONS AND STANDARDS OF THE CANADIAN ELECTRICAL CODE AND THE LATEST VERSION OF THE ANSI/EIA/TIA 568 SERIES AS OF THE DATE OF THE CONTRACT DOCUMENTS. WHEN THE SPECIFICATION REQUIREMENTS EXCEED THE REQUIREMENTS OF THESE PUBLICATIONS AND STANDARDS THE SPECIFICATIONS WILL GOVERN:		3) TEST RESULTS SHALL INCLUDE THE FOLLOWING:			
	THE ABOVE REQUIREMENTS WILL NOT IN ANY WAY LIMIT RESPONSIBILITY OR REQUIREMENTS TO COMPLY WITH ALL OTHER CODES. STANDARDS AND LAWS		a.) APPLICABLE ROOM NUMBER OF JACK LOCATION (ROOM NUMBER PER CONTRACT DOCUMENTS).			
29.3.	PERFORMANCE		b.) APPLICABLE TELECOMMUNICATIONS ROOM NUMBER.c.) CIRCUIT I.D. NUMBER WITH CORRESPONDING JACK IDENTIFIER.			
	SYSTEM SHALL PROVIDE "FUTURE PROOF" CHANNEL PERFORMANCE AND GUARANTEED MARGINS AS NOTED IN THIS DOCUMENT AND IS GUARANTEED TO EXCEED ANSI/TIA/EIA-568-B.2 CATEGORY 6 SPECIFICATIONS FOR		d.) WIRE MAP. e.) LENGTH.			
	INSERTION LOSS, NEXT, PSNEXT, ACR, PSACR, ELFEXT, PSELFEXT AND RETURN LOSS TO 250 MHZ. THE SYSTEM IS ALSO GUARANTEED 12 DB PSACR HEADROOM AT 250 MHZ.		f.) INSERTION LOSS.			Consultants
29.4.	SOURCE QUALITY CONTROL ALL MATERIALS SHALL BE PURCHASED FROM DISTRIBUTORS AUTHORIZED BY SYSTEM MANUFACTURERS TO		g.) NEAR-END CROSSTALK (NEXT) LOSS.			Architectural: NORR Archite
29.5.	SELL NEW AND UNUSED COMPONENTS. WALLPLATES		h.) PS-NEXT (POWER SUM NEAR END CROSS TALK).			Structural: NORR Archite Mechanical: NORR Archite
	MANUFACTURER - PROVIDE WALLPLATES AS SPECIFIED BELOW:		i.) ELFEXT (EQUAL LEVEL FAR END CROSS TALK).			Electrical: NORR Archite
	1) LEVITON QUICKPORT SINGLE GANG 2-PORT WALLPLATES WITH ID WINDOWS a. PART # - 42080-2(W)S		j.) PS-ELFEXT (POWER SUM EQUAL LEVEL FAR END CROSS TALK).			Seal(s)
	 2) LEVITON QUICKPORT SINGLE GANG 4-PORT WALLPLATES WITH ID WINDOWS b. PART # - 42080-4(W)S c. ADDROUTED FOUND 		k.) PROPAGATION DELAY.			ONAL EN
	4) WALL PLATES TO BE WHITE.		I.) DELAY SKEW.			25 00 S
29.6	JACKS		m.) RETURN LUSS.			E GE
	MANUFACTURER - PROVIDE DATA CONNECTORS AS SPECIFIED BELOW:	34.0. 34.1.	POWER DISTRIBUTION PROVIDE NEW EQUIPMENT AS INDICATED ON THE DRAWINGS.			PP-1
	a. PART # 61110-R(W)6 2) OR PRE-APPROVED FOUAL	34.2.	ALL EQUIPMENT TO BE CSA APPROVED.			2018-0
	3) PROVIDE BLANK MODULES FOR UNUSED PORTS	34.3. 34.4.	NEW BRANCH CIRCUIT BREAKERS AND WIRING TO BE INSTALLED UNDER THIS CONTRACT. PROVIDE TYPEWRITTEN DIRECTORY OF PANEL LOADS AND AFFIX TO PANELBOARD DOORS.			
	4) JACKS TO BE WHITE	34.5.	PANELBOARDS SHALL BE COMPOSED OF THE NUMBER OF CIRCUIT BREAKERS WITH POLES AND TRIP RATINGS AS LISTED IN THE SCHEDULES. WHERE SPACE ONLY IS CALLED FOR, PROVIDE ALL MOUNTING			
29.7	PATCH CABLES	34.6.	BRACKETS, BUSBAR DRILLINGS, FILLER PLATES, ETC., TO FACILITATE INSTALLATION OF FUTURE BREAKERS. WHERE EXISTING PANELBOARDS ARE SHOWN TO BE REPLACED WITH NEW, CONTRACTOR SHALL RELOCATE			2300, 411 - 1st Street SE, Calgary, AB Canada T2C
	1.) PATCH CABLES SHALL BE PROVIDED FOR ALL TERMINATED VOICE AND DATA PORTS, FOR BOTH ENDS OF EACH LINE. THE CORDAGE SHALL USE 23 AWG SOLID COPPER CONDUCTORS IN A BONDED PAIR		ALL EXISTING BRANCH CIRCUITS TO NEW PANELBOARD AND PROVIDE NEW BREAKERS FOR EXISTING AND NEW CIRCUITS.			
	CONFIGURATION FOR RELIABLE LONG FERM CHANNEL PERFORMANCE TO 625 MHz. THE TRANSMISSION CHARACTERISTICS OF THE CORDAGE WILL BE GUARANTEED TO 625 MHz. THAT PATCH CABLES SHALL SUPPORT 10Gb /s, FT-4, 23 AWG COPPER, BELDEN 10GX OR APPROVED EQUAL.	34.7.	WHERE PANELBOARDS ARE SHOWN TO BE DOUBLE-LUGGED, CONTRACTOR SHALL PROVIDE NEW DOUBLE LUG KITS IN EXISTING AND NEW PANELBOARDS.			A Partnership of Limited C Poon McKenzie Architects (Alberta) Inc. Poon McKenzie NORR is a trademark owned by Incenium Group Inc. and
	2.) THE QUANTITY OF THE PATCH CABLES FOR CONNECTION BETWEEN SWITCHES AND PATCH PANELS IN	34.8.	WHERE CALLED FOR, PROVIDE AN ISOLATED STANDOFF GROUND BUS FOR NEW OR EXISTING PANELBOARDS AND CONNECT BACK TO THE BUILDING GROUND WITH INSULATED #2 AWG.			Victor Smith, Architect, AAA, B.Arch, MAIBC Bruce G. McKenzie, Architect, AAA, M.Arch, M A. Silvin Baldassara Architect, AAA, D.Arch, M
	THE LAN ROOM IS TO BE AT LEAST THE SAME AMOUNT AS THE NUMBER OF PORTS ON THE HORIZONTAL PATCH PANELS. LENGTH OF PATCH CABLES TO BE 7ft OR 2m.	34.9.	PANELBOARDS: SHALL BE 120/208V OR 347/600V 3Ø 4W (FCN) 225A RATED AND COMPOSED OF THE NUMBER OF CIRCUIT BREAKERS WITH POLES AND TRIP RATINGS AS LISTED IN THE SCHEDULES. PANELS SHALL BE			Adrian Todeila, P.Eng., APEGA Chris Pal, P.Eng., APEGA
	3.) THE QUANTITY OF PATCH CABLES FOR CONNECTION AT THE WORKSTATION END IS TO BE AT LEAST THE SAME AMOUNT AS THE NUMBER OF PORTS ON THE HORIZONTAL PATCH PANELS. LENGTH OF PATCH		TIN-PLATED ALUMINUM BUSSING. PANELBOARD ENCLOSURE TO BE SPRINKLER-PROOF WITH FULL 3" DRIP-HOOD.			Project Manager
	UNDLED DE IDIL UK 4.DIN.	34.10.	BREAKERS TO BE BOLT-ON TYPE AND MEET OR EXCEED THE AVAILABLE FAULT CURRENT INDICATED ON THE SINGLE LINE DIAGRAM. BREAKERS OF MULTIPLE POLE CONFIGURATIONS SHALL BE COMMON-TRIP SINGLE HANDLE. BREAKERS TO BE 3-POSITION (OPEN TRIPPED CLOSED)			Project Leader
30.	COPPER PATCH & EQUIPMENT CORDS	34.11.	ALL ELECTRICAL EQUIPMENT SHALL BE GREY ANSI 49 PAINTED.			D. HIDER Client
	30.0.1. PROVIDE 2 METRE SERVICE LOOP AT THE PATCH PANEL END. 30.0.2. PROVIDE 1.5 METRES OF SLACK COILED NEATLY IN WORKSTATION TO ENSURE PATCH CABLES	34.12.	INTERRUPTING CAPACITY/WITHSTAND RATINGS FOR DISTRIBUTION EQUIPMENT SHALL MEET OR EXCEED LEVELS INDICATED ON SINGLE LINE DRAWINGS.			
	REACH INDICATED COMPUTER DEVICE LOCATION. 30.0.3. LEAVE 3.0 METRES SLACK FROM EACH WALL OUTLET NEATLY COILED TO ENSURE PATCH CABLES	35.0. 35.1	LUMINAIRES SUPPLY AND INSTALLATION OF ALL LUMINAIRES SHALL FORM PART OF THIS CONTRACT			
31.	REACH INDICATED COMPUTER DEVICE. ALL PRODUCT ALTERNATES MUST BE APPROVED ONE WEEK PRIOR TO TENDER CLOSING.	35.2.	SUPPLY AND INSTALLATION OF LIGHITNG CONTROLS WILL BE THE RESPONSIBILITY OF THIS CONTRACTOR.			Project
		35.3. 35 4	LUMINAIRES SHALL BE ADDED, RELOCATED OR REMOVED AS INDICATED.			
		50.7.	FAULTY BALLASTS AND PROVIDE TOUCH-UP PAINT WHERE REQUIRED.			
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2018-03-29	ISSUED FOR TEND	DER C
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MECHANICAL SPECIFICATIONS

1. GENERAL

- 1.1. ALL WORK SHOWN OR IMPLIED ON THESE DRAWINGS SHALL BE CARRIED OUT IN ACCORDANCE WITH:
- 1.1.1. NATIONAL BUILDING CODE, NBC 2015. 1.1.2. PLUMBING CODE OF CANADA 2010
- 1.1.3. CAN/CSA-B149.1-15 NATURAL GAS AND PROPANE INSTALLATION CODE.
- 1.1.4. LOCAL AUTHORITY HAVING JURISDICTION. 1.1.5. NFPA 10-2002 PORTABLE FIRE EXTINGUISHERS.
- 1.1.6. ULC STANDARDS
- 1.2. PRIOR TO SUBMITTING TENDERS, EACH TRADE SHALL EXAMINE THE SITE TO DETERMINE THE CONDITIONS WHICH MAY AFFECT THE PROPOSED WORK. NO CLAIM FOR EXTRA PAYMENT WILL BE CONSIDERED BECAUSE OF FAILURE TO FULFILL THIS CONDITION. START OF WORK WILL BE DEEMED EVIDENCE OF ACCEPTANCE OF, AND SATISFACTION WITH, EXISTING CONDITIONS. 1.3. THE DRAWINGS SHALL BE CONSIDERED TO SHOW THE GENERAL CHARACTER AND SCOPE OF THE WORK AND NOT THE EXACT DETAILS OF THE INSTALLATION. THE INSTALLATION SHALL BE COMPLETE WITH ALL ACCESSORIES AND SUPPORTS REQUIRED FOR A COMPLETE AND OPERATIVE INSTALLATION. THESE MECHANICAL DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTURAL, STRUCTURAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.
- 1.4. THE MECHANICAL CONTRACTOR SHALL COORDINATE THE WORK WITH ALL OTHER TRADES AND THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR COMMUNICATING SAFETY REQUIREMENTS TO ITS EMPLOYEES AND COMPLY WITH OCCUPATIONAL HEALTH AND SAFETY ACT.
- 1.5. ARRANGE, COORDINATE AND PAY ALL REQUIRED FEES AND PERMITS. SUBMIT DRAWINGS AND SPECIFICATIONS TO ALL AUTHORITIES AND OBTAIN APPROVAL BEFORE COMMENCING ANY WORK. PAY FOR FEES AND CHARGES LEVIED BY THE MUNICIPALITY, UTILITIES AND OTHER GOVERNING AUTHORITY FOR PERMITS, INSPECTIONS AND CERTIFICATES, AND WORK PERFORMED BY THE MUNICIPALITY OR UTILITIES IN CONNECTION WITH THE MECHANICAL WORK. ARRANGE AND COORDINATE SUCH WORK AND OBTAIN PERMITS. KEEP A COPY OF ALL SUCH PERMITS AND CERTIFICATES ON THE JOB SITE DURING THE PROJECT DURATION. 1.6. WORKMANSHIP AND MATERIALS SHALL MATCH OR EXCEED THAT OF THE EXISTING.
- 1.7. ALL WORK TO BE CONDUCTED DURING HOURS SPECIFIED BY THE PROJECT MANAGER. NO DISRUPTION TO BUILDING OPERATIONS WILL BE ALLOWED WITHOUT PRIOR APPROVAL OF THE OWNER. ALL CHANGES AND CONNECTIONS TO EXISTING SERVICES, REQUIRING THE SHUTDOWN OF THAT SERVICE SHALL BE DONE AT A TIME DESIGNATED BY THE PROJECT MANAGER. ALLOW FOR PREMIUM TIME NEEDED.
- 1.8. CAREFULLY REMOVE EQUIPMENT TO BE REUSED OR HANDED OVER TO THE OWNER. STORE EQUIPMENT FOR RE-INSTALLATION. RELOCATE ANY PIPING, DUCTWORK, OR EQUIPMENT INTERFERING WITH NEW CONSTRUCTION.
- 1.9. THE CONTRACTOR SHALL AT ALL TIMES KEEP PREMISES FREE FROM THE ACCUMULATION OF WASTE MATERIAL TO THE SATISFACTION OF THE PROJECT MANAGER. THE CLEANING OF THE AFFECTED AREA SHALL BE CONTINUOUS. PLACE DUST PROTECTION IN THE FORM OF COVER SHEETS OVER EQUIPMENT AND FURNITURE TO ENSURE NO DUST INFILTRATION.
- 1.10. MANUFACTURER'S INSTRUCTIONS REGARDING THE HANDLING, INSTALLATION AND TESTING OF EQUIPMENT SPECIFIED HEREIN SHALL BE CONSIDERED PART OF THIS SPECIFICATION. 1.11. SUPPLY TOOLS, EQUIPMENT AND PERSONNEL TO DEMONSTRATE AND INSTRUCT OPERATING AND MAINTENANCE PERSONNEL IN OPERATING, CONTROLLING, ADJUSTING, TROUBLESHOOTING AND SERVICING OF ALL SYSTEMS AND EQUIPMENT DURING REGULAR WORK HOURS, PRIOR TO ACCEPTANCE.
- 1.12. MECHANICAL CONTRACTOR SHALL OBTAIN AND PAY FOR HOISTING OF MECHANICAL EQUIPMENT. COORDINATE HOISTING SCHEDULE WITH PROJECT MANAGER. ARRANGE AND PAY FOR ANY REQUIRED PERMITS. 1.13. INSPECT ALL EQUIPMENT UPON DELIVERY AND NOTIFY PROJECT ENGINEER OF ANY DAMAGE OR DEFICIENCIES.
- 1.14. SUBMIT ONE (1) COPY OF SHOP DRAWINGS AND PRODUCT DATA IN ELECTRONIC PDF FORMAT OF ALL SPECIFIED EQUIPMENT & SYSTEMS. HARD COPY SHOP DRAWINGS WILL NOT BE ACCEPTED. CERTIFY THAT SHOP DRAWINGS HAVE BEEN REVIEWED BY GENERAL CONTRACTOR PRIOR TO SUBMITTING TO CONSULTANT FOR REVIEW. REVIEWED ELECTRONIC SHOP DRAWINGS WILL BE RE-DISTRIBUTED AS PER PROJECT MANAGER'S INSTRUCTIONS.
- 1.15. ALL EQUIPMENT, PIPING, DUCTWORK AND WIRING SHALL BE RUN AT RIGHT ANGLES TO AND BE SUSPENDED FROM THE BUILDING STRUCTURE. 1.16. PROVIDE BLACK WITH WHITE WRITING LAMACOID PLATE ON ALL NEW EQUIPMENT. LABEL UNIT AS SHOWN ON DRAWINGS. LETTERING SIZE TO BE MINIMUM 25MM HIGH. MOUNT NEAR CONTROL SECTION OF THE UNIT.
- 1.17. PROVIDE CUTTING, PATCHING AND CORING OF ALL WALLS, CEILING AND OTHER SURFACES AS REQUIRED FOR MECHANICAL WORK. OBTAIN WRITTEN VERIFICATION OF LOCATIONS FROM THE ENGINEER PRIOR TO CUTTING. ALL ROOFING WORK FOR MECHANICAL EQUIPMENT TO BE UNDERTAKEN BY QUALIFIED ROOFING CONTRACTORS UNDER THIS SECTION.
- 1.18. INSTALL ALL EQUIPMENT ACCORDING TO MANUFACTURER'S RECOMMENDATIONS WITH ADEQUATE ACCESS. 1.19. PIPING LAYOUT ILLUSTRATED ON DRAWINGS INDICATES GENERAL ROUTING OF PIPE WORK AND DOES NOT SHOW ALL FITTINGS AND OFFSETS REQUIRED FOR COMPLETE INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PIPING FITTINGS & OFFSETS REQUIRED FOR COORDINATED INSTALLATION WITH OTHER SYSTEMS (DUCTWORK, PIPING, CONDUITS, LIGHTS, ETC.). 1.20. CONTRACTOR SHALL BE RESPONSIBLE FOR DEACTIVATION, DRAINING, REFILLING AND REACTIVATING OF OPERATIONAL SYSTEMS. COORDINATE WITH OWNER AND ENSURE THAT NO UNDUE
- DISRUPTION OF BUILDING OPERATIONS OCCUR. 1.21. MAINTAIN A SET OF WHITE PRINTS MARKED UP TO "AS BUILT" CONDITION ON SITE, UPDATED ON AN ONGOING BASIS THROUGHOUT THE COURSE OF THE PROJECT. PURCHASE, FROM THE CONSULTANT, SET OF CADD FILES OF THE MECHANICAL CONTRACT DRAWINGS AND TRANSFER ALL INFORMATION ONTO THE CAD DRAWINGS. HAND OVER 2 SETS OF WHITE PRINTS AND CD WITH
- CADD FILES SHOWING THE "AS BUILT" CONDITION TO THE CONSULTANT FOR FINAL REVIEW PRIOR TO FINAL INSPECTIONS.
- 1.22. SUBMIT THREE (3) COPIES OF OPERATION AND MAINTENANCE MANUALS FOR ENGINEER'S APPROVAL. 1.23. WARRANTY PERIOD SHALL BE FOR TWELVE (12) MONTHS AFTER THE DATE OF SUBSTANTIAL COMPLETION AS DETERMINED BY ENGINEER.

2. INSULATION

- 2.1. INSULATE DUCTWORK, PIPING, AND EQUIPMENT IN ACCORDANCE WITH NECB 2011.
- 2.2. ALL COMPONENTS OF INSULATION SYSTEM TO BE SUITABLE FOR PLENUM INSTALLATION, HAVING MAXIMUM FLAME SPREAD RATING OF 25 AND MAXIMUM SMOKE DEVELOPED RATING OF 50 IN ACCORDANCE WITH CAN4-S102
- 2.3. INSULATE DOMESTIC COLD WATER AND DOMESTIC HOT WATER PIPING WITH 1" FIBER GLASS INSULATION WITH FACTORY APPLIED VAPOUR BARRIER JACKED, MOLDED TO CONFORM TO PIPING K VALUE AT 24 C.
- 2.2. PROVIDE ISOLATING VALVES ON MAIN AND/OR BRANCH LINES AND AT ALL EQUIPMENT OR FIXTURES OR WHERE SHOWN. ALL VALVES SHALL BE SUITABLE FOR THE OPERATING PRESSURE OF THE SYSTEM. 2.3. ALL THE INDOOR SUPPLY DUCT WORK TO BE INSULATED WITH 25mmTHICK FIBERGLASS INSULATION.
- 2.4. OUTDOOR & COMBUSTION AIR DUCT WORKS ARE TO BE INSULATED WITH 50mm OF INSULATION. 2.5. INSULATE EXHAUST DUCTS WITH 25mm INSULATION FOR 3000mm FROM OUTSIDE WALL.

PLUMBING

- 3.1. PROVIDE DIELECTRIC COUPLINGS/UNION UNIONS WHERE DISSIMILAR METALS ARE JOINED.
- 3.2. PROVIDE ISOLATING VALVES ON MAIN AND/OR BRANCH LINES AND AT ALL EQUIPMENT OR FIXTURES OR WHERE SHOWN. ALL VALVES SHALL BE SUITABLE FOR THE OPERATING PRESSURE OF THE SYSTEM IN WHICH THEY ARE INSTALLED. MAKE AND MODEL SHALL BE AS PER BASE BUILDING STANDARDS AND SPECIFICATIONS UNLESS NOTED OTHERWISE. 3.3. INSTALL ALL ABOVE GRADE PIPING TO ALLOW COMPLETE DRAINAGE.
- 3.4. BALL VALVES NPS 2 AND UNDER, SCREWED, CLASS 150, BRONZE BODY, STAINLESS STEEL BALL, PTFE TEFLON ADJUSTABLE PACKING, BRASS GLAND AND PTFE TEFLON SEAT, STEEL LEVER HANDLE, CRANE OR APPROVED EQUAL.
- 3.5. HANGERS AND SUPPORTS SHALL BE OF MANUFACTURED TYPE AND ASSEMBLED AS PER MANUFACTURER'S INSTRUCTIONS. DESIGN HANGERS AND SUPPORTS TO OPERATE UNDER ALL OPERATING CONDITIONS. ALLOW FOR FREE EXPANSION AND CONTRACTION AND PREVENT THE TRANSMISSION OF EXCESSIVE STRESSES INTO PIPE WORK OR CONNECTED EQUIPMENT. PROVIDE FOR VERTICAL ADJUSTMENT AFTER INSTALLATION. DESIGN SHALL BE IN ACCORDANCE WITH ANSI B31.1 AND MSS-SP58. SUPPORT FROM TOP OR BOTTOM OF STRUCTURAL MEMBERS. WHERE STRUCTURAL BEARING DOES NOT EXIST OR INSERTS ARE NOT IN SUITABLE LOCATIONS, PROVIDE SUPPLEMENTARY STRUCTURAL STEEL MEMBERS. PROVIDE ADDITIONAL SUPPORTS AT CHANGES IN PIPE DIRECTION AND FOR CONCENTRATION OF LOADS DUE TO WEIGHT OF VALVES, STRAINERS, ETC. HANGER SPACING: COPPER PIPING UP TO NPS 1/2 EVERY 5 FT, STEEL PIPING EVERY 10'. HANGERS SHALL BE WITHIN 12" OF EACH ELBOW.
- 3.6. PROVIDE PIPE IDENTIFICATION TO MATCH EXISTING BASE BUILDING STANDARD; IDENTIFY PIPE ON EITHER SIDE OF WALL / SLAB / ROOF PENETRATIONS, AND AT NOT LESS THAN 30' INTERVALS THROUGH LARGE ROOMS.
- 3.7. SHUT-OFF VALVE: BALL TYPE FOR NPS 2 ID AND SMALLER. BUTTERFLY TYPE FOR 65 MM (2-1/2") AND LARGER.
- 3.8. PLUMBING FIXTURES TO BE AS DWG M20-01. 3.9. DOMESTIC WATER PIPING SHALL BE TYPE 'L' COPPER WITH CAST BRASS OR WROUGHT COPPER FITTINGS. ALL JOINTS SHALL BE MADE USING LEAD-free 95/5 TIN-ANTIMONY SOLDER. PRESSURE TEST ALL PIPES IN ACCORDANCE APPLICABLE CODE REQUIREMENTS BEFORE APPLYING INSULATION, AT A MINIMUM PRESSURE OF 150% OF THE MAXIMUM OPERATING PRESSURE, FOR 6 HORS WITHOUT THE LOSS OF PRESSURE. SUBMIT TEST REPORT TO THE OWNER AND TO THE CONSULTANT.
- 3.10. SANITARY DRAIN LINES AND MAIN VENT STACKS SHALL BE CAST IRON COMPLETE WITH MJ JOINTS. BRANCH VENTS, SANITARY DRAINS UNDER 75MM (3") DIAMETER. BALL TEST ALL DRAIN LINES. PERFORM WATER TEST ON ALL NEW DRAIN AND VENT PIPES WHEN ROUGH-IN OF THE SYSTEM OR SECTION THEREFORE INCLUDING FITTINGS, BRANCHES, CLEANOUTS AND TRAPS EXCEPT FIXTURE TRAPS IN COMPLETE, FOR ONE HOUR. THERE SHALL BE NO LOSS OF WATER DUE TO LEAKAGE DURING THIS TIME.
- 3.11. NATURAL GAS STEEL, SCHEDULE 40: ASTM A53/A53M, GRADE B 3.12. FITTINGS: NATURAL GAS EITHER MALLEABLE IRON OR STEEL IN COMPLIANCE WITH ANSI/ASME B16.3, 1035 KPA, FOR SIZED 40MM AND UNDER SCREWED. STEEL, SAME SCHEDULE AS PIPE, FOR SIZES 50MM AND LARGER, AND FOR HIGH PRESSURE (OVER1.4 KPA) - ALL SIZES WELDED .

4. HEATING, VENTILATION, AND AIR CONDITIONING

- 4.1. GALVANIZED STEEL DUCT LOCK FORMING QUALITY: TO ASTM A 525M, Z90 ZINC COATING. THICKNESS, FABRICATION, JOINTS AND REINFORCEMENT: TO ASHRAE AND SMACNA. ALL TRANSVERSE JOINTS AND CONNECTIONS SHALL BE SEALED WITH WATER BASED DUCT SEALANT AND TAPE.
- 4.2. HANGERS: ALL DUCTWORK AND HANGERS SHALL BE FABRICATED IN ACCORDANCE WITH THE LATEST ASHRAE AND SMACNA RECOMMENDATIONS AND STANDARDS. 4.3. IDENTIFICATION DUCTWORK SYSTEMS STENCILLED LETTERS 50 MM (2") HIGH. DIRECTIONAL ARROWS 150 MM (6") LONG X 50 MM (2") HIGH. COLORS: BLACK, OR CO-ORDINATED WITH BASE COLOR TO ENSURE STRONG CONTRAST.
- 5. TESTING, ADJUSTING AND BALANCING
- 5.1. TEST NEW HEATING PIPING AND DUCTWORK, ADJUST AND BALANCE THE ENTIRE HEATING SYSTEM AND AIR SYSTEM.
- 5.2. REPORT: PROVIDE REPORT INDICATING AIR FLOW RATES AND LOCATION OF TESTING ON A COPY OF CONSTRUCTION DRAWINGS. SUBMIT 3 BOUND COPIES OF TAB REPORTS, COMPLETE WITH INDEX TABS FOR VERIFICATION AND APPROVAL OF ENGINEER.

6. FIRE PROTECTION

6.1. MULTI PURPOSE ABC TYPE DRY CHEMICAL, PRESSURIZED WITH HOSE AND SHUT OFF NOZZLE OR INTEGRAL SHUTOFF NOZZLE AND MOUNTING BRACKET.10 LB CAPACITY.

7. CONTROLS

7.1. PROVIDE ALL CONTROLS AND WIRING INCLUDING APPURTENANCES NECESSARY FOR COMPLETE AND OPERATING SYSTEM.

8. LIST OF APPROVED MANUFACTURERS

- 8.1. AIR TERMINALS GRILLES, REGISTERS, DIFFUSERS: E.H PRICE, TITUS, NAILOR.
- 8.2. ACCESS DOORS: MAXAM, MILCOR, MIFAB, ACUDOR.
- 8.3. AIR VENTS: HOFFMAN, MAID-O-MIST, TACO. 8.4. BALANCING AGENTS: KD ENGINEERING, MDT SYSTEMS, WESTERN MECHANICAL SYSTEMS
- 8.5. DRAINS-FLOOR, CLEANOUTS, PRIMERS: ZURN, ANCON, PPP, J.R-SMITH.
- 8.6. FANS: BROAN, GREENHECK, ACME, NUTONE, COOK.
- 8.7. FIRE EXTINGUISHERS: FLAG, NFE, WILSON & COUSINS.
- 8.8. ELECTRIC HEATERS: OULLET, CHROMALOX, STELPRO, QMARK.

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RH-10 R0		WBH	Room 119	110	27.5	2	87.8	76.7	0.06	1	1	0.4	26.7	46.1	305	152	1			
RH-11 R0		WBH	Room 115	445	37.5	15	87.8	76.7	0.08	1	1	0.4	26.7	46.1	610	457	1			March.
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RAWING NO.	DRAWING NAME
M00-00-01	MECHANICAL LEGEND, SCHEDULE, DRAWING LIST, SPECIFICATIONS
M20-00-01	PIPING DEMOLITION AND CONSTRUCTION PLANS
M50-00-01	VENTILATION DEMOLITION AND CONSTRUCTION PLANS

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RH-13 RH-14	ROSEMEX	WBH WBH	Room 110 Room 110a	120	37.5	2.6 8 2.6 8	7.8 76.7 7.8 76.7	0.06	1 1 1 1	0.4	26.7	46.1	305	152	1	_		
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TAG	MANUFAC	TURER MODEL	SERVICE	AIR FLOW	/ APD	HTG CAP EWT			FLOW RATE	ROWS	CIRCUITS	WPD	EAT DB	LAT DB	DI	M			Mechanica Electrical:	al: NORR Architects I NORR Architects I
RH-1	ROSEM	IEX WBH	Room 109	L/S 180	PA 37.5	КW4	°С 87.8	°C 76.7	L/S 0.09	1	1	KPA 1.4	°C 26.7	°C 46.9	W (MM) 305	H (MM) 229	NOTES 1	<u> </u>		
RH-2 RH-3	ROSEM ROSEM	IEX WBH IEX WBH	Room 107 Room 111	900 140	42.5 20	19.6 3	87.8 87.8	76.7 76.7	0.42	1 2	1 0.5	0.5 0.8	26.7 26.7	46.1	711 381	457 229	1		Seal(s)	
RH-4 RH-5	ROSEM ROSEM	IEX WBH IEX WBH	Room 114 Room 15, 106	230 320	35 45	5.5 9.3	87.8 87.8	76.7	0.12	1 1	1	3 9.9	26.7 26.7	48.3 47.8	305 457	305 305	1			NAL ENGI
RH-6 RH-7	ROSEM	IEX WBH	Room 121 Room 122	100	-	2	87.8 87.8	76.7	0.043	1	1	-	26.7 26 7	48.3 48.3	381 381	305	2			SS ST
RH-8	ROSEM	IEX WBH	Room 102	240	32.5	3.8	87.8	76.7	0.08	1	1	1.3	26.7	47.8	305	229	1	_		HOLE TO
RH-10	ROSEM	IEX WBH	Room 128 Room 119	110	27.5	2	87.8	76.7	0.08	1	1	0.4	26.7	47.2	305	152	1			
кн-11 RH-12	ROSEM ROSEM	IEX WBH	коот 120, 123 Room 115	135 445	35	2.5 15	87.8 87.8	76.7	0.06	1 1	1 1	0.4	26.7 26.7	46.1	305 610	152 457	1 1			March.=
RH-13 RH-14	ROSEM ROSEM	IEX WBH IEX WBH	Room 110 Room 110a	120 120	37.5 37.5	2.6 2.6	87.8 87.8	76.7	0.06	1 1	1 1	0.4 0.4	26.7 26.7	46.1	305 305	152 152	<u>1</u> 1			
RH-15 RH-16	ROSEM ROSEM	IEX WBH	Room 112 Room 126	122 300	27.5 37.5	2.2 7.20	87.8 87.8	76.7 76.7	0.05 0.16	1 1	1 1	0.3 5.70	26.7 26.7	46.7 48.3	305 381	152 305	1 3		N(ORR
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RH-6 R		WBH	Room 121	100	-	2 2	87.8	76.7	0.2	1	1	-	26.7	47.8	381	305	2			0	STALLAN L.
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	GENERAL NOTES
-	READ STRUCTURAL DRAWINGS IN CONJUNCTION WITH SEPARATELY BOUND SPECIFICATIONS, TYPICAL DETAILS AND ALL OTHER CONTRACT DOCUMENTS. DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY DOCUMENTS.
	WHERE DOCUMENTS ARE REFERENCED IN THE GENERAL AND DESIGN NOTES, THEY SHALL BE THE LATEST EDITIONS, UNLESS OTHERWISE NOTED OR SHOWN.
•	BEFORE PROCEEDING WITH WORK, CHECK ALL THE DIMENSIONS SHOWN ON STRUCTURAL DRAWINGS AGAINST ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND EXISTING SITE CONDITIONS. REPORT INCONSISTENCIES TO CONSULTANT BEFORE PROCEEDING WITH THE WORK.
	CHECK AND VERIFY IN THE FIELD ALL SIZES AND DIMENSIONS INVOLVING THE EXISTING STRUCTURE AND COORDINATE WITH NEW CONSTRUCTION.
	DO NOT EXCEED DURING CONSTRUCTION, DESIGN LIVE LOADS SHOWN ON PLANS, REDUCED AS NECESSARY UNTIL MATERIALS REACH DESIGN STRENGTH.
-	DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. ELEVATIONS ARE IN METRES UNLESS NOTED OTHERWISE.
-	SCALES NOTED ON DRAWINGS ARE FOR GENERAL INFORMATION ONLY. DO NOT SCALE DRAWINGS.
	TYPICAL STRUCTURAL DETAILS SHOWN IN DRAWING SERIES S02 SHALL GOVERN THE WORK. IF DETAILS DIFFER ON OTHER DRAWINGS, THE MOST STRINGENT GOVERNS.
	SEE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING: a. SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS, EXCEPT AS NOTED. WHERE NOMINAL DIMENSIONS ARE SHOWN MAKE NECESSARY PROVISIONS FOR ROUGH OPENINGS TO ALLOW PROPER INSTALLATION OF ALL
	 BUILDING SYSTEMS. b. SIZE AND LOCATION OF ALL INTERIOR AND EXTERIOR NON-LOAD BEARING PARTITIONS. MAKE NECESSARY PROVISIONS TO ALLOW FOR DEELECTION OF THE STRUCTURE WITHOUT LOADING ANY NON-LOAD REARING
	PARTITIONS. c. SIZE AND LOCATION OF ALL CONCRETE CURBS, FLOOR DRAINS SLOPES, INSERTS, ETC. EXCEPT AS SHOWN.
	 a. TRENCHES, PITS, AND SUMPS. e. ROOF, WALL AND FLOOR FINISHES. f. WATERPROOFING AND DAMP PROOFING. c. FLOVATIONS AND DIMENSIONS NOT SUCHABLE DRAWINGS. NOTE THAT STRUCTURAL DRAWINGS.
•	g. ELEVATIONS AND DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS. NOTE THAT STRUCTURAL DRAWINGS DO NOT INTEND TO DUPLICATE DIMENSIONS SHOWN ON OTHER CONTRACT DOCUMENTS.
0.	 a. PIPE AND DUCT RUNS, SLEEVES, HANGERS, TRENCHES, WALL AND SLAB OPENINGS ETC. EXCEPT AS SHOWN OR NOTED.
	 b. ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS. c. CONCRETE INSERTS FOR ELECTRICAL, MECHANICAL OR PLUMBING FIXTURES. d. SIZE AND LOCATION OF MACHINE OR EQUIPMENT BASES, ANCHOR BOLTS FOR MOTOR MOUNTS, EXCEPT AS SHOWN OR NOTED.
1.	ALL ARCHITECTURAL, ELECTRICAL OR MECHANICAL LOADS IMPOSED ON THE STRUCTURE THAT EXCEED 50kg SHALL BE SUBMITTED FOR REVIEW BY THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION UNLESS SPECIFICALLY DETAILED OR NOTED ON THE STRUCTURAL DRAWINGS.
2.	DRAWINGS AND DETAILS ARE INTENDED TO SHOW THE END RESULT OF DESIGN. MODIFICATIONS TO THE DESIGN NECESSARY TO SUIT MEANS AND METHODS OF CONSTRUCTION, SITE DIMENSIONS OR CONDITIONS SHALL BE SUBMITTED TO CONSULTANT FOR APPROVAL BEFORE PROCEEDING.
3.	IN THE CASE OF DISCREPANCIES BETWEEN THE GENERAL NOTES, SPECIFICATIONS, PLANS/DETAILS OR REFERENCE STANDARDS THE MORE STRINGENT REQUIREMENTS SHALL GOVERN.
4.	MISCELLANEOUS METAL, PRECAST AND STAIR FABRICATORS SHALL:
	 b. DESIGN ALL GUARDS TO MEET LATERAL LOADS DESCRIBED IN ABC 4.1.5.15 AND 4.1.5.16. c. DESIGN ALL HANDRAUS TO MEET LOADS DESCRIBED IN ABC 3.4.6.5.
F	 d. DESIGN ALL STAIRS TO SUPPORT A MINIMUM LIVE LOAD OF 4.8 kPa UNLESS NOTED OTHERWISE ON DRAWINGS.
э.	AS -BUILT DRAWINGS S-00 TO S-05 DATED MAY 2006 PREPARED BY PROTOSTATIX ENGINEERING CONSULTANTS INC. (PROJECT NUMBER 05-1867) AVAILABLE FROM THE DEPARTMENTAL REPRESENTATIVE. WHERE EXISTING CONDITIONS DIFFER FROM THOSE SHOWN ON DRAWING, ADVISE CONSULTANT PRIOR TO PROCEEDING WITH NEW WORK.
•	CONSTRUCTION
-	THE CONTRACTOR SHALL PROPOSE A FULL METHODOLOGY FOR EXECUTING THE WORK DETAILED IN THE CONTRACT DOCUMENTS.
-	 UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS, NO PROVISIONS HAVE BEEN MADE IN THE DESIGN FOR CONDITIONS OCCURRING DURING CONSTRUCTION. a. THE CONTRACTOR SHALL DEMONSTRATE THE STABILITY AND SAFETY OF ALL ELEMENTS OF THE BUILDING DURING EVERY STAGE OF CONSTRUCTION. b. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BRACING AND SHORING REQUIRED FOR ALL STRESSES AND INSTABILITY OCCURRING DURING CONSTRUCTION. THE CONTRACTOR SHALL ACCEPT FULL RESPONSIBILITY FOR ALL SUCH MEASURES. c. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BRACING. SHORING, SHEET PULING, OR OTHER TEMPORARY
_	SUPPORTS TO SAFEGUARD ALL EXISTING OR ADJACENCY AFFECTED BY THIS WORK.
•	AND DISCONNECTION OF EXISTING UTILITIES IN THE BUILDING. NO UTILITIES SHALL BE REMOVED OR DISCONNECTED WITHOUT THE APPROVAL OF OWNER AND ASSOCIATED UTILITIES AUTHORITIES.
-	THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE WORK. THE CONSULTANT HAS NO OVERALL SUPERVISION AUTHORITY AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM ACTIONS OF ANY TRADE CONTRACTOR. THE CONSULTANT HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES OF THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS ON THE PROJECT SITE.
	THE CONTRACTOR SHALL DETERMINE THE LOCATIONS OF ALL ADJACENT UNDERGROUND UTILITIES PRIOR TO EARTHWORK, FOUNDATIONS SHORING AND EXCAVATION. ANY UTILITY INFORMATION SHOWN ON THE DRAWINGS AND DETAILS IS APPROXIMATE AND NOT NECESSARILY COMPLETE
-	THE PROPOSED SCHEDULE OF WORK IS TO BE COORDINATED WITH ALL SUB-TRADES, THE CONSULTANT AND
-	INSPECT THE EXISTING CONSTRUCTION AND BECOME THOROUGHLY FAMILIAR WITH THE EXISTING CONDITIONS.
-	SHOP DRAWINGS
-	FOR ALL STRUCTURAL COMPONENTS SHOWN ON THE STRUCTURAL DRAWINGS, SUBMIT COPIES OF SHOP DRAWINGS AS DIRECTED, FOR REVIEW BY THE CONSULTANT.
	SHOP DRAWINGS SHALL SHOW COMPLETE INFORMATION FOR THE FABRICATION AND ERECTION OF THE STRUCTURAL COMPONENTS.
	CONCRETE REINFORCEMENT SHOP DRAWINGS SHALL CLEARLY SHOW BAR LENGTHS, BENDS, LOCATIONS OF BARS, METHOD OF SUPPORT, DETAILS OF PLACEMENT, COORDINATION WITH FORMWORK, EMBEDMENT, AND CONCRETE VIBRATION. PROVIDE AT MINIMUM, WALL AND COLUMN ELEVATIONS, WALL AND BEAM SECTIONS, MATERIAL SCHEDULES, BAR LAP SCHEDULES AND LOCATIONS.
-	WOOD FRAME SHOP DRAWINGS (INCLUDING BUT NOT LIMITED TO, FLOOR FRAMING CONNECTIONS, ROOF FRAMING AND CONNECTIONS TO STRUCTURE BELOW, AND STAIRS) SHALL BE ACCOMPANIED BY DETAILED CALCULATIONS AND SHALL BE SEALED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE PROVINCE OF AI BERTA.
	REVIEW OF SHOP DRAWINGS BY THE STRUCTURAL CONSULTANT IS ON A SAMPLING BASIS AND SOLELY TO ASSESS THAT THE SUBMITTED SHOP DRAWINGS REFLECT THE INTENT OF THE STRUCTURAL DESIGN. INTENDED OR PROPOSED DEVIATIONS FROM THE DESIGN INTENT MUST NOT BE SUBMITTED ON SHOP DRAWINGS
-	REVIEW BY THE CONSULTANT SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR SEEING THAT THE
-	SHOP DRAWINGS FOR STRUCTURAL COMPONENTS DESIGNED BY THE FABRICATOR/CONTRACTOR'S ENGINEER MUST
	ALBERTA.
• ·	THE CONTRACTOR SHALL RETAIN AN EXPERIENCED GEOTECHNICAL ENGINEER LICENSED TO PRACTICE IN THE
	THE GEOTECHNICAL ENGINEER RETAINED BY THE CONTRACTOR SHALL INSPECT THE CONDITION AND ASSURE THE
	ADEQUACY OF ALL SUB-GRADES, FILLS, AND BACKFILLS BEFORE PLACEMENT OF PILES. AT THE COMPLETION OF THE PROJECT, THE GEOTECHNICAL ENGINEER SHALL ISSUE AN AUTHENTICATED LETTER OF ASSURANCE STATING THAT ALL FOOTINGS/.PILES HAVE BEEN INSTALLED AND MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
-	AND CLAY AS SPECIFIED IN THE EARTH WORKS SPECIFICATION SECTION.
-	DAUNFILLING SHALL BE CARRIED OUT IN A MAXIMUM LIFTS OF 200 MM OF LOOSE FILL, EACH COMPACTED THE STANDARD PROCTOR MAXIMUM DRY DENSITY INDICATED IN THE SPECIFICATIONS.
•	AND THE FLOOR CONSTRUCTIONS AT TOP AND BOTTOM OF THE WALLS HAVE BEEN CAST AND ATTAINED THEIR DESIGN STRENGTH.

6. WHERE BACKFILL IS PLACED ON EACH SIDE OF FOUNDATION WALLS, DO NOT EXCEED A GRADE DIFFERENCE OF 600 mm.

WHERE THE SLAB ON GRADE IS USED TO TIE THE TOP OF A WALL RETAINING EARTH, THAT WALL SHALL BE ADEQUATELY SHORED UNTIL THE SLAB HAS BEEN CAST AND ATTAINED ITS DESIGN STRENGTH.

- OR RETAINING WALLS.
- PROJECT SPECIFICATIONS.
- 5. CAST IN PLACE CONCRETE
- BELOW, UNLESS NOTED OTHERWISE ON THE DRAWINGS.

- 3. SUBMIT MIX DESIGNS FOR EACH CLASS OF CONCRETE TO BE USED ON THE PROJECT.
- 4. ALL CONCRETE SHALL BE NORMAL DENSITY, UNLESS NOTED OTHERWISE.
- 5. ADMIXTURES THAT CONTAIN CHLORIDES SHALL NOT BE USED.
- SHALL BE AIR ENTRAINED.
- WEATHER CONCRETE PLACEMENT PROCEDURES.
- a. CONCRETE COVER TO REINFORCING. b. CONCRETE COVER FOR FIRE RATINGS. TENSION DEVELOPMENT LENGTH AND LAP SPLICES. COMPRESSION DEVELOPMENT LENGTH AND LAP SPLICES.

- ANCHORING DEVICES TO AVOID EXISTING CONCRETE REINFORCEMENT.
- CORRESPONDING NOTES BELOW:
- APPROVED BY THE CONSULTANT.
- CONSULTANT.
- d. REFER TO SPECIFICATIONS FOR POUR LENGTH LIMITATIONS.
- WORK.
- 18. OPENINGS, SLEEVES, EMBEDDED DUCTS:
- PRIOR TO PLACEMENT OF CONCRETE.
 - APPROVED BY THE CONSULTANT.
 - THE CONCRETE SHALL BE EMBEDDED IN THE STRUCTURE. d. PROVIDE ADDITIONAL REINFORCING AT OPENINGS AS DETAILED IN THE TYPICAL DETAILS.
 - DRAWINGS.
- 21. THE CONCRETE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POUR SEQUENCES AND CONSTRUCTION CONTROLLED ENVIRONMENT.
- CONCRETE.
- PLANS:
- 33. MINIMUM ELAPSED TIME BETWEEN ADJACENT CONCRETE PLACEMENTS SHALL BE 48 HOURS.
- DRAWINGS.
- CONTRACTOR.
- MIXING AND APPLICATION.
- 6. <u>CONCRETE PILES</u>
- ENGINEER IF UNUSUAL OR UNEXPECTED CONDITIONS OCCUR.

8. USE LIGHT, HAND-OPERATED COMPACTING EQUIPMENT TO COMPACT BACKFILL ADJACENT TO FOUNDATION WALLS

9. EXCAVATED MATERIAL SHALL BE LEGALLY DISPOSED OF, STORED AT THE SITE, OR USED FOR BACKFILLING OPERATIONS AS REQUIRED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERS RECOMMENDATIONS AND

10. IT IS THE RESPONSIBILITY OF CONTRACTOR TO VERIFY THE GEOTECHNICAL INFORMATION AND TO OBTAIN HIS OWN DATA AND TO POINT DISCREPANCIES TO THE CONSULTANT WHERE THEY OCCUR.

1. CONCRETE: CONFORM WITH CAN-CSA A23.1 REQUIREMENTS AND THOSE SHOWN IN THE CONCRETE MIX SCHEDULE

CONCRETE MIX	SCHEDULE			
	MIN. COMPRESSIVE STRENGTH AT 28 DAYS (MPa)	EXPOSURE CLASS	CONCRETE TYPE	AIR CONTENT (%)
CTURAL BEAMS	35	C1		
DE (NOT EXPOSED TO G AND THAWING)	25			
E (EXPOSED TO FREEZING D THAWING)	32			
CURBS, PAVING SLABS	32			
PILE CAPS	35	C1		
SHAFT	35			
САР	35			
	35			
B ON GRADE	25			

DESIGN CONCRETE MIXES TO SUIT REINFORCEMENT DETAILS SHOWN ON THE PLACEMENT DRAWINGS. PROVIDE SMALLER AGGREGATES OR SELF CONSOLIDATING CONCRETE IN AREAS OF HIGHER REINFORCEMENT DENSITY.

6. EXTERIOR CONCRETE AND INTERIOR CONCRETE SUBJECT TO FREEZE/THAW CYCLES, SALT, ETC, INCLUDING WALLS

REFER TO CAN CSA A23.1&2 AND CONCRETE SPECIFICATIONS SECTION 03.30.00 FOR THE HOT AND COLD

8. REFER TO THE CONCRETE TYPICAL DETAILS FOR THE FOLLOWING INFORMATION:

9. FOR ALL STRUCTURAL MEMBERS PROVIDE COVER FOR A MINIMUM 2 HOUR FIRE RATING (4 HOURS FOR FIREWALLS) UNLESS NOTED OTHERWISE IN ARCHITECTURAL DRAWINGS

10. DOWELS TO EXISTING CONCRETE SHALL USE THE HILTI HIT-RE500 DOWELING SYSTEM, UNLESS OTHERWISE APPROVED BY THE CONSULTANT. COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. OBTAIN CONSULTANT'S APPROVAL PRIOR TO DRILLING/DOWELING ANY REINFORCEMENT.

11. THE CONTRACTOR SHALL MODIFY THE LAYOUT OF NEW THROUGH BOLTS, EXPANSION ANCHORS AND OTHER

12. CONSTRUCTION JOINTS SHALL BE DOWELED, KEYED AND THOROUGHLY CLEANED. ALL CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL CONSTRUCTION JOINT DETAILS AND ANY

a. HORIZONTAL CONSTRUCTION JOINTS SHALL NOT BE MADE IN BEAMS UNLESS SHOWN OR REVIEWED AND b. VERTICAL CONSTRUCTION JOINTS MAY BE MADE ONLY AT MIDSPAN OF BEAMS OR SLABS UNLESS OTHERWISE NOTED OR SHOWN OR DIRECTED, AND THEIR LOCATION SHALL BE REVIEWED AND APPROVED BY THE

c. WHERE THE SIZE OF KEY IS NOT SHOWN ON THE DRAWINGS, THE KEY SHALL BE 25% OF THE CROSS SECTION DIMENSION AND A MINIMUM OF 38 mm INTO THE FIRST POUR OF CONCRETE.

17. CONTRACTOR TO SUBMIT PROPOSED LOCATIONS OF CONSTRUCTION JOINTS FOR APPROVAL PRIOR TO START OF

a. COORDINATE AND INSTALL ALL REQUIRED EMBEDDED ITEMS, INSETS SLEEVES, POCKETS, ETC. AS REQUIRED b. NO SLEEVES SHALL BE PLACED VERTICALLY OR HORIZONTALLY THROUGH BEAMS UNLESS REVIEWED AND

c. NO ALUMINUM CONDUIT OR OTHER SUCH PRODUCTS WITH MATERIAL DETRIMENTAL TO THE LONGEVITY OF

e. OBTAIN CONSULTANT'S APPROVAL FOR ANY OPENINGS REQUIRED BUT NOT SHOWN ON STRUCTURAL

20. CONCRETE CAST ON SLOPED SURFACES SHALL BEGIN AT THE LOWEST ELEVATION AND CONTINUE MONOLITHICALLY TOWARD THE HIGHER ELEVATION UNTIL THE INTENDED CAST IS COMPLETED.

PROCEDURES FOR ALL CONCRETE WORK TO ACCOUNT FOR TEMPERATURE DIFFERENTIALS AND SHRINKAGE OCCURRING DURING THE CONSTRUCTION PHASE UNTIL THE BUILDING IS PERMANENTLY IN A MECHANICALLY

22. THE USE OF CHLORIDES SUCH AS DEICING SALTS IS PROHIBITED FOR MELTING ICE PRIOR TO PLACEMENT OF

23. SIZES OF CONCRETE PLACEMENTS SHALL NOT EXCEED THE FOLLOWING, UNLESS OTHERWISE INDICTED ON THE a. SLABS ON GRADE: PLACE IN ALTERNATING STRIPS (APPROXIMATE WIDTH 10m & MAXIMUM LENGTH 60m)

34. JOINTS BETWEEN THE STRUCTURAL (AND ARCHITECTURAL) MEMBERS SHALL BE PROPERLY PREPARED AND FILLED WITH JOINT SEALANT UNLESS NOTED OTHERWISE. ALL JOINT EDGES, INCLUDING TOP AND BOTTOM SURFACES AND VERTICAL AND HORIZONTAL SURFACES SHALL BE FORMED OR TOOLED AS REQUIRED. JOINT SEALANT SHALL BE APPLIED ONLY TO THE TOP, VERTICAL, AND HORIZONTAL SURFACES UNLESS NOTED OTHERWISE ON THE

35. JOINTS TO BE PREPARED AND FILLED WITH JOINT SEALANT SHALL INCLUDE, BUT ARE NOT LIMITED TO, CONSTRUCTION JOINTS, CONTROL JOINTS, ISOLATION JOINTS, AND ALL INTERFACE JOINTS BETWEEN SIMILAR AND DISSIMILAR MEMBERS. SPECIFIC LOCATIONS MAY BE INDICATED ON THE DRAWINGS, OR MAY BE REQUIRED BY APPROVED SHOP DRAWINGS, OR MAY OCCUR DUE TO THE CONSTRUCTION SEQUENCE SELECTED BY THE

36. PRIOR TO PLACING CONCRETE ADJACENT TO EXISTING CONCRETE WITHOUT A CONSTRUCTION JOINT THOROUGHLY CLEAN, DE-GREASE AND MECHANICALLY ROUGHEN EXISTING CONCRETE SURFACES. APPLY EPOXY BONDING AGENT PRIOR TO PLACING FRESH CONCRETE. FOLLOW ALL MANUFACTURER'S INSTRUCTIONS FOR SURFACE PREPARATION,

37. WHERE NEW CONCRETE ELEMENTS ARE CAST AGAINST EXISTING CONCRETE ELEMENTS OR STRUCTURES, PROVIDE NECESSARY TEMPORARY SHORING TO RESIST FULL HYDROSTATIC PRESSURE OR OTHERWISE EMPLOY NECESSARY MEANS AND METHODS TO AVOID EXERTING ANY PRESSURE OR LOADING ON THE EXISTING STRUCTURE.

1. GENERAL: PILING TO BE CAST-IN-PLACE CONCRETE PILE TYPE. PROVIDE SHOP DRAWINGS SEALED AND SIGNED BY AN EXPERIENCED PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ALBERTA. BEFORE COMMENCING WORK, ESTABLISH LOCATION AND EXTENT OF UNDERGROUND UTILITY LINES IN AREAS OF PILING. VERIFY FINDINGS WITH

2. DESIGN: PILES ARE TO BE DESIGNED TO RESIST THE LOADS AND ACCOMMODATE THE TOLERANCES SHOWN ON THE DRAWINGS AND ARE TO BE MONITORED DURING INSTALLATION BY A PROFESSIONAL GEOTECHNICAL ENGINEER RETAINED BY THE CONTRACTOR. THE CONTRACTOR IS TO ISSUE. AT THE COMPLETION OF PILING, A CERTIFICATE BEARING THE SEAL AND SIGNATURE OF A QUALIFIED PROFESSIONAL GEOTECHNICAL ENGINEER LICENSED IN THE PROVINCE OF ALBERTA, ATTESTING TO THE PROPER INSTALLATION OF THE PILES.

- 4.

- F
- 2. RI
- 4. \

- 10. A
- 12. T

3.	TOLERANCES: MAINTAIN THE FOLLOWING TOLERANCES FOR CONCRETE PIERS: OUT OF POSITION, +/- 75mm; OUT OF VERTICAL, +/- 2% TO MAXIMUM OF +/- 50mm.	TREATED WOOD T GALVANIZED IN TH	O BE STAINLESS STEEL OR HOT DIP HE SAME CONNECTION.	9 GALVANIZED. DO NOT	T MIX STAINLESS STEEL AND HOT DIP	DATE 2018-02-07	
4.	RECORDS: MAINTAIN RECORDS OF PILE PLACEMENT AS FOLLOWS: ELEVATIONS OF TOP AND BOTTOM OF PILE; DATE AND TIME DRILLING COMPLETED AND SHAFT DIAMETER. SUBMIT COMPLETED PILING RECORDS TO THE ENGINEER	26. ALL SHIMS SHALL	BE SEASONED AND DRIED AND OF	THE SAME GRADE (MIN	IIMUM) AS THE MEMBERS CONNECTED.	2018-02-14	ISSUED FOR DP
5.	UPON COMPLETION. ACCEPTABILITY: ENGINEER WILL BE THE SOLE JUDGE OF ACCEPTABILITY OF EACH PILE. PILES SUSPECT OF BEING UNABLE TO SUPPORT THE LOADS SHOWN ON THE DRAWINGS MAY BE LOAD TESTED IN ACCORDANCE WITH ASTM	27. 25 mm DIAMETER APPROVED PRIOR 28. DIAPHRAGMS:	HOLES MAY BE DRILLED IN THE CEI TO DRILLING.	NTER 1/3 OF JOISTS, BI	UT ALL OTHER HOLES MUST BE	2018-03-02 2018-03-29	ISSUED FOR 95% F
	D1143. THE COSTS OF TESTING PILES WHICH MEET OR EXCEED THE LOAD TEST REQUIREMENTS WILL BE PAID FOR BY THE OWNER. THE COSTS OF TESTING AND REMEDIAL ACTIONS REQUIRED TO ENSURE THE PILE CAPACITIES SHOWN ON THE DRAWINGS FOR PILES WHICH NOT SATISFY THE LOAD TEST REQUIREMENTS SHALL BE PAID FOR BY THE CONTRACTOR.	THE FLOOR/RO OTHERWISE NO A. UNBLOCKED DI a. FASTENERS: 3	OF SHEATHING AND SUPPORTING N TED, DIAPHRAGM CONNECTION RE APHRAGMS: 3.7 mm DIAMETER x 75 mm LONG 0 0 mm o/c AT DIAPHRACM POUNDA	MEMBERS HAVE BEEN D EQUIREMENTS FOR FLOI COMMON NAILS.	DESIGNED AS A DIAPHRAGM. UNLESS R/ROOF SHEATHING ARE:		
7.	SLAB ON GRADE	B. SPACING. 100 ALONG INTER B. BLOCKED DIAPH	MEDIATE FRAMING MEMBERS. HRAGMS (BLOCKING MUST BE PROV	/IDED AT ALL PANEL ED	DGES):		
1.	UNDER SLAB FILL SHALL CONSIST OF A MINIMUM OF 200 mm OF COMPACTED GRANULAR MATERIAL AS STATED IN THE SPECIFICATIONS.	a. FASTENERS: 3 b. SPACING: 75 LOAD; 150 mi	3.7 mm DIAMETER x 75 mm LONG (5 mm o/c AT DIAPHRAGM BOUNDAI m o/c ALONG INTERMEDIATE FRAM	COMMON NAILS. RIES; 100 mm o/c AT C 1ING MEMBERS.	CONTINUOUS PANEL EDGES PARALLEL TO		
2.	PLACE SLABS-ON-GRADE ON MATERIAL CAPABLE OF SUSTAINING 25 kPa SURCHARGE WITHOUT SETTLEMENT RELATIVE TO THE BUILDING FOUNDATIONS.	c. ALL ROOF SHE C. ALL PANEL EDG IOISTS.	EATHING COMES WITH "H" CLIPS U.I SES SHALL BE BACKED BY BLOCKING	N.O. ABOVE. 5 AT ALL JOINTS THAT .	ARE PERPENDICULAR TO THE FLOOR		
3.	REFER TO GEOTECHNICAL FOR SPECIFIC GRADATION REQUIREMENTS FOR SUBGRADE MATERIAL WHEN UNDERSLAB GAS DEPRESSURIZATION SYSTEMS ARE REQUIRED BY THE BUILDING CODE.	30. MANUFACTURED V	WOOD JOISTS, BEAMS AND TRUSSES	5:			
8.	REINFORCING STEEL	a. ALL MANUFAC STRUCTURE B	CTURED WOOD JOISTS AND TRUSSE ELOW SHALL BE DESIGNED BY SUPP	ES AND THEIR CONNECT PLIER AND THE SHOP DE	TIONS TO THE CORRESPONDING RAWINGS TO BE PROVIDED TO THE		
1. 2.	REINFORCING STEEL SHALL BE DEFORMED BAR CONFORMING TO CSA STANDARD G30.18-09 (R2014), GRADE 400R, UNLESS OTHERWISE NOTED. REINFORCING STAINLESS STEEL BARS SHALL BE GRADE 420. BAR MARKS WITH PREFIX 'S' DENOTE STAINLESS STEEL BARS. BAR MARKS WITH PREFIX 'C' DENOTED EPOXY-COATED STEEL BARS. REFER TO TYPICAL DETAILS FOR MINIMUM COVER TO REINFORCEMENT.	MUST HAVE A PROVINCE OF AND INSTALL TO BE DESIGN	CONSULTANT FOR REVIEW PRIOR T PROFESSIONAL ENGINEER'S SEAL O JURISDICTION, AND SHALL BE RESP ATION (COMPLETE FLOOR / ROOF S IED BY SUPPLIER.)	O FABRICATION, UNLE ON ALL PAGES. THIS EN PONSIBLE FOR SUPERVIS SYSTEM INCLUDING JOI	GINEER MUST BE LICENSED IN THE SION OF JOISTS / TRUSSES FABRICATION ISTS / TRUSSES, HANGERS, BRACING, ETC.		
3.	REINFORCING BAR AREAS ARE 100, 200, 300, 500, 700, 1000, 1500 AND 2500 mm ² FOR BAR DESIGNATIONS 10, 15, 20, 25, 30, 35, 45 AND 55, RESPECTIVELY.	b. JOIST / TRUSS OPENINGS AS LOCATIONS O	SUPPLIER SHALL BE RESPONSIBLE F REQUIRED. COORDINATE WITH ARC F ALL OPENINGS.	FOR ALL FRAMING FOR CHITECTURAL, MECHAI	ADDITIONAL MECHANICAL LOADS AND NICAL AND ELECTRICAL FOR SIZE &		
4.	WELDED WIRE FABRIC SHALL HAVE A MINIMUM YIELD STRENGTH OF 450 MPa AND SHALL CONFORM TO CSA	c. ACCESSORIES: BEARING HARI	ALL ACCESSORIES REQUIRED FOR DWARE AND CROSS BRACING MUST	ERECTION INCLUDING T BE DESIGNED AND SU	BRACING, BRIDGING, BLOCKING, METAL IPPLIED BY JOIST / TRUSS SUPPLIER.		
5.	REINFORCING STEEL IS TO BE DETAILED, BENT AND PLACED IN ACCORDANCE WITH R.S.I.C. REINFORCING STEEL	e. LUMBER: MAC	360 FOR ROOF TRUSSES. CANTILEV HINE STRESS RATED OR LAMINATEI	/er joists live load e d veneer. Moisture c	DEFLECTION 2L/480. CONTENT 19% AT TIME OF		
	MANUAL OF STANDARD PRACTICE SUBMIT SHOP DRAWINGS INDICATING ALL DETAILS OF REINFORCING STEEL PLACEMENT.	f. JOIST / TRUSS IS FABRICATE	re. 5 Supplier's Engineer to provide d and installed in accordance	A CERTIFICATE INDICA E WITH THE DESIGN.	ATING THAT THE FLOOR / ROOF SYSTEM		
6.	ALL REINFORCEMENT SHALL BE SECURELY HELD IN PROPER POSITION WHILE POURING CONCRETE. CONTRACTOR SHALL PROVIDE CHAIRS, SPACER BARS, SUPPORT BARS AND OTHER ACCESSORIES TO SUPPORT REINFORCING. ALL THE WIRE, CHAIRS AND BAR SUPPORTS FOR FOUNDATIONS AND FOR EXPOSED CONCRETE SHALL BE NON-METALLIC OR COATED.	g. JOIST SUPPLIE MISCELLANEO h. ALL MANUFAC NATIONAL BU STRINGENT S	R SHALL BE RESPONSIBLE FOR THE I US DETAILS. CTURED JOIST PRODUCTS SHALL BE ILDING CODE OR DESIGNED TO LOO PACING SHOWN ON FRAMING PLAN	DESIGN OF CONNECTION E DESIGNED TO VIBRATI CAL CODE REQUIREMENT NS ARE SUGGESTED ON	ONS TO TIMBER WALLS AND OTHER ION CRITERIA 4.1.1.6 AND 9.23.4 OF THE NTS, WHICHEVER IS THE MORE		
7.	CONTRACTOR SHALL NOT USE ANY OF THE STRUCTURAL REINFORCEMENT SHOWN ON PLANS AS ACCESSORY/SUPPORT BARS. SUPPORT BARS MUST BE PROVIDED TO MAINTAIN LOCATION OF STRUCTURAL REINFORCEMENT AS INDICATED ON PLANS	VIBRATION RE i. ALL MANUFAC	EQUIREMENTS. CTURED JOIST PRODUCTS AND THE		THE SUPPORTING STRUCTURE SHALL BE		
8.	TACK WELDING OF REINFORCEMENT IS NOT PERMITTED. WELDED SPLICES IN REINFORCING BARS WILL ONLY BE	CODE OF CAN THE DRAWING	IADA AND ALBERTA BUILDING COD	DE, UNLESS MORE STRIN	NGENT REQUIREMENTS ARE NOTED ON	This drawing the CLIENT kind made b) has been prepared and there are no re by NORR Architects F
-	CONSULTANT.	J. JUIST/TRUSS S "NON LOAD B	EARING" WALLS CONSTRUCTED TIG	GHT TO THE UNDERSIDI	E OF THE FLOOR JOIST AND TRUSSES.	any party Planners has	with whom NORR is not entered into a co
9.	PROVIDE CLASS 'B' TENSION LAP SPLICES U.N.O. ALL SPLICE LOCATIONS SHALL BE TO THE APPROVAL OF THE CONSULTANT.	31. SHEAR WALLS: a. ALL EXTERIOR	R WALLS AND INTERIOR PARTY WAL	LS ON THE DRAWING A	ARE TO BE CONSIDERED AS SHEAR WALLS.	This drawin purposes un dated by the	ig shall not be us itil the seal appearing Architect or Engineer
10.	APPROVED REBAR COUPLERS MAY BE USED AT THE CONTRACTORS OPTION TO AID PLACEMENT OF DOWELS THROUGH FORMS. MECHANICAL SPLICES SHALL DEVELOP 125% OF THE TENSILE STRENGTH OF THE REBAR.	b. ALL EXTERIOR SHEATHING W SECOND, 150	R WALLS TO HAVE A MINIMUM 9.5 n /ITH 64 mm COMMON NAILS ALON mm FROM SECOND TO ROOF AND	mm PLYWOOD OR OSB IG ALL PANEL EDGES AT NAIL AT 300 mm o/c	SHEATHING ON ONE SIDE. NAIL T 100 mm o/c FROM BASEMENT TO ALONG ALL INTERMEDIATE FRAMING	Broiget Com	
12. 1	TIMBER CONSTRUCTION	MEMBERS FRO c. ALL PANEL ED	OM MAIN TO ROOF. DGES SHALL BE BACKED BY BLOCKIN S THAT ARE PERPENDICULAR TO TH	NG HAVING THE SAME (CROSS SECTIONAL AREA AS THE STUDS	LUNCH	IROOM EXPAN
1.	ENGINEERING DRAWINGS.	d. PROVIDE SOLI e. NAIL SHEATHI	D BLOCKING AT 1200 mm o/c MAX NG BOARD TO STUDS, TOP AND BC	XIMUM FOR ALL EXTERI DTTOM PLATES AND BL	IOR WALL. LOCKING. FASTENING OF GYPSUM	Keyplan	
	WOOD MEMBER MATERIAL GRADES MEMBER MATERIAL GRADE	f. PROVIDE 12 m DIAMETER AN	nm DIAMETER ANCHOR BOLTS AT 6 CHOR BOLTS AT 1200 mm o/c AT 9	500 mm o/c TYPICAL A OTHER WALLS.	AT SHEAR WALLS'; PROVIDE 12 mm		
	JOISTS (2x8 AND SMALLER)SPRUCE-PINE-FIR NO. 2 OR BETTERBEAMS AND STRINGERS (2x10 AND LARGER)SPRUCE-PINE-FIR NO. 2 OR BETTER	32. SAWN LUMBER SHA	ALL NOT BE NOTCHED OR DRILLED	IN THE FIELD WITHOUT	T THE PERMISSION OF THE CONSULTANT.		
	POSTS AND TIMBERSSPRUCE-PINE-FIR NO. 2 OR BETTERSTUDS, PLATES & MISC. FRAMINGSPRUCE-PINE-FIR NO. 2 OR BETTER	33. ALL LUMBER EXPO BE PRESSURE TREA	SED TO WEATHER OR IN CONTACT TED UNLESS SPECIFICALLY INDICAT	WITH MASONRY OR CO TED ON THE DRAWINGS	ONCRETE EXPOSED TO WEATHER SHALL S. INTERIOR MEMBERS BEARING ON		
	TOP AND BOTTOM PLATES AT BEARING WALLSSPRUCE-PINE-FIR NO. 2 OR BETTER2x4 STUDSSPRUCE-PINE-FIR NO. 2 OR BETTER	PRESERVATIVE ALL	AROUND. USE EITHER MICRONIZED	D OR SOLUBLE COPPER	BASED WOOD PRESERVATIVE.	Consultants	
	2x6 STUDS AND LARGER SPRUCE-PINE-FIR NO. 2 OR BETTER PLYWOOD SHEATHING GRADE C-D	13. <u>TESTING AND INS</u> THE CONTRACTOR	F <u>PECTION</u> R SHALL ARRANGE FOR THE FOLLO	WING ITEMS TO BE INSF	PECTED OR TESTED BY AN INDEPENDENT		
	OSB SHEATHING STRUCTURAL 1	THIRD-PARTY INSP TESTED SHALL INC	PECTION/TESTING AGENCY ACCEPT	ABLE TO THE OWNER A E FOLLOWING.	AND THE CONSULTANT. THE ITEMS TO BE	Architectura Structural: Mechanical	I: NORR Architects E NORR Architects E NORR Architects E
2.	THE USE OF STUD GRADE MATERIAL TO SUBSTITUTE ANY OF THE GRADES NOTED ABOVE MUST BE REVIEWED AND APPROVED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.	1. GEOTECHNICAL: PERFORM ALL PREPARATION	TESTING AND INSPECTION (COMPA	ACTION, BEARING CAPA	ACITY PILE INSTALLATION, SUB GRADE	Electrical:	NORR Architects E
3.	STUD LOAD CARRYING CAPACITY HAS BEEN REDUCED IN ACCORDANCE WITH THE CORRESPONDING ULC FIRE RATING ASSEMBLY. REFER TO ARCHITECTURAL DRAWINGS AND WALL SCHEDULE FOR SPECIFIC DETAILS.	2. CONCRETE:				Seal(s)	
4.	NAILS, SPIKES, AND STAPLES TO CONFORM TO CSA STANDARD B111.	THE REQUIREM POUR DATES,	MENTS FOR AIR, SLUMP AND AGE PI TESTING PERFORMED, CLASS OF CO	RIOR TO BEING USED. (ONCRETE USED AND TE	CONTRACTOR TO MAINTAIN RECORDS OF EST RESULTS FOR ALL ITEMS POURED.		
5. 6.	ALL NAILS FOR STRUCTURAL WORK SHALL BE COMMON WIRE NAILS UNLESS NOTED OTHERWISE. ALL STUD WALLS SHOWN AND NOT OTHERWISE NOTED SHALL BE 2x4 STUDS AT 400 mm o/c AT INTERIOR WALLS	RESULTS OF C REVIEWED ANI	YLINDER STRENGTH TESTING TO BI D CERTIFIED BY TESTING AGENCY.	E SENT TO OWNER AND	D CONSULTANT. ALL MIX DESIGNS TO BE		
7	AND 2x6 AT 400 mm o/c AT EXTERIOR WALLS.	3. REINFORCING STEE CONTRACTOR MASONRY OR	EL AND MASONRY: SHALL ADVISE CONSULTANT OF P REINFORCED CONCRETE AT LEAST		NFORCING STEEL FOR REINFORCED		
8.	PROVIDE ADDITIONAL STUDS UNDER TRUSSES SUPPORTED BY EXTERIOR WALLS IF THE BEARING LOCATION FALLS	PLACEMENT.					
9.	PROVIDE WOOD LINTEL HEADERS AT ALL OPENINGS AS SHOWN BELOW, UNLESS NOTED OTHERWISE ON PLAN:	14. <u>DEMOLITION</u> 1. COMPLY WITH THE	E NATIONAL BUILDING CODE OF CA	ANADA PART 8 CONST	RUCTION SAFETY MEASURES AT		
	U mm< SPAN < 1,000 mm: 2 - 38x1841,000 mm< SPAN < 1,800 mm: 2 - 38x235	2. PREVENT MOVEME	אים שבאיסנו רוסא Sites, and all al NT, Settlement, or other dama	APPLICABLE PROVINCIAL	L REQUIREMENTS. UCTURES, UTILITIES, AND PARTS OF		UKR
10.	BEAMS (EXCEPT LINTELS) SHALL HAVE A MINIMUM BEARING LENGTH OF NO LESS THAN 89 mm UNLESS OTHERWISE REQUIRED BY NBCC 2010 (REFER TO NOTES TO TABLES A-8 TO A-11). FLOOR JOISTS SHALL HAVE A MINIMUM BEARING LENGTH OF NO LESS THAN 38 mm UNLESS OTHERWISE NOTED.	BUILDINGS TO REM 3. BEFORE PROCEEDII	IAIN IN PLACE.	S, SUBMIT SHOP DRAWI	INGS PREPARED BY A LICENSED	2300, 411 Calgarv. A	- 1st Street SE, AB Canada T2G 4Y5
11.	PROVIDE SOLID BLOCKING FOR WOOD COLUMNS THROUGH FLOOR TO SUPPORTS BELOW.	PROFESSIONAL ENCONSTRUCTION T	GINEER, SHOWING PROPOSED METH O REMAIN.	HOD OF DEMOLITION A	AND MEANS OF PROTECTING EXISTING	norr.com NORR AR	CHITECTS ENGINEE
12.	WALLS SHALL HAVE DOUBLE BOTTOM PLATES AND DOUBLE TOP PLATES FOR ALL EXTERIOR BEARING WALLS. END NAIL THE TOP PLATE TO EACH STUD WITH TWO 75 NAILS AND TOENAIL OR END NAIL EACH STUD TO THE BOTTOM PLATE WITH TWO 75 NAILS.	 DO NOT DEVIATE I WITHOUT PRIOR W ANY DEVIATIONS. 	FROM OR FIELD-ALTER SHORING AN	ND BRACING INDICATEI	D ON REVIEWED SHOP DRAWINGS ING DESIGN. NOTIFY CONSULTANT OF	A Partners Poon McKenzie Archi NORR is a trademark Victor Smith, Arch Bruce G. McKenz A. Silvio Baldassa	srip of Limited Compa lects (Alberta) Inc. Poon McKenzie Holdings Inc owned by Ingenium Group Inc. and is used und nitect, AAA, B.Arch, MAIBC zie, Architect, AAA, M.Arch, MAIBC arra, Architect, AAA, B.Arch, MAIBC
ı ۵.	a. WOOD FRAMING BELOW WITH 75 NAILS AT 300 mm o/c	IS IN PLACE AND H	IAS BEEN INSPECTED BY THE ENGIN	IEER RESPONSIBLE FOR	SHORING CONSULTANT	Adrian Todeila, P Chris Pal, P.Eng.	, APEGA
_	D. CONCRETE WITH TO HIM DIAMETER ANCHOR BULTS (TSU MM MIN EMBED) AT 1200 MM 0/C UNLESS NOTED OTHERWISE.	ס. אטו אטו KEMUVE אוויטע פון אנאטא	I LIVIFURAKT SHUKING UK BRACING	I UNTIL APPROVED BY S		Project Man D. HIDER	ager Draw
14. 15.	PROVIDE DOUBLE JOISTS AROUND ALL OPENINGS IN FLOOR OR ROOFS UNLESS NOTED OTHERWISE. PLYWOOD ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH THE GRAIN PERPENDICULAR TO SUPPORTS AND NAILED WITH 75 NAILS AT 150 mm o/c TO FRAMED PANEL EDGES AND OVER STUD WALLS AS SHOWN ON PLANS AND AT 300 mm o/c TO INTERMEDIATE SUPPORTS UNLESS NOTED OTHERWISE.					Project Lead D. HIDER Client RCM	ler Chec A. TC
16.	ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TONGUE-AND-GROOVE JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING, TOFNAIL BLOCKING TO SUPPORTS WITH (NAILS) AT 300 mm o/c UNLESS NOTED OTHERWISE						-
17.	AT BLOCKED FLOOR AND ROOF DIAPHRAGMS PROVIDE FLAT 2x4 BLOCKING AT ALL UNFRAMED PLYWOOD PANEL						
18.	LAY TIMBER PLANK DECKING IN A TWO-SPAN CONTINUOUS PATTERN.					Project	SFAIL PDS
19.	PROVIDE MINIMUM BEARING OF 50 mm (2") FOR ALL TIMBER PLANK DECKING.					LUNCH	IROOM EXPAN
20. 21	SAWN LUMBER SHALL NOT BE NOTCHED OR DRILLED IN THE FIELD WITHOUT THE PERMISSION OF THE CONSULTANT.						
- ' .	PRESSURE TREATED WOOD OR POLYETHYLENE SHEET BETWEEN THE WOOD AND MASONRY OR CONCRETE.	SHEET NUMBER	DRAW	ING LIST	DRAWING NAME	Drawing Title	RAL NOTE
22.	OTHERWISE.	S-01 S-02	GENERAL NOTES GENERAL NOTES	S-06	PLANS AND SECTIONS		
23.	OPENINGS AND HOLES: a. PREPARE LAYOUTS OF ALL NEW HOLES AND OPENINGS THROUGH EXISTING WORK FOR REVIEW BY THE	S-03 S-04	TYPICAL DETAILS TYPICAL DETAILS				
	 CONSULTANT. b. CORE DRILL NEW HOLES FOR PIPES TO A DIAMETER NOT LARGER THAN THE OUTSIDE PIPE DIAMETER PLUS 25 mm (1") 	S-05	TYPICAL DETAILS				
	c. WHERE OPENINGS ARE TO BE CUT, ALWAYS PRE-DRILL THE CORNERS USING A 100 mm (4") DIAMETER CORE DRILL OR DRILL A SERIES OF HOLES TO PREVENT OVERCUTTING AT THE CORNERS.					Check Scale	(may be photo reduc
74	PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL ROLTS AND LAC SCREWS REARING ON WOOD					0	1inch

- 4. NA
- 5. AL
- 6. A
- 7. PR
- 8. PR
- 9. PF
- 10. E
- 11. PR
- 12. W
- 13. Al
- 14. PR 15. PL` 1
- 16. A
- 17. AT
- 18. LA
- 19. PR
- 20. SA
- 21. W
- 22. A 23. C

24. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD.

25. ALL FASTENERS (HANGERS, CLIPS, SCREWS, BOLTS, WASHERS, ETC.) IN CONTACT WITH PRESSURE TREATED OR FIRE

Project No. NCCA17-0228 Drawing No. S-01

DESIGN NOTES

- 1. <u>DESIGN</u>
- 1. THE STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE:
- a. ALBERTA BUILDING CODE (2014) b. NATIONAL BUILDING CODE OF CANADA (2010)
- c. CSA A438-00 "CONCRETE CONSTRUCTION FOR HOUSING AND SMALL BUILDINGS"
- 2. ALL REINFORCED CONCRETE ELEMENTS HAVE BEEN DESIGNED AND OR SHALL BE CONSTRUCTED IN ACCORDANCE WITH:
- a. CSA A23.3-14 "DESIGN OF CONCRETE STRUCTURES" b. CSA - A23.1-14 "CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION"
- c. CSA A23.2-14 "TEST METHODS AND STANDARD PRACTICES FOR CONCRETE"
- 3. ALL CONCRETE FORMWORK AND OR FALSEWORK SHALL CONFORM WITH:
- a. CSA 269.1 "FALSEWORK FOR CONSTRUCTION PURPOSES" b. CSA - S269.2-M "ACCESS SCAFFOLDING FOR CONSTRUCTION PURPOSES"
- c. CSA S269.3-M "CONCRETE FORMWORK"
- 5. ALL STRUCTURAL WOOD ELEMENTS HAVE BEEN DESIGNED AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH: a. CSA - 086-14 " ENGINEERING DESIGN IN WOOD"
- b. CSA O325-07 (R2012) "CONSTRUCTION SHEATHING" c. CSA - O122-06 (R2015) "STRUCTURAL GLUED-LAMINATED TIMBER"
- d. CSA O80.1-08 (R2012) "PRESERVATIVE TREATMENT OF WOOD" e. CSA - S406-14 "SPECIFICATION OF PERMANENT WOOD FOUNDATIONS FOR HOUSING AND SMALL BUILDINGS"
- 7. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR LOCATIONS OF REQUIRED FIRE RESISTANCE AND RATINGS.
- 8. UNIT FLOOR AND ROOF LOADINGS, SOIL BEARING PRESSURES AND FOUNDATION LOADS GIVEN ON DRAWINGS ARE UNFACTORED. MEMBER FORCES GIVEN ON DRAWINGS ARE FACTORED.
- 2. LATERAL LOADS ON STRUCTURAL FRAME
- THE STRUCTURE HAS BEEN DESIGNED TO RESIST THE EFFECTS OF THE WIND LOADS. THE DESIGN PARAMETERS FOR THIS LOADS ARE AS NOTED BELOW:
- LOCATION: INNISFAIL, AB DESIGN LIFESPAN: 50 YEARS
- 1. WIND LOADS:

Q	<u>FACTORS</u> lw = 1.25 q = 0.41			
	C _p C _g	ULS Q (kPa)	SLS Q (kPa)	Ce = 0.9
1	0.7500	0.3625	0.2200	
1E	1.1500	0.5625	0.3300	
4	-0.5500	-0.2625	-0.1600	
4E	-0.8000	-0.3875	-0.2300	

2. SEISMIC DATA:

INNISFAIL, AB $S_a(0.2) = 0.10$ $S_a(0.5) = 0.06$ $S_a (1.0) = 0.03$ $S_a (2.0) = 0.02$ PGA = 0.06

- 3. DEAD LOADS (SERVICE)
- 1. DEAD LOADS ARE LOADS GENERATED BY THE SELF-WEIGHT OF THE STRUCTURE.
- 2. SUPERIMPOSED DEAD LOADS ARE LOADS GENERATED BY THE WEIGHT OF MECHANICAL SYSTEMS, ELECTRICAL SYSTEMS, TOPPINGS, PARTITIONS, AND MISCELLANEOUS LOADINGS.
- 3. REFER TO NOTES ON PLANS FOR ALL LOADS APPLIED TO THE STRUCTURE.
- 4. ROOF LIVE LOADS
- 1. THE ROOF AREAS HAVE BEEN DESIGNED TO RESIST THE LEAST FAVOURABLE EFFECTS OF THE SNOW, RAIN, AND WIND LOADINGS. THE DESIGN PARAMETERS FOR THESE LOADS ARE NOTED BELOW.
- 2. SNOW LOAD: a. THE FOLLOWING SNOW LOAD HAS BEEN CONSIDERED IN THE DESIGN OF THE ROOF AREAS.

$S = Is \frac{SNOW \ LOAD}{[Ss \ (Cb \ x \ Cw} \ x \ Cs \ x \ Ca) + Sr]}$
S = 1.825 kPa

FACTORS
ls = 1.25
Ss = 1.7 kPa
Sr = 0.1 kPa
Cb = 0.8
Cw = 1.0
Cs = 1.0
Ca = 1.0

- b. ADDITIONAL SNOW ACCUMULATION ADJACENT TO HIGHER WALLS, ROOFS, AND MECHANICAL UNITS IS INDICATED ON PLANS.
- 3. RAIN LOAD: a. THE DESIGN OF THE ROOF STRUCTURE IS BASED ON THE ASSUMPTION THAT THE FLOOR CONTROL ROOF DRAINS SATISFY ALL REQUIREMENTS OF THE NATIONAL PLUMBING CODE OF CANADA, 2010 EDITION.
- b. THE TOTAL RAIN LOAD APPLIED OVER THE HORIZONTAL PROJECTION OF THE SURFACE SHALL BE THE LESSER OF EITHER THE ONE-DAY RAINFALL OR A DEPTH OF RAINWATER EQUAL TO 30 mm ABOVE THE LEVEL OF THE SCUPPERS
- ONE-DAY RAINFALL = 95 mm ($\frac{1}{50}$ yr) DESIGN RAIN LOAD = 95 mm
- 4. WIND UPLIFT ON ROOFS:
- a. ROOF ELEMENTS (TRUSSES, JOISTS, DECK, BEAMS, ETC) AND THEIR CONNECTIONS TO THE STRUCTURE ARE TO BE DESIGNED FOR THE UPWARD SUCTION OF 0.9 KPA DUE TO WIND.
- 5. LIVE AND OTHER LOADS:

a. SEE NOTES ON FLOOR PLANS. ALL VALUES GIVEN ARE UNFACTORED LOADS UNLESS OTHERWISE SHOWN ON PLAN.

- 5. GEOTECHNICAL INFORMATION
- 1. A GEOTECHNICAL REPORT WAS NOT AVAILABLE AT THE TIME OF DESIGN. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A PROFESSIONAL GEOTECHNICAL ENGINEER WHO SHALL BE RESPONSIBLE FOR CONDUCTING ALL NECESSARY INVESTIGATION S AND DESIGN TO SUIT THE PROJECT REQUIREMENTS.
- 6. PROVISIONS FOR FUTURE EXTENSIONS
- 1. THE STRUCTURE HAS NOT BEEN DESIGNED FOR ANY FUTURE EXTENSIONS.

	STRUCTURAL ABBR	TD-1	SLAB ON (
AB ABC ADJ AESS	ANCHOR BOLT ALBERTA BUILDING CODE ADJUSTABLE ARCHITECTURALLY EXPOSED	MAX MC MECH	MAXIMUM MOMENT CONNECTION MECHANICAL		
ALT ARCH	STRUCTURAL STEEL ALTERNATE ARCHITECTURAL	MEW MEZZ MID	MIDDLE EACH WAY MEZZANINE MIDDLE		
AIFB B, BOT	ASPHALT IMPREGNATED FIBREBOARD	MISC MIN ML	MISCELLANEOUS MINIMUM MIDDLE LAYER		++
BC BET BEW	ELEV. BOT. OF CAISSON BETWEEN BOTTOM EACH WAY	m mm mm ²	METRE MILLIMETRE SQUARE MILLIMETRE		
BLDG BLL BM	BUILDING BOTTOM LOWER LAYER BEAM	NBC	NATIONAL BUILDING CODE (OF CANADA	SAWCUT OR KEYED CONSTRUCTION JOI COLUMN CENTRELII
BM BPL BRG BSMT	BEARING/BASE PLATE BEARING BASEMENT	NF NIC NTS	NEAR FACE NOT IN CONTACT NOT TO SCALE		
BUL	BOTTOM UPPER LAYER CHANNEL	o/c o/o	ON CENTRE OUT TO OUT		FORM DIAMOND
c/c c/w CA	CENTRE TO CENTRE COMPLETE/CONNECT WITH COLUMN ABOVE	OPNG OPP OSB	OPENING OPPOSITE ORIENTED STRAND BOARD		JOINT. REMOVE FORM BEFORE PLACING INFILL CONCRETE.
CB CANT CF	COLUMN BELOW CANTILEVER CONCRETE FIREPROOFED	OWSJ PC	OPEN WEB STEEL JOIST PRECAST		
CJ CL «	CONTROL JOINT CLEAR CENTRE LINE	Pf, Cf, Tf, Mf, Vf P, C, T, M, V PL	FACTORED LOADS UNFACTORED LOADS PLATE		SQUARE COLUMN
COMP COL CONC	COMPOSITE COLUMN CONCRETE CONSTRUCTION JOINT	P/T P/C	POST TENSIONED, PRESSURE POLYVINYL CHLORIDE	TREATED	1. FORM AROUND COLUMNS. {NOT REQUIR 2. "X" = 30 TIMES SLAB THICKNESS, EXCEPT IN ACCORDANCE WITH SPECIFICATION " A DECEST AR APEA NO LAPCED THAN WH
CONT	CONTINUOUS	R REF RFM	REACTION, RADIUS REFERENCE REMAINDER		 FLACE SLAD AREA NO LARGER THAN WH SAWCUT CONTROL JOINTS IN ACCORDA LIMIT RATIO OF LENGTH TO WIDTH OF A REFER TO TYPICAL SLAB ON GRADE JOIN THE SAMEUT IONISCIN ACCORDANCE N
D.FIR DIA, Ø DIM	DOUGLAS FIR DIAMETER DIMENSION	REQ'D REV RE	REQUIRED REVISION RIGHT END		7. FILL SAWCUT JOINTS IN ACCORDANCE W
DIAG DL DO, "	DIAGONAL DEAD LOAD DITTO	REINF R/W	REINFORCEMENT REINFORCE WITH		
DP DWG DWL	DEEP DRAWING DOWEL	S SS SDF	STANDARD BEAM SINGLE STIRRUP STEP DOWN FOOTING		ADD 1- GREAT ONLY)
DN DS	DOWN DOUBLE STIRRUPS	SECT SF SIM	SECTION SPRAY FIREPROOFED SIMILAR		
EA EC EE	EACH EPOXY COATED EACH END	SLA SL SOG	SNOW LOAD ACCUMULATION SLAB SLAB ON GRADE	N	
EF EJ, EXP JT EL, ELEV ELEC, ELECT	EACH FACE EXPANSION JOINT ELEVATION	SP SPEC SPF STD	SPADREL, SPRUCE SPECIFICATION SPRUCE-PINE-FIR STANDARD		
ELLC, ELLCT EMBED EQ FS	EMBEDMENT EQUAL FACH SIDE	STRUCT STIFF SO	STRUCTURAL STIFFENER SOUARE		SA
EW EX, EXIST EXT	EACH WAY EXISTING EXTERIOR	ST STIR	STRAIGHT STIRRUP		
FIN FL	FINISHED FLOOR	t, THK T T&B	THICKNESS TOP TOP AND BOTTOM		
FTG FMC fy	FOOTING FULL MOMENT CONNECTION YIELD STRENGTH	TC TEMP TEW	ELEV TOP OF CAISSON TEMPERATURE TOP EACH WAY		
f'c FF	COMPRESSIVE STRENGTH OF CONC FAR FACE	TJ TLE TLL	TIE JOIST TOP LEFT END TOP LOWER LAYER		
GALV GA GL	GALVANIZED GAUGE GRIDLINE	TUL TYP	TOP RIGHT END TOP UPPER LAYER TYPICAL		
HE HH HIF	HOOK EACH END HOOK - HOOK (HOOK EACH END) HORIZONTAL INSIDE FACE	TOS TSB	TOP OF TOP OF SLAB TENSION SPLICE CLASS 'B'		SAWCUT
HOF HOR. HORIZ HEF	HORIZONTAL OUTSIDE FACE HORIZONTAL HORIZONTAL EACH FACE	USF U/S U/N	UNDERSIDE OF FOOTING UNDERSIDE UNLESS NOTED		
HSS HP	HOLLOW STRUCTURAL SECTION HIGH POINT	UNO UL UPT	UNLESS NOTED OTHERWISE UPPER LAYER UPTURNED		ADD 1-15 x 1500 LG. (
INT ID	INTERIOR INSIDE DIAMETER	VBF VEF	VERTICAL BRACED FRAME VERTICAL EACH FACE		GREATER THAN 200 OT TOP ONLY) AT EACH CO
k kN kPa	KILO KILONEWTON KILOPASCAL	VERT VOF VIF VSC	VERTICAL VERTICAL OUTSIDE FACE VERTICAL INSIDE FACE	IECTION	DOOR
Ld LE LG	DEVELOPMENT LENGTH LEFT END LONG/LENGTH	W WP	WIDE FLANGE BEAM WALL PLATE. WORKING POIN		
LU LLH LLV L	LIVE LOAD LONG LEG HORIZONTAL LONG LEG VERTICAL SINGLE ANGLE DOUBLE ANGLE	WT WWF WWF	STRUCTURAL TEE WELDED WIRE FABRIC WELDED WIDE FLANGE		
LP	LOW POINT				

ON (CLASS B)					COMPRESSION			
f'c=4	5MPa	f'c=50MPa		f'c=55MPa		f'c≽25MPa		
TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	REGULAR LAPS	COLUMN W/TIES	COLUMN W/SPIRALS
470	360	450	350	420	330	300	300	300
590	460	560	430	530	410	370	300	300
710	550	670	520	640	490	440	360	330
950	730	890	690	850	650	580	480	440
1180	910	1120	860	1060	820	730	600	550
1850	1420	1750	1340	1660	1270	910	750	680
2370	1820	2230	1720	2120	1630	1160	960	870
-	-	-	-	-	-	1450	1200	1090

TO CONCRETE CAP/PIER	TDF-5
COLUMN COLUMN COLUMN SLAE COLUMN COLUMN SLAE COLUMN CO	A A A A A A A A A A A A A A A A A A A
Image: constraint of the state of the st	
A A A A A A A A A A A A A A A A A A A	MENT

STANDARD HOOK MASS DIA. AREA BAR SIZE Α BEND kg/m d mm2 D 90° 180° 120 Т8 0.395 50 50 130 8 T10 0.617 130 10 79 60 160 40 T12 0.888 113 190 150 50 12 70 T16 1.580 201 95 260 180 16 T20 2.47 20 314 120 320 220 T25 491 150 400 280 3.86 25 T32 804 260 550 420 6.31 32 1257 T40 400 720 640 9.87 40 DETAILING DETAILING 1----7---DIMENSION DIMENSION

HOOK DEVELOPMENT LENGTH

FOR GRADE 400 BARS

		I _{hb} (mm)						
BAR NO.	x* (mm)	f'c (MPa)						
		20	25	30	35	40		
10M	45	253	226	206	191	179		
15M	65	358	320	292	270	253		
20M	80	436	390	356	330	308		
25M	100	563	504	460	426	398		
30M	155	669	598	546	505	473		
35M	185	798	714	652	603	565		
45M	270	977	874	798	739	691		
55M	355	1261	1128	1030	953	892		

