

PROPANE HOT WATER BOILER SCHEDULE						
No.	CAPACITY KW (MBH)		WATER TEMP. °F		USGPM	REMARKS
	INPUT	OUTPUT	ENT.	LVGL.		
B-2	17.5-47 (0.059-0.16)	16-43 (0.055-0.14)	160.0	180.0	15.4	ACCEPTABLE MANUFACTURER: VITODENS 200-W 228H4S, COMPLETE WITH CONDENSATE NEUTRALIZATION UNIT.

CIRCULATING PUMP SCHEDULE								
SYMBOL	SERVICE	LOCATION	FLOW RATE GPM	PRESSURE DROP FT/HD.	FLUID TYPE	MOTOR		REMARKS
						HP	VOLTAGE	
P-1/A	RTU HYDRONIC LOOP	TOWN HALL MECH RM A107	42	43	25% GLYCOL	1	575/3/60	ARMSTRONG 4380 SERIES 1508-001.5
P-2/A	AHU HYDRONIC LOOP	PERNEEL MECH RM	19	33	25% GLYCOL	1	575/3/60	ARMSTRONG E22.2 cl 120V SERIES
P-3	DOMESTIC HOT WATER RECIRC PUMP	PERNEEL MECH RM	.5	20	DOMESTIC HOT WATER	-	-	ARMSTRONG ASTRO 250SS
P-4	PERIMETER HEATING CIRCULATING PUMP	TOWN HALL MECH RM A107	12	20	WATER	-	-	ARMSTRONG E10.2 cl 120V SERIES
P-5	IN FLOOR HEATING CIRCULATING PUMP	TOWN HALL MECH RM A107	2	7	WATER	-	-	WLO STAR S 21 FX TO BE PROVIDED WITH IN FLOOR RADIANT SYSTEM
P-6/6A	GEO THERMAL LOOP	TOWN HALL MECH RM A107	35	40	25% GLYCOL	1	575/3/60	ARMSTRONG 4380 SERIES 1508-001.0
P-7/7A	GEO THERMAL LOOP	PERNEEL MECH RM	35	40	25% GLYCOL	1	575/3/60	ARMSTRONG 4380 SERIES 1508-001.0

RADIATION SCHEDULE							
SYMBOL	MODEL	LENGTH MM (INCHES)	HEIGHT MM (INCHES)	CAPACITY KW/M (BTU/FT)	EWT °F	LWT °F	REMARKS
RAD1 KW	STERLING PRP-03	FIELD MEASURE	219 (8-5/8)	0.25 (872)	170	150	FREE STANDING PEDESTAL MOUNT. REFER TO DRAWINGS FOR PIPING CONNECTION LOCATIONS. COLOUR: WHITE.
RAD2 KW	PRICE RPLA	FIELD MEASURE	610 (24)	0.12 (399)	170	150	24" WALL MOUNT PANEL, 6 TUBES, CASTELLATED FINISH, 2" BULLNOSE ENDS. COLOUR: WHITE.

PLUMBING FIXTURE SCHEDULE			
REFER	DESCRIPTION	MANUFACTURER	ACCESSORIES AND TRIM
L1	BARRIER-FREE WALL HUNG VITREOUS CHINA LAVATORY	AMERICAN STANDARD DECORUM [MODEL 9024.01EC]	FAUCET: AMERICAN STANDARD SERIN SENSOR OPERATED 0.35 GPM MODEL C/W TRANSFORMER WASTE FITTING: MCGUIRE 155A SUPPLIES: MCGUIRE LFH170BV TRAP: MCGUIRE 8872C MIXING VALVE: MCGUIRE 605XTRM1070 CARRIER: WATTS CA-411
L2	BASIN DROP IN COUNTER MOUNT VITREOUS CHINA	AMERICAN STANDARD RONDALYN DESIGN, MODEL 0491.19.020 15" X 12-1/8", COLOUR WHITE, 4" CENTERS	FAUCET: AMERICAN STANDARD SERIN SINGLE LEVER CERAMIC CARTRIDGE, BRASS SPOUT, 0.5 GPM MODEL 2064LDHV05.002/2064.101.101P WASTE FITTING: MCGUIRE 155A SUPPLIES: MCGUIRE LFH170BV TRAP: MCGUIRE 8872C MIXING VALVE: LAWLER 570-86820
L3	BARRIER FREE WALL HUNG VITREOUS CHINA LAVATORY	AMERICAN STANDARD DECORUM [MODEL 9024.01EC]	FAUCET: AMERICAN STANDARD SERIN SINGLE LEVER CERAMIC CARTRIDGE, BRASS SPOUT, 0.5 GPM MODEL 2064LDHV05.002/2064.101.101P WASTE FITTING: MCGUIRE 155A SUPPLIES: MCGUIRE LFH170BV TRAP: MCGUIRE 8872C MIXING VALVE: LAWLER 570-86820 CARRIER: WATTS CA-411
L4	BASIN DROP IN COUNTER MOUNT VITREOUS CHINA	AMERICAN STANDARD RONDALYN DESIGN, MODEL 0491.19.020 15" X 12-1/8", COLOUR WHITE, 4" CENTERS	FAUCET: AMERICAN STANDARD SERIN SENSOR OPERATED 0.35 GPM MODEL C/W TRANSFORMER WASTE FITTING: MCGUIRE 155A SUPPLIES: MCGUIRE LFH170BV TRAP: MCGUIRE 8872C MIXING VALVE: MCGUIRE 605XTRM1070
WC1	WALL MOUNTED FLUSH VALVE WATER CLOSET	AMERICAN STANDARD [MODEL 3351.001]	VALVE: SLOAN ROYAL OPTIMA 153-1.28 ACCESSORIES: WATTS ISCA-101 CARRIER SINGLE/DOUBLE CENTICO 820 SERIES
WC2	WATER CLOSET FLOOR MOUNT VITREOUS CHINA -TANK TYPE	AMERICAN STANDARD [MODEL 215AA.165.020] 4.8L FLUSH, TANK SET, INSULATED TANK, COLOUR WHITE, BOLTED TANK COVER, -ORDER WITH TRIP LEVER ON TRANSFER SIDE	SEAT: CENTECO MODEL 820STS.001 COMMERCIAL TOILET. SEAT, OPEN FRONT WITH COVER, WHITE. VALVE: INCLUDED WITH WC SUPPLY: MCGUIRE LFH172BV
U	URINAL	AMERICAN STANDARD [MODEL 6042.001EC.020]	FLUSH VALVE: SLOAN ROYAL OPTIMA SMOOTH 186-0.125 TOP SPUD WITH EL-451 BOX MOUNT HARD WIRED TRANSFORMER ACCESSORIES: CARRIER CA-321 & WUCO URINAL CLEAN OUT
S1	SINGLE COMPARTMENT STAINLESS STEEL SINK	FRANKE [MODEL PSX110-2312]	FAUCET: AMERICAN STANDARD MODEL 4717300242853-R4 WASTE FITTING: 112.0185.195 CRUMB CUP MIXING VALVE: LAWLER 570
S2	TRIPLE COMPARTMENT SKULLERY SINK	FRANKE [MODEL STL2454-1/2] FLOOR MOUNTED, GRADE 18-10 14 GA 302 STAINLESS STEEL WITH SQUARE CORNER CONSTRUCTION & ROLLED RM. ADJUSTABLE LEGS.	FAUCET: TWO CHICAGO FAUCETS MODEL 510-GC813AL12ABCP WALL MOUNTED WITH SPOUT ONE C/W PRE-RINSE SPRAY WASTE FITTING: INCLUDED 3-1/2" CRUMB CUP MIXING VALVE: LAWLER 570
S3	SINGLE COMPARTMENT STAINLESS STEEL SINK	FRANKE [MODEL LBS9106-1/3]	FAUCET: DELTA MODEL 27C4875 WASTE FITTING: 3-1/2" CRUMB CUP WITH 1-1/2" TAILPIECE MIXING VALVE: LAWLER 570
MS	MOP SINK	STERN-WILLIAMS [MODEL MTB-2424] 24"x24"x10" FLOOR MOUNTED TERRAZZO C/W DRAIN	FAUCET: AMERICAN STANDARD MODEL 8355.115.002 ACCESSORIES: V-70 BUMPER GUARD, BP BACK SPLASH PANEL, T-35 36" HOSE & WALL HOOK, & T-40 MOP HANGER
SH	TILED SHOWER ACCESSORIES	FLOOR AND WALLS BY GENERAL	SHOWER VALVE: AMERICAN STANDARD COMMERCIAL GRADE PRESSURE BALANCING VALVE MODEL R1155 VALVE TRIM: AMERICAN STANDARD SINGLE HANDLE HANDHELD SHOWER SYSTEM MODEL T431MD.500.295 HAND SHOWER: AMERICAN STANDARD HYDROFOCUS 2GPM MAX WITH CHECK VALVE MODEL 1660.207.295 ACCESSORIES: AMERICAN STANDARD HYDROFOCUS 2GPM MAX WITH CHECK VALVE MODEL 1660.207.295 SLIDE BAR MODEL 1660.225.295 METAL HOSE MODEL 8888.053.002 VACUUM BREAKER 1660.400.295 FLOOR DRAIN: SCHLUTER FLOOR DRAIN SYSTEM REFER TO ARCHITECTURAL SPECIFICATIONS FOR MEMBRANE
DF	BARRIER FREE DRINKING FOUNTAIN WITH BOTTLE FILLER	ELKAY [MODEL LZ8WS(VR)SP]	ACCESSORIES: -

NOTES:  
1. ACCEPTABLE ALTERNATES SUBJECT TO SHOP DRAWING REVIEW. AMI, CAMBRIDGE BRASS, CRANE, KOHLER, STERLING, BEIMS, BENEKE, DELTA, MOEN ENCON, POWERS.  
2. PROVIDE STAINLESS STEEL CABINETS FOR THERMOSTATIC MIXING VALVE, RECESSED IN WALL AND ADJUST MIXING VALVES TO MAXIMUM OF 49 DEGREE C.

SUPPLY AIR OUTLET SCHEDULE							
DESIGNATION	S-1	S-2	S-3	S-4	S-5	S-6	S-7
MOUNTING	FLOOR MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED
OUTLET TYPE	LINEAR FLOOR GRILLE	ROUND CONE DIFFUSER	SQUARE CONE DIFFUSER	SQUARE CONE DIFFUSER	SIDEWALL LOUVERED FACE DIFFUSER	SIDEWALL LOUVERED FACE DIFFUSER	SIDEWALL LOUVERED FACE DIFFUSER
NOMINAL SIZE: MM (IN)	600X150 (24X6)	572# (22-1/2#)	300X300 (12X12)	600X600 (24X24)	200X150 (10X6)	250X150 (10X6)	300X200 (12X8)
CONNECTION SIZE: MM (IN)	445X130 (17.5X5)	250# (10#)	100# (4#)	200# (8#)	-	-	-
AIRFLOW RANGE: L/S (CFM)	47-110 (100-230)	105-175 (220-370)	15-45 (35-90)	65-128 (140-270)	40-95 (80-200)	55-135 (100-250)	85-205 (180-430)
MAXIMUM NOISE CRITERIA	NC 20	NC 20	NC 20	NC 20	NC 20	NC 20	NC 20
MODEL REFERENCE	PRICE LFG	PRICE RCDE	PRICE SCD	PRICE SCD	PRICE 5100-L	PRICE 5100-L	PRICE 5100-L

RETURN AIR GRILLE SCHEDULE									
DESIGNATION	R-1	R-2	R-3	R-4	R-5	R-6	R-7	R-8	R-9
MOUNTING	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	CEILING SURFACE MOUNTED	CEILING SURFACE MOUNTED	CEILING SURFACE MOUNTED
OUTLET TYPE	LOUVERED FACE RETURN	LOUVERED FACE RETURN WITH DISSIPATER	LOUVERED FACE RETURN	LOUVERED FACE RETURN WITH DISSIPATER	LOUVERED FACE RETURN WITH DISSIPATER	LOUVERED FACE RETURN WITH DISSIPATER	EGGCRATE GRILLE	EGGCRATE GRILLE	EGGCRATE GRILLE
NOMINAL FACE SIZE: MM (IN)	200x125 (8x5)	200x125 (8x5)	300x150 (12x6)	300x150 (12x6)	300x200 (12x8)	450x200 (18x8)	200x125 (8x5)	250x200 (10x8)	600x600 (24x24)
AIRFLOW RANGE: L/S (CFM)	20-50 (45-110)	20-50 (45-110)	35-95 (80-195)	35-95 (80-195)	60-130 (120-275)	85-190 (180-400)	30-95 (60-200)	65-190 (140-400)	510-1185 (1080-2500)
MAXIMUM NOISE CRITERIA	NC 20	NC 20	NC 20	NC 20	NC 20	NC 20	NC 25	NC 25	NC 25
MODEL REFERENCE	PRICE 530	PRICE TLRD & 530	PRICE 530	PRICE TLRD & 530	PRICE TLRD & 530	PRICE TLRD & 530	PRICE 80 D	PRICE 80 D	PRICE 80 D

ELECTRIC DOMESTIC HOT WATER SCHEDULE					
No.	INPUT KW	STORAGE CAPACITY (USGAL)	MINIMUM TEMP. (°F) INCREASE	RECOVERY (GPH) @ 100°F RISE	REMARKS
HW-1	12	50	100.0	124	ACCEPTABLE MANUFACTURER: BRADFORD WHITE ELECTROFLEX MD COMMERCIAL GRADE E32-50S-3, 1-1/4" CONNECTION
HW-2	17.5	---	60.0 @ 2 GPM	---	ACCEPTABLE MANUFACTURER: EMAX HOME ADVANTAGE II HA024240 3 MODULE 208V, 3/4" CONNECTION
HW-3	5.8	---	27.0 @ 1.5 GPM	---	ACCEPTABLE MANUFACTURER: EMAX HOME ADVANTAGE II HA028240 1 MODULE 208V, 3/4" CONNECTION
HW-4	17.5	---	60.0 @ 2 GPM	---	ACCEPTABLE MANUFACTURER: EMAX HOME ADVANTAGE II HA024240 3 MODULE 208V, 3/4" CONNECTION

DUCTLESS SPLIT SYSTEM SCHEDULE (INDOOR UNIT / OUTDOOR UNIT)								
No.	AREA SERVED	AIR FLOW RANGE L/S (CFM)	COOLING CAPACITY BTUH	ELECTRICAL			MANUFACTURER AND MODEL (BASIS OF DESIGN MITSUBISHI ELECTRIC)	
				MCA	MCCP	VOLTAGE		
AC-1	TOWNHALL STORAGE ROOM	150-200 (320-425)	12000	1A	-	208V/1#/60Hz	29	MITSUBISHI ELECTRIC PKA-A12H47 C/W IO INTERFACE MODULE
CU-1	ROOF	750 (1590)	12000	11A	28A	208V/1#/60Hz	92	MITSUBISHI ELECTRIC PUY-A12NKA7-BS C/W WIND SCREENS, ULTRA-LOW AMBIENT OPTION, AND MOUNTING STAND. REFER TO DRAWINGS FOR LOCATION.

PLUMBING FIXTURE CONNECTION SCHEDULE					
REFER	DESCRIPTION	SANITARY	SANITARY VENT	DHWS	DCWS
L1	BARRIER-FREE WALL HUNG LAVATORY	32 Ø	32 Ø	13 Ø	13 Ø
L2	DROP IN COUNTER MOUNT BASIN	32 Ø	32 Ø	13 Ø	13 Ø
L3	BARRIER-FREE WALL HUNG LAVATORY	32 Ø	32 Ø	13 Ø	13 Ø
L4	DROP IN COUNTER MOUNT BASIN	32 Ø	32 Ø	13 Ø	13 Ø
WC1	WALL MOUNTED FLUSH VALVE WATER CLOSET	80 Ø	40 Ø	-	25 Ø
WC2	FLOOR MOUNTED TANK TYPE WATER CLOSET	80 Ø	40 Ø	-	13 Ø
U	WALL MOUNTED URINAL	50 Ø	32 Ø	-	20 Ø
S1	SINGLE COMPARTMENT STAINLESS STEEL SINK	40 Ø	32 Ø	13 Ø	13 Ø
S2	TRIPLE COMPARTMENT SKULLERY SINK	40 Ø	32 Ø	13 Ø	13 Ø
S3	SINGLE COMPARTMENT STAINLESS STEEL SINK	40 Ø	32 Ø	13 Ø	13 Ø
MS	MOP SINK	80 Ø	40 Ø	13 Ø	13 Ø
SH	TILED SHOWER ACCESSORIES	80 Ø	40 Ø	13 Ø	13 Ø
DF	DRINKING FOUNTAIN C/W BOTTLE FILLER	32 Ø	32 Ø	-	10 Ø

DOOR GRILLE SCHEDULE		
DESIGNATION	DR1	DR2
MOUNTING	SURFACE MOUNT IN DOOR	SURFACE MOUNT IN DOOR
OUTLET TYPE	LOUVERED FACE RETURN	LOUVERED FACE RETURN
NOMINAL FACE SIZE: MM (IN)	200x150 (8x6)	200x150 (8x6)
AIRFLOW RANGE: L/S (CFM)	20-50 (45-110)	20-50 (45-110)
MAXIMUM NOISE CRITERIA	NC 20	NC 20
MODEL REFERENCE	NAILOR 51DGD-FR	NAILOR 51DGD

EXHAUST AIR GRILLE SCHEDULE		
DESIGNATION	E-1	E-2
MOUNTING	CEILING SURFACE MOUNTED	CEILING SURFACE MOUNTED
OUTLET TYPE	EGGCRATE GRILLE	EGGCRATE GRILLE
NOMINAL FACE SIZE: MM (IN)	200x125 (8x5)	300x300 (12x12)
AIRFLOW RANGE: L/S (CFM)	30-95 (60-200)	70-285 (150-600)
MAXIMUM NOISE CRITERIA	NC 25	NC 25
MODEL REFERENCE	PRICE 80 D	PRICE 80 D

EXPANSION TANK SCHEDULE										
SYMBOL	LOCATION	SERVICE	PUMP	MINIMUM TOTAL VOLUME L (GAL)	MINIMUM SUPPLY TEMP.	MAXIMUM SUPPLY TEMP.	MINIMUM PRESSURE	MAXIMUM PRESSURE	MODEL	
No1	TOWNHALL MUNICIPAL MECH STORAGE ROOM	HOT WATER PERIMETER HEATING	P-4	2.5	40°F	170°F	10	27	AMTROL MODEL 30	

KITCHEN EXHAUST HOOD SCHEDULE					
No.	MANUFACTURER AND MODEL	EXHAUST VOLUME L/S (CFM)	EXHAUST SP (INWG)	SUPPLY VOLUME L/S (CFM)	DIMENSIONS L X W X H MM (IN)
EH1	GREENHECK GHEV	614 (1300)	0.312	566 (1200)	2286 X 1219 X 610 (90 X 48 X 24)

EXHAUST FAN SCHEDULE								
AREA SERVED	MODEL	AIRFLOW L/S (CFM)	EXTERNAL STATIC PRESSURE (IN WG)	POWER	ELECTRICAL VOLTAGE	RPM	ACCESSORIES	
EF-1	PERNEEL KITCHEN	GREENHECK TCB-1-13-3	614 (1300)	0.562	1/3 HP	575/3/60	1725	①②③④
EF-2	PERNEEL MECH RM	GREENHECK SQ-120-VG	255 (540)	0.1	1/4 HP	115/1/60	750	①②③④⑤
EF-3	PERNEEL STORAGE RM.	GREENHECK SQ-120-VG	255 (540)	0.1	1/4 HP	115/1/60	750	①②③④⑤

① MOTOR COVER / BELT GUARD ② SPRING HANGING ISOLATORS ③ BACK DRAFT DAMPER ④ PREFAB. ROOF CURB ⑤ 2 SPEED MOTOR ⑥ MOTOR SIDE GUARD  
⑦ INSULATED HOUSING ⑧ HERESTE COATING ⑨ WEATHERPROOF DISCONNECT ⑩ INLET / DISCHARGE GUARD ⑪ WALL COLLAR ⑫ BAROMETRIC DAMPER

VAV TERMINAL BOX SCHEDULE					
SYMBOL	INLET SIZE MM	MAX FLOW L/S	MAX PRESS DROP IN WG	REMARKS	
VAV1	100# (4)	24-100 (50-225)	0.29	EH PRICE SDV-5000	
VAV2	125# (5)	30-165 (63-350)	0.19	EH PRICE SDV-5000	
VAV3	150# (6)	31-212 (66-450)	0.18	EH PRICE SDV-5000	
VAV4	300# (12)	143-990 (304-2100)	0.18	EH PRICE SDV-5000	
VAV5	350# (14)	207-1416 (439-3000)	0.18	EH PRICE SDV-5000	

NOTE: TERMINAL UNITS DO NOT REQUIRE REHEAT BOXES. TERMINAL UNITS TO INCLUDE 3FT SOUND ATTENUATOR.

HOT WATER REHEAT COIL SCHEDULE								
SYMBOL	L/S (CFM)	ENT °F (°C)	LAT °F (°C)	WATER ΔT °F (°C)	MAX. APD INWG	FLOW RATE L/S (CFM)	MAX. EPD FT/HD.	CAPACITY KW (MBH)
RCH1 KW	110 (230)	13 (5.5)	22 (7.2)	6.7 (2.0)	0.20	0.03 (0.5)	0.2	0.75 (2.5)

IT IS THE RESPONSIBILITY OF THE APPROPRIATE CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS ON SITE AND TO REPORT ALL ERRORS AND/OR OMISSIONS TO THE ARCHITECT.

ALL CONTRACTORS MUST COMPLY WITH ALL PERTINENT CODES AND BY-LAWS.

THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION UNTIL SIGNED BY THE ARCHITECT.

DO NOT SCALE DRAWINGS

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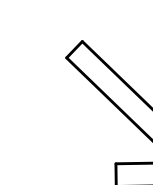


VR 16-178

6	ISSUED FOR TENDER	12.10.2017
5	ISSUED FOR PRE-TENDER REVIEW	25.08.2017
4	ISSUED FOR 95% REVIEW	18.08.2017
3	ISSUED FOR 90% REVIEW	09.08.2017
2	ISSUED FOR REVIEW	07.07.2017
1	ISSUED FOR 33% REVIEW	23.12.2016
#	ISSUED FOR	00.MM.YY

REVISIONS:

ARCHITECT SEAL: NORTH ARROW:



CLIENT:

ARCHITECT:

PROJECT TITLE:

MCNAB BRAESIDE

ARNPRIOR ONTARIO

SHEET TITLE:

MUNICIPAL BUILDING MECHANICAL SCHEDULES

DRAWN: AW

CHECKED: IF

SCALE: 1:50

SHEET No:

PROJECT No: 16-178

M001