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 THIS DRAWING SHALL NOT BE SCALED.

**PLUMBING FIXTURE SCHEDULE**

TAG	TYPE	FIXTURE				ACCESSORY			ACCESSORY			NOTES
		MANUFACTURER	MODEL	MOUNTING	BARRIER FREE	TYPE	MANUFACTURER	MODEL	TYPE	MANUFACTURER	MODEL	
WC-1	FLUSH VALVE TOILET	ACORN	'DURA-WARE' 2100-W-1-HPS-BCN	WALL	YES	CONCEALED FLUSHOMETER	SLOAN	'REGAL XL OPTIMA' 153-1.6 ES-S,	TRANSFORMER CARRIER COUPLING	SLOAN WATTS MIFAB	EL-342 ISCA-101-M11 MI-HUB TR-440	TOILET: BLOWOUT JET, OFF FLOOR, WALL THICKNESS 190MM BLOCK, WALL (CONCEALED), OFF-FLOOR, WALL OUTLET, 1.6 GPF, HIGH POLISH INTEGRAL SEAT, BLIND CAP NUTS (3). FLUSHOMETER: FOR TOP SPUD TOILET, QUIET ACTION DIAPHRAGM TYPE, INFRARED SENSOR, SOLENOID OPERATED FLUSH CONTROLLER CIRCUITRY, COURTESY FLUSH ELECTRONIC OVER-RIDE BUTTON, BAK-CHEK ANGLE STOP, EXPOSED CP ELBOW FOR TOP SPUD CONNECTION, VACUUM BREAKER, SENSOR LOCATED ABOVE THE TOILET, 5 VA POWER REQUIRED PER UNIT. OFFSET P-TRAP WITH INSULATION COVERING. WATTS FLOW STOPPER. PROVIDE 4" (102 MM) SQUARE ELECTRICAL BOX FOR MOUNTING SENSOR PLATE. TRANSFORMER: 240/24 50 VA. CARRIER: SINGLE HORIZONTAL, ADJUSTABLE, MOUNTED ON CONCRETE FLOOR, ALL EPOXY COATED, CAST IRON FITTING, ADJUSTABLE ABS SLIDE NIPPLE WITH INTEGRAL TEST CAP AND NEOPRENE BOWL GASKET, WASTED PLATED HARDWARE, CHROME CAP NUTS, TILING FRAME, 4) NO HUB WASTE, 2" NO HUB VENT, 350 LBS STATIC LOAD. 12" FINISHED METAL STUD WALL TO BACK OF PIPE SPACE. COUPLING: NO-HUB, TYPE 300 AISI STAINLESS STEEL BAND, TYPE 300 AISI STAINLESS STEEL EYELETS, ELASTOMERIC COMPOUND GASKET MEETING THE REQUIREMENTS OF ASTM C-564. TYPE 300 AISI STAINLESS STEEL SHIELD, TESTED TO MAINTAIN 4.3 PSI OF WATER PRESSURE AT 60 INCH LB MIN/MAX TORQUE BOLT TIGHTNESS, TESTED AND CERTIFIED TO ASTM STANDARD 1460-2012 AND CSA STANDAD B602-2010 AND LISTED WITH IAPMO. ALL MODELS ARE LISTED TO THE NATIONAL PLUMBING CODE OF CANADA AND RELEVANT CANADIAN STANDARD (S) AND BEAR THE CUPC MARK OF CONFORMITY. NON CONSTANT TEMPERATURE RATING IS 140F. PROVIDE WITH BACK REST (NOT INCLUDED) TO MEET CITY OF WINNIPEG REQUIREMENTS.
WC-2	FLUSH TANK TOILET	AMERICAN STANDARD	'CADET' #2467016.020	FLOOR	YES	TOILET SUPPLY	MCGUIRE	LFH172BV	SEAT	CENTOCO	5005TSCC.001	TOILET: FLOOR MOUNTED TANK TYPE TOILET, VITREOUS CHINA, TANK TYPE 'CADET RIGHT HEIGHT PRESSURE-ASSISTED ELONGATED', 419 MM HIGH TOILET, 3483.001, 4142.016, VITREOUS CHINA, FLOOR MOUNTED, 1.6 US GAL PER FLUSH, TWO PIECE, ELONGATED BOWL, SIPHON JET FLUSH ACTION, RAISED SANITARY BAR. PROVIDE FLOOR FLANGE, (SAME MATERIAL AS THE CONNECTING PIPE DRAIN), WITH ALL BRASS BOLTS AND WITH RUBBER GASKET. PROVIDE BOLTED TANK COVER IF REQUIRED - TO MEET LOCAL CODES. SEAT: HEAVY DUTY TOILET SEAT, SOLID PLASTIC, OPEN FRONT LESS COVER. SUPPLY: POLISHED BRASS TOILET SUPPLY.
L-1	LAVATORY	ACORN	'MERIDIAN' 3701-1-1-SO-DMJ-PDM	WALL	YES	INTEGRAL FAUCET	-	-	MIX VALVE GRID DRAIN SUPPLIES P-TRAP WALL CARR.	LAWLER MCGUIRE MCGUIRE WATTS	TMM-1070 155A LFH165LKN3 8872C CA-321	LAVATORY: STAINLESS STEEL CURVED FRONT UNI-BASIN LAVATORY, OFF-FLOOR, WALL OUTLET, SENSOR OPERATION, DECK MOUNTED SPOUTS, DECK MOUNTED J SPOUT, METERING LIQUID SOAP DISPENSER. MIXING VALVE: BELOW DECK MECHANICAL WATER MIXING VALVE, BRONZE BODY, TEMPERATURE ADJUSTING DIAL, 3/8" INLETS AND OUTLET COMPRESSION FITTINGS, HIGH TEMPERATURE THERMOSTATIC LIMIT STOP, SHUT-OFF WITH AUTOMATIC RESET WHEN TEMPERATURE EXCEEDS 120 °F, INTEGRAL CHECKS, OFFER TEMPERATURE RANGE FROM FULL COLD THROUGH 114.8 °F. PROVIDE TEE, ADAPTORS AND FLEX. COPPER TUBING TO SUIT INSTALLATION. DRAIN: CAST BRASS ONE PIECE TOP, 17 GA. TUBULAR 1-1/4" TAILPIECE. SUPPLIES: CHROME PLATED FINISH POLISHED BRASS, HEAVY DUTY ANGLE STOPS, 10 MM (3/8") I.P.S. INLET X 76 MM (3") LONG RIGID HORIZONTAL NIPPLES, V.P. LOOSE KEYS, ESCUTCHEON AND FLEXIBLE COPPER RISERS. P-TRAP: HEAVY CAST BRASS ADJUSTABLE BODY, WITH SLIP NUT, 1-1/4" SIZE, SHALLOW WALL FLANGE AND SEAMLESS TUBULAR WALL BEND. CARRIER: MOUNTED ON CONCRETE FLOOR, EPOXY COATED TOP AND BOTTOM UNIVERSAL STEEL HANGER PLATES, HEAVY GAUGE EPOXY COATED STEEL OFFSET UPRIGHTS WITH WELDED FEET SUPPORTS. 4" FINISHED METAL STUD WALL TO BACK OF PIPE SPACE.
L-2	LAVATORY	AMERICAN STANDARD	'MURRO' 0954.004EC.020 0059.020EC.020	WALL	YES	SINGLE HANDLE FAUCET	AMERICAN STANDARD	'SERIN' #2064LDH.101.002 2064.101P	MIX VALVE GRID DRAIN SUPPLIES P-TRAP WALL CARR.	LAWLER MCGUIRE MCGUIRE WATTS	TMM-1070 155A LFH170BVRB 8872C WCA-411-CA-481	LAVATORY: WALL HUNG BASIN, WHITE FINISH. PROVIDE TEE, ADAPTORS AND FLEX. COPPER TUBING TO SUIT INSTALLATION. PROVIDE TEMPERED WATER TO HOT SIDE OF FAUCET. FAUCET: SINGLE HANDLE FAUCET. MIXING VALVE: BELOW DECK MECHANICAL, INTEGRAL CHECKS. DRAIN: OPEN GRID DRAIN. SUPPLIES: POLISHED BRASS FAUCET SUPPLIES. P-TRAP: MCGUIRE WALL CARRIER: BASIN CARRIER.
WH-1	WALL HYDRANT	WATTS	HY-430	WALL	-	-	-	-	-	-	-	WALL HYDRANT, MODERATE CLIMATE 3/4" (19MM) WITH INTEGRAL VACUUM BREAKER CHROME PLATED HYDRANT FACE, INTEGRAL VACUUM BREAKER, GALVANIZED WALL CASING, ALL BRONZE HEAD AND HYDRANT KEY. LENGTH TO SUIT WALL THICKNESS.
FD-1	FLOOR DRAIN	WATTS (OR EQUAL)	FD-100-C-A	FLOOR	-	-	-	-	-	-	-	FLOOR DRAIN, EPOXY COATED CAST IRON, WITH ANCHOR FLANGE, REVERSIBLE MEMBRANE CLAMP WITH PRIMARY AND SECONDARY WEEPHOLES, ADJUSTABLE NICKEL BRONZE STRAINER, NO HUB OUTLET. PROVIDE WITH WADE MODEL #4405 TRAP SEAL DEVICE (OR EQUAL), REGULARLY FURNISHED: ELASTOMERIC TRAP SEAL DEVICE WITH FITTING.
MS-1	FLOOR DRAIN	STERN WILLIAMS	#MTB-2424	FLOOR	-	TWO HANDLE	AMERICAN STANDARD	#8350.243	WALL HOOK HANGER	STERN WILLIAMS STERN WILLIAMS	T-35 T-40	SQUARE SERVICE / MOP SINK, 610 MM (24") X 610 MM (24") X 254 MM (10") DEEP, FLOOR MOUNTED, TERRAZZO COMPOSED OF PEARL GRAY MARBLE CHIPS AND PORTLAND CEMENT GROUND SMOOTH, SEALED TO RESIST STAIN, CAST BRASS DRAIN WITH STAINLESS STEEL STRAINER, 3"(75MM) OUTLET, WALL MOUNTED TWO HANDLE FAUCET, CHROME PLATED, 8" (203MM) CENTERSET, CAST BRASS BODY, SLOW COMPRESSION, UNRESTRICTED HOSE END OUTLET, SPOUT WITH ATMOSPHERIC VACUUM BREAKER AND BUCKET HOOK 173 MM (7-1/4") FROM WALL TO OUTLET REACH, LEVER HANDLES. HOSE AND WALL HOOK HOSE 36" (914MM) LONG WITH 3/4" (19MM) CHROME COUPLING, STAINLESS STEEL WALL BRACKET. MOP HANGER STAINLESS STEEL #4 FINISH, 24" (610MM) LONG WITH 3 RUBBER SPRING LOADED CLIPS. STERN WILLIAMS BP BACK SPLASH PANEL 20 GAUGE TYPE 304 STAINLESS STEEL. PROVIDE P-TRAP, SAME MATERIAL AS THE CONNECTING PIPE DRAIN.
CO	CLEAN-OUTS	WATTS (OR EQUAL)	CO SERIES	-	-	-	-	-	-	-	-	CLEAN OUT: DUCCO COATED, CAST IRON BODY, AND REMOVABLE POSITIVE GASKET SEAL CLOSURE PLUG AND HEAVY DUTY 6" (150MM) ROUND ADJUSTABLE COVER
-	WATER HAMMER ARRESTORS	WATTS (OR EQUAL)	LF SERIES	-	-	-	-	-	-	-	-	WATER HAMMER ARRESTORS: LEAD-FREE, STAINLESS STEEL, PRESSURIZED CHAMBERS, BELLOWS, SIZE ACCORDING TO MANUFACTURER'S RECOMMENDATIONS CHART TO ELIMINATE WATER HAMMER AND SHOCK FROM PIPING SYSTEM. PROVIDE WATER HAMMER ARRESTORS ON HOT AND COLD WATER SUPPLIES TO ALL QUICK VALVES, SOLENOIDS, AND PLUMBING FIXTURES, AND LOCATE IN AN UPRIGHT POSITION BETWEEN THE LAST TWO FIXTURES ON A LINE, OR HORIZONTALLY AT THE END OF LINE CLOSEST TO SUPPLY SOURCE.

**LEGEND - PLUMBING**

	SANITARY LINE ABOVE FLOOR/GRADE
	SANITARY LINE BELOW FLOOR/GRADE
	VENT LINE
	VENT LINE INSULATION
	PUMPED DISCHARGE LINE
	GAS LINE
	DOMESTIC COLD WATER (DCW)
	DOMESTIC HOT WATER (DHW)
	HOT WATER RECIRCULATION (DHW)
	CLEANOUT
	FLOOR / HUB DRAIN
	PUMP
	SHUT-OFF VALVE
	BALL VALVE
	CHECK VALVE
	MANUAL BALANCING VALVE
	UNION
	PRESSURE REDUCING VALVE
	STRAINER
	PIPE ANCHOR
	WALL HYDRANT
	PRESSURE GAUGE
	THERMOMETER
	DIRECTION OF FLOW

**LEGEND - HVAC**

	SUPPLY AIR DIFFUSER
	RETURN AIR GRILLE
	EXHAUST AIR GRILLE
	DOOR GRILLE
	THERMOSTAT
	HUMIDISTAT
	CARBON DIOXIDE DETECTOR
	ON / OFF SWITCH (BY ELECTRICAL)
	DUCTWORK LOCATED IN FLOOR
	BALANCING DAMPER
	FIRE DAMPER
	BACK DRAFT DAMPER
	MOTORIZED DAMPER
	FLEXIBLE DUCT CONNECTION
	THERMAL INSULATION
	ACOUSTIC INSULATION
	GRILLE / DIFFUSER TAG
	EQUIPMENT TAG
	ALTERNATE EQUIPMENT TAG
	DRAWING NOTE TAG

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Revisions  
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 Date Revision  
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**PLUMBING EQUIPMENT SCHEDULE**

TAG	TYPE	LOCATION	MANUFACTURER	MODEL	CAPACITY	ELECTRICAL	NOTES
HWT-1 (EXISTING)	HOT WATER HEATER TANK	SUSPENDED ABOVE MOP SINK	RHEEM	PROE30 1 CNS3 POU	30 USG 1.5 KW	1.5 KW XXX/X/60	EXISTING HOT WATER TANK TO BE RELOCATED AS INDICATED ON DRAWINGS. PROVIDE WITH NEW DRAIN FOR T&P RELIEF DOWN TO MOP SINK.
P-1	GRINDER PUMP	EXISTING SEWAGE TANK	FRANKLIN ELECTRIC 'FPS'	IGP-A231-20 #515862	20 GPM 100' HEAD	2 HP 240V/60	AUTOMATIC GRINDER, 20FT CORD, 1-1/4" DISCHARGE, CAST IRON WITH EPOXY COATING MOTOR COVER, NITRILE MOTOR COVER O-RING, SINGLE PHASE, CAPACITOR START, CAPACITOR RUN MOTOR DESIGN, INTEGRAL OVERLOAD PROTECTION, SS MOTOR SHAFT, BRASS IMPELLER, 2 BLADE SS ROTATING CUTTER, SS STATIONARY CUTTER. PROVIDE PUMP COMPLETE WITH CUSTOM ALDERON CONTROL PANEL. PROGRAM CONTROL PANEL PLC AS INACTIVE DURING SCHEDULE OCTOBER - MAY (CONFIRM EXACT DAYS WITH OWNER). PROGRAM CONTROL PANEL TO ENERGIZE PUMP EVERY 72 HOURS FOR 15 SECONDS DURING INACTIVE SCHEDULE TO EXERCISE PUMP.

**VENTILATION SUMMARY**

(BASED ON ASHRAE STANDARD 62-2010 TABLES 6.1 & 6.4)

A.) OUTSIDE AIR	AREA [FT²]	RATE [CFM/FT²]	OCC	OCC RATE [CFM/P]	E <sub>r</sub>	OUTSIDE AIR [CFM]	
HRV OFFICE	60	0.06	1	5.0	0.8	10.8	
						TOTAL	10.8
C.) EXHAUST AIR	AREA [FT²]	HEIGHT [FT]	FIX [#]	EXHAUST RATE	EXHAUST AIR [CFM]		
WASHROOM UNIVERSAL	-	-	1	50 [CFM/FIX]	50		
WASHROOM STAFF	-	-	1	50 [CFM/FIX]	50		
MAINTENANCE	450	-	-	0.77 [CFM/FT²]	346.5		

REFER TO CONTROLS SECTION OF SPECIFICATIONS.

Stamp  
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 Certificate of Authorization  
 Nova 3 Engineering Ltd.  
 No.962 Date: 2021-10-25  
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 PROVINCE OF MANITOBA  
**A.J.S. CORTENS**  
 Member 31511  
 2021-10-25  
 REGISTERED PROFESSIONAL ENGINEER

Project  
 City of Winnipeg  
 Churchill Park Maintenance  
 Building Renovation  
 430 Churchill Dr  
 Winnipeg, Manitoba  
 drawing title  
 MECHANICAL - MECHANICAL SCHEDULES  
 scale as noted designed by HC  
 date 2021-10-20 drawn by HC  
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