





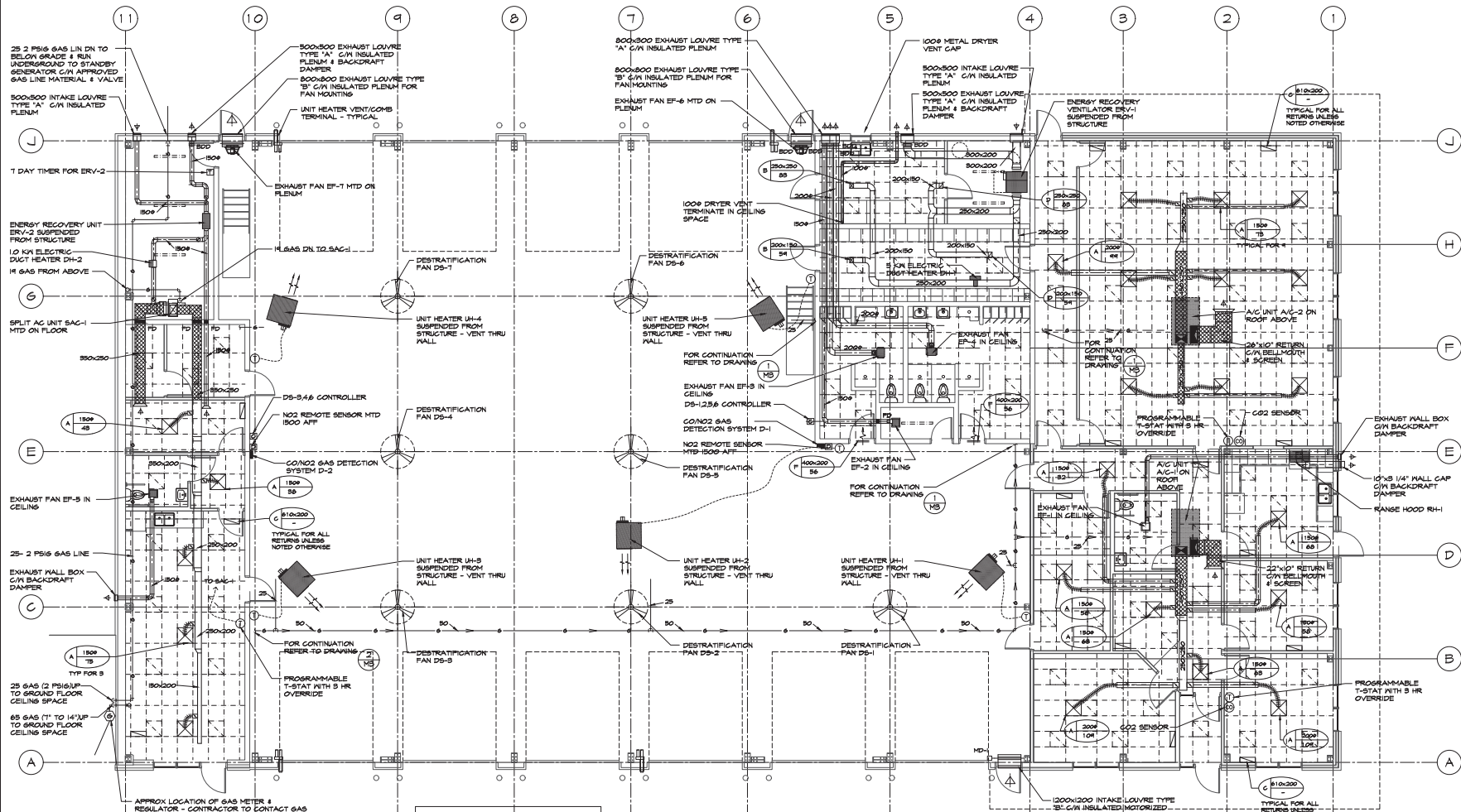
**TRENCH DRAIN SPECIFICATION**

TRENCH DRAINAGE SYSTEMS SHALL BE WATTS DEAD LEVEL "D" PRE SLOPED POLYPROPYLENE DRAIN WITH 52 mm (2") WIDEX(17mm (6/8") LONG DUCTILE IRON FRAME. UNSTABILIZED TAL-FILLED POLYPROPYLENE CHANNELS. SYSTEM SHALL BE FRAME ANCHORED BRACKETS TO BE DUCTILE IRON CLASS II. EACH TRENCH RUN TO BE COMPLETE WITH ISONIS600 (6"x6"x24") CATCH BASIN WITH TRASH BASKET.

**1 GROUND FLOOR PLAN**  
 M1 SCALE: 1:15 (METRIC)

ISSUED FOR TENDER		MAY 2/22 2015	
NO.	DESCRIPTION	DATE	BY
ISSUES			
			
<p>THIS DRAWING IS AN INSTRUMENT OF PROFESSIONAL SERVICE FOR USE EXCLUSIVELY ON THIS PROJECT. RE-USE OF ANY PORTION OF THIS DOCUMENT IS PROHIBITED. COPYRIGHT 2022 - OTS ENGINEERING SERVICES LTD.</p>			
			
PROJECT			
<b>NEW FIRE STATION</b> No 1			
<b>488 COUNTY ROAD 10</b> MILLBROOK ONTARIO			
TITLE			
<b>GROUND FLOOR PLAN</b> - PLUMBING & DRAINAGE			
SCALE	AS NOTED	DWG NO.	
DRAWN	S. STRAVAGHAN		
DESIGNED	S. STRAVAGHAN		
CHECKED	REB		
PROJECT	21.061	REV.	NOV 2021 000 FILE NO. 2106101
			

AT GENERATOR PROVIDE 2 PSIG TO T  
TO 1/4" REGULATOR AND 50 (1/4" WC)  
GAS LINE FROM REGULATOR TO  
GENERATOR - FOLLOW GENERATOR  
RECOMMENDATIONS



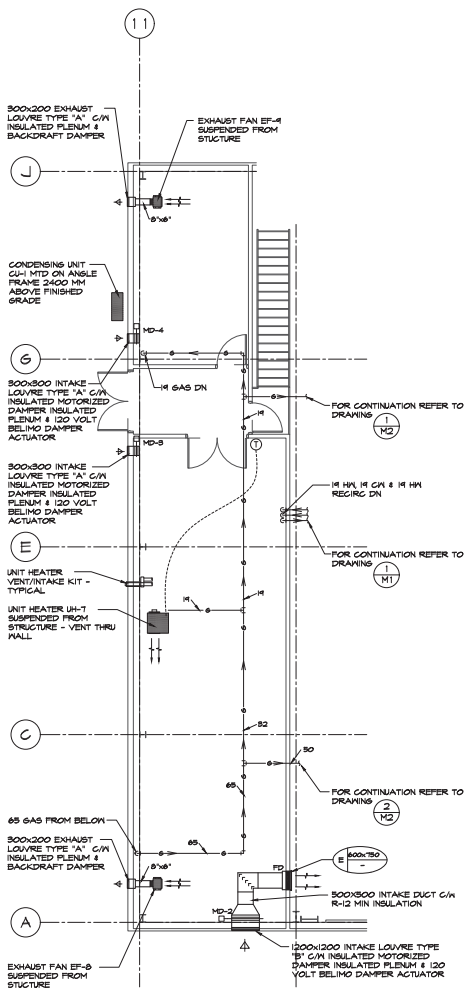
APPROX LOCATION OF GAS METER &  
REGULATOR - CONTRACTOR TO CONTACT GAS  
COMPANY FOR GAS SERVICE AND PAY ALL  
FEES (IF APPLICABLE) APPROX BUILDING  
LOAD - 100 CFH & 1250 CFH STANDBY  
GENERATOR LOAD

CARBON MONOXIDE/NITROGEN DIOXIDE  
DETECTOR D-1 & D2 MTD ON MALL EQUAL TO  
HONEYWELL MODEL ES94H DUAL GAS  
DETECTOR WITH REMOTE NO2 SENSOR G/M 100  
VOLT POWER, INTERLOCK RELAY WITH ON/AUTO  
STARTERS (STARTERS BY ELECTRICAL UNIT  
MOUNTINGS TO BE 400 TO 1800 AFF - G/M  
WATER RESISTANT COVER

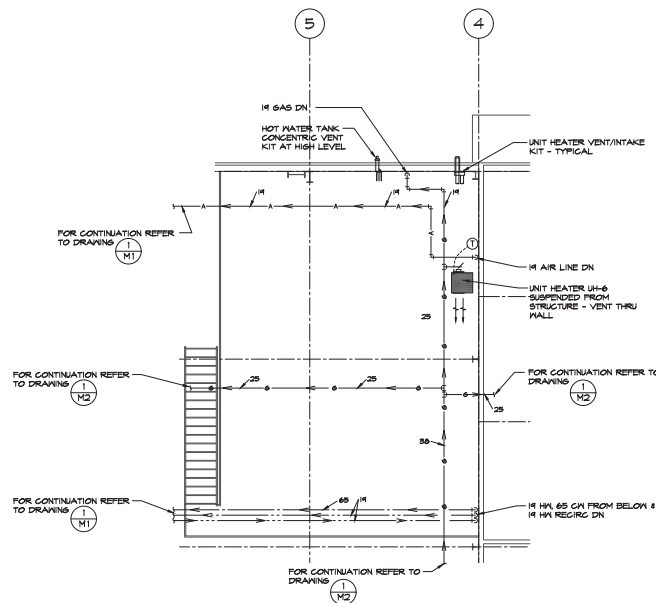
1 GROUND FLOOR PLAN  
SCALE: 1/8" = 1'-0" (METRIC)

ISSUED FOR TENDER	MAY 2/22 2015
NO. DESCRIPTION	DATE BY
ISSUES	
<p>THIS DRAWING IS AN INSTRUMENT OF PROFESSIONAL SERVICE FOR USE EXCLUSIVELY ON THIS PROJECT. REUSE OF ANY PORTION OF THIS DOCUMENT IS PROHIBITED. COPYRIGHT 2022 - OTS ENGINEERING SERVICES LTD.</p>	
<p><b>OTS ENGINEERING</b> 204 Birk Street P.O. Box 1041 Burlington, ON L7R 7J7 Phone: (765) 745-5533 Fax: (765) 745-7466 Email: info@otsengineering.com</p>	
PROJECT	NEW FIRE STATION No 1
	488 COUNTY ROAD 10 MILLBROOK ONTARIO
TITLE	GROUND FLOOR PLAN - HVAC
SCALE	AS NOTED DWG NO.
DRAWN	S. STRAVAGHAN
DESIGNED	S. STRAVAGHAN
CHECKED	REB
PROJECT	21061
REV.	NOV 2021 000 FILE NO. 2107001

**M2**



11 SECOND FLOOR PLAN  
SCALE: 1 : 75 (METRIC)



5 MEZZANINE FLOOR PLAN  
SCALE: 1 : 75 (METRIC)

DIFFUSER & GRILLE SCHEDULE				
TYPE	MANUFACTURER	FUNCTION	MODEL	REMARKS
A	E.H. PRICE	SUPPLY	24"x24"V8GD/31/3C/B12	24"x24" 3 GONE STEEL DIFFUSER FOR T-BAR LAY IN WHITE FINISH
B	E.H. PRICE	SUPPLY	5200/F/L/A/B12	DOUBLE DEFLECTION, STEEL, DAMPER, 32mm (1-1/4") FLAT BORDER, SCREEN FASTENINGS WHITE FINISH
C	E.H. PRICE	RETURN	CORE STYLE 80	1/2"x1/2"x1/2" ALUMINUM GRID CORE FOR T-BAR LAY IN, WHITE FINISH
D	E.H. PRICE	EXHAUST	5950/F/L/A/B12	SINGLE DEFLECTION, 1/2" BLADE SPACINGS, 52 (1-1/4") FLAT BORDER, OPPOSED BLADE DAMPER, SCREEN FASTENINGS, WHITE FINISH
E	E.H. PRICE	TRANSFER	5850/F/L/A/B12	SINGLE DEFLECTION, 1/2" BLADE SPACINGS, 52 (1-1/4") FLAT BORDER, SCREEN FASTENINGS, WHITE FINISH
F	E.H. PRICE	TRANSFER	5761/BF/B15	HEAVY DUTY STEEL DOOR GRILLE, 1 1/8"x6" FLAT BORDER BOTH SIDES, SCREEN FASTENINGS, ALUMINUM POWDER COAT FINISH

ALTERNATES : METALLAIRE, NALOR

COMPRESSED AIR DESIGN NOTES:

- DESIGN CODE: ANSI/ASME B31.1
- WORKING PRESSURE: 40 PSI
- DESIGN PRESSURE: 50 PSI
- DESIGN TEMPERATURE: 50°F
- TOTAL LENGTH OF PIPE: SEE DRAWING
- TEST PRESSURE: 150% (60 PSI)
- TEST MEDIUM: COMPRESSED AIR AND SOAP
- USE ONLY REGISTERED FITTINGS AND VALVES
- SAFETY RELIEF VALVE, LOCATED AT AIR COMPRESSOR
- MEDIUM: COMPRESSED AIR

COMPRESSED AIR SPECIFICATIONS:

- GENERAL
- SCOPE: INDUSTRIAL QUALITY STEEL PIPING SYSTEMS FOR COMPRESSED AIR RATED AS FOLLOWS:
  - WORKING PRESSURE: 40 PSIG 620 KPA
  - DESIGN PRESSURE: 50 PSIG 684 KPA
  - DESIGN TEMPERATURE: 50°F 10°C
  - MAXIMUM PIPE S: 2

REFERENCE STANDARDS

- DO PIPING SYSTEM WORK IN ACCORDANCE WITH ANSI/ASME B31.1-1985 POWER PIPING CODE
- IN THE EVENT OF DISAGREEMENT BETWEEN THIS SPECIFICATION AND REFERENCE PUBLICATIONS, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.
- PRODUCTS
  - STEEL PIPE: TO ASTM A86-84, SCHEDULE 40, GRADE B, TYPE E
- FITTINGS
  - DUCTILE IRON THREADED
  - ELBOWS: DUCTILE IRON THREADED
  - PIPPLES: SCHEDULE 40, TO ASTM A86-84
- VALVES
  - GATE VALVES: TO NPS 6, CODE APPROVED, CLASS 125 FLANGED ENDS, IRON BODY, COBALT BRONZE MOUNTED
  - ACCEPTED MATERIAL: JENKINS FIG. 484
- HANGERS, SUPPORTS AND SPRAY BRACES
  - FABRICATE HANGERS, SUPPORTS AND SPRAY BRACES IN ACCORDANCE WITH ANSI B31.1-1985 AND MSS-SP58-1988
  - SUPPORT FROM TOP OF STRUCTURAL MEMBERS WHERE POSSIBLE. WHERE STRUCTURAL BEARING DOES NOT EXIST OR INSERTS ARE NOT IN SUITABLE LOCATIONS, PROVIDE SUPPLEMENTARY STRUCTURAL STEEL MEMBERS
  - PIPE ATTACHMENT: ADJUSTABLE GLEVIS TO MSS-SP58, TYPE I.
- EXECUTION
  - INSTALL COMPRESSED AIR PIPING IN ACCORDANCE WITH THE ONTARIO BOILER & PRESSURE VESSEL CODE AND ANSI/ASME B31.1-1985 POWER PIPING CODE
  - SLOPE PIPING DOWN IN DIRECTION OF FLOW TO LOW POINTS
  - USE ECCENTRIC REDUCERS OF PIPE SIZE CHANGE INSTALLED TO PROVIDE POSITIVE DRAINAGE
  - REAM PIPES, CLEAN SLACK AND DIRT, INSIDE AND OUT.
- VALVES
  - INSTALL VALVES WITH STEMS UPRIGHT OR HORIZONTAL UNLESS OTHERWISE APPROVED OTHERWISE
  - INSTALL VALVES AT ALL BRANCH TAKE-OFFS TO ISOLATE EACH PIECE OF EQUIPMENT, AND AS INDICATED.

9.3 HANGERS

1 SPACINGS AND MIDDLE ATTACHMENT (ROD) DIAMETER WITHIN 500MM OF EACH HORIZONTAL ELBOW AND AS SPECIFIED IN TABLE BELOW.

PIPE SIZE NPS	ROD DIAMETER	MAXIMUM SPACING STEEL
2	10MM	3.2M
2 1/2	10MM	3.6M
3	10MM	3.8M
4	18MM	4.2M

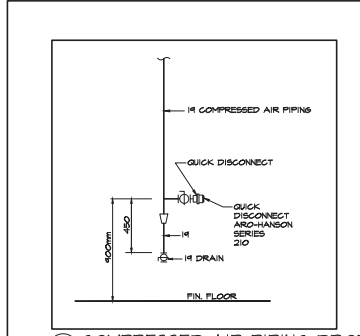
2 OFFSET HANGER SO THAT ROD IS VERTICAL IN OPERATING POSITION.  
3 ADJUST HANGERS TO EQUALIZE LOAD.

9.4 TESTS

- HAVE ENGINEER WITNESS TEST. NOTIFY ENGINEER MINIMUM OF ONE WORKING DAY PRIOR TO TEST.

9.5 MARKING

- IDENTIFY AND MARK PIPING.

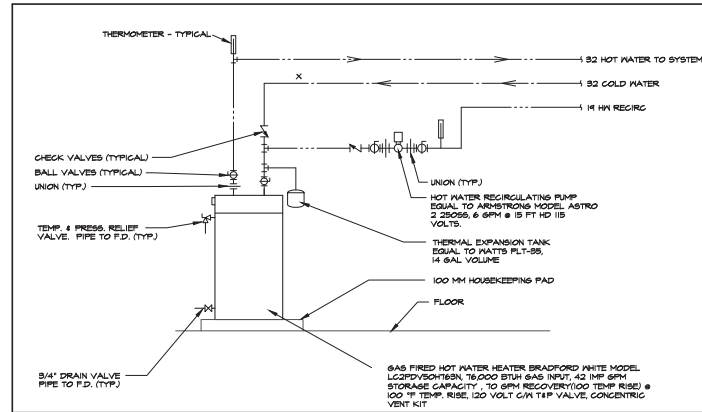
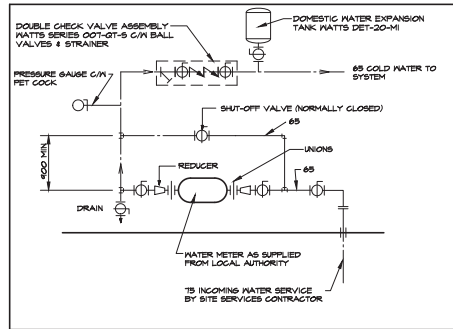


9 COMPRESSED AIR PIPING DROP  
SCALE: NTS

ISSUED FOR TENDER	MAY 2/22 2015
NO. DESCRIPTION	DATE BY
ISSUES	
<p>THIS DRAWING IS AN INSTRUMENT OF PROFESSIONAL SERVICE FOR USE EXCLUSIVELY ON THIS PROJECT. RE-USE OF ANY PORTION OF THIS DOCUMENT IS PROHIBITED. COPYRIGHT 2022 - OTS ENGINEERING SERVICES LTD.</p>	
<p><b>OTS ENGINEERING</b> 254 Birk Street P.O. Box 1841 Peterborough, ON K9J 7Y7 Phone: (705) 745-5533 Fax: (705) 745-7888 Email: info@otsengineering.com</p>	
<p>PROJECT: NEW FIRE STATION No 1 988 COUNTY ROAD 10 MILLBROOK, ONTARIO</p>	
<p>TITLE: SECOND &amp; MEZZANINE FLOOR PLANS - MECHANICAL</p>	
SCALE: AS NOTED	DWG NO.:
DESIGNED: S. STRANAGHAN	
CHECKED: REB	
PROJECT: 21061	
<p>REV. - NOV 2022 000 FILE NO. 21061</p>	

PLUMBING FIXTURE SCHEDULE							APPROVED ALTERNATES: ZURN, DELTA		
NO.	DESCRIPTION	HOT WATER	TEMP WATER	COLD WATER	DRAIN	VENT	FIXTURE MAKE & MODEL	TRIM MAKE & MODEL	REMARKS
A	WATER CLOSET	-	-	15	3"	50	AMERICAN STANDARD "CADET PRO" RIGHT HEIGHT 258AA154 FLOOR MTD VITREOUS CHINA ELONGATED, 34 mm (1 1/8") GLAZED TRAPWAY, LINED FLUSH TANK, 4.8L (1.07 GAL) FLUSH 418BA-T4 (TANK COVER LOCKING DEVICE) CHROME FINISH HANDLE	CENTOGCO 820915.001 HEAVY DUTY OPEN FRONTED FRONT WITH COVER FOR ELONGATED BOWL, STAINLESS STEEL CHECK HINSES, METAL WASHERS & STAINLESS STEEL POSTS AND NUTS	C/W MCGUIRE CHROME PLATED RIGID TOILET SUPPLY & ESCUTCHEONS
A1	WATER CLOSET - BARRIER FREE	-	-	15	3"	50	AMERICAN STANDARD "CADET PRO" RIGHT HEIGHT 258AA154 FLOOR MTD VITREOUS CHINA ELONGATED, 34 mm (1 1/8") GLAZED TRAPWAY, LINED FLUSH TANK, 4.8L (1.07 GAL) FLUSH 418BA-T4 (TANK COVER LOCKING DEVICE) CHROME FINISH HANDLE	CENTOGCO 820915.001 HEAVY DUTY OPEN FRONTED FRONT WITH COVER FOR ELONGATED BOWL, STAINLESS STEEL CHECK HINSES, METAL WASHERS & STAINLESS STEEL POSTS AND NUTS	C/W MCGUIRE CHROME PLATED RIGID TOILET SUPPLY & ESCUTCHEONS
B	LAVATORY	15	-	15	3/2"	52	AMERICAN STANDARD "MURRO" 0154 0046C VITREOUS CHINA WALL MOUNTED, REAR OVERFLOW, RECESSED SELF DRAINING DECK, 102mm (4") CENTRES, C/W 0091 0202C SHROUD/KNEE CONTACT GUARD	MOEN 8425 SINGLE HANDLE DECK FAUCET, ALL METAL, CONST. CHROME PLATED, 4" LEVER, DURALAST CARTRIDGE, 1.2 GPM, OPEN GRID STRAINER	C/W FLEXIBLE SUPPLIES & ESCUTCHEONS
B1	LAVATORY - BARRIER FREE (PUBLIC)	15	-	15	3/2"	52	AMERICAN STANDARD "MURRO" 0154 0046C VITREOUS CHINA WALL MOUNTED, REAR OVERFLOW, RECESSED SELF DRAINING DECK, 102mm (4") CENTRES, C/W 0091 0202C SHROUD/KNEE CONTACT GUARD	MOEN CARBOL ELECTRONIC (AC POWER), BRASS CONST. CHROME PLATED, 4" CENTRESET, VANDAL RESISTANT AERATOR, 1.8 L/MIN (0.3 GPM), OPEN GRID STRAINER C/W ADJUSTABLE THERMOSTATIC MIXING VALVE & CONNECTOR & TRANSDUCER	C/W FLEXIBLE SUPPLIES & ESCUTCHEONS
B2	LAVATORY - BARRIER FREE	15	-	15	3/2"	52	AMERICAN STANDARD "MURRO" 0154 0046C VITREOUS CHINA WALL MOUNTED, REAR OVERFLOW, RECESSED SELF DRAINING DECK, 102mm (4") CENTRES, C/W 0091 0202C SHROUD/KNEE CONTACT GUARD	MOEN 8425 SINGLE HANDLE DECK FAUCET, ALL METAL, CONST. CHROME PLATED, 4" LEVER, DURALAST CARTRIDGE, 1.2 GPM, OPEN GRID STRAINER	C/W FLEXIBLE SUPPLIES & ESCUTCHEONS
C	SHOWER	15	-	15	50	52	BY GENERAL CONTRACTOR	MOEN SINGLE HANDLE POSI TEMP PRESSURE BALANCING VALVE, T875ERS VALVE, 1.5 GPM, SHOWER FINISH C/W ROUGH-IN VALVE, SHOWER ARM & SHOWER HEAD	C/W FLEXIBLE SUPPLIES & ESCUTCHEONS
D	SINK - 2 COMP.	15	-	15	56	52	FRANKE LBD2608P-1, 20 GAUGE, TYPE 502 18-9 55, 8" (200mm) CENTRE SET, SATIN FINISH ON EXPOSED SURFACES, 3 1/2" (89mm) GRIND CUP STRAINER	MOEN 8701 SINGLE HANDLE DECK FAUCET, ALL BRASS CONST. CHROME PLATED, DECK PLATE, 1" LONG SWING SPOUT, 8" CENTRES, DURALAST CARTRIDGE, 5/7 L/min (1.5 GPM)	C/W FLEXIBLE SUPPLIES & ESCUTCHEONS
D1	SINK - 2 COMP.	15	-	15	56	52	FRANKE LBD2608P-1, 20 GAUGE, TYPE 502 18-9 55, 8" (200mm) CENTRE SET, SATIN FINISH ON EXPOSED SURFACES, 3 1/2" (89mm) GRIND CUP STRAINER	MOEN 8249 TWO HANDLE DECK FAUCET, ALL BRASS CONST. CHROME PLATED, DECK PLATE, 216mm LONG SPOUSEBACK SPOUT, 200mm (8") CENTRES, NON METALLIC CARTRIDGE, 5.7 L/min (1.5 GPM)	C/W FLEXIBLE SUPPLIES & ESCUTCHEONS
E	EMERGENCY EYE/ FACE WASH	15	15	15	56	52	HANS TR60BT-1460BT STAINLESS STEEL, BOWL/EYE/ FACE WASH, ABS SHOWER HEAD, PRESSURE ACTIVATED PLASTIC POP OFF 3.7 USGPM FLOW CONTROL	HANS 1201R THERMOSTATIC MIXING VALVE WITH THE FLOW OF 10 USGPM	1/2" HOT & COLD WATER TO MIXING VALVE - VALVE LOCATED IN HIGH ON WALL
F	LAUNDRY BOX	15	-	15	50	50	PPP MH-5004LB, STEEL, BOX WITH WHITE POWDER COATED FINISH, 50mm DRAIN PIPE CONNECTION WATER HAMMER ARRESTORS, QUARTER TURN BALL VALVES		
G	HOP SINK	15	-	15	75	50	FIAT M82424, SQUARE, FLOOR MOUNTED, MOLDED STONE, STAINLESS STEEL STRAINER WITH DRAIN	FIAT 880 WALL MOUNTED TWO HANDLE UTILITY FAUCET, CHROME PLATED FINISH, WALL MOUNTED, 204mm (8") CENTRESET, INTEGRAL STOPS, HOSE OUTLET, 50mm (2") SPOUT WITH VACUUM BRAKER AND BUCKET HOOK	

APPROVED ALTERNATES: GRANE, MAAX, MOEN, MROLIN, KHOLER



LEGEND	
SYMBOL	DESCRIPTION
---	SANITARY ABOVE GROUND
----	SANITARY BELOW GROUND
----	DOMESTIC COLD WATER
----	DOMESTIC HOT WATER
----	DOMESTIC HOT WATER REGICULATING LINE
----	SANITARY VENT
----	COMPRESSED AIR LINE
(A)	BALL VALVE
(A)	PLUMBING FIXTURE DESIGNATION
⊕	NATURAL GAS PIPING
⊕	NATURAL GAS PIPING ON ROOF
GO	CLEANOUT (BELOW GROUND & ABOVE GROUND DRAINAGE)
NFB	NON FREEZE HOSE BIBB
⊠	SUPPLY DIFFUSER
⊠	RETURN OR EXHAUST GRILLE
⊠	SIDEWALL SUPPLY OR RETURN GRILLE
⊠	10"x8" TRANSFER SHEET METAL SLEEVE IN WALL ABOVE CEILING (2" WIDER THAT WALL THICKNESS)
⊠	RETURN OR EXHAUST DUCT DOWN OR AWAY
⊠	SUPPLY DUCT DOWN OR AWAY
⊠	SUPPLY DUCT UP OR TOWARDS
⊠	RETURN OR EXHAUST UP OR TOWARDS
⊠	METAL FLEXIBLE DUCTWORK, MAXIMUM LENGTH 10'-0" (SIZE AS DIFFUSER NECK)
⊠	INDICATED 50MM ON COLLAR C/W VOLUME DAMPER (SIZE AS DIFFUSER NECK)
⊠	1" ACOUSTIC DUCT INSULATION (THICKNESS NOT INCLUDED IN DUCT SIZE SHOWN)
⊠	DUCT SILENCER
⊠	DIFFUSER DESIGNATION - TYPE - REFER TO SCHEDULE SIZE - DIFFUSER NECK OR GRILLE SIZE
⊠	FLEXIBLE CONNECTION
⊠	TURNING VANES (DOUBLE THICKNESS)
⊠	TYPE "B" FIRE DAMPER IN HORIZONTAL OR VERTICAL DUCT
⊠	BACKDRAFT DAMPER
⊠	VOLUME DAMPER
⊠	THERMOSTAT MTD AT 9'-6" AFF UNLESS OTHERWISE NOTED
⊠	TEMPERATURE SENSOR (MTD AT 9'-6" AFF UNLESS OTHERWISE NOTED)
⊠	THERMOSTAT CONTROL LINE
⊠	1 DAY TIME CLOCK

NO.	DESCRIPTION	DATE	BY
0	ISSUED FOR TENDER	MAY 2/22 2015	

ISSUES			
NO.	DESCRIPTION	DATE	BY

THIS DRAWING IS AN INSTRUMENT OF PROFESSIONAL SERVICE FOR USE EXCLUSIVELY ON THIS PROJECT. RE-USE OF ANY PORTION OF THIS DOCUMENT IS PROHIBITED. COPYRIGHT 2022 - OTS ENGINEERING SERVICES LTD.

**OTS ENGINEERING**  
234 Birk Street  
Fergus, Ontario  
K1M 1Y7  
Phone: (705) 745-5533  
Fax: (705) 745-7466  
Email: info@otsengineering.com

PROJECT: **NEW FIRE STATION No 1**  
988 COUNTY ROAD 10  
MILLBROOK ONTARIO

TITLE: **SCHEDULES & DETAILS MECHANICAL**

SCALE	AS NOTED	DWG NO.
OWNER	G. STRANAVAGHAN	
DESIGNED	G. STRANAVAGHAN	
CHECKED	REB	
PROJECT	21061	

REV: NOV 2022  
000 FILE NO. 2106102

**M4**

**SPLIT AIR CONDITIONING SYSTEM SCHEDULE** ALTERNATES - LENOX, YORK

SYSTEM NO.	LOCATION	MANUFACTURER	MODEL NO.	TYPE	INDOOR UNIT														OUTDOOR UNIT - HEAT PUMP					REMARKS							
					COOLING CAPACITY NOM.				HEATING CAPACITY				FAN				ELECTRICAL				SYSTEM NO.	MANUFACTURER	MODEL NO.		ELECTRICAL			LOW AMBIENT CONTROL	REFRIGERANT		
					KW	MBH	BTU	TON	KW	MBH	BTU	TON	HP	R.P.M.	EXT. STATIC PRESS.	PA	INCH	VOLTS	PH	AMPS					MOCP	VOLTS	PH			MCA	MOCP
SAC-1	SERVICE	CARRIER	54T8040V14-10	FURNACE	9.2	18	NA	NA	11.7	40	11.4	24	504	685	-	-	-	240	1	0.11	NA	G4H	CARRIER	34AH44B	208	1	171	20	YES	410A	INDOOR UNITS C/W MATCHING COOLING COIL. SYSTEM COMPLETE WITH REFRIGERANT PIPING, 4 REFRIGERANT - PIPE CONDENSATE TO NEAREST DRAIN - OUTDOOR UNIT C/W LOW AMBIENT KIT/GRANICASE HTR, FREEZE STAT, FINE Baffle COMPRESSOR START ASSIST, MOTOR MASTER CONTROLLER & WALL HEAT KIT

**AIR CONDITIONING UNIT SCHEDULE**

UNIT NO.	LOCATION	MANUFACTURER	MODEL NO.	SENS COOLING CAPACITY				REFRIG.	SEER OR SEER	NAT GAS HEATING CAP.				FAN				ELECTRICAL				OPERATING HEIGHT	REMARKS						
				KVA		MBH				BTU		INPUT		OUTPUT		AIR FLOW		BHP		EXT. SP				VOLTS		MCA		MOCP	
				KVA	MBH	KVA	MBH			KVA	MBH	KVA	MBH	KVA	MBH	L/S	CFM	L/S	CFM	L/S	CFM			HP	R.P.M.	EXT. SP	PH	INCH	VOLTS
A/C-1	ROOF	CARRIER	486CEM02E2AS	7.5	29.94	10.2	85.14	410A	16.1	32.2	110	29.8	88	566	1200	0.46	1850	144	0.5	208	3	22	30	297	367	2	STAGE HEAT - UNIT TO BE COMPLETE WITH DIRECT DRIVE, ECO-BLUE™ TEMPERATURE ECONOMIZER IV WITH BAROMETRIC RELIEF, BASE ELECTRO MECHANICAL CONTROLS, 24" HIGH ROOF CURB, WALL MTD CO2 SENSOR & DISCONNECT SWITCH		
A/C-2	ROOF	CARRIER	486CEM02E2AS	10.8	37.06	14.6	44.96	410A	16.1	32.2	110	29.8	88	566	1200	0.46	1850	144	0.5	208	3	27	30	274	615				

**UNIT HEATER SCHEDULE** ALTERNATES - MODINE

NO.	HFR	MODEL	NAT GAS HEATING CAP.				FAN				ELECTRICAL				OPERATING HEIGHT	REMARKS			
			INPUT		OUTPUT		AIR FLOW		HP		VOLTS		FLA				MOCP		
			KVA	MBH	KVA	MBH	L/S	CFM	HP	R.P.M.	VOLTS	PH	FLA	MOCP			FLUE DIA INCH	COMB AIR DIA INCH	KG
UH-1	REZNR	UDZ-150	44	150	14.6	124.5	406	1421	1/30	1050	115	1	9.4	15	5"	6"	77	175	C/W THERMOSTAT, HANGING HARDWARE, HORIZONTAL VENT/COMB TERMINATION KIT (CG6), VENT THRU WALL
UH-2	REZNR	UDZ-100	30.8	105	14.6	87.15	363	764	1/30	1050	115	1	9.4	15	4"	4"	44	47	C/W THERMOSTAT, HANGING HARDWARE, HORIZONTAL VENT/COMB TERMINATION KIT (CG6), VENT THRU WALL
UH-3	REZNR	UDZ-150	44	150	14.6	124.5	406	1421	1/30	1050	115	1	9.4	15	5"	6"	77	175	C/W THERMOSTAT, HANGING HARDWARE, HORIZONTAL VENT/COMB TERMINATION KIT (CG6), VENT THRU WALL
UH-4	REZNR	UDZ-150	44	150	14.6	124.5	406	1421	1/30	1050	115	1	9.4	15	5"	6"	77	175	C/W THERMOSTAT, HANGING HARDWARE, HORIZONTAL VENT/COMB TERMINATION KIT (CG6), VENT THRU WALL
UH-5	REZNR	UDZ-150	44	150	14.6	124.5	406	1421	1/30	1050	115	1	9.4	15	5"	6"	77	175	C/W THERMOSTAT, HANGING HARDWARE, HORIZONTAL VENT/COMB TERMINATION KIT (CG6), VENT THRU WALL
UH-6	REZNR	UDZ-80	8.8	30	7.2	24.6	215	456	0.06	1950	115	1	9.4	15	4"	4"	26	30	C/W THERMOSTAT, HANGING HARDWARE, HORIZONTAL VENT/COMB TERMINATION KIT (CG6), VENT THRU WALL
UH-7	REZNR	UDZ-80	8.8	30	7.2	24.6	215	456	0.06	1950	115	1	9.4	15	4"	4"	26	30	C/W THERMOSTAT, HANGING HARDWARE, HORIZONTAL VENT/COMB TERMINATION KIT (CG6), VENT THRU WALL

**HEAT RECOVERY SCHEDULE**

TAG	AREA SERVED	MANUFACTURER	MODEL NO.	OUTSIDE AIR				EXHAUST AIR				WINTER SUPPLY TEMP.		SUMMER SUPPLY TEMP.		ELECTRICAL				OPERATING HEIGHT IN LBS	REMARKS		
				FLOW L/S (CFM)		ESP PA (IN)		FLOW L/S (CFM)		ESP PA (IN)		FAN (HP)		VOLTS		PH		AMP				MOCP	
				FLOW L/S (CFM)	ESP PA (IN)	FAN (HP)	FLOW L/S (CFM)	ESP PA (IN)	FAN (HP)	WINTER SUPPLY TEMP.	SUMMER SUPPLY TEMP.	VOLTS	PH	AMP	MOCP	VOLTS	PH	AMP	MOCP				
ERV-1	PPE ROOMS	GREENTEC	LCH-4E	141 (300)	49.6 (0.4)	-	141 (300)	49.6 (0.4)	-	56" F	78" F	120	1	4.7	15	152	C/W ALUMINUM CORE, ADJUSTABLE MOTORS, THREADED ROD HANGERS & FILTERS						
ERV-2	PCCP	GREENTEC	PE 715 ERV	58 (80)	6.2 (0.25)	-	58 (80)	6.2 (0.25)	-	56" F	78" F	120	1	1.5	15	152	C/W ALUMINUM CORE, ADJUSTABLE MOTORS, THREADED ROD HANGERS & FILTERS						

**FAN SCHEDULE** ALTERNATES - PIEN, COOK

FAN NO.	LOCATION	FUNCTION	MANUFACTURER	FAN TYPE	MODEL NO.	CAPACITY		EXT. STATIC PRESS	FAN R.P.M.	MOTOR				HEIGHT	REMARKS			
						L/S	CFM			HP	IN	VOLTS	PHASE			RPM	KG	LBS
						L/S	CFM			HP	INCH	HP OR IN	VOLTS			PHASE	RPM	KG
EF-1	UWR-106	EXHAUST	GREENHECK	CEILING EXHAUST	SP-80-V6	58	80	62	0.25	495	6	120	1	495	5.4	12	0.6 BONES C/W "V6" MOTOR DIAL ON FAN, 2 SPEED, BACKDRAFT DAMPER	
EF-2	JAN-110	EXHAUST	GREENHECK	CEILING EXHAUST	SP-80-V6	58	80	62	0.25	495	6	120	1	495	5.4	12	0.6 BONES C/W "V6" MOTOR DIAL ON FAN, 2 SPEED, BACKDRAFT DAMPER	
EF-3	NR-104	EXHAUST	GREENHECK	CEILING EXHAUST	SP-A340-V6	71	150	62	0.25	424	18	120	1	424	10.4	24	2 BONES C/W "V6" EC MOTOR, DIAL ON FAN, VIBRATION ISOLATOR, BACKDRAFT DAMPER	
EF-4	NR-108	EXHAUST	GREENHECK	CEILING EXHAUST	SP-A340-V6	106	225	62	0.25	1015	18	120	1	1015	10.4	24	3 BONES C/W "V6" EC MOTOR, DIAL ON FAN, VIBRATION ISOLATOR, BACKDRAFT DAMPER	
EF-5	NR-125	EXHAUST	GREENHECK	CEILING EXHAUST	SP-80-V6	58	81	31	0.125	495	6	120	1	495	5.4	12	0.6 BONES C/W "V6" MOTOR DIAL ON FAN, 2 SPEED, BACKDRAFT DAMPER	
EF-6	APPARATUS	EXHAUST	GREENHECK	SIDEWALL EXHAUST	SEI-18-42H-V6	1265	2680	31	0.125	1042	3/4	HP	208	1	1125	17.2	36	3.3 BONES C/W "V6" EC MOTOR, MOTOR DIAL ON FAN, BACKDRAFT DAMPER
EF-7	APPARATUS	EXHAUST	GREENHECK	SIDEWALL EXHAUST	SEI-18-42H-V6	1265	2680	31	0.125	1042	3/4	HP	208	1	1125	17.2	36	3.3 BONES C/W "V6" EC MOTOR, MOTOR DIAL ON FAN, BACKDRAFT DAMPER
EF-8	STOR	EXHAUST	GREENHECK	INLINE CABINET	CSP-A125	55	117	31	0.125	480	5/4	120	1	480	7.1	17	0.3 BONES C/W ISOLATION KIT, BACKDRAFT DAMPER	
EF-8	STOR	EXHAUST	GREENHECK	INLINE CABINET	CSP-A125	55	117	31	0.125	480	5/4	120	1	480	7.1	17	0.3 BONES C/W ISOLATION KIT, BACKDRAFT DAMPER	
DSH-1	T TO APP BAY	DESTRAIT	CANARM	CEILING PROPELLER	CF80 DYNIN	4221	8444	-	-	-	-	120	1	-	8.4	18.5	WHITE C/W 450 MM (18" DOWNROD) REM-DC004-H SPEED CONTROLLER TO CONTROL THE 3 FANS C/W WITH REVERSE	
RH-A	SUITE KITCHEN	EXHAUST	BROAN	RANGE HOOD	BUBB055	52	110	62	0.25	-	-	120	1	-	-	-	150 MM (6") WIDE STAINLESS STEEL C/W BACK DRAFT DAMPER SPEED CONTROLLER & LIGHTS	

**EXHAUST & INTAKE LOUVRE SCHEDULE**

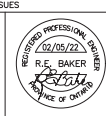
TYPE	MANUFACTURER	MODEL	THICKNESS	REMARKS
A	VENTEX	2225	2"	6085-T5, EXTRUDED ALUMINUM, STATIONARY 45° BLADE, 2" DEEP, STORM-PROOF LOUVRE SYSTEM, 1/2"X1/2" GALVANIZED 14 GAUGE BIRDSCREEN, COLOUR TO BE SELECTED BY ARCHITECT.
B	VENTEX	2455	4"	6045-T5, EXTRUDED ALUMINUM, STATIONARY 90° BLADE, 4" DEEP, STORM-PROOF LOUVRE SYSTEM, 1/2"X1/2" GALVANIZED 14 GAUGE BIRDSCREEN, COLOUR TO BE SELECTED BY ARCHITECT.

ALTERNATES - E.H. PRICE

**ELECTRIC DUCT HEATER SCHEDULE**

UNIT NO.	MANUFACTURER	MODEL	DUCT DIMENSIONS (MM)	KVA	VOLTS/ PHASES	STAGES	AIR FLOW L/S	AT TEMP °F	CONT. VOLTS	OPTIONS
DH-1	THERMOLEC	FC	250 250 5	208	SCR	300	52	24	C/W OPTION 1, 2, 3, 4, 5, 10	
DH-2	THERMOLEC	TER-6-120	1800 1800 4	1201	SCR	47	54	24	C/W AIR FLOW SENSOR, TEMPERATURE CONTROLLER AND SENSORS	

- REQUIRED OPTIONS:
- 1 BUILT-IN DISCONNECT SWITCH
  - 2 SCR PROPORTIONAL CONTROLLER
  - 3 SCREENS BOTH SIDES
  - 4 ELECTRONIC AIR FLOW SENSOR
  - 5 SOLID STATE RELAY (TRIAC)
  - 6 LOAD FUSES, HRC TYPE
  - 7 PILOT LIGHTS
  - 8 FULL BREAK CONTRACTORS
  - 9 ELECTRONIC ROOM THERMOSTAT RT
  - 10 MODULATING DUCT THERMOSTAT - 0 DEG F TO 100 DEG F
  - 11 24 VOLT CONTROL CIRCUIT - FOR CONNECTION TO BY-PASS BOX CONTROLS

ISSUED FOR TENDER	MAY 2/22 2025
NO. DESCRIPTION	DATE BY
ISSUES	
	
THIS DRAWING IS AN INSTRUMENT OF PROFESSIONAL SERVICE FOR USE EXCLUSIVELY ON THIS PROJECT. RE-USE OF ANY PORTION OF THIS DOCUMENT IS PROHIBITED. COPYRIGHT 2022 - OTS ENGINEERING SERVICES LTD.	
<b>OTS ENGINEERING</b> 204 Birk Street P.O. Box 3947 Scarborough, Ont. M1V 4Y7 Phone: (753) 745-5533 Fax: (753) 745-7888 Email: info@otsengineering.com	
PROJECT	NEW FIRE STATION No. 1
<b>488 COUNTY ROAD 10 MILLBROOK, ONTARIO</b>	
TITLE	SCHEDULES MECHANICAL
SCALE	AS NOTED
DESIGNED	B. STRAVAGHAN
CHECKED	REB
PROJECT	21061
REV.	NOV 2022 000 FILE NO. 2106102
M5	

