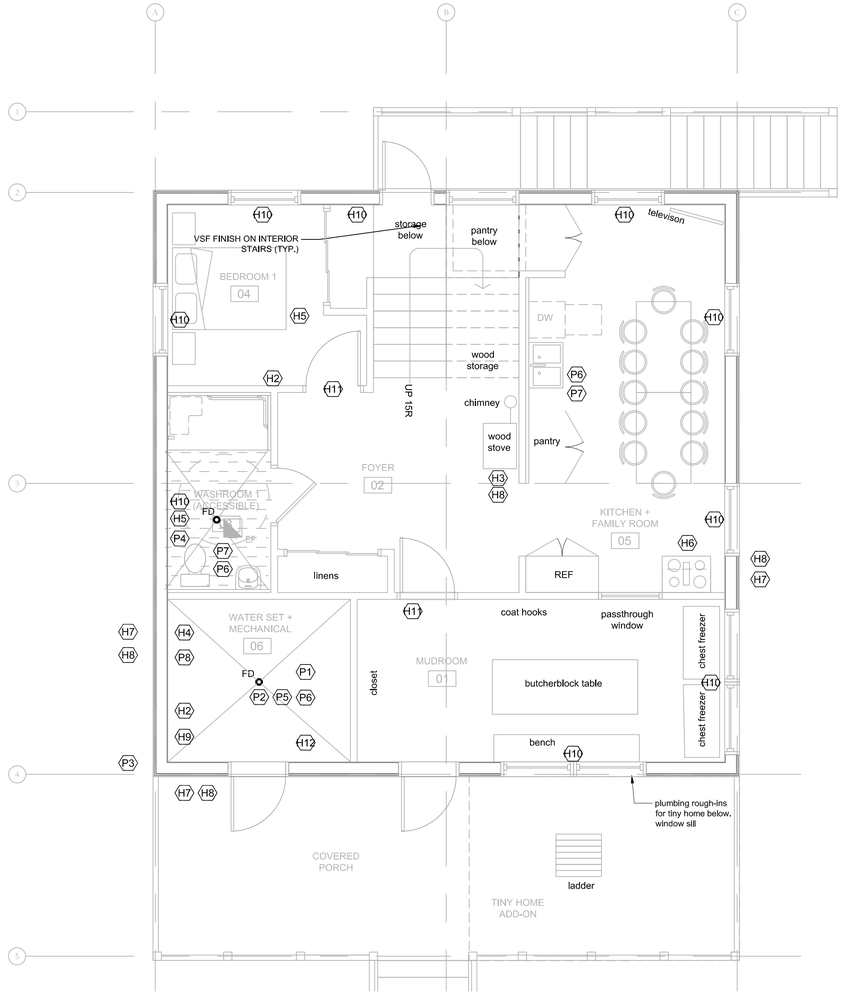
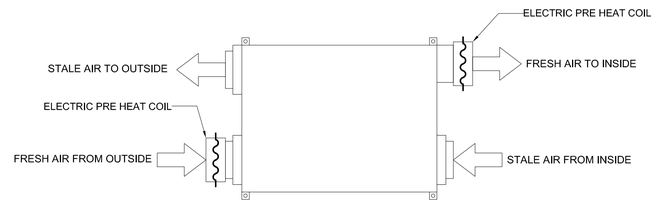


1 M-01 GROUND FLOOR
1:50



2 M-01 HRV DETAIL
N.T.S.

PROJECT INFORMATION

1	BUILDING LOCATION	
2	ROOF AREAS	
3	EXISTING ROOF ASSEMBLIES	
4	NEW ROOF ASSEMBLIES	

HVAC KEYNOTES:

H1 -PROVIDE AN INDEPENDENT DRYER VENT DUCT TO THE OUTSIDE THROUGH AN EXTERIOR WALL

H2 -PROVIDE A CARBON MONOXIDE DETECTOR IN EACH BEDROOM

H3 -FOR WOOD STOVES PROVIDE A SUITABLE CHIMNEY (FLUE) THROUGH THE ROOF, AND AN OUTDOOR AIR (COMBUSTION AIR) DUCT FROM A FLOOR OPENING CONNECTED DIRECTLY TO THE WOOD BURNING STOVE. THE OUTDOOR AIR OPENING TO THE OUTSIDE SHOULD BE BELOW THE BOTTOM OF THE STOVE'S FIREBOX TO HELP PREVENT TOO MUCH COLD AIR FROM ENTERING THE BUILDING. WOOD STOVES SHOULD BE A TYPE THAT CAN PRE-HEAT ITS OUTDOOR AIR. WOOD STOVES SHOULD NOT BE A 'CATALYST' TYPE.

H4 -PROVIDE A HEAT RECOVER VENTILATOR (HRV). THE UNIT SHOULD BE COMPLETE WITH A SUPPLY FAN, EXHAUST FAN, DEFROST SYSTEM, ELECTRIC PRE-HEATER, ELECTRIC HEATER, AND MANUAL CONTROL SWITCH. THE UNIT SHOULD HAVE A LOW TEMPERATURE REDUCTION FACTOR OF NOT LESS THAN 50% AT -25C OUTDOOR AIR TEMPERATURE. THE PRE-HEATER SHOULD BE ABLE TO HEAT THE OUTDOOR AIR TO 0C. THE HEATER SHOULD BE AFTER THE HRV AND ABLE TO HEAT THE AIR TO ROOM TEMPERATURE. THE DUCT FROM THE OUTSIDE SHOULD BE INSULATED AND HAVE A DAMPER IN THE DUCT IN ORDER TO SET THE DESIRED AIRFLOW.

H5 -PROVIDE AN EXHAUST DUCT FROM HRV TO EVERY BEDROOM AND BATHROOM WITH THE EXHAUST INLET LOCATED AT THE CEILING LEVEL

H6 -PROVIDE AN EXHAUST FAN DUCT TO THE OUTSIDE OF A MINIMUM OF 50 L/S AIRFLOW IN THE KITCHEN

H7 -LOCATE ALL AIR EXHAUST AND INTAKE WALL OPENINGS ABOVE THE ACCUMULATED SNOW LEVEL

H8 -LOCATE ALL AIR INTAKES WALL OPENINGS AWAY FROM POTENTIAL AIR CONTAMINATION SOURCES SUCH AS EXHAUST AIR OPENINGS, FUEL SYSTEM VENT PIPING, DRYER VENTS, OR VEHICLE PARKING AREAS

H9 -PROVIDE AN OIL FIRED FURNACE WITH DIRECT , SIDE WALL FLUE AND COMBUSTION AIR INTAKES. LOCATE OIL STORAGE TANK OUTDOORS

H10 -PROVIDE A DUCTED HEATING REGISTER FROM THE FURNACE TO EACH ROOM WITH AN EXTERNAL WALL. LOCATE REGISTERS UNDER WINDOWS AND ALONG EXTERIOR WALLS.

H11 -PROVIDE AT LEAST ONE DUCTED RETURN AIR GRILL FROM EACH FLOOR . EACH ROOM SHOULD HAVE A RETURN AIR GRILLE, OR A GAP UNDER THE DOOR CONNECTED TO A ROOM THAT HAS A RETURN AIR GRILLE.

H12 -PROVIDE AN ELECTRIC SPACE HEATER.

PLUMBING KEYNOTES:

P1 -PROVIDE POTABLE WATER STORAGE TANKS WITH ACCESS FOR EXTERNAL TRUCK FILLING.

P2 -PROVIDE A FLOOR DRAIN IN MECHANICAL ROOM THAT HAS THE WATER SERVICE AND HEATER

P3 -PROVIDE BURIED AND INSULATED SANITARY SEWAGE HOLDING TANK SUITABLE FOR PUMPER TRUCK COLLECTION. CONNECTIONS TO THE TANK SHOULD ALLOW FOR GROUND MOVEMENT

P4 -PROVIDE A MINIMUM 3 INCH DIAMETER DRAINAGE PIPE TO EACH WATER CLOSET (TOILETS). PROVIDE A MIN. 4 INCH DIAMETER DRAINAGE PIPE FROM THE BUILDING

P5 -CONNECT A DRAINAGE PIPE TO THE HEAT RECOVERY VENTILATOR

P6 -SLOPE ALL SANITARY DRAINAGE PIPING DOWNWARD IN THE DIRECTION OF FLOW AT A MINIMUM OF 1 IN 50 SLOPE

P7 -PROVIDE SUITABLE PLUMBING VENT PIPING TO THE OUTSIDE THROUGH THE ROOF FOR ALL PLUMBING DRAINAGE LINES

P8 -PROVIDE AN ELECTRIC, TANKLESS WATER HEATER CAPABLE OF PROVIDING A MINIMUM OF 8 GPM.

NOTES

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PROJECT
TECHNICAL GUIDE FOR NORTHERN HOUSING

DRAWING
BUNIBONIBEE BUILDING MECHANICAL LAYOUT NEW WORK

DESIGN	DATE	SCALE
DES	2020-03-30	As Shown
DRAWN: DRW	PROJECT NO. 1901150.01	
CHECKED: CHK	DRAWING NO M-01	VERSION ####
APPROVED: APP		

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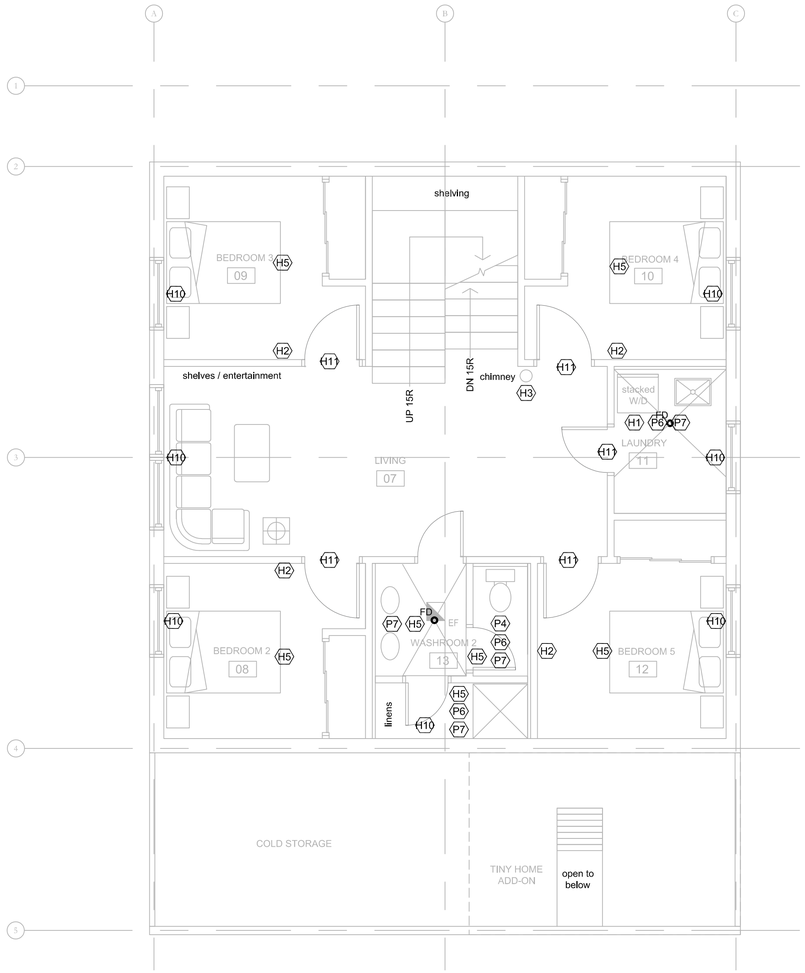

1 M-02 SECOND FLOOR
1:50

PROJECT INFORMATION

1	BUILDING LOCATION	
2	ROOF AREAS	
3	EXISTING ROOF ASSEMBLIES	
4	NEW ROOF ASSEMBLIES	

HVAC KEYNOTES:

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H7 -LOCATE ALL AIR EXHAUST AND INTAKE WALL OPENINGS ABOVE THE ACCUMULATED SNOW LEVEL

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P6 -SLOPE ALL SANITARY DRAINAGE PIPING DOWNWARD IN THE DIRECTION OF FLOW AT A MINIMUM OF 1 IN 50 SLOPE

P7 -PROVIDE SUITABLE PLUMBING VENT PIPING TO THE OUTSIDE THROUGH THE ROOF FOR ALL PLUMBING DRAINAGE LINES

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DESIGN DES	DATE 2020-03-30	SCALE As Shown
DRAWN DRW	PROJECT NO. 1901150.01	
CHECKED CHK	DRAWING NO M-02	VERSION ####
APPROVED APP		

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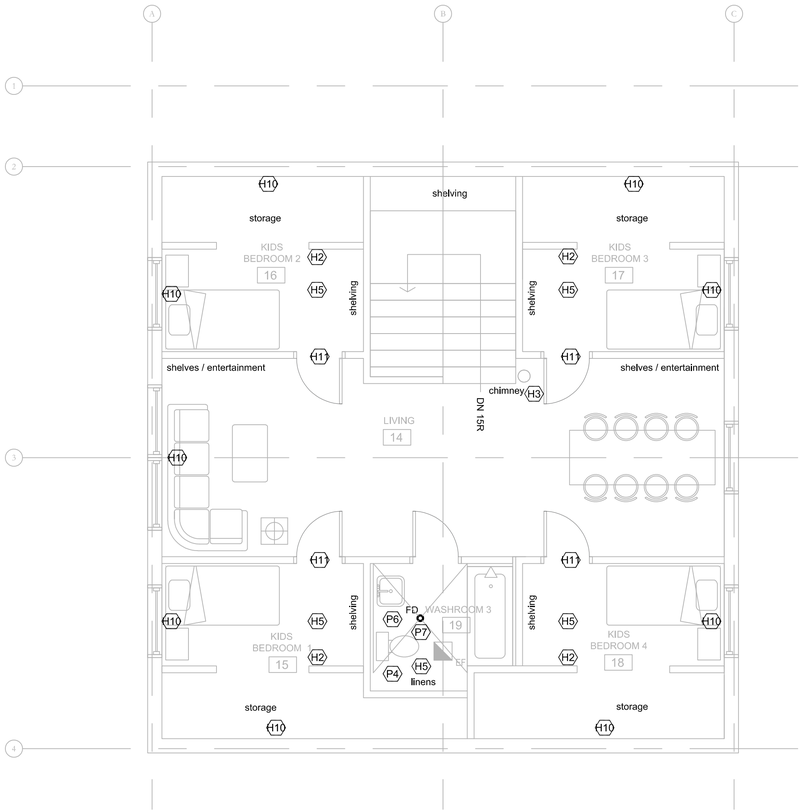

1 M-03 THIRD FLOOR
1:50

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