ENERG	YWISE LLC						
OUTLINE W	ORK SCOPE: FALMOUTH TOWN HAL	L INSULATION UPGRADE	Revision: 11/18/15				
LINE ITEM #	WORK ITEM	LOCATION	RELATED WORK				
AREA "A": ROOF DECK, SLOPED CEILINGS							
1	Insulate the interior surface of the roof deck with 5' of urethane, sprayed foam insulation between the rafter, including the end walls, if the end walls are not already insulated.	Open area, plus behind the knee walls of both sides of the open area, plus the roof deck of the mechanical room located in the NW corner of the space.	Ceiling removal, staging, storage relocation and protection. The building must be vacated during and after the spray foam installation. Note: The GWB of the knee walls may provide a fire barrier for the sprayed foam behind the knee walls; the open-room area must be fire rated, per the State Fire Code. Create access openings in the knee walls.				
2	Alternate #1: Install 1 1/2" of urethane, sprayed foam insulation on the roof rafters of the roof deck, incl fire rating via line item #1.	Open area, plus behind the knee walls of both sides of the open area, plus the roof deck of the mechanical room located in the NW corner of the space.	Added measure to reduce the "thermal-bridging" heat loss, through the roof frame, to the roof deck.				
3	Install 6 3/4" of cellulose, dense pack insulation in the enclosed ceiling rafter bays.	Enclosed sloped-ceiling areas located inside the knee walls on each side of the open space.	Removal the existing fiberglass insulation and rafter vent material from rafter bays or the enclosed ceiling.				
	AREA "B": ATTIC FLAT, SLOPED CEILINGS,						
	KNEE WALL, ROOF DECK						
4	Install 12" cellulose, loose-fill insulation in the attic flat area.	The flat ceiling area above the main room of Area B	Hinge, insulate and air seal the flat-attic access hatch cover. Air seal penetrations in the attic floor. Install and insulation dam around the attic hatch.				

5	Install 6 3/4" of cellulose, dense pack insulation in the enclosed ceiling rafter bays, each side.	Enclosed, sloped-ceiling areas located inside the knee walls on each side of the open space.	Remove the fiberglass insulation from the enclosed ceiling; remove the rafter vents from the east side only; the rafter vents on the west side are to remain in place.
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6	West Side: Insulate the interior surface of the roof deck with 5' of urethane, sprayed foam insulation between the rafter, include the end walls, if exposed to the outside.	West side knee wall area only	Air seal MEP penetrations in the floor deck of the knee wall area.
7	East Side: Install 12" cellulose, loose-fill insulation in the floor area behind the knee wall.	East Side knee wall area only	The mechanical and piping equipment in this area does not provide access to spray foam the roof deck; Air Seal MEP penetrations; soffit ventilation and rafter vents are to remain active.
8	Reinforce the fiberglass insulation in the knee wall with insul-web material	East side knee wall only	Fiberglass insulation remains in place; very limited work space.
	AREA "C": ATTIC FLAT, WALLS, SLOPED CEILINGS, ROOF DECK		
9	Install 12" cellulose, loose-fill insulation in the attic flat area.	The flat ceiling area above the main room of Area C	Hinge, insulate and air seal the flat-attic access hatch cover. Air seal penetrations in the attic floor; Install an insulation dam around the attic hatch; air seal & protect the chimney bypass with Roxul insulation; construct an insulation pour stop at the drop-off to the lower level.
10	Install dense pack cellulose insulation in the N. & S. w/ insul-web; spray foam the E wall that has 4 x 2 framing (2 x 4 on the flat).	Area behind the knee wall and the walls common to the heated space.	Remove fiberglass insulation from the N., S. and E. walls.
11	Air seal the mechanical penetrations in the open areas.	Open, lower attic space at the tie- in to Area B	Adjust and distribute the existing fiberglass insulation.

12	Install 12" cellulose, loose fill insulation on all flat areas at the tie-in, plus north and south of the enclosed area	Open, lower attic space at the tie- in to Area B	Between the E. and W vertical walls, plus N. & S. of the enclosure
	CRAWL SPACE: INSULATE FOUNDATION		
	WALLS & PERIMETER JOIST		
13	Remove the wire mesh and rigid foam board from the knee walls; install 2" of urethane sprayed foam insulation on the knee walls and the perimeter joist areas.	All exposed wood, concrete and rubble foundation surfaces.	Secure and air seal the top of the floor vapor barrier with spray foam, overlap a min. of 3".
14	Air seal the MEP penetrations in the first floor deck.	First floor deck, where visible through the rodent screen.	Removal of the rodent screen required.
15	Insulate and air seal the crawl space door	Crawl Space entrance at the bulk head	2" rigid foam board, plus door gasket kit & door latch hardware.
16	Infill (4) holes in the vapor barrier & seal with 10 mil poly and poly tape	Crawl Space	10 mil poly, minimum & poly tape MUST be utilized