Westcustogo May 12, 2016

Attendance:

Clark Baston
Brian Sites
Stephen Barr
Jennifer Smith
Paul Hodgetts
Darla Hamlin
Rod Duckworth

Guests

Katie Murphy – Economic Development and Sustainability Committee

Alex Carr - Selectmen

Richard Lo – Kaplan Thompson

Fortunaut Mueller- Revision Energy

Rosemary Roy – Town manager

First business approval of minutes from last meeting

Jen would like to add into the last minutes a brief visit by this committee to the kitchen of NYMS. We were surprised to see how much existing and usable stainless there is for a future Westcustogo kitchen. We also questioned who to call to check the Ansel system on the stove.

Fortunat Mueller – Envision Energy –

- Installed solar panels
- Energy efficient heating system
- Work with a lot of municipals and with financing
- Asked that we consider energy efficient for towns benefit
- As a member of North Yarmouth feels it would be best decision
- Maintence and up keep …third party they monitor or can be monitored on line by owner is another option
- They have over 6000 systems and phone is never ringing off the hook for service calls
- Holds up well with our weather
- Average life span of panel warranty is 25 years
- 45-50 years' panels are still producing 80% energy
- They rent the roof and then they put the solar on and then charge for the power after five to seven years we can buy it back…no upfront additional costs
- Example the public works building in Yarmouth is a third party ownership model

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Richard Low – Kaplan Thompson

-energy efficient plans for tight budgets

- net zero, high performance, energy efficient

-referred to Friendship School

-Feels that the attention to detail from the beginning is one of the huge difference they offer

Questions asked

*Do you have any budget models for us to see the difference of having or not having solar?

There is an easy way to compare. Kalan Thompson can determine this based on all the information of proposed building. They'll research the variables that need to be investigated such as use and hours, energy consumption variance would be the loss of heat and ventilation…more in and out heat lose in the winter, shape size performance…then they could determine efficiency.

*Overall is it your (Fortunat's) opinion this (solar panels) would be a savings?

People put these structures in because they save money

*If the structure is as large as existing gym, would it be more in costs than just a regular structure?

Not necessarily, spending more money there can be savings with building a building this way to begin with. Insulation costs are high but savings in the first year from heat lose creates savings immediately. The answer to creating an effective space is hiring experience weather them or someone else but experience. What is a shell. It is a thermal envelope. It may not be what you see and touch inside the building but it must be continuous from slab to walls to roof to roof overhang, etc. It its separate slab and separate walls they need a bridge. If the bridge is steel beams that go to the slab, then steal will radiate the cold from the slab throughout where they are. This does not create the most efficient structure.

*Have you (Kaplan Thompson) worked with a lot of renovations

Residential renovations are where we began. This would be the first commercial renovation of this size.

*Can you use existing slab?

We would use the same principle as a basement renovation. It might be better to remove existing slab depending on stability of slab. Might cost more to keep existing slab in inefficiencies then to start with a new slab that can create the thermal envelope. We would again need a briefing process to pose and answer these suitable questions prior to offering best proposal and determining most cost and energy efficient structure.

-Project goals, what are we trying to achieve

-Energy model

-Examine number of building shells possible

-A number of proposals

- a 2x6 exterior wall with foam

-Double thick insulation

-And then several energy conservation conversations are had

-What is the most efficient for the direction they have chosen to go

*Is the friendship school net zero?

They haven't completed an annual cycle yet. We are expecting to be net zero but still tweaking to get their solar and heat pumps working at maximum efficiency. The appeal is the heat pumps work off pf electric also which you would be making off the roof. Another n=benefit of heat pumps if they are the ac also.

*Can heat pumps keep up?

Heat pump performance ratio of heat out, to get heat in, in temps of 25/30 is a COP of 3 units. In -17 degrees it is a COP of 1.9. New generation of heat pumps can keep up.

No boiler will be needed with solar so we save on initial purchase and maintence of boiler

Kaplan Thompson offered a field trip to see the Friendship School.

Discussed that solar piece is a super easy build. We build what we want and then build a system to fit building or determine what load it needs to handle or even build it just to fit a specific budget.

We as a group with selectman Alex Carr and town manager Rosemary Roy discussed what our actual responsibilities of the Westcustogo Planning Committee are. We spoke of what our ideas of what project requirements are. To be very clear as to what we want done.

We discussed a site visit

FB page is up – but no info on it yet

Objectives for future meetings

-26th next meeting

-Create a preliminary report for selectman by the June 7th.

-Keep on radar, transitioning to the next stage

-changing the charge

- Continuing on

-meld the team to the architect

Meeting adjourned