



Imagine This Addition for Our Tisbury School

- * with 5000 sq. ft. new space for Kitchen/Cafeteria etc
 - * with 5000 sq.ft. new space for Art, Shop, MakerSpace!
 - * with Safe, Educational and Fun After-School Center
 - * with Emergency Shelter for Hundreds
 - * with Excellent Air Quality
 - * Near zero Fossil Fuels and Near-Zero Carbon Footprint
 - * 100% Solar with Battery Storage
 - * Year-round Organic Salads Production for Daily Lunches
 - * Truly Solar-Green, Clean and Energy-Selfsufficient - Etc
- And it will Save Money!

This is a Proposal for such an Addition

By Anna Edey

- 40 years Success with Solviva Solar-Green Design - Better Living at Less Cost
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To the Tisbury School Building Committee, and Tisbury Taxpayers

This is a Proposal for an Addition to Our Tisbury School

By Anna Edey

With 40 years experience developing, maintaining and proving new and better designs and methods for providing solar-powered Heating, Cooling, Electricity and EV cars, organic year-round Food Production, as well as Composting and clean, green, beneficial Wastewater Management, including Flush Toilets. Reducing Fossil Fuel, CO2 emissions, Nitrogen pollution and Other Harm Down to Near Zero, In ways that can also reduce cost of living, and improve health, security and quality of life.

Proposal Presented at the Tisbury School Vision Event, on January 22, 2020

- With Hopes for a Better Future than the one we are currently facing -

This proposal has taken 2 years to arrive to this still preliminary stage of development - through times of hope and optimism - and times of despair as I am always seeking and hoping to find better ways to present my proposals here in my own community - always hoping to learn to write more clearly and self-explanatory about what I recommend for the various big municipal projects that come up on the Vineyard. Always seeking the right tone, the right words, hoping to find better ways to help people to understand that this really is all doable NOW - practical, reliable, available and economically advantageous right NOW, and that this is what we need to do, want to do, and what we must do, NOW. Always hoping to inspire people to get up and do what needs to be done. Now the time has come to let go of our addiction to fossil fuel.

Everything I propose has been designed and calculated in minute detail, which have been constantly evolving over these past 2 years. All components of this proposal have been proven, tested and documented, all of which I can produce upon request. And every detail will of course be scrutinized and optimized by architects and engineers etc.

This proposal is intended as a baseline from which WE, our community, can evolve the best addition WE can imagine.

Anyone can join the discussion. All ideas are welcome and will be carefully considered.

This proposal may be very similar to what Tappe Architects have in mind proposing, in which case we are in luck. But what if this is not the case, and their ideas, knowledge and experience are not sufficiently up-to-date to produce a design that is as solar-green, clean, energy-selfsufficient and economical as this one. If that's the case, then I would be willing to consider an invitation to join the team as Solar-Green Consultant.

That's how we can finally have the School Addition that We Need and Want -

And I propose that it can all be done in ways that would save a lot of time and a lot of money.

Thanks for your honest consideration of this proposal - Can you imagine it?

I would appreciate any and all feedback, ideas, questions, comments, discussions.

Thanks. Let's meet and talk - Anna Edey solvivagreen@gmail.com

What I am proposing is a new 2-story building to be located close to the west wall of the existing old school (see image above), and connected to it via a wide 2-story entryway with ramps that provide full access to both the first and second floors of both this new building and the old one.

It will add 10,000 sq.ft. floor space to the current size of our school, 56,000 sf? plus a 5000 sf full dry Basement, and also a 3000 sf covered screened Porch.

This Proposal aims to fulfill the following wishes and needs for Our School,
(and I would not be surprised if a majority in our Town would want most or all of the following):

- 1 - It Provides 5000 sf space (96 x 52') on the 1:st floor, for Cafeteria and Kitchen -
 - This is 3x more space than the current 1500 sf.
 - With lunch seating for 200 at 20 tables (w. space for 100 additional chairs).
 - With 500 sf Kitchen with multiple stoves, sinks, coolers, prep areas etc.
 - It also includes 500 sf for Restrooms, with multiple full access toilets and sinks.
 - Big doors open wide to the Outdoor Gardens along the south side, and to the
 - Large Covered Screened Porch just beyond (see below).

- 2 - It Provides 5000 sf space (96 x 52') on the 2:nd floor, for Art, Shop, "Maker-Space!"
 - This provides 3x more space than the current 1500 sf.
 - And will be equipped with the best, most cost-effective tools, supplies, shelves, drawers, sinks, tables needed for a wide variety of different Arts and Crafts.
 - in the Woodworking Shop area, and in the Art Studio area, and in the whole overlapping area in the middle - the "Maker-Space"!
 - This also includes 500 sf for restrooms, with multiple full access toilets and sinks.

- 3 - It Provides 5000 sf of dry sunlit Basement space -
 - This provides a highest-level Emergency Shelter and safe long-term storage of foods and hygiene/medical supplies - and connected to a safe well as nearby as possible: providing water security even through the most extended blackouts.

- 4 - It Provides excellent healthy air quality for the entire building
 - All the indoor air is quietly and continuously refreshed and purified as it is circulated through the PhytofilterGardens, the multi-level Indoor Gardens on wheels along the whole south façade.

- 5 - It Provides a wonderful multi-purpose After-School Drop-in Center
 - offering kids of all ages a safe, supervised, well-equipped, fun, educational and nourishing place to come hang-out after school, weekends and holidays.

6 - It Provides Indoor Gardens

- For year-round food production for learning and daily salads for school lunches. And, these multi-level gardens-on-wheels have tremendous capacity for filtering indoor air, thus providing excellent air quality in this entire building. To be managed by excellent Gardener/Teachers and apprentices.

7 - It Provides 100% Solar Power, with Long-term Battery Storage

- To power all functions - including heating, cooling, hot water, air-purification, all electronics, cooking etc. Also transportation, with electric school buses which will save money, and will emit no CO2 pollution (currently the school buses consume roughly ... ? gallons of diesel? Costing? Emitting ...?.tons of CO2 - annually). AND those huge bus batteries will serve as the mega battery system that will store mega kilowatthours of solar energy to keep all functions running through prolonged cloudy weather, or blackouts caused by major grid failure or cyber sabotage terrorism.

8 - It will Require Near Zero Fossil Fuels for any functions (with a goal of Zero)

- The current school consumes roughly 17,000 gallons oil + 200,000 kWh annually.

9 - It therefore will Produce Near Zero CO₂ Pollution (with a goal of Zero)

- The current school causes roughly 400 tons CO₂ pollution annually.

10 - And, of course it will also have:

- Non-Toxic Materials, High Energy Efficiency, Mini-Split Heat Air Pumps for Heating/Cooling/Humidity Control, Air-to-Air Heat-Exchangers, Air Purifiers -

11 - In addition, this Proposal Provides a long Covered Screened Porch

- 3000 sf (107 x 28'), close to the Main Addition, providing much needed protection from solar UV radiation and mosquitos. It provides lots of space for tables, chairs and benches.

At the far end of this structure is a Year-Round Greenhouse, surrounded by Raised Garden Beds, and a Year-Round Composting System capable of continuously turning all the school's food wastes and other compostables into tons of high quality compost.

12 - The roof of this Porch provides space for an additional 5000 sf of PV panels,

- Producing an additional 100,000 kWh of solar electricity annually.

The total combined area of these two roofs amounts to 15,000 sf of PV panels, which, at 20 kWh/sf/yr, will be capable of producing roughly 300,000 kWh of solar electricity annually - which may be more power than the entire building and all its functions will require.

MY PROPOSAL for a Wonderful Tisbury School Addition

- IN A NUTSHELL -

This is a simple basic saltbox design - 2-story, post and beam, full basement - normal amount of opening windows on east, north and west walls. Solid wall of normal opening windows on entire south wall (solar heat and light, no over-heating). Low-pitched single-plane 10,000 sq.ft. roof, with PV roofing that will produce roughly 200,000 kWh of solar electricity annually.

Another 100,000 kWh will be produced on the roof of the proposed adjacent porch. Together, they will generate 300,000 kWh annually, which may be more than will be required to reliably power all functions (we'll know more after we calculate how much energy will be required to run it all - for instance, the mini-splits for heating, cooling and humidity control).

*Let's teach our children the good hope news by actually doing it:
That these 2 PV roofs will continue to generate pretty much
the same amount of energy over the next 20 years or longer -
300,000 kWh annually - free from just solar energy - just sunlight.
Preventing more than 500,000 pounds CO₂ pollution annually.
And requiring hardly any maintenance.*

This is a very strong, simple, logical building design which, upon examination and explanation, every Vineyard architect, engineers and builder (and children!) would understand, and most would agree that this seems to constitute a Pretty Good Basic Design that seems to offer what we need and would like to add to our school, and from which we can evolve toward the Best School Addition that WE can imagine. All ideas are welcome, and will be carefully considered.

It covers most of the criteria that The Good People of Tisbury Want and Need:

- A Big Gorgeous Practical Space for Kitchen/Cafeteria, with lunch seating for 200+ and room for an additional 100 chairs (Town Meetings?)
- A Big Inspiring Maker-Space with well equipped Shop and Art studio
- Which together make a Wonderful Versatile After-School Community Drop-in Center
- A safe and secure Emergency Shelter for the entire school community - offering warming, cooling, safe food and water, electricity, sleeping cots, kitchen, showers and toilets - enough to provide for the needs for of more than 400 people through extended periods of widespread Black-Outs, during which everything we depend on will stop functioning.
- Everything Powered by Solar electricity and Batteries
- Near-zero fossil-fuels (aiming for zero)
- Near-zero Carbon dioxide pollution (aiming for zero)
- On-site Food Production, seed to cafeteria - daily fresh organic salad greens!
- PhytoFilterGardens to provide superior air purification in the entire building.
- No Mold or Mildew, because of the quiet solar-powered ventilation system that keeps the air moving into every nook and cranny - they don't like to settle where air is moving.
- Vitally Important Learning Opportunities for Our Community and Beyond.

And, to top it all off - this proposal aims to be: - Lower cost to build -
- Faster and more efficient to build - Lower cost to operate and maintain.

Imagine all that this addition would be able to offer to our community . . .