

SUSTAINABLE ENERGY COMMISSION
Regular Meeting
Public Works Department, 4 Turkey Hill Road, Newtown
Thursday, November 17, 2022
Called to order at 7:00M

*THESE MINUTES ARE SUBJECT TO APPROVAL BY THE SUSTAINABLE ENERGY
COMMISSION*

Present: Kathy Quinn, David Stout, Derek Pisani, Robert Bohn, Carol Walsh, Mike Oristaglio

Absent: Dana Myjak, George Brown, Robert Bohn, Allen Adriani

Also Present – Director of Public Works Fred Hurley, BOE Director of Facilities Bob Gerbert

Communications – None

Public Comments - None

Acceptance of Minutes – D. Stout moved to accept the minute of the 9/15/22 meeting. D. Pisani seconded, all in favor.

D. Stout moved to accept the minutes of the 10/20/22 meeting, C. Walsh seconded, all in favor.

BUSINESS

Approval of 2023 Meeting Schedule(Attachment A)– D. Stout moved to approve the 2023 meeting schedule. R. Bohn seconded, all in favor.

Follow up on Cenergistic Presentation from October Meeting – B. Gerbert said that they are going to put together an RFP and see what kind of response they get. This is required by the Town's purchasing regulations.

10K Grant decision – No update

Sub-Committees:

EV Charging Stations – D. Pisani discussed the research he has been doing. He met with BEAM and Titan Energy via zoom. Edmond Town Hall and the Community Center are two locations for the EV charging stations.

Energy Storage – No update

Portfolio Manager – No update

VNM solar project – New project waiting state approval – F. Hurley said they are putting in a new application which will not be limited to 5 buildings, they will be able to include street lights as well.

Solar Canopy at Police Department – No update

Other Solar Opportunities – No update

School Updates:

High School (5) RTUs and parking lot lights – B. Gerbert reported that the work on the parking lot lights will start on Monday. They are doing all the exterior building lights and parking lot which should take 2 to 3 weeks to complete.

Hawley – B. Gerbert reported that the project is on target, on budget and on schedule. Two rooftops were delivered and installed, more to come mid-December and January.

Town Building Strategic Plan Committee update – They got Al Miles involved to move this from Gram Clifford's server to the towns for future storage and operation. A copy of the Status Presentation is attached (Attachment B).

Municipal Energy Plan – No update

Social Media – Girl Scout troop 50440 has created fliers to help educate residents on how to recycle correctly. The will be rotated on the Facebook page.

ADDITIONAL ITEMS TO BE ADDRESSED

Changes to recycling/composting efforts – The town is looking to get a grant with DEEP to get on site composting but we would have to do a pay as you throw volunteer pilot program.

Lighting at FFH – They are working on reducing the light pollution caused by the lights at FFH. They are looking at shields that will go onto the lights so they do not cast up.

Next meeting is December 15, 2022

Having no further business, the meeting was adjourned at 7:55pm.

Respectfully Submitted,
Arlene Miles, Clerk



SUSTAINABLE ENERGY COMMISSION
NEWTOWN PUBLIC WORKS
4 TURKEY HILL ROAD, NEWTOWN, CT 06470

2023 MEETING SCHEDULE

Meetings are held on the third Thursday of the month at 7:00pm.

January 19

February 16

March 16

April 20

May 18

June 15

July 20

August 17

September 21

October 19

November 16

December 21

January 18, 2024

B



Town of
Newtown
Connecticut

Status Presentation

November 16, 2022

Town Building Inventory & Planning Work Group

Allen Adriani, P.E., Vice-Chair

Graham Clifford

Bob Gerbert, P.E.

Fred Hurley

Zach Marchetti P.E.

David Schill, P.E.

Ned Simpson, Chair

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Topics

- Our Vision
- Building Data Model
- Demo of Newtown Information System (NIS)
- Status of Loading Data
- Capture and Management of Building Documentation
- Next Steps



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Why A Town Building Inventory

- Save Money
- Efficient Buildings
- Limit disruptions to operations
- Consistency
- Transparency
- Accessibility
- Nonpolitical
- Fact Based
- Work Smarter, not harder
- Training and Orientation
- Knowledge Transfer



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Uses of Building Inventory



Operational

- Maintenance
 - What needs to be done
 - What was done
 - Routine (Preventative Maintenance)
 - What, When, How
 - Repair
 - Follow-up
- Linkage to Work Order System
 - Brightly Systems (Dude's Solutions)
 - DPW System
- Documentation
 - Look-up and Retrieval

Planning

- Project Overlay
 - CIP
 - Non-CIP Replacement
 - Abatement Needed
- Energy Audits
- Ad hoc Queries
- Analysis of Maintenance Data – Patterns to inform
 - Preventive Maintenance Scheduling
 - Saving for replacement
 - Purchases
- Knowledge Transfer

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Defining a Building

- Define as a hierarchy
 - Campus
 - Facility/Building
 - Wing
- Sources for Building Information
 - 2010 inventory spreadsheets (mostly schools)
 - CRMA Insurance filing
 - Individual's knowledge
- Other town systems focus on Properties with information about buildings
 - GIS
 - Vision – Appraiser System
 - IQS – Town Records
- 60 Campuses and 70+ Facilities



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Defining Building Components

A taxonomy, consistent vocabulary, was needed

- Structure:
 - **Group** (Conceptual group, not physical thing)
 - **Systems** (Physical things)
 - **Components** (Physical things)
- Systems and Components have Parameters describing characteristics of the physical things
- Collections of components can be defined and named



Facility (Building) System Groups

1. Structural
2. Envelope
3. Mechanical
4. Plumbing
5. Electrical
6. Interior
7. Safety
8. Grounds
9. Other

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Component Example

Mechanical

A. System: Heating

a. Component: Boiler

Parameter: Boiler Plant

Parameter: Fuel

Parameter: Boiler Type

Parameter: BTU Rating

Parameter: Install Date

Parameter: Condition



B. System: Cooling

C. System: Ventilation

D. System: Exhaust

E. System: Packaged System - HVAC

a. Component: HVAC Heat

b. Component: HVAC Ventilation

c. Component: HVAC Exhaust

d. Component: HVAC Cooling

E. System: Controls

F. System: Fuel Tanks

Parameter: Type

Parameter: Size (gallons, lbs, other)

Parameter: Installation Date

G. System: Elevators

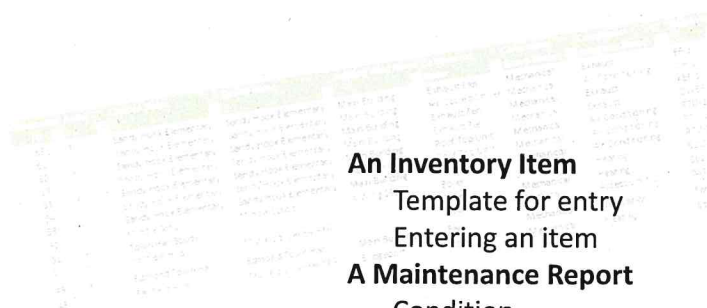
H. System: Other

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Newtown Information System

<https://www.vbbs.com/nis/>



An Inventory Item

Template for entry

Entering an item

A Maintenance Report

Condition

Remaining Useful Life

Work was done

Tagging an Image to an entry

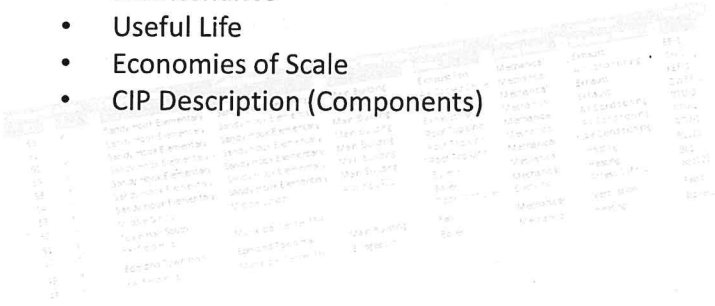
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Newtown Information System

Reporting (Look-up) Examples

- Maintenance
- Useful Life
- Economies of Scale
- CIP Description (Components)




<https://www.vbbs.com/nis/>

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Companion Challenge: Facility Documentation

Digital documents, drawings and images that can be associated with System, Component and/or Facility and Wing

- Architectural & Engineering Design
 - Drawings
 - CAD files
 - Specifications
- As Built
- Inspection and Maintenance Reports
- Collect, Centrally Store and Index files for recent construction
- Scan paper documents



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Newtown Information System

<https://www.vbbs.com/nis/>

Azure Linux VM running Apache/PHP

Azure Blob (for document storage)

Azure SQL DB (for the relational data)

ID	Name	Address	Status
1	Sandy Hook Elementary	100 N. Main St.	Active
2	Sandy Hook Middle School	100 N. Main St.	Active
3	Sandy Hook High School	100 N. Main St.	Active
4	Sandy Hook Elementary	100 N. Main St.	Active
5	Sandy Hook Middle School	100 N. Main St.	Active
6	Sandy Hook High School	100 N. Main St.	Active
7	Sandy Hook Elementary	100 N. Main St.	Active
8	Sandy Hook Middle School	100 N. Main St.	Active
9	Sandy Hook High School	100 N. Main St.	Active
10	Sandy Hook Elementary	100 N. Main St.	Active
11	Sandy Hook Middle School	100 N. Main St.	Active
12	Sandy Hook High School	100 N. Main St.	Active
13	Sandy Hook Elementary	100 N. Main St.	Active
14	Sandy Hook Middle School	100 N. Main St.	Active
15	Sandy Hook High School	100 N. Main St.	Active
16	Sandy Hook Elementary	100 N. Main St.	Active
17	Sandy Hook Middle School	100 N. Main St.	Active
18	Sandy Hook High School	100 N. Main St.	Active
19	Sandy Hook Elementary	100 N. Main St.	Active
20	Sandy Hook Middle School	100 N. Main St.	Active
21	Sandy Hook High School	100 N. Main St.	Active
22	Sandy Hook Elementary	100 N. Main St.	Active
23	Sandy Hook Middle School	100 N. Main St.	Active
24	Sandy Hook High School	100 N. Main St.	Active
25	Sandy Hook Elementary	100 N. Main St.	Active
26	Sandy Hook Middle School	100 N. Main St.	Active
27	Sandy Hook High School	100 N. Main St.	Active
28	Sandy Hook Elementary	100 N. Main St.	Active
29	Sandy Hook Middle School	100 N. Main St.	Active
30	Sandy Hook High School	100 N. Main St.	Active

Design Documentation
User Manual in Draft

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Building Inventory & Planning Work Group Going Forward

- Building Inventory
 - Initial population of the data
 - Ongoing data capture and quality
 - Additions and Replacement
 - Maintenance Routine & Repair
 - Move NIS to Newtown Azure
- Document Management
 - An Infrastructure
 - Initial population of the data
 - Existing Document File Capture from recent construction
 - Document scanning and indexing
 - BOE Project underway
 - Municipal project
 - Ongoing data capture and quality

scanoptics
[Intelligent] Data Management

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