

Town of Newtown  
Town Building Inventory & Planning Work Group  
May 26, 2021 Minutes

THE FOLLOWING MINUTES ARE SUBJECT TO APPROVAL BY THE TOWN BUILDING  
INVENTORY & PLANNING WORK GROUP

The Town Building Inventory & Planning Work Group held a regular meeting Wednesday, May 26, 2021. The meeting was held virtually over Zoom. Ned Simpson called the meeting to order at 7:03 pm.

**PRESENT:** Graham Clifford, David Schill, Zach Marchetti, Deborra Zukowski, Ned Simpson (Chair), and Bob Gerbert (via phone)

**ABSENT:** Allen Adriani, Fred Hurley

**VOTER COMMENTS:** none

**ACCEPTANCE OF THE MINUTES:** Zach M moved to approve the minutes of May 12, 2021, seconded by David S. Motion passed unanimously.

**COMMUNICATIONS:** Deb Z sent out document suggesting alternate nomenclature for the data model. This document was discussed later in the meeting.

**NEW BUSINESS:** None

**OLD BUSINESS:**

**Discussion: Purpose, design and development of a Town building inventory  
Overlay data structure for CIP and other activities for planning:**

Ned S led the discussion, using the information provided in Exhibit A, about a possible overlay for the building inventory database that could be used to assist with the CIP planning process. He noted that Projects #BOE-08 and #BOE-09 (Turf Practice Field and Hawley elevator, respectively) would be new capital items and questioned if they should be added to the inventory database. The team generally agreed that such items should be added, but only after the associated projects were completed.

Ned S then asked about the NMS kitchen renovation in Project #BOE-11. Bob G suggested initially uploading data for the existing kitchen as it may be useful to possibly derive energy use benefits resulting from the renovation that might inform decisions about the CIP. Zach M mentioned that the Sustainable Energy Commission is suggesting that it may be best to look at energy at the building level rather than the system/component level. That would help the commission to focus their efforts on buildings that use more energy than expected.

Ned S then noted in Example 1 (Reed Install Gas Boiler / LED heating) that CIP projects may span multiple systems/components. Graham C suggested that the database would use a different hierarchy for CIP projects, potentially linking to components managed in the inventory. Bob G suggested that candidates for CIP could be identified by looking at age, physical inspections, etc. Ned S was concerned that writing a query that looked at something like age would return too many things to be useful. Ned S requested that Graham C look into mocking up an overlay system for informing CIP planning. Graham C said he would need consensus on what to do, but could look into basic options.

Ned S. moved on the Example 2 (Middle Gate – Window Modifications), asking what information was needed for determining if such a project should be on the CIP. Bob G suggested number of windows per wing, vintages, and type. He said that typically all windows would be done during the same project. Zach M commented that window sizes and orientation could be useful for energy audits. Graham C agreed that such data could be useful as input to an energy audit tool. The discussion continued on about the scope and time requirements for different levels of energy audits.

Moving on to example 3 (Hawley – Elevator to Cafe), Ned S asked if the elevator might span multiple wings. Graham suggested that, like the boilers in Hawley, the elevator could be considered a facility-

Town of Newtown  
Town Building Inventory & Planning Work Group  
May 26, 2021 Minutes

wide resource. The Notes field could be used to further clarify wings or sections of the building that it serviced.

Ned S asked about terminology. Deb Z suggested that the terminology be consistent with the language used by the Legislative Council when discussing the CIP. Ned S then referred to language in the CIP Financial Regulation. All agreed that the use of “Project” was reasonable, and a flag could be added to the components in the building inventory to indicate if they were “Capital Assets” as defined in the regulation.

**Prototype tool for collecting building component information:**

Ned S asked Deb Z to go through her communication, shown in Exhibit B. Deb Z said that the intent was to ensure that the terminology used was clear to users who would be inputting data. Also, she referred to data gathered from the Public Works Garage during the prior meeting to ensure that the terminology was rich enough to capture the information that the engineers called out. The team then discussed if the nomenclature was synonymous in scope with the existing nomenclature used in the database. There was much overlap in the underlying concepts. Deb Z requested that the engineers work together to suggest terminology that made sense to them and that the data team would then retrofit it to the database.

**Other:** None

**Action Item Summary:**

- 1) Graham C will look investigate options for providing a CIP planning overlay.
- 2) Ned S, Deb Z, and Allen A will review the nomenclature used for describing components.

**VOTER COMMENTS:** none

**ANNOUNCEMENTS:** none

**ADJOURNMENT:** Deb Z moved to adjourn the regular meeting of the Town Building Inventory & Planning Work Group at 8:10 pm. Zach M seconded. Motion passed unanimously.

Town of Newtown  
Town Building Inventory & Planning Work Group  
May 26, 2021 Minutes

## Exhibit A:

“Building Info Uses Support CIP 20210525” document provided by Ned S.

# Use of the Building Inventory

## Uses of the inventory

- Identifying and structuring Capital Asset Projects for the Capital Improvement Plan (CIP) In put to BOE and BOS
- Identify and structure large replacement and maintenance projects for planed funding
- Identification of when (year) inspection of a building component should be done
- Record inspection findings of a building component

## Example CIP Capital Asset Projects and the Building Inventory

Table below is an excerpt of some Capital Asset Projects proposed in the '21/'22 thru '30/'31 Capital Improvement Plan (CIP) to use for discussion of how the Town Building Inventory would be used

Town of Newtown, Connecticut *Capital Improvement Plan* '21/'22 thru '30/'31

Department	Project #	'21/'22	'22/'23	'23/'24	'24/'25	'25/'26	'26/'27
Reed - Install Gas Boiler / LED Lighting	BOE-03		1,539,894				
Middle Gate - Window Modifications	BOE-07					1,000,000	
High School - Turf Practice Field (rear of school)	BOE-08					1,100,000	
Hawley - Elevator to Café	BOE-09						318,000
Reed - New Roof, Solar panels remove and reinstall	BOE-10						3,710,000
Middle School - Complete Kitchen Renovation	BOE-11						795,000
High School - New Roof / Restoration	BOE-12						2,921,360
Edmond Town Hall - Parking Lot Improvements	ETH - 1		450,000				
Edmond Town Hall Building Renovations	ETH - 2					550,000	

## Question:

- Will the inventory be useful for Capital Asset Projects that are now things, not replacement or renovation? (BOE-08, BOE-9)
- Will the inventory be useful for something like the Kitchen Renovation (BOE-11) where there is Mechanical Existing/new vent(s) electrical, and plumbing, but also a lot of movable equipment.

## Example 1: - Reed Install Gas Boiler / LED Lighting

This project includes the following data from the inventory. Estimating this project would be driven by information about boiler capacities and performance and count of light fixtures

1. Campus Name = Reed School
2. Facility Name = Reed Intermediate School

Town of Newtown  
Town Building Inventory & Planning Work Group  
May 26, 2021 Minutes

3. Building Wing Name = Original
4. Component Group Name = Mechanical
  - a. Component Subgroup Name = Heating
  - b. Component Name = Boiler
    - i. Parameters
5. Component Group Name = Electrical
  - a. Component Subgroup Name = Lighting?
  - b. Component Name = Boiler
    - i. Parameters

**Example 2: Middle Gate - Window Modifications**

This project includes for following data from the inventory. Estimating this project would be driven by the count of windows standard, typical and special sizes. It would likely cover both the original and addition wings of the facility

1. Campus Name = Middle Gate
2. Facility Name = Reed Intermediate School
3. Building Wing Name = Original
4. Component Group Name = Envelope
  - a. Component Subgroup Name = Windows
  - b. Component Name =
    - i. Parameter
5. Building Wing Name = Addition
6. Component Group Name = Envelope
  - a. Component Subgroup Name = Windows
  - b. Component Name =
    - ii. Parameter

**Example 3: Hawley - Elevator to Café**

Unlike the first two examples which are replacements, this is something new. Inventory my not be a source for CIP development. My understanding is that the elevator would have doors to both the 1928 and 1948 wings

1. Campus Name = Hawley School
2. Facility Name = Hawley Elementary School
3. Building Wing Name = 1928
4. Component Group Name = ?
  - a. Component Subgroup Name = ?
5. Building Wing Name = 1928
6. Component Group Name = ?
  - a. Component Subgroup Name = ?

**Grouping Components into Projects to be funded**

- A. Must be within a Facility
- B. Could be across Facilities if it is a common Component Subgroup
- C. Other?

Town of Newtown  
Town Building Inventory & Planning Work Group  
May 26, 2021 Minutes

## Exhibit B:

“DataModelSchema Ded Z Alternate Nomenclature 20210520” document provided by Deb Z.

Name	Type
Town Garage Campus	Campus
Public Works Garage (PWG)	Facility
Cold Storage Garage (CSG)	Facility
Salt Shed (SS)	Facility
Town Garage Grounds (TGG)	Grounds

### Components within Public Works Garage

Name	System Classification	System	Component	Subcomponent
PWG Roof + properties: type = low pitch, installation date = ?.	Structural [see note 2]	Envelope	Roof	
PWG Roof Sheathing + properties: type=single membrane.	Structural [see note 2]	Envelope	Roof	Sheathing
PWG Roof Insulation + properties: type = ?, depth = 2 inches, installation date = ?.	Structural [see note 2]	Envelope	Roof	Insulation
PWG Ext Walls + properties: type = steel skeletal w/ nblock infill, not reinforced, count = ?.	Structural [see note 2]	Envelope	Wall	
PWG Ext Walls Sheathing + properties: type = metal (I think), installation date = ?.	Structural [see note 2]	Envelope	Wall	Sheathing
PWG Ext Walls Insulation + properties: type = ?, installation date = 1980 ?.	Structural [see note 2]	Envelope	Wall	Insulation
PWG Front Windows + properties: type = double pane, orientation = north, installation date = ?.	Structural [see note 2]	Envelope	Glazing [3]	Window
PWG Front Door + properties: type = ??.	Structural [see note 2]	Envelope	Glazing [3]	Door
PWG Garage Doors + properties: type = ?, count = ?	Structural [see note 2]	Envelope	Glazing [3]	Door
PWG Heating + properties: type = hot water.	Mechanical	Energy.Heating	Distributor	
PWG Boiler + properties: type = ?, location = ?, make = ?, model = ?, manufacturer = ?, rating = ?, rating units = BTU.	Mechanical	Energy.Heating	Boiler	
PWG Boiler Tank + properties: type = oil, location - ?, rating = 1000, rating units = gallons.	Mechanical	Energy.Heating	Boiler	Tank
PWG AC Condenser + properties: type = ?, location = next to generator, make = ?, model = ?, manufacturer = ?, rating = ?, rating units = tons.	Mechanical	Energy.AC	Condenser	

Town of Newtown  
Town Building Inventory & Planning Work Group  
May 26, 2021 Minutes

PWG AC Air Handler                      Mechanical                      Energy.AC                      Ventilation                      Air Handler  
+ properties: type = ??, location = ?, make = ?, model = ?, manufacturer = ?, rating = ?,  
rating units = SEER ?

PWG Air Exhaust                      Mechanical                      Energy                      Exhaust  
+ properties: type = ?, location = garage.

PWG Generator                      Mechanical                      Energy                      Generator  
+ properties: type = ?, location = outside, east side of bldg, make = ?, model = ?, manufacturer = ?,  
rating = 100, rating units = kW.

PWG Generator Tank                      Mechanical                      Energy                      Generator                      Tank  
+ properties: type = diesel, location - ?, rating = ?, rating units = gallons.

Notes:

1. The data contained herein comes from the detailed notes from our May 12 meeting.
2. The concept of “envelope” doesn’t seem to be at the same level as mechanical, electrical, etc. There is what seems (to me) to be another system classification, Structural, that is not yet defined. Might “envelope” fall in this classification? What other systems would fall in the structural classification?
3. I’m not sure what “glazing” is and if it is comparable to walls and roof, though Allen’s data model suggests it is so.
4. Due to time constraints, I was only able to do the the data for envelope and mechanical. Hopefully, I can get all of the data from the detailed notes ready prior to our next meeting, though no promises.