MINNESOTA B3 GUIDELINES

Step by Step Instruction for the Transition from Design and Construction to Operations in the B3 Guidelines Tracking Tool

Prepared by

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The purpose of this document is to facilitate the transition from the *Construction Mode* to the *Occupancy Mode* in the B3 Guidelines Tracking Tool. The *Construction Mode* contains information relating to the planning, design and construction of a project; whereas the *Occupancy Mode* of the B3 tracking tool will be used to record annual energy usage, water usage, ongoing operations management items, and waste diversion rates for a period of 10 years from date of occupancy. This tracking is required for all state general obligation bonded construction projects. The data collected as part of the B3 and SB 2030 programs is publicly accessible.

Below is a step-by-step guide for each project that has completed the *Construction Mode* to transition into the *Occupancy Mode.* **Note:** older state-funded projects that used the previous spreadsheet-based B3 Guidelines version 2.0 or earlier will still be able to use the B3 Guidelines Tracking Tool for their annual reporting, though they will not be required to input their *Construction Mode* information. Projects using the pre-SB-2030 Energy Standard are still required to track their energy consumption information, though they are not required to meet the SB 2030 Standard annually.

When should you consider moving your project from Construction Mode to Occupancy Mode?

1. When the GO Bonded project has completed the Correction Period (CP) phase in the tracking tool

   or

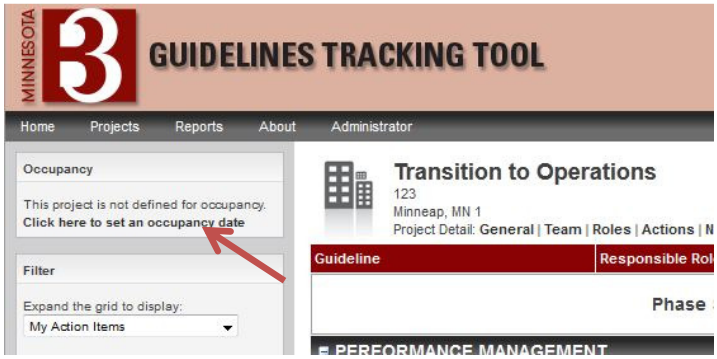
2. When you are required to report operational data for your GO Bonded project. Information during occupancy can be input prior to completing the design and construction phases of the tool, though compliance with the B3 Guidelines and SB 2030 program requires completion of both the *Construction Mode* and *Occupancy Mode* of the tool for projects in version 2.1 and later.

<u>Step One:</u> Verify that all the required guidelines are completed for all phases in the Construction Mode (AP thru CP phases) of the B3 Tracking tool

This is an important step as the data in the *Construction Mode* will automatically be transferred to the relevant sections of *Occupancy Mode*. If the *Construction Mode* is not completed prior to beginning input into the *Occupancy Mode* additional data entry may be required and the accuracy of the tool compromised.

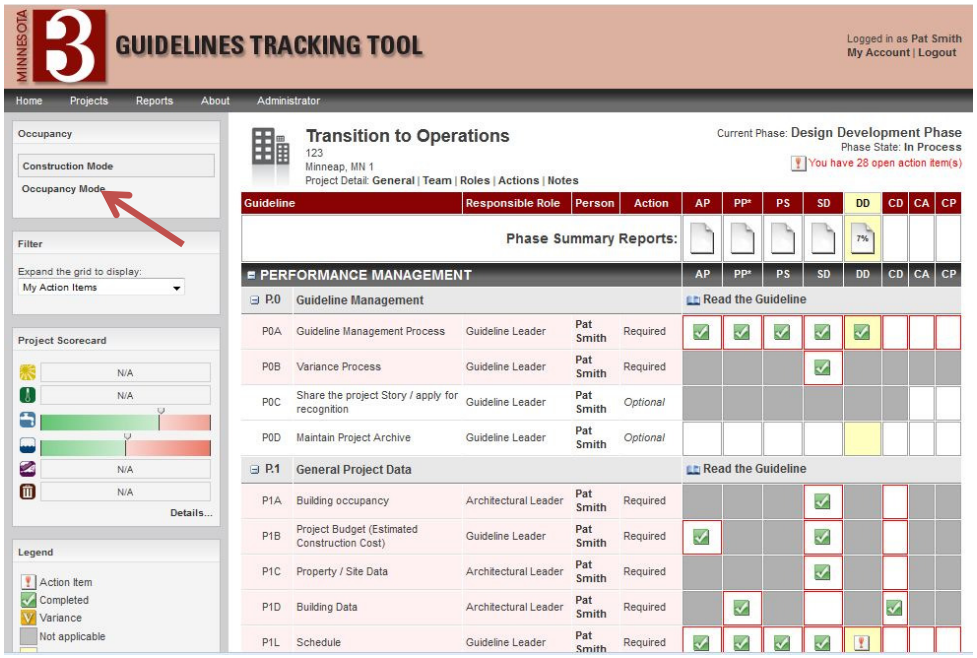
<u>Step Two:</u> Verify that the project file is in *Occupancy Mode*

If you have not entered an Occupancy Date for your project you will need to do so to enable the *Occupancy Mode*. The option to establish an Occupancy Date will appear at the upper left of the project page (see below). After the Occupancy Date has been entered the tool will automatically default to *Occupancy Mode* if the project has both completed all of the design and construction phase submissions and if the current date is after the Occupancy Date.



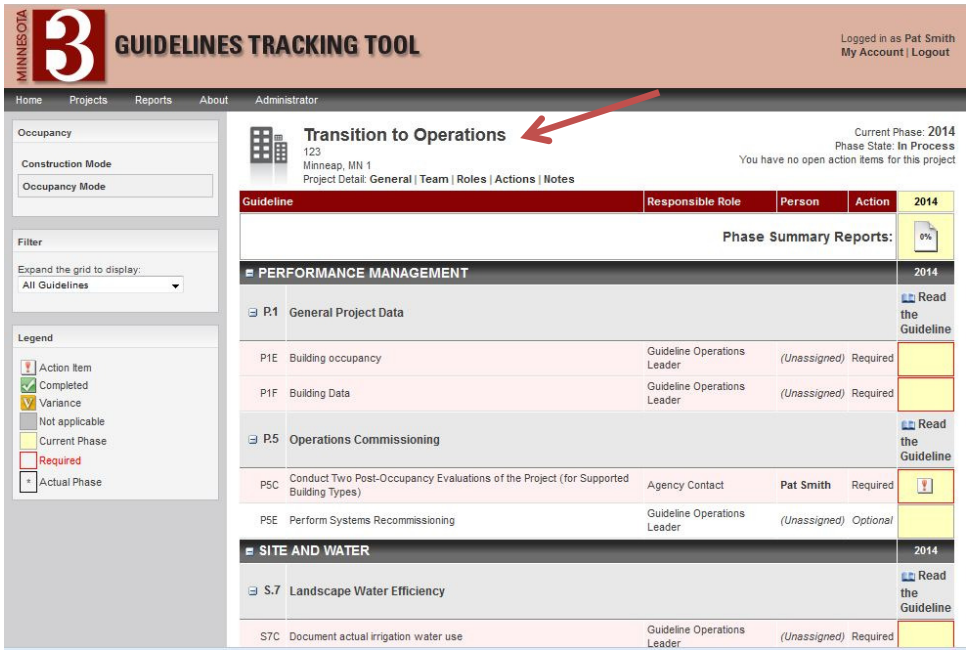
After *Occupancy Mode* has been enabled by setting an Occupancy Date, *Occupancy Mode* and *Construction Mode* can be navigated by the links located in the upper left hand corner of the tracking tool. During Occupancy Mode you may wish to navigate to the *Construction Mode* to reference previously submitted information.

See below – Selecting *Occupancy Mode* after the occupancy date has been established

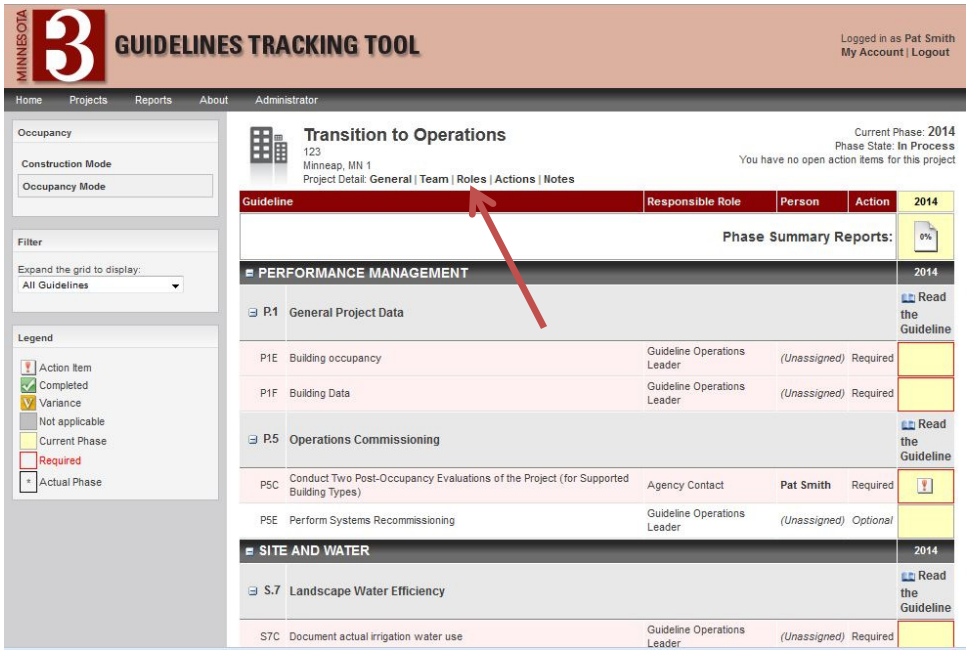


Step Three: Establish a *Guideline Operations Leader* for the Project

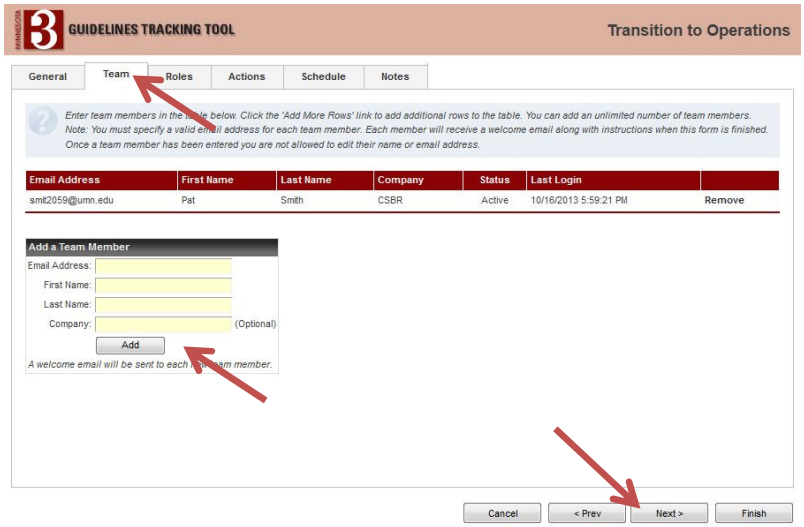
When you select *Occupancy Mode*: your tracking tool screen should look like this, note that the project name for this example is *Transition to Operations*



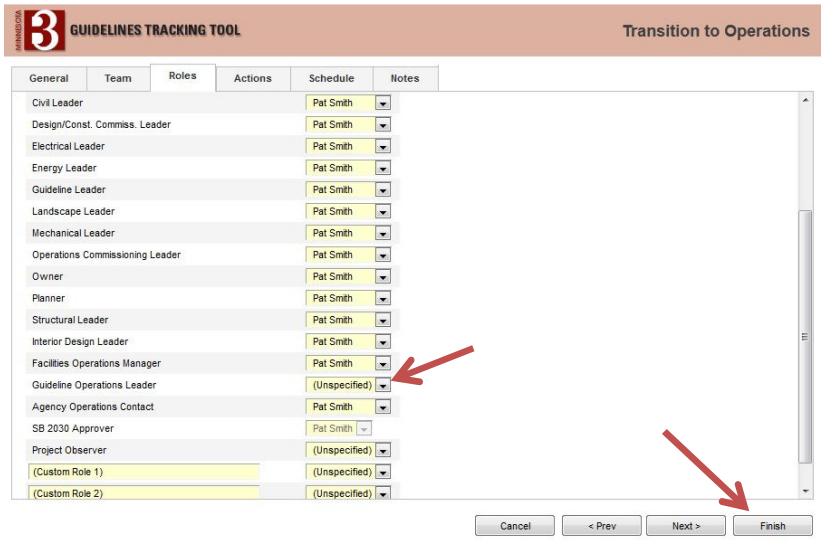
Under *Project Details,* open *Roles* and identify the roles of both *Facility Operations Manager* and *Guideline Operations Leader*.



The *Guideline Operations Leader* is the responsible party to complete the Occupancy Mode requirements. If the role of *Guideline Operations Leader* has not been assigned, identify this person within your organization and place his/her name using the *Team* link under *Project Details*. When you open this tab your screen should look like this:

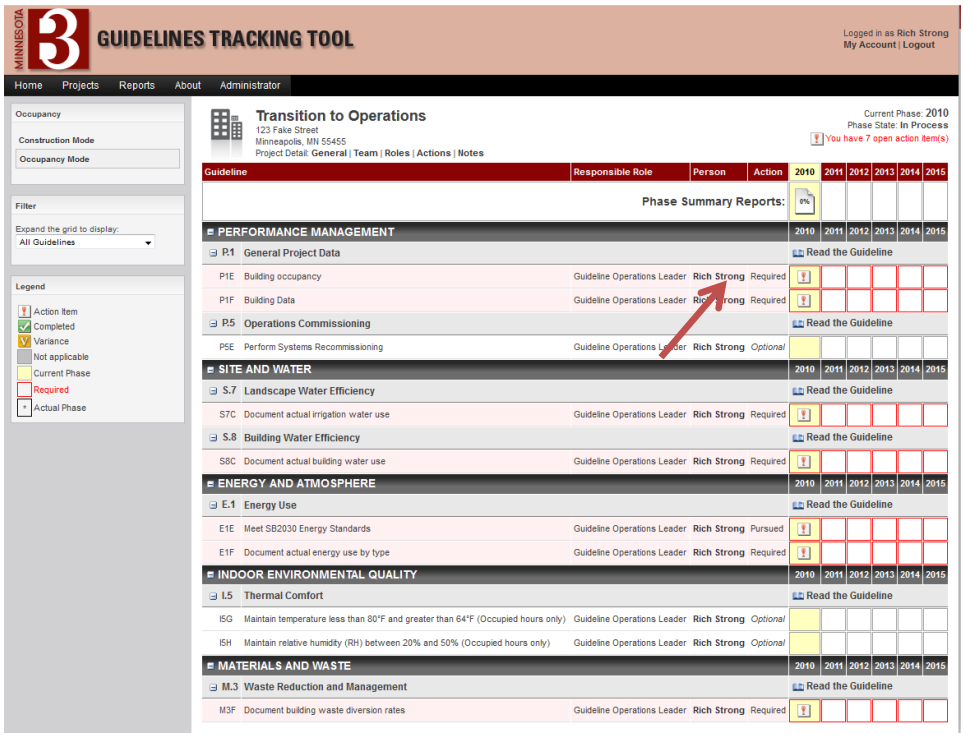


If the individual who will be the *Guideline Operations Leader* is not already in this list, fill in the name and email of the *Guideline Operations Leader* below *Add a New Team Member* and click *Add*. Then clicking *Next* brings you to the *Roles* tab, where you can assign this team member to the *Guideline Operations Leader* role. Be sure to click *Finish* to save your work:



<u>Step Three:</u> Verify the *Guideline Operations Leader* assignment

Return to the main screen and the *Guideline Operations Leader* should be in place and look like this: In this example Rich Strong has been assign the role of *Guideline Operations Leader*



<u>Step Four:</u> Fill out current project information

If you are assigned as the *Guideline Operations Leader* you will be prompted to open Guideline P1E *Building Occupancy* and other guidelines with this symbol and to verify or complete the best estimates of hourly occupation of the building. If it is an office building fill the *Building employees, yearly person hours*. If it is an residential building fill in the *Building residents, yearly person hours*. Also complete the *Building visitors, yearly person hours.*

Open P1F *Building Data* and verify or complete entries on lines P1F1 and P1F2, as well as the space types below. If they are not already completed (carried forward from the *Construction Mode* by the tool) you may wish to navigate to the *Construction Mode* and reference the numbers that were entered in SP1D1 and P1D2.

This symbol will alert you that this guidelines has not been filled out. Click on and the guideline will open so you can fill in the appropraite information and click save and the information will be recorded and this will meet the requirements of the guidelines

Step Five: Upload Post Occupancy Evaluations and Enter Operations Commissioning Information

The B3 Guidelines require operations commissioning – a small set of operational requirements for the project; a template for the annual report is available as Appendix P-5c at www.b3mn.org/guidelines/documents.html. This annual updated report is uploaded under section P5a in the tracking tool. Also navigate to P5b and indicate that operations management is being pursed during operation.

For suported building types the B3 Guidelines require two Sustainable Post Occupancy Evaluations (SPOES). Reference http://www.b3mn.org/poe/about.html to determine if your project type is currently supported and to contact the SPOE team who will arrange and execute the evalutaion and provide SPOES report with results. When available, upload these documents into section P5C or indicate that your building type is unsupported (and therefor exempt from the SPOES requirement).

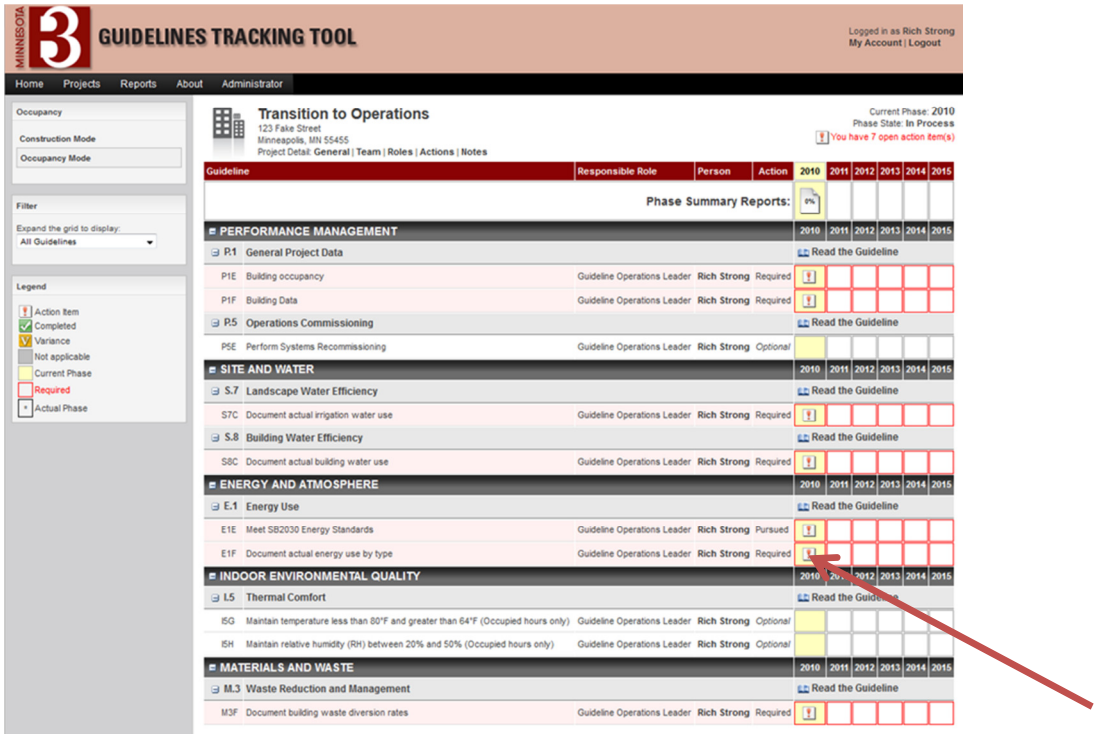
If Bird-safe guidelines (S14) were required for your project you will need to sign off that bird-safe practices in operation are being followed by answering "yes" under Guideline S14.

Step Six: Enter Energy Consumption Information

We recommend setting up and inputting the Energy Consumption information prior to inputting the water information, as the process is similar. Both energy and water consumption information is entered in through the B3 Benchmarking system which is linked to the B3 Guidelines Tracking Tool file for the project. If you currently use B3 Benchmarking for this building please notify Rich Strong at stron081@umn.edu that you would like your project in the Benchmarking system linked to the B3 Tracking Tool. Once this is done the annual energy consumption can automatically populate E1F through the B3 Tracking Tool. (see below)

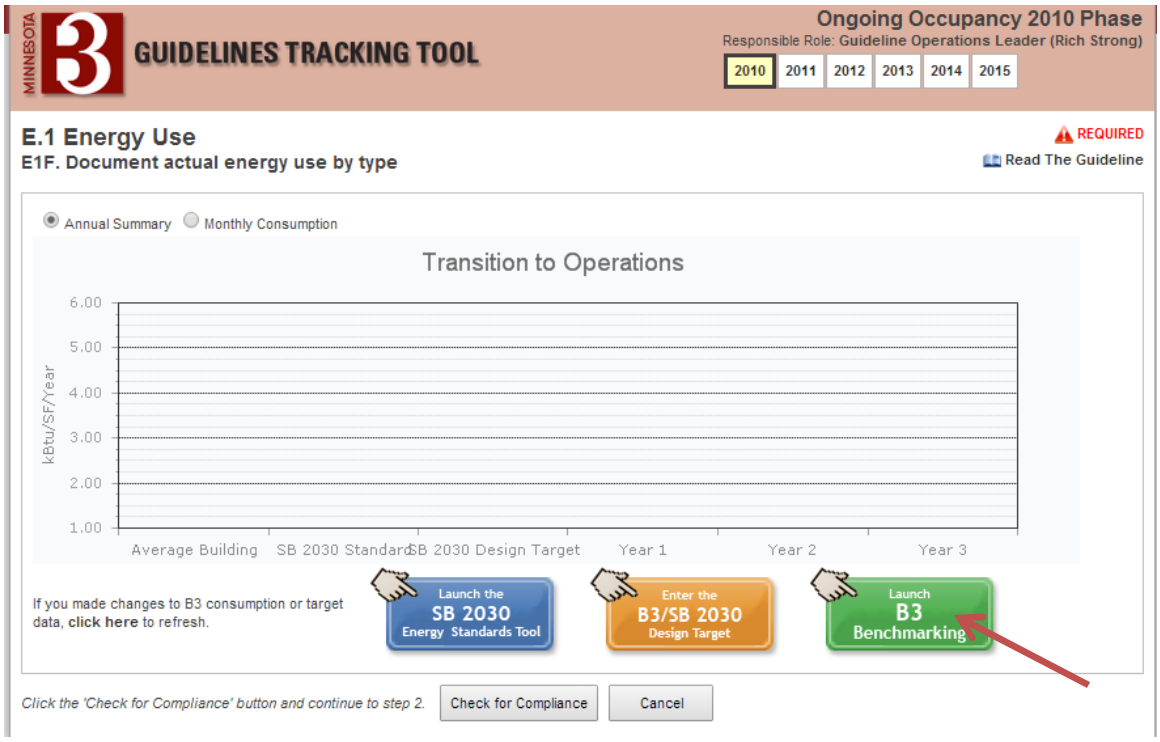
If you do not currently have this building project in the B3 Benchmarking program, please notify Rich Strong at stron081@umn.edu that you would like a building site created for your project. They will need to know the *Data Owner* – an individual who will ultimately be in charge of entering consumption data into B3 Benchmarking (This may be the *Guideline Operations Leader*). They may request other building information necessary to create the B3 Benchmarking file.

You will be notified once your B3 Benchmarking building site has been created and linked to your B3 Tracking Tool file. You will access and input your utility consumption information through the B3 Tracking Tool by clicking on the *Launch B3 Benchmarking* button under guideline E1F. The B3 Benchmarking program will open, allowing you to enter or edit your utility information. (see below)



Click on the  on E1f under the year that you are inputting. Here it is YEAR 2010. Each year corresponds to one year of operation, starting on the occupancy date of the listed year.

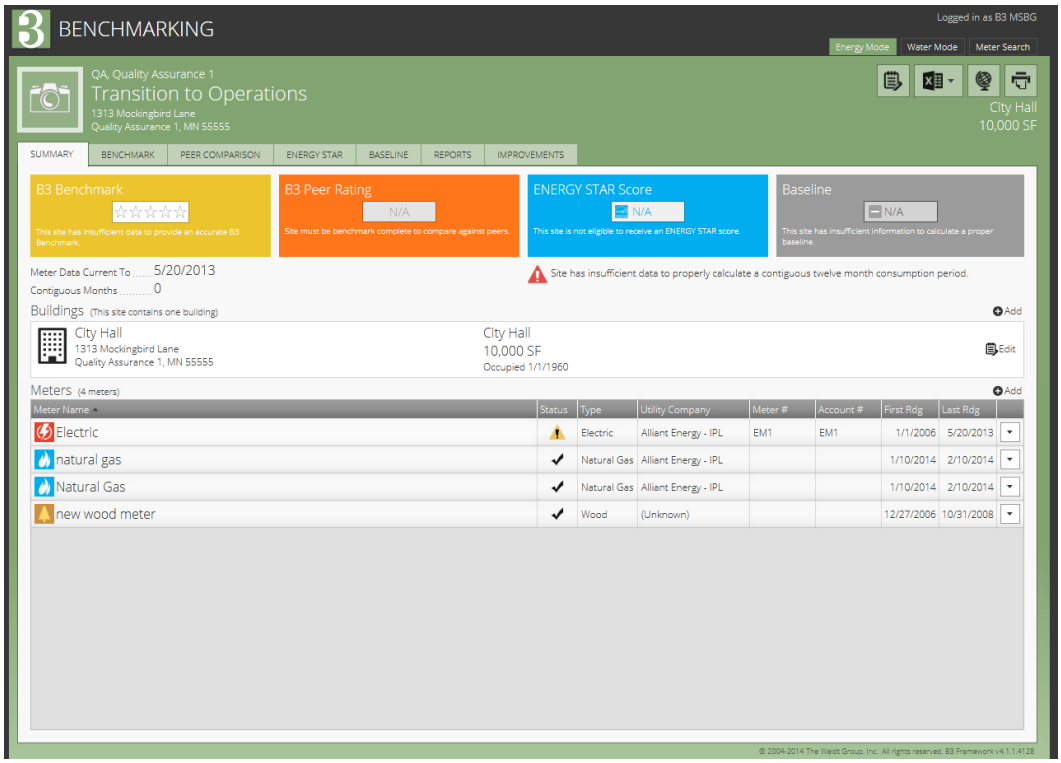
When you have click on E1F you should see this screen:



If the project has an active link to a B3 Benchmarking file the links (buttons) to the SB 2030 Energy Standard and the B3/SB 2030 Design Target should have appeared like this (above). If not then you will have to refresh the page (by clicking on the link to the left of the B3 buttons, where it says “click here”). If you still don’t see the buttons above please contact stron081@umn.edu for assistance.

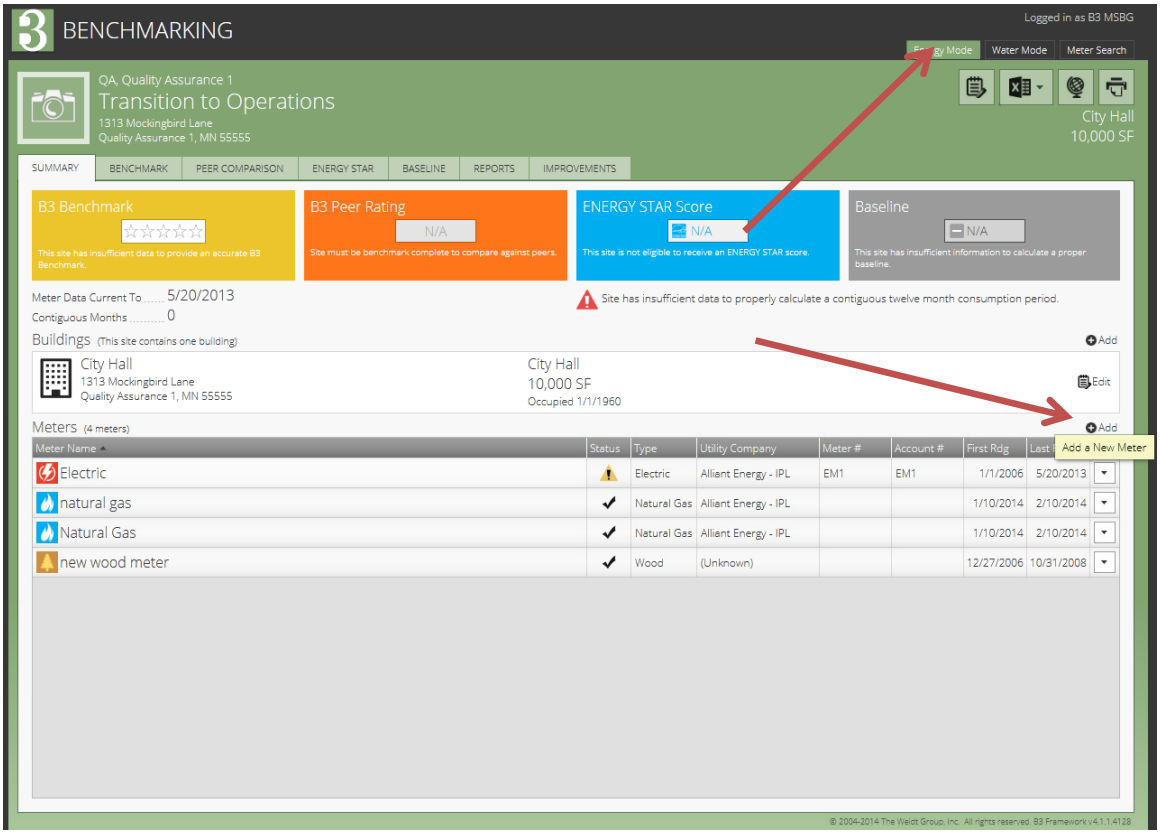
To enter your utility data click 

and you will get a screen that should look like this:

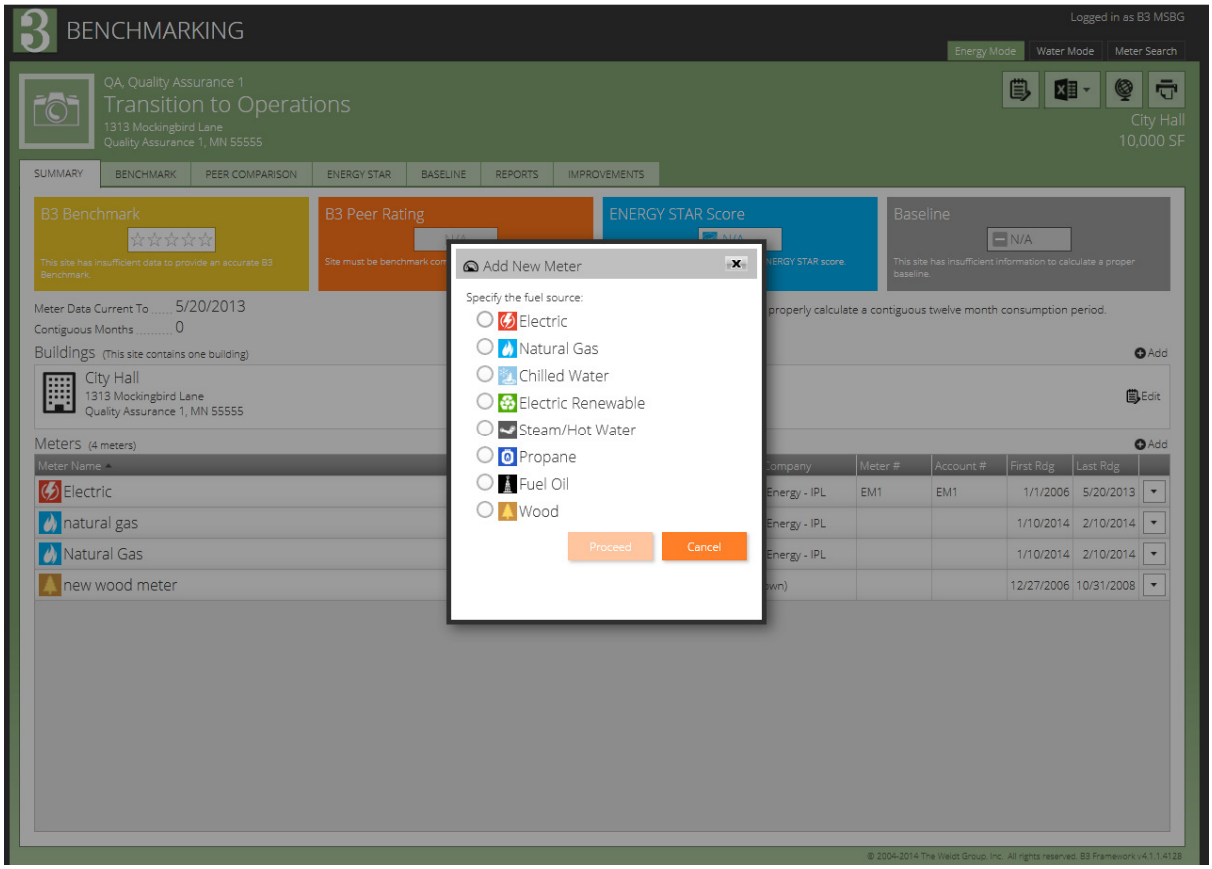


In this case the meters are already set up in your file. If you need to add meters to your property please follow the instructions below:

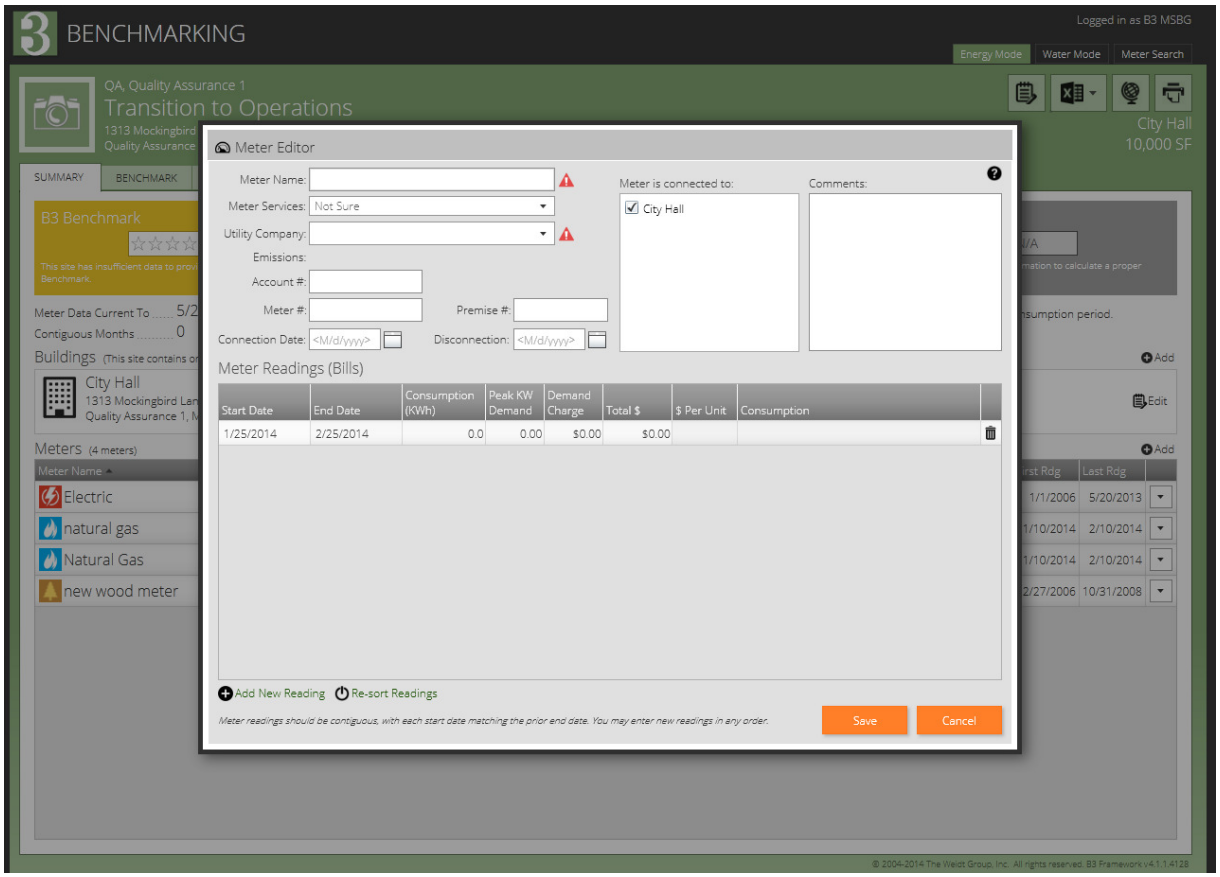
A building meter is added by clicking *Add*. Note that below the file is in the B3 Benchmarking *Energy Mode*, we will use the *Water Mode* later.



The following screen should appear:



Select the meter type and click on Proceed the screen should look like this:



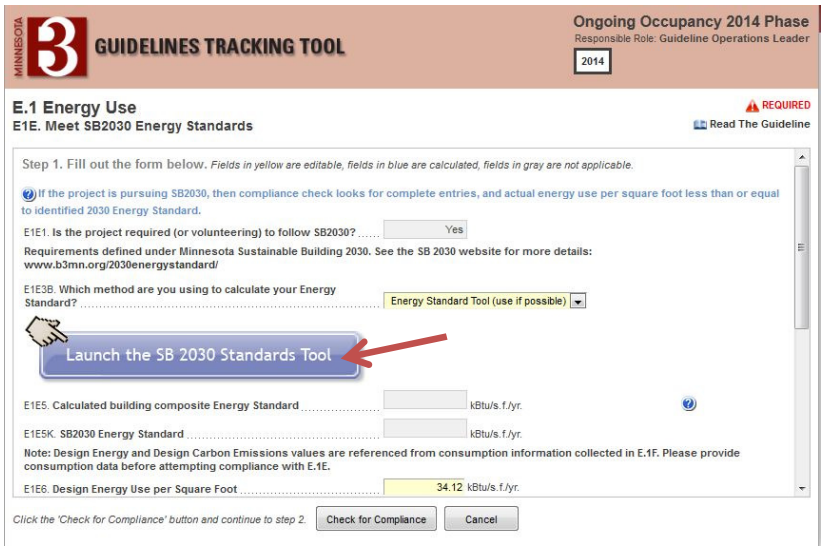
Enter the following Information: Meter Name, Meter Services, Utility Company (pull down menu). Account #, Meter # etc. Make sure that in the box labeled Meter is connected to: your building is listed there.

Input the usage associated with this meter, including start and end dates, consumption and associated charges.

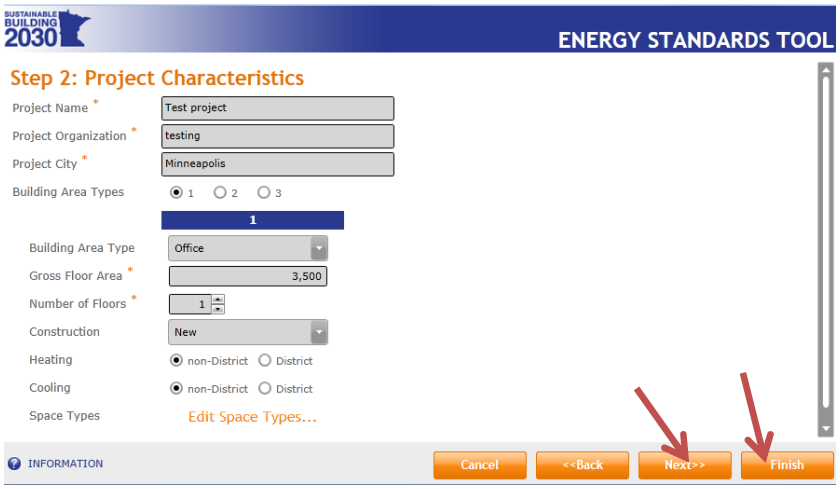
Once the utility data is saved in the B3 Benchmarking site, you can close the B3 Benchmarking Program and navigate back to the B3 Tracking Tool. The information should be automatically input into E1F (though you may need to refresh the page). Verify the information is correct and click on *Check for Compliance*.

<u>Step Seven:</u> Run the Energy Standard Tool

Open E1E *Meet SB 2030 Energy Standards*; you will need to click on *Launch the SB 2030 Standards Tool* to re-run the Energy Standard for the building and generate relevant entries for the tracking tool.


MINNESOTA
3
GUIDELINES TRACKING TOOL
Ongoing Occupancy 2014 Phase
Responsible Role: Guideline Operations Leader
2014
E.1 Energy Use
E1E. Meet SB2030 Energy Standards
REQUIRED
Read The Guideline
Step 1. Fill out the form below. Fields in yellow are editable, fields in blue are calculated, fields in gray are not applicable.
If the project is pursuing SB2030, then compliance check looks for complete entries, and actual energy use per square foot less than or equal to identified 2030 Energy Standard.
E1E1. Is the project required (or volunteering) to follow SB2030? ..... Yes
Requirements defined under Minnesota Sustainable Building 2030. See the SB 2030 website for more details: www.b3mn.org/2030energystandard/
E1E3B. Which method are you using to calculate your Energy Standard? ..... Energy Standard Tool (use if possible)
Launch the SB 2030 Standards Tool
E1E5. Calculated building composite Energy Standard ..... kBtu/s.f./yr.
E1E5K. SB2030 Energy Standard ..... kBtu/s.f./yr.
Note: Design Energy and Design Carbon Emissions values are referenced from consumption information collected in E.1F. Please provide consumption data before attempting compliance with E.1E.
E1E6. Design Energy Use per Square Foot ..... 34.12 kBtu/s.f./yr.
Click the 'Check for Compliance' button and continue to step 2.
Check for Compliance
Cancel

Verify that the information in the standard tool is accurate; the inputs should have carried through from the previous phase. If needed, make any changes in occupancy, schedule, or use of the building, click *Next* to run your SB2030 Energy Standard. Click *Finish* to import your calculated results back to the B3 Guidelines Tracking Tool.



Verify the *Design Energy Use per Square Foot* and the *Design Carbon Emissions per Square Foot* from your design model. The Actual Energy Use will be automatically imported from E1EF. Clicking *Check for Compliance* verifies that the building is operating within the SB2030 Standard for that year of operation.

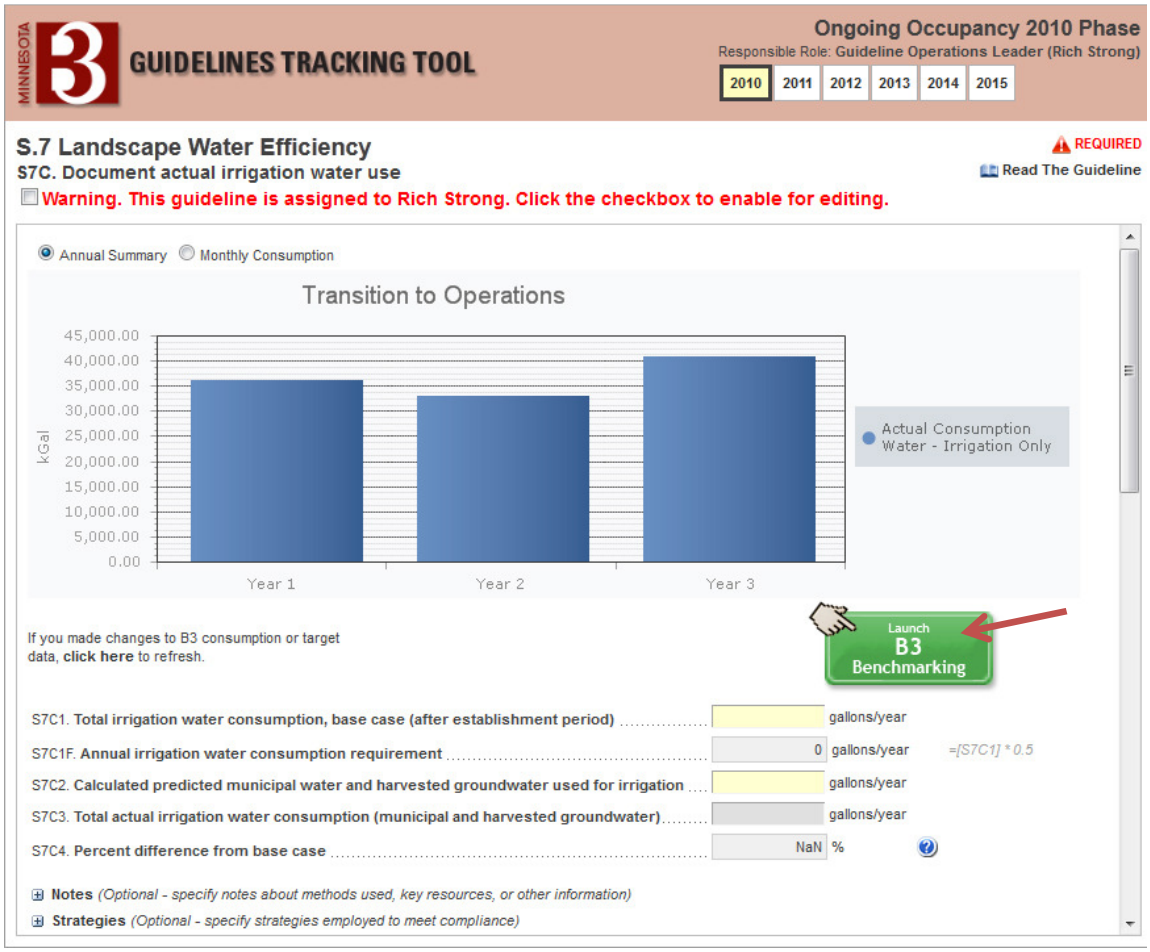
You may wish to also input your projects estimated energy consumption from the simulation into the Benchmarking program, which allows monthly utility data to be evaluated. Consider inputting your project's utility consumption monthly to allow a better response to any problems that may arise and more fully uses the Benchmarking program to evaluate your project's performance. You can copy the monthy consumption estimates from the B3 Tracking Tool and input it into the B3 Benchmarking program, under "Targets."

<u>Step Eight:</u> Enter Water Information

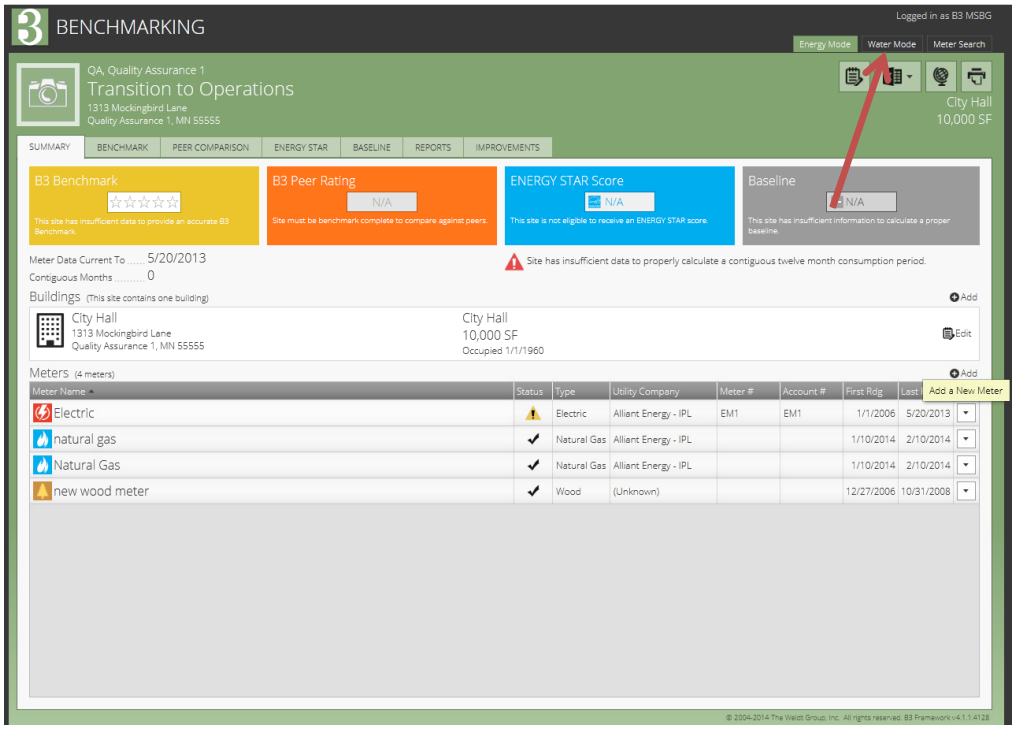
Tracking water consumption is also done through the B3 Tracking Tool using the Benchmarking Program; the process is similar to inputting energy consumption information. The inputs will vary based on whether irrigation is metered separately from indoor water consumption. Separate irrigation consumption tracking is required for tracking of B3 Guidelines requirements, though mixed consumption tracking is supported but non-compliant.

Even if the project does not have any irrigation consumption it will be necessary to open S7C for each year of reporting.

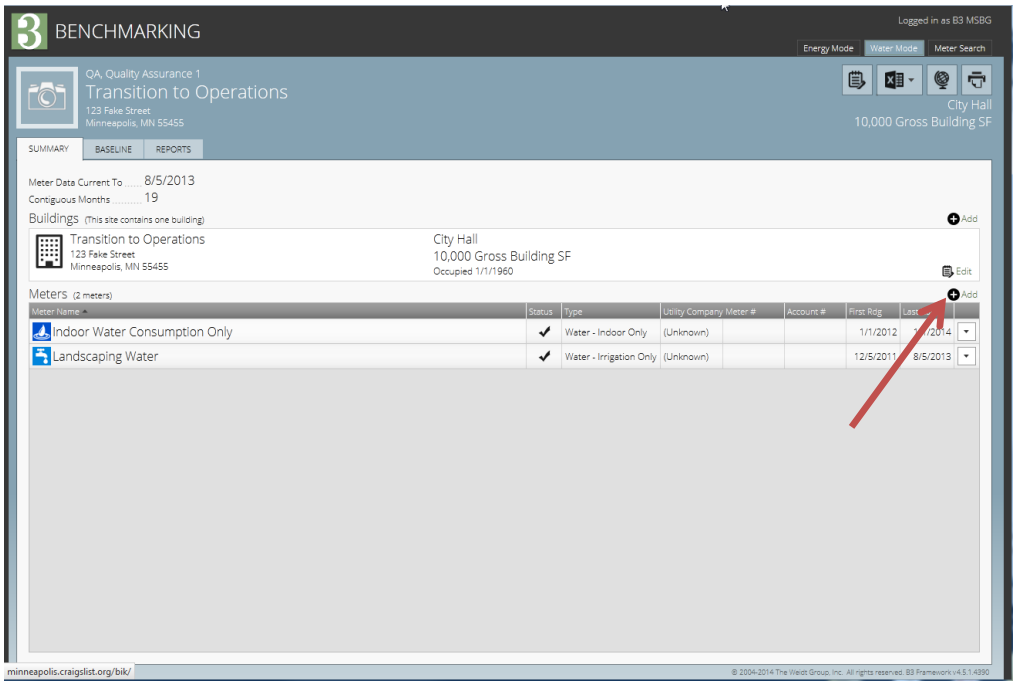
Open S7C *Document Actual Irrigation Water Use* and input values, verify or complete entries for SC71 and SC72. You may wish to navigate to the *Construction Mode* and reference the numbers that were entered in S7A1A and S7A1B. If you do not have water information already entered into B3 Benchmarking launch the program by clicking on *Launch B3 Benchmarking*.



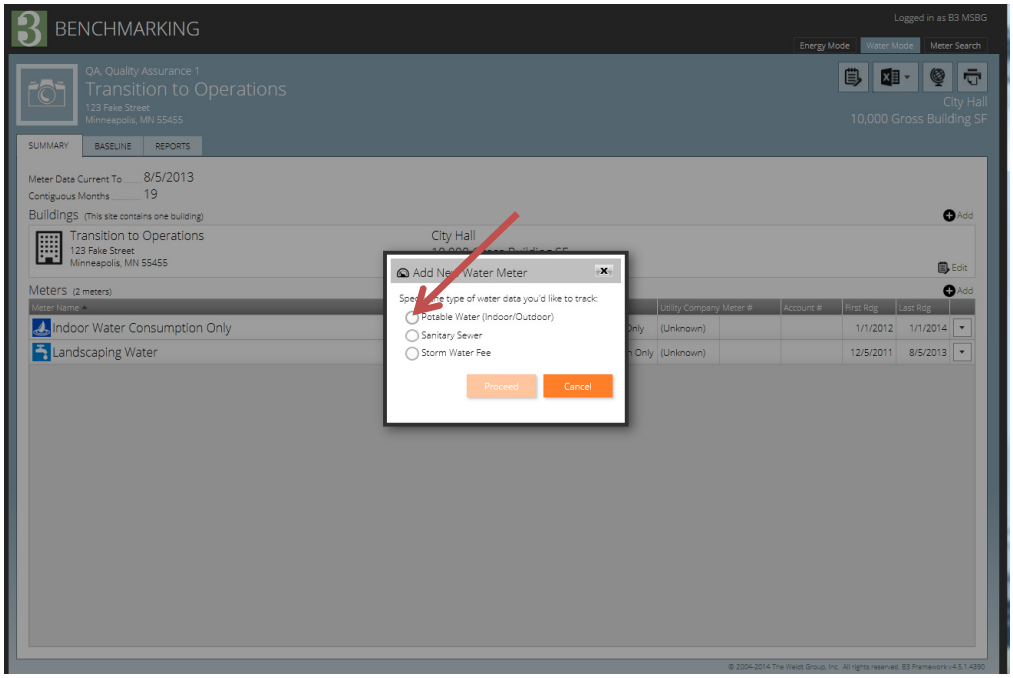
In B3 Benchmarking navigate to the water mode:



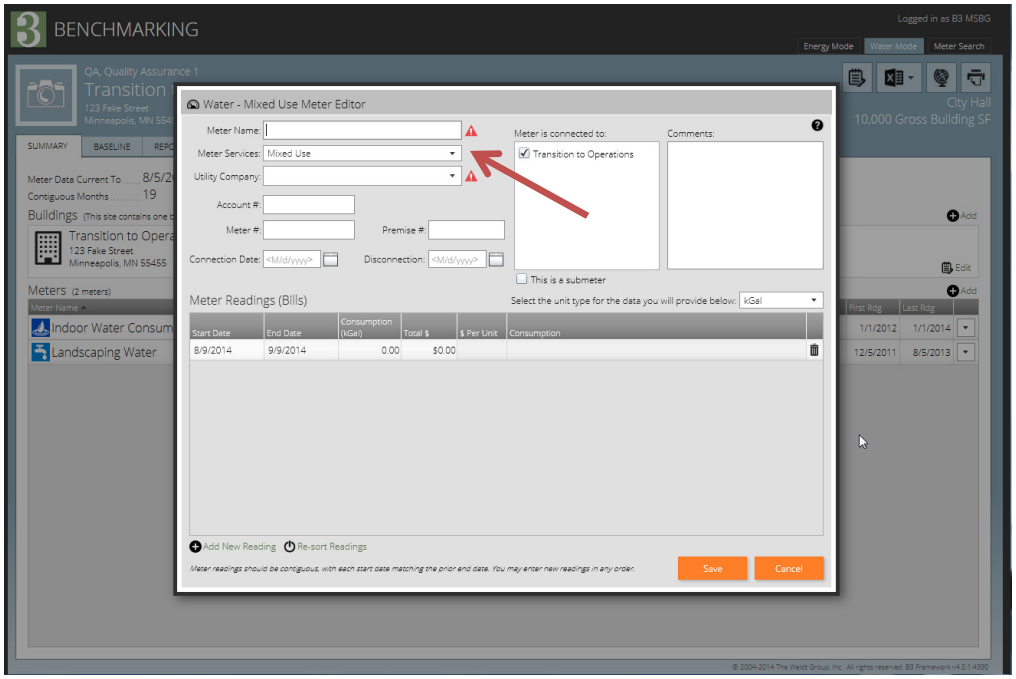
In the water you will need to establish meters, here we have both indoor and outdoor water meters established:



Similar to the process to add an energy meter you can add water meters by clicking add, you will get this dialog box:

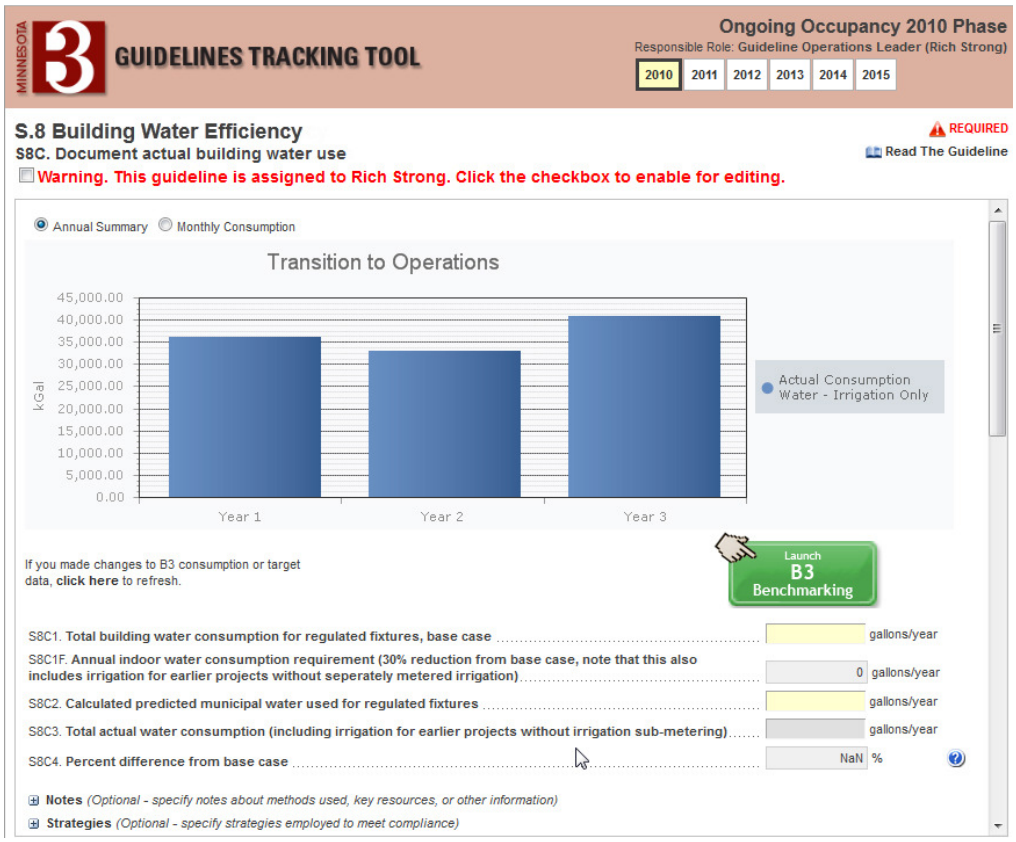


Clicking on “Potable Water” allows you to establish the Meter Name, Utility Company, account number, meter number and other criteria. Note that it is essential that you indicate whether this meter serves indoor or outdoor water consumption under “Meter Services” as the tracking tool relies on this information to determine compliance with S7C and S8C. After S7C1 and S7C2 have been input you will also see the B3 requirement and the design estimates for irrigation consumption graphed on the annual view. If you do not have sub-metered irrigation you can indicate that the meter services mixed indoor and outdoor consumption:



After all water information (indoor and irrigation consumption) has been saved you can close the Benchmarking program and return to the B3 Tracking Tool and refresh the page. S7C4 will calculate the percentage difference and determine compliance, and the tool will graph the consumption related to the B3 requirement and the design estimate.

Open S8C *Document Actual Building Water Use* and verify or complete entries for lines S8C1 and S8C2. You may wish to navigate to the *Construction Mode* and reference the numbers that were entered in S8A1A and S781B if values are not present. The total amount of water of actual annual building water consumption from your water will be imported from the B3 Benchmarking program, and S8C4 will calculate the percentage difference and determine compliance:



Note that if you have mixed indoor and outdoor water consumption, the combined values (and the combined B3 requirement) will be tracked in S8C. Also – after S8C1 and S8C2 are input the B3 requirement and the estimated consumption will show up on the annual graphs.

<u>Step Nine:</u> Enter Waste Information

Open M3F *Waste Reduction and Management*; fill in M3F1, M3F2 and M3F3. In M3F2, enter the total amount of solid waste that was generated during the operation of the project for that year. In M3F3, enter the total amount of operational waste that was recycled or otherwise diverted from a landfill for that year of operation. M3F4 will calculate the percentage recycled and determine compliance. If waste tracking is not available based on your waste tracking service indicate this in M3F1.

<u>Step Ten:</u> Ongoing Operations Compliance

Repeat steps four through nine every year for ten years. Change team members as necessary to complete required tracking.