



Town of Nantucket – New Our Island Home Skilled Nursing Facility

Project Story

January 21, 2025

Communications Plan



General Update to the Planning and Design of the New Our Island Home (OIH) Facility at the Sherburne Commons Site

October 4, 2024

Dear Sherburne Commons Neighbors:

We write to provide you with an update on the above project. First – a quick review as to how we got here:

At the 2017 Annual Town Meeting, the Town proposed the acquisition of property adjacent to Sherburne Commons, plus an appropriation for a skilled nursing facility to be constructed there. Those articles were not approved by the voters. In 2018, the Select Board directed Town Administration to determine what it would take to construct a new OIH facility at the current site on East Creek Road. Thereafter, between 2019 – 2021, architects were engaged to undertake this analysis, charrettes were held, stakeholders were interviewed, other properties close to the current site were reviewed, consultation with the state Department of Public Health occurred and analysis of different operating models was conducted.

At its meeting on August 16, 2021, the Select Board voted to pursue a new OIH facility at the Sherburne Commons site with the current OIH to be repurposed for a Senior Center and to put forward articles at the 2022 Annual Town Meeting (ATM) for design for a new OIH facility. At the 2022 ATM and Annual Town Election, design and associated funds in the amount of \$8.5m was approved.

In 2023, the design architect (SMRT) and required Owner's Project Manager (Verter) were engaged and the Board approved the Construction Manager At Risk (CMR) project delivery method. This approach also requires the approval of the state Inspector General which was granted in early 2024. Using CMR increases the accuracy of cost estimates because the contracted builder is involved in the budgeting phases along with the design team and therefore provides a higher level of cost control. Additionally, the Construction Manager is contracted to deliver the project at a guaranteed maximum price based on an agreed set of construction documents and specifications. In accordance with statutory requirements, we have engaged a contractor, Consigli Construction Company.

Visit www.nantucket-ma.gov/news for more information on this project.

A Steering Committee was assembled for the project in late 2022 which includes the Town Manager, members of SMRT, Verter, and Consigli, Bob Eisenstein of Eisenstein Fishery Associates (current contractor assisting with administrative oversight of the facility), Assistant Town Manager Rick Sears, Finance Committee member Peter Schaffer, and Select Board member Dawn Holdgate. A separate Advisory Committee has also been established which includes the Steering Committee members as well as representatives from Sherburne Commons, Nantucket Cottage Hospital, Our Island Home, Friends of Our Island Home, Nantucket Center for Elder Affairs and the Senior Center.

While it has been established that the new facility will be located at Sherburne Commons, there is a long-term lease between the Town and Sherburne for the Sherburne facility on the Town property. The lease is subject to an amendment and is the subject of current discussion with the Sherburne Commons Board of Directors.

Meanwhile...

Planning and design efforts continue to progress.

The Select Board was updated on project status on July 10, 2024, including presentation of the Consigli schematic design project estimate which was identified at \$95M. This project estimate includes construction, contingencies, and all other related project costs. A second revised estimate will be presented to the Select Board on October 9, 2024. The final total project cost will not be until early spring 2025 when the project is currently anticipated to be put out to bid. For those interested, please refer to the Town of Nantucket YouTube channel (@townofnantucket) where you may view the formal presentations the OIH team made to the Select Board on March 20, 2024, and July 10, 2024.

We appreciate everyone's constructive comments and suggestions during our 6 neighborhood meetings and 3 Sherburne Commons Resident meetings earlier this year. Some highlights and updates:

- The facility location is planned for the area currently occupied by Sherburne Commons staff housing, at the front of the site off South Shore Road. The design is under discussion with the Sherburne Commons Board of Directors. The most recent iteration of the design, which contains modifications to address concerns of Sherburne residents and the Sherburne Board, will be reviewed at the October 9th Select Board meeting and is also available on the Town website (see QR Code below).
- Site survey, initial geotechnical explorations, and a test well for the evaluation of the potential for a geothermal system has been completed. With this information, the project's 'design development' stage is well underway. This stage includes more detailed design of the proposed facility, including courtyards, parking and

circulation, the proposed South Shore Road landscape screening, and buffers on the south, west and northern site boundaries.

- Updated traffic counts have been completed. These counts include an updated assessment of existing South Shore and Sherburne Commons traffic, as well as current traffic patterns at the existing OIH on East Creek Road. The final traffic engineering recommendations were completed in August and are included in updated site plans.
- Project permitting, including formal reviews by the Planning Board and HDC are scheduled to commence this fall.
- The overall project schedule remains unchanged with final costs being formally presented to the voters at the 2025 Annual Town Meeting and Annual Town Election.

One of the key tasks for our Construction Manager is looking at the specific details of how they will construct the project: construction duration, construction delivery location, material staging as well as location of job site trailers and parking. And, of mitigation/minimization of the disruption to Sherburne Commons and other nearby residents. Once the OIH team has a viable plan it will share the process with the neighborhood on what to expect during construction. Having a Construction Manager on site and sensitive to resident and abutter concerns during construction will be a key factor in the success of the project.

Please click on the QR to subscribe to the Town's t3a.gov/news.

C. Elizabeth Gibson
Town Manager



Scan for more information

Visit www.nantucket-ma.gov/news for more information on this project.

Visit www.nantucket-ma.gov/news

Why New OIH at Sherburne Commons?

Select Board - August 2021

- *Several different feasibility options evaluated the ability to expand and rebuild at the existing OIH site and all were impractical.*
- *The select board decided to rebuild a new OIH on Town owned land at Sherburne Commons.*
- *The select board agreed to put Article 11 of ATM 2022 to the voters.*

ATM 2022

Article 11: Design and OPM Services - Adopted

- Yes – 757
- No – 130
- No indication of size or number of beds
- Site: Sherburne Commons

ATM 2025

TBD: Total Anticipated Project Cost including:

- Construction Cost and Design Team Construction Oversight, Project Closeout

ATM 2022 Approval: Project Charter - Article 11

- A. Locate New Our Island Home on Town owned land at Sherburne Commons Campus**
- B. Existing OIH is outdated and does not meet best practices for patient care, or current Department of Public Health regulations for nursing support and mechanical systems.**
- C. Voters approved having an on-island nursing facility it needs to be replaced.**
- D. Select Board and Finance Committee have voted unanimously to support this Article and OIH project**

E. New Our Island Home will benefit all Islanders by:

- Allowing for flexibility and more space, providing improved quality of life:
 - Privacy
 - Dignity
 - Independence
 - Meaningful activities for residents
- Continuing the operation of a local Skilled Nursing Facility, saving Nantucketer's the time, inconvenience and expenses of off-Island travel
- Creating a more home-like facility that can focus on person-centric care
- Replacing a failing building with code compliant facility that will meet the standards of care of Skilled Nursing Facilities for years to come
- Allowing the existing site at 9 East Creek to be repurposed for a new Senior Center

Our Island Home Guiding Principles

Care for the Residents & Families

- Abundant natural light, access & views to nature.
- Good neighbor. Community focused.
- Choice/encouragement around social & activity spaces.
- Glare and noise reduction.
- Non-institutional look/feel. Welcoming to all – EDI focused.
- Easy wayfinding and navigation.
- Patient access and parking.
- Clear main entrance.
- Space for special occasions & visiting presentations.

Operationally Sound

- Budget / project viability
- Balance between resident privacy & staff observation.
- Thoughtful storage solutions. Right stuff, right place, right time.
- Durable materials that are easy to maintain & stand the test of time.
- Standardization for workflow and maintenance.
- Plug & play technology ready

Safety

- Single patient rooms.
- Environmental: Air quality and temperature.
- Balance of both physical and mental well-being/memory care.
- Facility ready for future pandemics.
- Clear paths of travel that minimize travel distances.
- Covered drop-off zone.
- Outdoor resident space with controlled access.

Future Ready & Sustainably Designed

- Maximize use of sustainable materials.
- Reduce operational cost/lower energy use/or zero energy use.
- Easy to maintain systems.
- Red List Free, PFAS free.
- Low carbon materials where possible.
- Aligns with Passive House, LEED, and WELL building design principles.
- Space for expansion.
- Reliable redundant solutions
- Offset electricity consumption with on-site renewable energy. Solar? Geothermal?

Care for the Caregivers

- Safe & supportive environment in which to provide quality care.
- Staff respite space.
- Maximize natural light.
- Efficient design for collaboration & communication
- Clear zoning between resident and staff areas
- Recruitment and retention.
- Design that supports staffing challenges and optimizes workflow.

Project Highlights

What is the need for change - new needs for nursing care?

When comparing the existing OIH facility to the future OIH facility, there are some major improvements that will dovetail with improving health outcomes for residents as well as enhancing their quality of life. Some deficiencies to highlight in the existing OIH building are.

- Most of the rooms are double occupancy, which creates privacy issues for residents, staff and families on a daily basis.
- The resident room bathrooms are undersized and predominately not ADA compliant.
- The sightlines from the nurse station to each resident wing is compromised and, in some cases, non-existent.
- There is no ADL component in the existing OIH, making some rehabilitation services a challenge.
- There is one modestly sized room that is used for both the Living Room and Activity functions. The space is severely undersized for 45 residents and creates challenges when residents prefer to do varying activities.



Project Highlights

What is the need for change - new needs for nursing care? (cont.)

- Generally, the facility compromises the concept of choice for the residents.
- Resident rooms do not have any ceiling lifts, therefore creating challenges around safety for both resident and staff.
- There are very limited areas for residents to go if they are experiencing sensory overload.
- Clinical space functions are compromised due to space constraints.
- General storage throughout is lacking.
- Interior finishes are dated and tired. Many areas do not align with healthcare /FGI design guidelines / best practice for skilled nursing facilities.



Project Highlights

Improving health outcomes / safety

- The new OIH is planned for 45 private resident rooms. Single Resident Rooms are associated with many benefits to the resident, staff and families including:
 - Enhanced environment for resident's home, privacy and control.
 - Improved sleep patterns, reduced aggression / agitation (especially for residents with dementia), improved infection prevention, potential for reduction in medications and fewer medication errors.
 - In addition, single rooms provide the opportunity for improved HIPPA compliance, patient dignity, pandemic-safety, equity around natural light and views to outside, opportunity for privacy with family, opportunity for tele-health and personal phone and video calls.
 - Allows for greater flexibility management for new admissions (male/female)



Project Highlights

Improving health outcomes / safety (cont.)

- The headwall of each resident room will have a grab bar that leads to the bathroom for improved resident safety.
- Each room is planned to have a ceiling lift. These will improve safety for both residents and staff. Private rooms will also allow for in-room rehabilitation services to occur.
- Improved hygiene with private European style bathrooms in each resident room. All are ADA compliant, have grab bars throughout, a shower seat, and storage. The ceiling lift track will have the capability to transfer the resident directly into the bathroom shower as well as the toilet area.
- In addition to the typical resident room, we have planned for a Person of Size room, two connected rooms, and a Hospice suite that includes a dedicated area for families.



Project Highlights

Improving health outcomes / safety (cont.)

- Handrails and seating nooks throughout the building to help residents move throughout as well as offer areas to rest along their journey.
- Placement of Nurse stations and CNA stations: The new OIH has been designed for optimal viewing from the center nursing core area toward each of the resident wings. There are CNA stations designed at the end of each corridor for additional observation as well as charting.
- Rehabilitation / PT is planned to have an ADL component, a ceiling lift with walk-assist, and an outdoor area specific to rehabilitation, all aiding in both short- and long-term patient's and resident's recovery.
- Materials and finishes selected are non-institutional and comply with both healthcare-grade as well as FGI guidelines. Selected materials are and are low maintenance, environmentally friendly, and selected for their longevity.



Project Highlights

Improving health outcomes / safety (cont.)

- Wayfinding approach throughout the building will be both intuitive and purposeful, aiding those with navigational and visual challenges to find their destination.
- Thoughtful and standardized processes and storage solutions for staff aimed to help with efficiency and reduce frustration.
- Equipment alcoves throughout the resident corridors to declutter and provide clear and safe circulation for all.
- Clear zoning between staff and resident spaces.



Project Highlights

Enhancing quality of care / quality of life

The new OIH is planned to have many features, as outlined below, incorporated into the facility to enhance the quality of care and quality of life for residents, staff, and families.

- Community-focused. Choice and encouragement around social and activity spaces.
- Areas for families to gather for regular visits as well as special occasions.
- Accessible and safe outdoor space.
 - Two courtyards, passive and active approach.
 - Three exterior patio areas with security fencing.
 - Seating, walking paths, rehabilitation functions (in active courtyard).
- Maximize natural light throughout the building.
- Integrated Loop Technology in Living Room, Private Dining, and the Conference Room to assist those with hearing challenges.
- Places for families to meet with OIH staff including the ability for video capability.



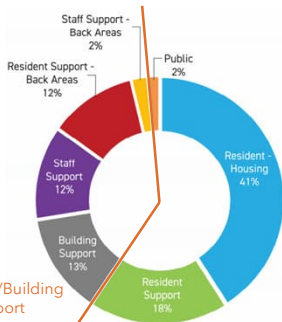
Project Highlights

Enhancing quality of care / quality of life

- Areas for staff to do training - both resident-focused and clinical focused.
- Plug & play technology ready.
- Improved acoustics throughout the building.
- Resident rooms have a dedicated parking spot and power outlet for residents with electric wheelchairs.
- Non-denominational spiritual space and flexible sensory room are both included in the design.
- Flexible furnishings are planned throughout that will accommodate the variety of needs of this population.
- Community spaces: many different locations and sizes throughout the building to offer choice for the residents and their families
- Staff respite space and break space with natural light and access to outdoor space.
- Covered drop off zone at main entrance.
- The building is planned to be Passive House certified which will result in comfortable indoor temperatures as well as improved acoustics from outdoor noise.



Why is the new OIH the size it is?



39%
Staff/Building
Support
Spaces Sized
to support
resident's
requirements

61% Resident Spaces - CODE REQUIRED DIMENSIONS

Project Breakdown: Gross Square Footage: 59,267 gsf

- 47,382 gsf (First Floor)
 - Including: 1,500 gsf (Future expansion)
- 14,572 gsf (Basement)
 - Including 2,687 gsf (Future Shell Space)

41%: Resident Spaces - BEDROOMS - THREE 15 BED NEIGHBORHOODS

- 24,300 gsf **45 Single Rooms with individual toilet/shower room:**
 - 12 of these are sized to be converted from singles to doubles in future, for 12 additional Beds if census requires: needed
 - Allowing for flexibility and more space
 - Improve quality of life: Privacy, dignity, independence and meaningful activity

20%: Resident Spaces - REQUIRED COMMON AREAS

- 11,853 gsf
 - Improve quality of life: Privacy, dignity, independence and meaningful activity

39%: Staff / Building Support Spaces - REQUIRED BACK OF HOUSE SPACES

- 23,114 gsf
 - Improve quality of care and working conditions for staff

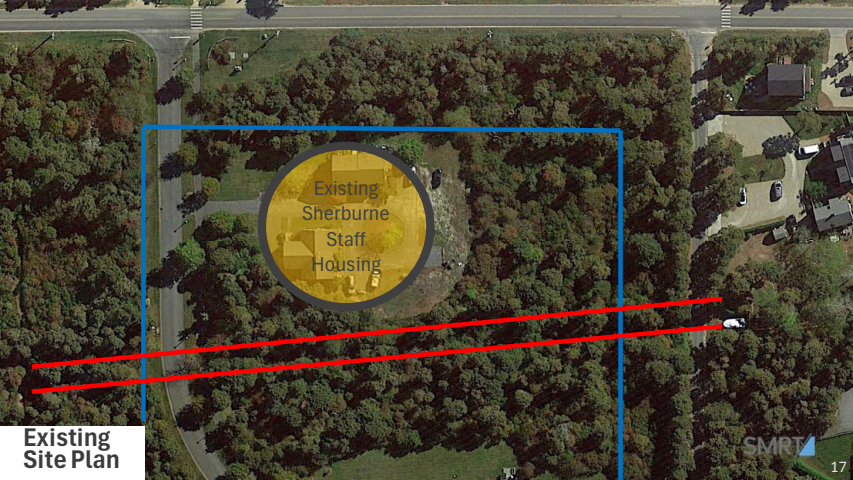
Project Renderings





Existing
Site Plan

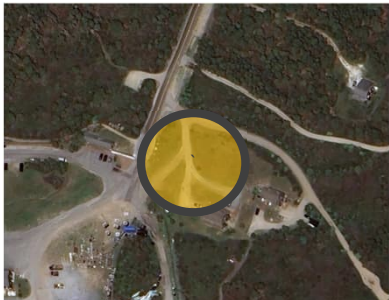
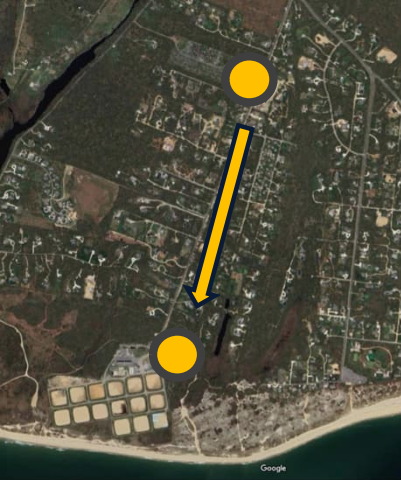
SMRT



Existing
Sherburne
Staff
Housing

Existing
Site Plan

SMRT



Relocated / Moved Sherburne Staff Housing



New
Sherburne
Staff
Housing

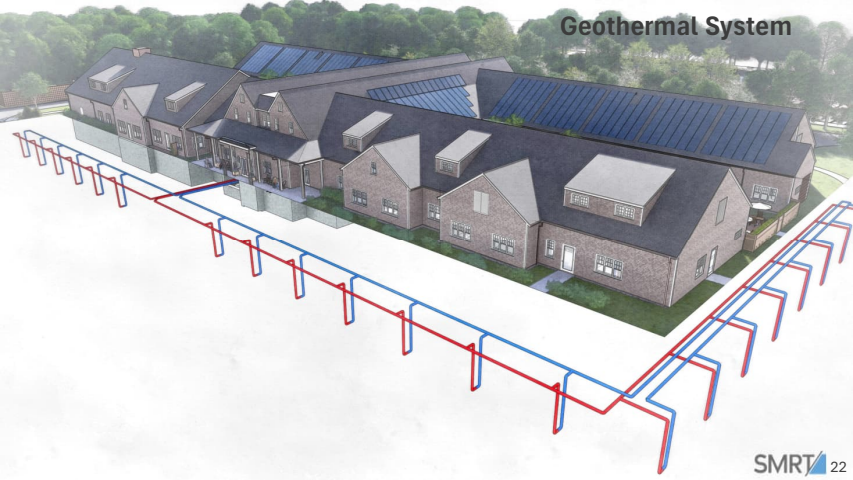
Site Plan



Bird's-Eye Perspective



Geothermal System



Roof Mounted PV Arrays



Attic Mechanical Space



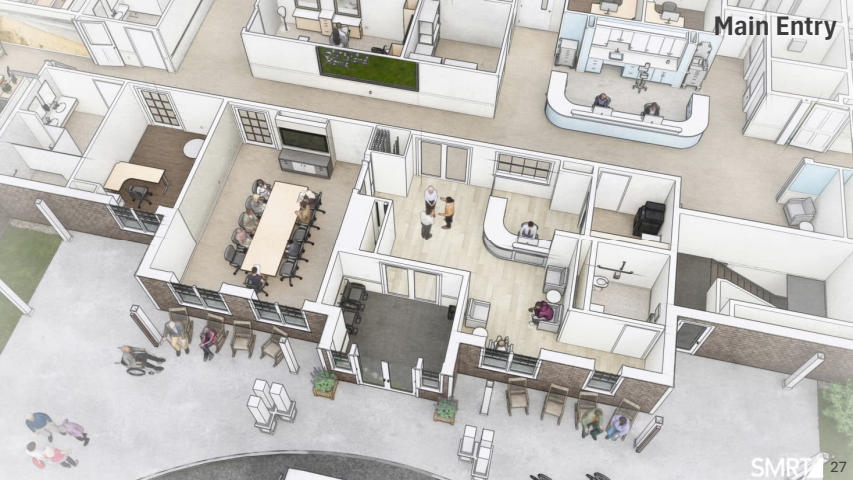
Overall - First Floor



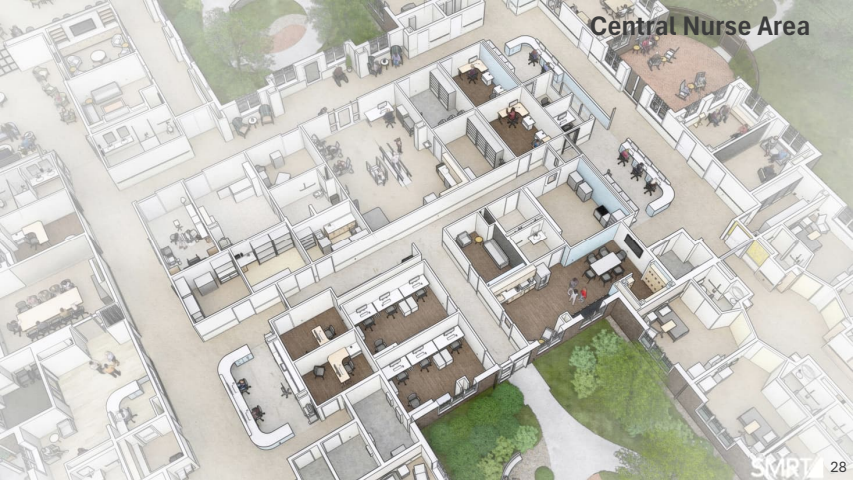
Resident / Family Covered Drop Off Area



Main Entry



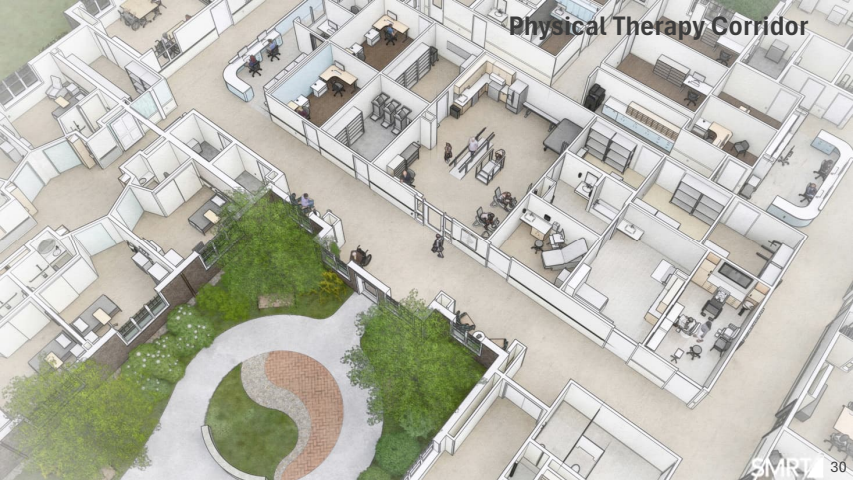
Central Nurse Area



**Nurse Area,
Resident
Activities,
Sensory,
Meditation**



Physical Therapy Corridor



Physical Therapy Corridor



Active Main Street

- Access to courtyard
- Physical Therapy
- Connections to resident neighborhoods
- Large windows allow for natural light and views to courtyard
- Interior spaces have transom lights to extend natural daylight far into the interior of the building.



Narrative – The Project Design Concept – Use as Resident Therapy



Resident Wing Entrance

Distinct Neighborhoods -

- Homelike and recognizable with clear wayfinding
- Good for residents

Floors:

- Rubber Flooring, natural product, easily cleanable, durable and long lasting
- Minimize patterns and shinning which is disorienting for some

Wall Protection:

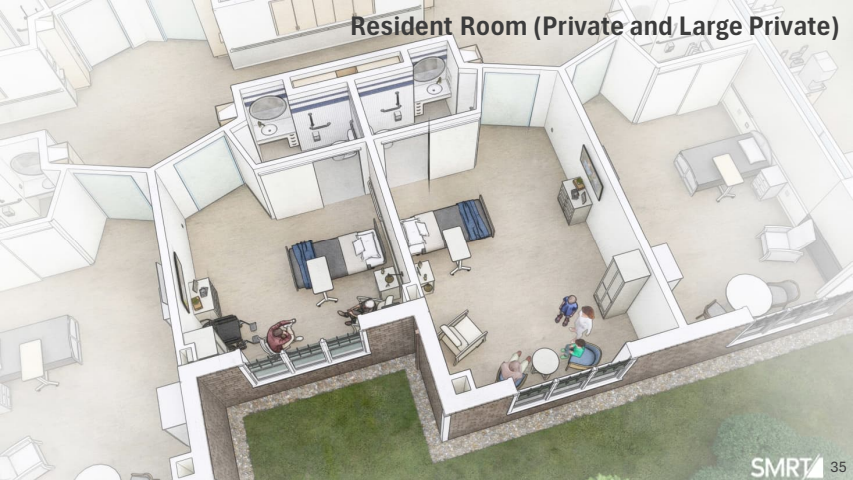
- Simple look but reduces need to patch repair walls from equipment impacts.



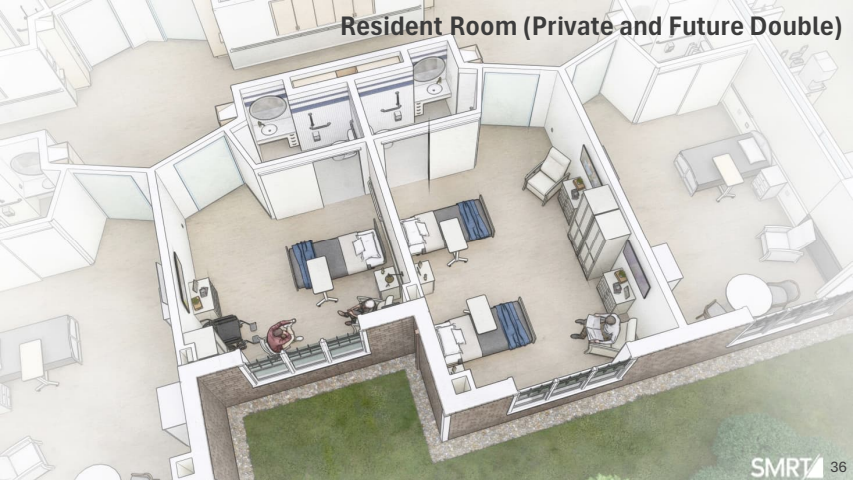
Resident Wing



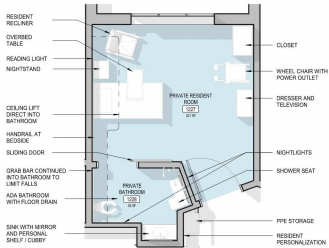
Resident Room (Private and Large Private)



Resident Room (Private and Future Double)



Resident Room



TYPICAL RESIDENT ROOM PLAN

Single Occupancy Private Bedrooms

- Space for wheelchairs
- Space for recliner
- Space for visitors to visit and welcome to stay
- Views to nature

Ceilings:

- Cost effective - Acoustical Ceiling Tiles

Ceiling Lifts:

- Resident transfer if needed to/from bed and assistance to bathroom.



Resident Room Restroom

Handrails

- All rooms are handicap accessible
- Continuous from resident bed to the toilet, reduces resident falls.

Ceramic Tiles:

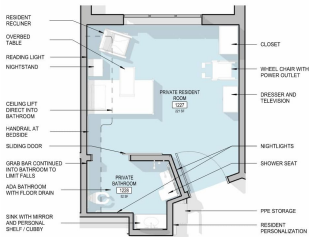
- Provides excellent slip resistance (grout lines)
- Long lasting and timeless

Mirrors/Lighting:

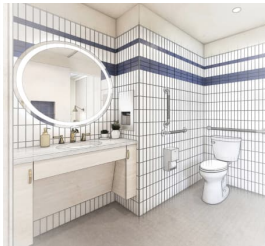
- Clean and modern

Shower:

- Flexible and sized for staff assistance if required, seat and handrails.



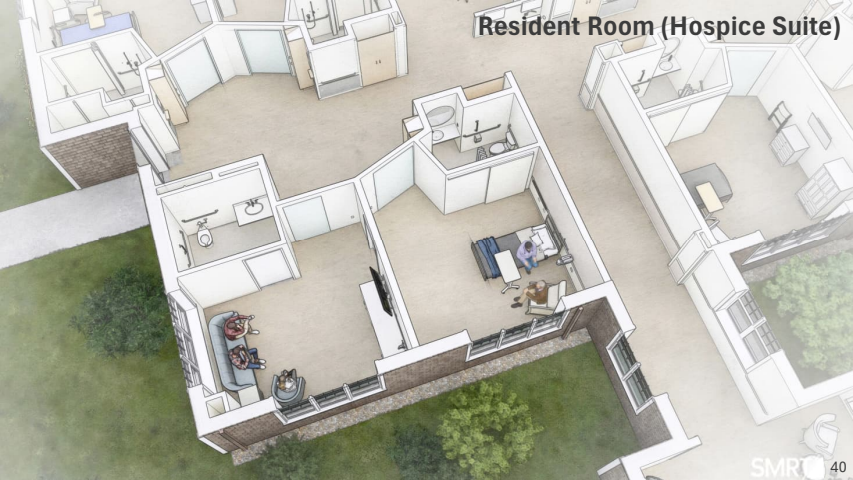
TYPICAL RESIDENT ROOM PLAN



Resident Room (Person of Size Room)



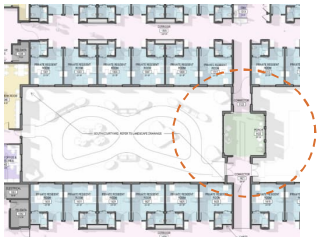
Resident Room (Hospice Suite)



Resident Wing – South Porch



Porches

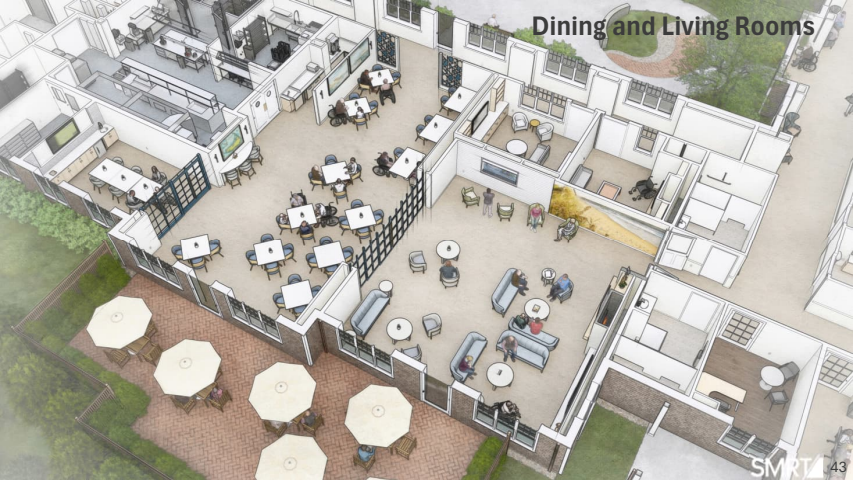


Active Neighborhood Street / Porch Meeting Areas

- Access to courtyard
- Gathering space outside of resident room for loved ones to meet with resident
- Connections to resident neighborhoods allows for residents to pace walk and avoid dead ends
- Convenient access for staff/supplies between neighborhoods



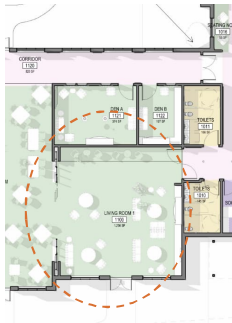
Dining and Living Rooms



Dining and Living Rooms – Large Event



Living Room



Hearth

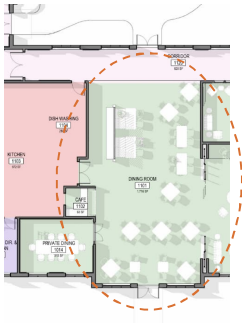
- Timeless gathering area

Graphics / Images / TV:

- Variety of therapy for residents and activities
- Aquarium (similar to what is today at OIH)
- Simply ceiling feature (lights and details reinforces active space)
- Large graphic image to evoke memories and discussion with staff (art therapy)



Dining Room



Private Dining Room

- Options for resident celebrations with family / friends
- Quieter dining option for residents who prefer less activity
- Reinforcing resident choice.

Choice:

- Variety of dining table options.

Flexibility:

- Living Room and Dining Room can be opened up to one large space. This space can be used for larger gatherings with staff, family and community events



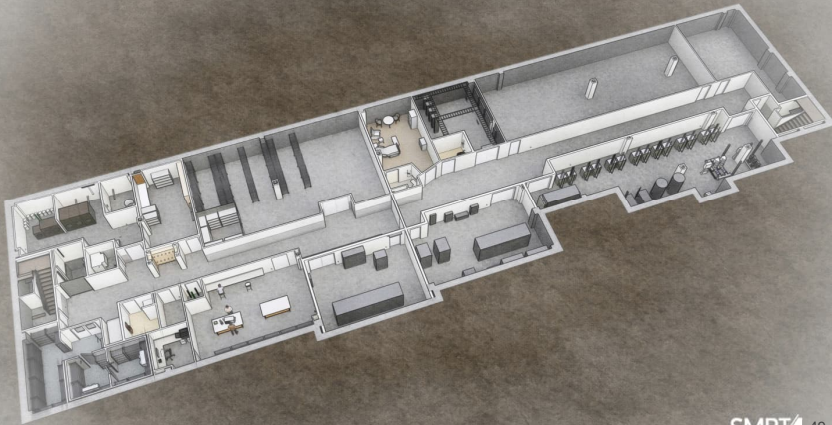
Service Entrance / Kitchen / Dining Room



First Floor – Service / Dining / Living Activities Wing



Basement – Service / Staff Only Area



Site Development and Renderings





**Existing
Site Plan**

SMART

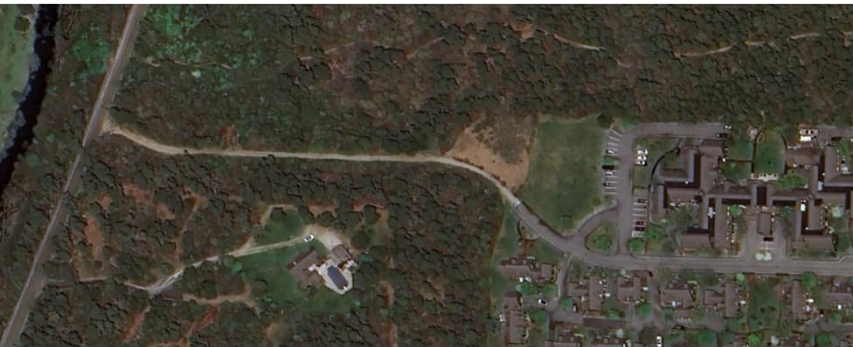


Existing
Site Plan

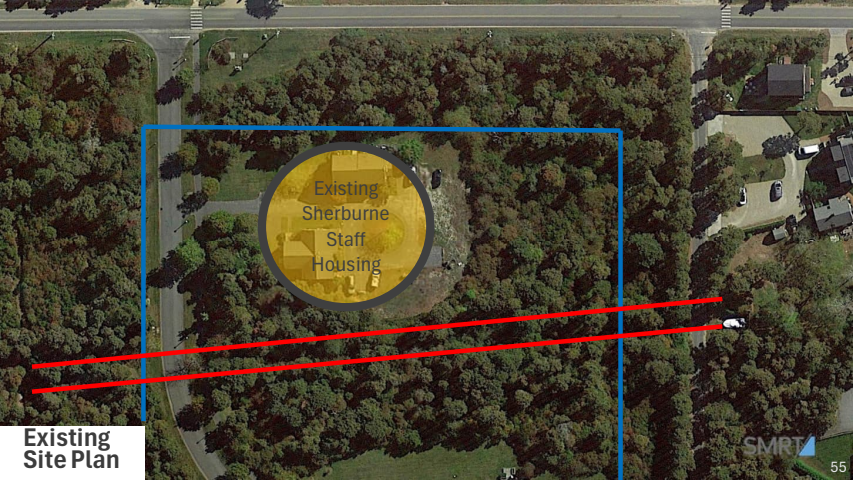


Existing
Site Plan

SMRT



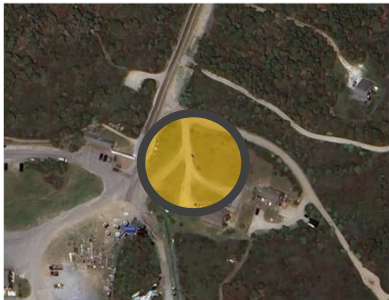
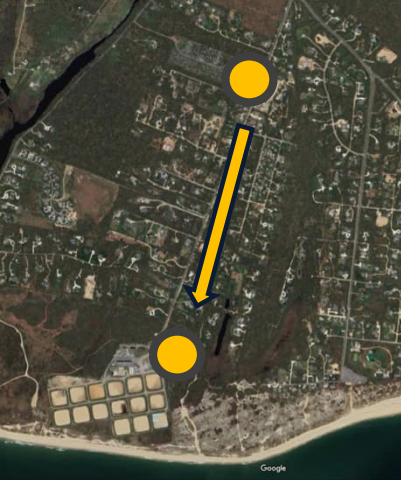
Existing Emergency Access
to Miacomet Road



Existing
Sherburne
Staff
Housing

Existing
Site Plan

SMRT



Relocated / Moved Sherburne Staff Housing



New
Sherburne
Staff
Housing

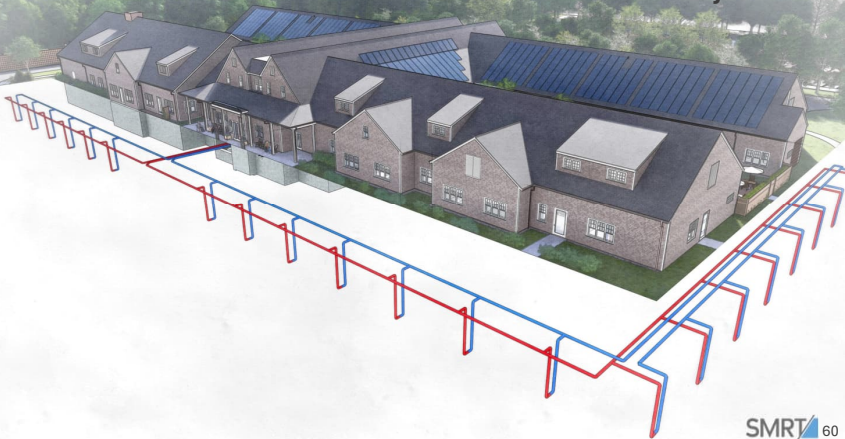
Site Plan



Bird's-Eye Perspective



Geothermal System



Roof Mounted PV Arrays



Attic Mechanical Space



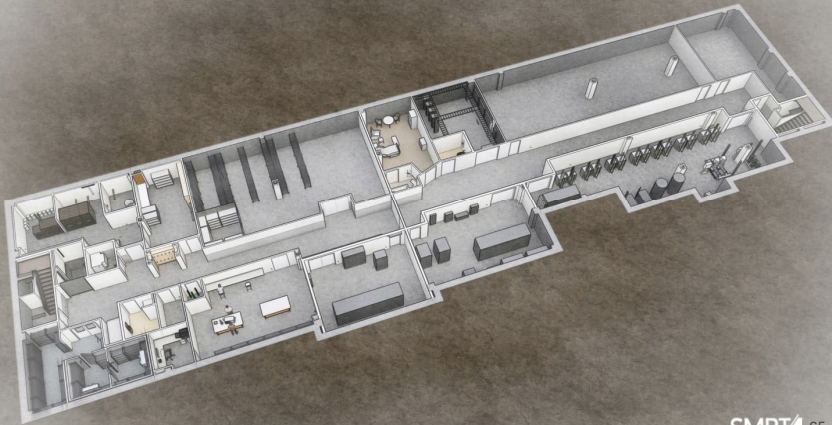
Overall - First Floor



First Floor – Service / Dining / Living Activities Wing



Basement – Service / Staff Only Area





Building Elevations – Replaced Sherburne Staff Housing





Existing Sherburne Entry View from South Shore Road

Proposed Entry View from South Shore Road



Proposed Entry View from South Shore Road



View from South Shore Road (Looking Northwest, just past South Pasture)



Proposed view from South Shore Road (Looking Northwest)





Entry View from driveway to Sherburne Staff Housing



Proposed Sherburne Commons Road



Proposed Sherburne Commons Road



**Proposed View of New OIH / Staff Housing
from Sherburne Commons Road**



Existing Sherburne Commons looking West



Proposed View of New OIH / Sherburne Commons Housing from
Sherburne Commons Road from Sherburne Commons looking East



**Proposed View of New OIH Entrance
from Sherburne Commons Road**

Proposed Building Entry view





Bird's-Eye
Perspective

Project Schedule / Next Steps



Milestone Budget Updates

Construction Documents (CD): 1/10/25:

Consigli – Bidding / Guaranteed Maximum Price (GMP) Schedule

- Trade Bids Due: March 4, 2025
- Remaining Bids Due: March 11, 2025
- Initial GMP: March 7, 2025
- Final GMP: April 2, 2025
- Select Board Update: April 9, 2025

ATM 2025: Saturday May 3, 2025

Pending all permitting and ATM25 Approval / Election:

- Construction Phase/Procurement: September 2025 to September 2027

Permitting Milestone Updates

Planning Board: COMPLETE: Received Approval with conditions on 12/9/24

HDC Submission: IN PROCESS: 12/2/24, Hearing on 1/21/25

Massachusetts Department of Public Health:

- Determination of Need
- Plan Review Process

Sustainability / Resilience Update



Sustainability Update

The path forward

Sustainability: Balancing the economic, environmental, and social health of our island to ensure we meet the needs of current residents and visitors without compromising the ability of future generations to meet evolving needs. The Town of Nantucket will lead by example through institutionalizing sustainability principles into municipal operations.



NANTUCKET

SUSTAINABILITY ASSESSMENT RECOMMENDATIONS REPORT

FEBRUARY 2020



OIH Sustainability Update

The path forward

Energy Reduction Measures

- New OIH is predicted to use 78% less energy per square footage than the existing OIH
- The new facility will be an all-electric building, with on-site energy generation from geothermal and PV array system. This approach will provide stability on utility costs in a volatile energy market.





OIH Sustainability Update

The path forward

Energy Reduction Measures

On-Site Renewable Energy: Photovoltaic (PV)

- Based on the possibility area for roof mounted PV, an array could support approximately 72% of the building energy demand.
- The roof mounted PV array would reduce the energy demand from utility services by 93% when compared to the existing facility. Reducing annual energy grid consumption to 611,000 kBtu, equating to a predicted annual energy cost from the utility grid of \$0.57/sf.



OIH Sustainability Update

The path forward



Energy Reduction Measures

HVAC/Geothermal

- The building will utilize energy recovery ventilators (ERV) for ventilating occupant spaces and common areas. The ERVs will be highly efficient at recovering the energy from the exhaust air taken from the building to condition the incoming fresh air. The fresh air supplied through the ERVs will all come from outdoors and all of the exhaust air taken from the building will be discharged outdoors (i.e. there is no recirculation of ventilation air in the building).
- The building will utilize highly efficient, variable-refrigerant-flow (VRF) heat pump systems for space heating and cooling and for tempering ventilation air. The VRF systems will be connected to the geothermal well field which allow the systems to operate at a higher efficiency than VRF systems that utilize outdoor equipment.
- The building will utilize a geothermal well-field for providing energy to the space heating and cooling systems and tempering ventilation air. The geothermal well-field will also be used to provide energy for the domestic hot water system and refrigeration systems serving the commercial kitchen.
- The geothermal well-field allows for outdoor equipment to be eliminated and for all major pieces of equipment to be located indoors within mechanical spaces.
 - Locating equipment indoors allows for easier access for service and maintenance and results in longer lifespans for equipment as they will not be exposed to coastal conditions.
 - Locating equipment indoors reduces exterior noise generated by HVAC equipment which benefits both building occupants and neighbors.

How Geothermal Closed Loop System Works

Absorbing heat from the earth during winter to heat OIH and then releasing heat back into the ground during summer for cooling purposes

By circulating a mixture of water and antifreeze through a connected network of buried pipes warmed by the ground which is 50 degrees year-round

450 feet deep wells

1. Heating in winter: The fluid in the underground loop absorbs heat from the surrounding soil. Reverse in summer.
2. Heat pump transfer: The fluid is pumped to the heat pump where it transfers its heat to the refrigerant inside the unit. Reverse in winter.
3. Air distribution: The heated refrigerant is then used to warm the air in the building via an air handler

OIH Sustainability Update

The path forward



Energy Reduction Measures

Fully electric Kitchen

- Environmental impact: Switching to electric appliances eliminates direct greenhouse gas emissions from gas combustion, contributing to a more sustainable kitchen operation.
- Indoor air quality: Electric cooking produces significantly less fumes and pollutants compared to gas, improving air quality for kitchen staff.
- Induction technology: Many modern electric appliances use induction cooking, which provides precise temperature control and heats cookware directly, potentially leading to faster cooking times and improved efficiency.
- Electrical infrastructure needs: Upgrading the electrical system in the building may be necessary to accommodate the increased power demand from electric appliances.
- Cost considerations: While electric appliances might have a higher upfront cost, potential energy savings and reduced ventilation needs could offset the initial expense over time.
- Electrified kitchen promoted a healthy environment for kitchen staff and residents by eliminating greenhouse gas emissions associated with the burning of propane. The existing facility's kitchen produced roughly 21,500 kg CO₂e annually, this is equivalent to carbon sequestered by 21.6 acres of U.S. forests each year.
- Electrified kitchen removes the dependency on utility gas delivery and can be operated from renewable energy systems.

OIH Sustainability Update

The path forward



Passive House

A third-party building certification program that prioritizes energy efficiency and occupant wellness and thermal comfort through high thermal resistance and airtight building envelope construction.

Passive House certification provides third-party verification which ensures the building construction meets the design intent of a quality exterior envelope through enhanced inspections and testing.

Passive houses are built with high-quality materials and strict construction methods/monitoring, which makes them durable.

Passive House aligns with the goals of improving the lives of the residents in a senior care environment. Focusing on the thermal comfort for the residents through the following:

- System, free from outside drafts, cold spots and overheating
- Improved air quality
- Quiet: tight envelope and insulation reduces noises from exterior

OIH Sustainability Update

The path forward

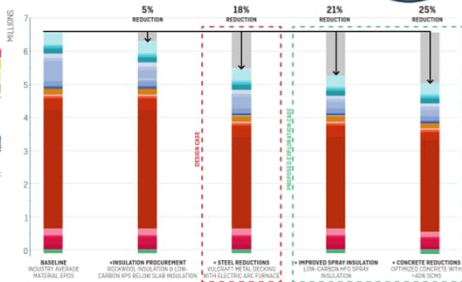


WBLCA & WLC ASSESSMENT BOUNDARIES - BUILDING SCOPE



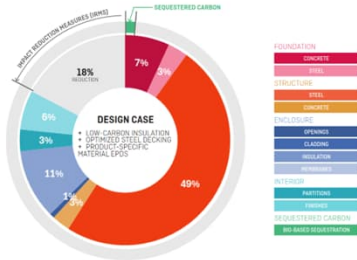
WBLCA & WLC Study

- Part 1: Cradle to Grave Embodied Carbon (WBLCA)
- Part 2: Whole Life Carbon (WLC) Evaluation



OIH Sustainability Update

The path forward



Greenhouse Gas Emissions

- Through comparative modeling, which evaluates the building as designed against the same building with a baseline mechanical system and code minimum thermal envelope, the proposed design is predicted to produce nearly 45% less greenhouse gas emissions, before consideration of the additional offsets associated with PV.
- The PV array offers an additional 28% reduction of greenhouse gas emissions, totaling approximately **73%** in GHG reductions.
- All electric building is able to become "carbon neutral" with both on and offsite renewable energy sources are implemented on the site and the electrical grid becomes decarbonized. Building using fossil fuels will always produce greenhouse gas emissions until those system are replaced with electrified systems.

OIH Sustainability Update

The path forward



**INFLATION
REDUCTION
ACT**



Rebates/Incentives

- Through Mass Saves, the project is able to recoup a percentage of the project costs associated with the proposed rooftop PV array, the geothermal ground source heat pump system, as well as additional rebates for Passive House Certification and Post Occupancy Incentives. Anticipated Rebate \$500,000.
- The Federal Inflation Reduction Act (IRA) offers additional incentives that are targeted for both the rooftop PV array as well as the geothermal ground source heat pump system. Anticipated Rebate: \$4,000,000.

Potential Incentives	\$4,494,149
Mass Save – PV	\$304,606
Mass Save – Construction Incentive	\$120,600
Mass Save – Passive House Certification	\$3,000
Mass Save – Post Occupancy Incentive	\$90,500
Mass Save – Appointed Technical Advisor Fee	(\$7,500)
Mass Save – Ground Source Heat Pump	\$859,100
IRA Federal 30% Tax Credit – PV	\$345,843
IRA Federal Tax Credit - Geothermal	\$2,778,000