

**Arlington High School Building Committee**  
**AHS Sustainability/MEP Subcommittee Meeting**  
**Thursday Oct 11, 2018, 2:30pm - 5pm**

Skanska Meeting Notes – Recorded by Victoria Clifford & reviewed by Ryan Katofsky

Attendees: Ryan Katofsky, Kevin Settlemyre, Brendan Giza-Sisson (Eversource), Kevin Caddle, Rachel Oliveri, Nitya Sompuram, Chin Lin, Steve Nesterak, Daniel Ruiz, Victoria Clifford, Arthur Duffy, Nate Dick (Eversource), Charles Stellberger (Eversource), Kent Werst, Ben Heymer (Seventhwave), Kim Cullinane (Eversource), Rob Diemer (by phone)

*Seventhwave – Accelerated Performance for Arlington Schools Presentation*

*Presented by Ben Heymer & Kim Cullinane*

Process:

- Firstly, Identify EUI goals (summarize goals)
- Arlington will be awarded a stipend for a design charrette (\$3,000)
- Front loaded incentives: the program will guarantee incentive of \$0.50/sqft based on EUI selected (provided the building achieves its goal)
- If school outperforms its goal, the program will reward based on savings per existing incentive levels, but not less than the up-front guarantee.
- Steve requests examples of similar size programs that have gone through the accelerated performance demonstration program
- HMFH has not decided if HMFH or InPosse will be performing the energy modeling (it is a contractual decision that needs to be made)
- Comment is made that the consultant that performs the energy model needs to be comfortable with sharing the model with Eversource
- The way the school is scheduled and operated plays a huge role in the EUI – the school building being efficient is only one piece of the pie. EUI is determined by the schedule.
- Another key consideration is the plug load
- There is \$30,000 dollars of incentive money for Arlington
  - o First half of the payment will be made out to the design team if the design hits the EUI mark (subject to review by Seventhwave)
- Will MSBA Participate or Deduct for these grants?
  - o General sense is no. Skanska to investigate this and report back.
  - o Kim (Eversource) answered that utility incentives are no longer deducted from MSBA reimbursement levels and that this program is supported by the MSBA.

Survey Results (sustainability priorities of the full AHS Building Committee):

- Strong desire for building to be connected to the outdoors
- Strong interest for net zero energy ready or net zero energy
- Strong desire to reduce water use by 30%
- Maximize renewable power production
- Programing:
  - o desire for the building to be flexible for future programmatic changes

- Climate resilience:
  - o fully resilient to all climate conditions
- Prioritization:
  - o (low score -high desire) Indoor environmental quality, ease of maintained, lowering utility bills -- all practical goals
  - o (high score – low desire) – risk reward sharing, receive external recognition, intelligent feedback, superior interior finish, latest technology
  - o Reoccurring themes: passive design, ease of maintenance
  - o Concern that “low first cost” fell to low desire – not in line with the feedback the committee has been receiving from the community
- HMFH is concerned that the survey / information presented thus far does not consider that this building is a school – the building needs to serve its purpose, serve the students and the educational plan
- Seventhwave notes that the survey was geared to energy usage rather than school operations
- Non-negotiables that consider the school program needs to be woven in – it will serve as a baseline
- It is noted that the Educational Program isn’t written from the perspective of how the spaces will be served by mechanical systems/acoustics/lighting
- HMFH needs a clear direction from the District on which LEED acoustics they are aiming to achieve so that HMFH can deliver the desired building
- Ben is using 100-year building life evaluation
- MSBA uses a 30-year building life evaluation
- Ben to show his priority numbers at a 30-year building life basis
- The building COULD be programed so that wings are shut off to conserve energy – needs to align with the educational plan and building utilization
- Kate Loosian – Would push for system controls to be higher on the priority list (currently on the “If Possible” list)
  - o InPosse responds – good system controls will be provided regardless
- HMFH mentions that we need to be cautious of what EUI goal is being advertised to the public. We can transparently advertise an obtainable goal – there can be an internal goal that is lower.
- Ryan asks - what are the steps necessary to create an energy model?
  - o Ben – first we need to set a deadline for the initial outline
- The sustainability committee needs to inform the larger SBC on the consensus for thermal comfort (temperature/humidity)
- HMFH notes that historically we haven’t seen high schools come in under 40 EUI (historically). If we want to beat a 40 EUI, we need to be committed
  - o Kevin C. noted that high schools can be as low as 36 today
- Kevin S. offers to compile historical data of HS EUI’s – will include caveats for the systems they are using
- The subcommittee needs more information to understand what the proposed design can handle for ground source heat pumps
- HMFH suggests adding photovoltaics to the northeast site slope (between away bleachers and bike path)

- Who owns that space?
  - HMFH / Skanska to look at site survey
  - Potentially very costly due to the contamination
- Double glazed vs. Triple glazed windows (premium attached)
- Heating / cooling are we hitting a point or a range?
  - Should be a space by space conversation
  - Delivering 80 or 75 degrees? It is a hard question regardless of how it is delivered (systems)
- Dan suggests that we have one more meeting with this group to define the energy model goals before reporting out to the full committee

Next steps:

- The program needs a range for EUI - recommended range is +/- 3 points
- Pick a range and design to that goal
- Will need HMFH to give a critical timeline of when the decisions need to be made by the committee on the HVAC system
- One week for the committee to review the Seventhwave report & provide feedback.