

STA Building & Grounds Committee Minutes of Meeting from April 11, 2022

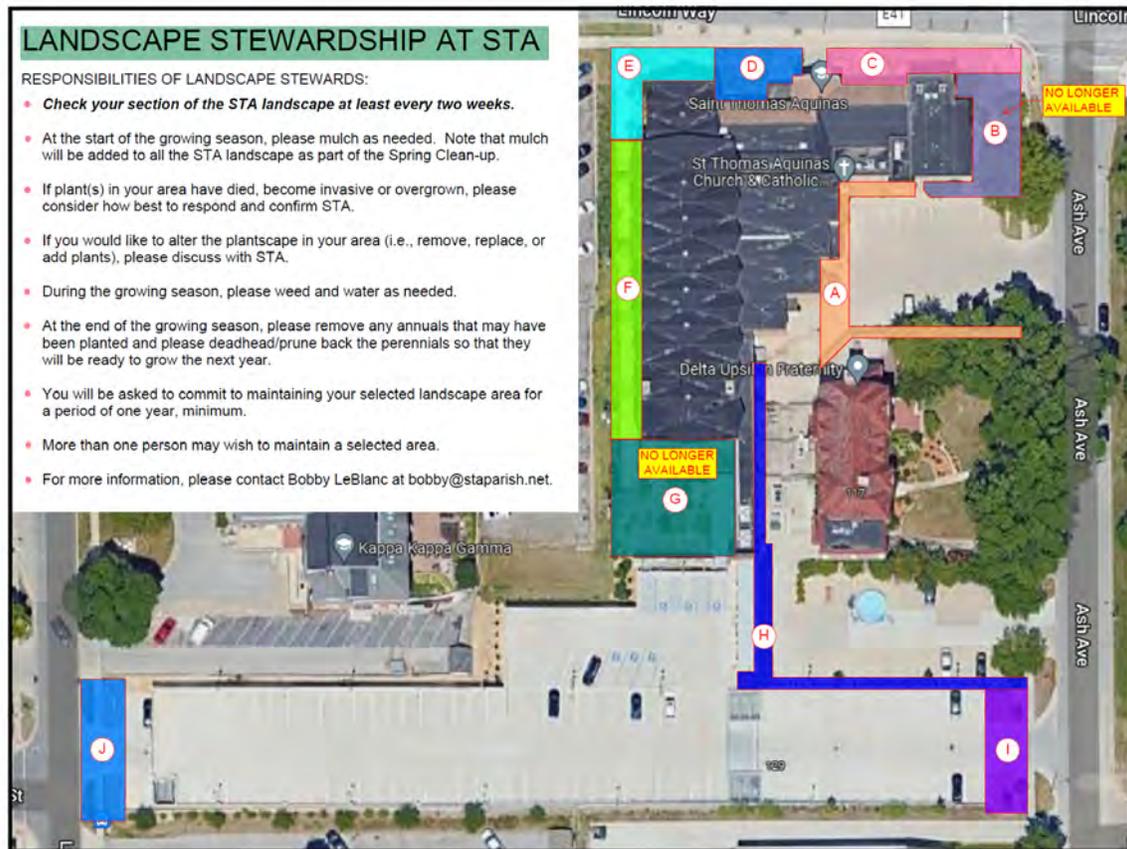
Attendance: Jim Smith, Quenton Schneider, John Moss, Carl Bern, Bobby LeBlanc, Warren Franke, Scott Blum

Absent: Andy Campbell, Kevin Sorenson

Scott Blum was thanked for his service as the Chair of the B&G Committee for the past year. Warren Franke began serving as Chair for the next year, effective this meeting. Kevin Sorenson will replace Warren, effective April 2023.

Below are the items suggested by Bobby as the B&G “to do” list for the foreseeable future. We discussed several of them at tonight’s meeting.

1) Landscape Plan – There are 10 areas that need stewards. Areas G and B are taken and 2 other parishioners have expressed interest. Bobby will wait a week and put another blurb in the church bulletin, including links to the map and FAQs.



2) Sidewalk Repairs – Quenton met with Brad of Hoffman Construction to discuss grinding down or fixing the cracks along Lincoln Way as well as finding a way to stabilize the drainage gate in the parking structure (which is markedly affected by winter freeze). Quenton will get a quote from Brad.

3) Spring Clean-up – It is scheduled for Saturday, April 30th. Warren will serve as the host. He will call Jackie Conzemius to see if she is fully retired. If so, we need to find someone to coordinate the outdoor activities. Quenton and Scott said they’d be willing to

do so next time but are unavailable on the 30th. After talking to Jackie, Warren will contact Kevin Sorenson or Gene Noem, if need be.

Warren will contact Peter Orazem (K of C) to see if the knights would be willing to lead a mulch spreading effort.

4) Decide scope of HVAC (boiler) work, companies to ask for a quote, decision and time frame –

Scott and John (maybe Carl, too?) will shepherd this effort. See e-mail excerpt at end of these minutes to see what the long-term scope of work might be.

The most proximal concern is replacing the boilers and adjacent water heaters. It was guesstimated that this could be \$150,000+. Bobby indicated that the money is there—in the STA Operating Reserve (\$400,000) and a \$600,000 endowment for this kind of work. However, timing is important—both in getting the parts needed (ever-present supply chain issues) and installing the systems (weather needs to be temperate since substantial part of the church will have no water and no cooling/heating for a week or so).

It was suggested that Baker Group, Mechanical Comfort, and ACI be asked to provide quotes and scope of work. Scott et al., will work on this.

5) Church floor waxing – will be in the fall as there is no manpower to move the pews

Items we didn't get to:

- 6) What is next HVAC repair/replacement after boilers?
- 7) Ceiling damage in gathering space

Other items that were mentioned

- The parking deck will be cleaned in June.
- The clerestory window cleaning needs to be scheduled for a slow time at STA, June or July.

HVAC Scope of Work: (e-mail summary from Scott and clarifications from Dave Chongo, in red):

Thank you goes to Dave Chongo of KCL Engineering for coming to Ames from Ankeny this morning to help us look over the equipment and just discuss a variety of things related to HVAC equipment. On behalf of the Building and Grounds Committee at STA, we greatly appreciate this!

Thanks also goes to John Moss and Bobby LeBlanc for joining our tour and discussion this morning. This email is intended to provide a summary of what we discussed and, hopefully, a plan for work related to this equipment moving forward.

Notes from our tour this morning:

1. There are two boilers. Both need to be replaced eventually. Dave – can you give us an opinion of when you believe we should take action on this?

< 5 years unless directed by boiler inspector that it needs to be done sooner.

2. The work related to combustion air from the boilers will be a point of discussion with any contractor. There is a chimney leading from the boiler room downstairs straight up that may possibly be used. **The Chimney can be reused however new flue would need to be installed and new combustion air routed to the new boilers for a sealed combustion installation**
3. The water heater needs to be replaced when replacing the boilers. **The replacement of the boiler flue would dictate replacement of the natural draft water heater with a sealed combustion type unit (flue and combustion air intake would route the same as the new boiler flues and combustion air intakes.)**
2. The current leak in the boiler room is on the **dual water** chilled /hot water line. Dave mentioned a few times that cracks (**compromised vapor barrier**) and voids in the insulation around chilled water pipes often results in rusting of the pipe **The condensation will wick down the pipe under the pipe insulation and soak the fiberglass insulation rendering the insulation useless**. It is likely that the humidity in the room causes condensation between the pipe insulation and the pipe itself. This latent air is able to reach the point of the cold pipe through the **compromised vapor barrier**, cracks and voids in the pipe insulation. There is a seriously rusted pipe that is leaking up high in the boiler room and it looks as though more chilled water pipe in this room needs to be completely removed and replaced.
3. Air handling unit (AHU) #3 is located in the basement boiler room and serves the adjacent dining area downstairs. It doesn't run as often as some of the other AHUs. This unit should either be replaced entirely or repaired in place. Repairing in place is likely the solution given the tight nature of this room. Repair in place may mean replacing the fan, the coil, and any rusted panels. Dave felt this should be dealt with in the next five years.
4. The chilled water pipe in the basement boiler room should be checked and may all need to be replaced. Chilled water piping in other areas of the facility should also be checked at various locations by the contractor. Obviously, we are hoping that the rusting is only occurring in the basement boiler room, but it would occur anywhere that a chilled water pipe **vapor barrier is destroyed and** exposed to latent air because the insulation is compromised.
5. Dave suggested the use of an insulation bag with Velcro attachment where insulation does not fully cover **valves or strainers** or other locations on the chilled water piping. **All damaged insulation with compromised vapor barrier should be replaced**.
6. Dave suggested that PVC jacketing should be added to chilled water pipes. (**in exposed locations below 8' above the floor**) this will protect the vapor barrier of the insulation jacket material from being damaged in the future)
7. AHU #6 has recently been repaired, so this is done. This serves the foyer/entry of the sanctuary.
8. Many of the smaller AHUs are DX units, and are not, in Dave's opinion, in urgent need of replacement. Furthermore, if these units fail, they don't serve the sanctuary or chapel, thus not as hard to deal with from the standpoint that they serve limited areas of the building.

9. Dave feels the chiller has at least five years of life left in it. Further, the pumps offer some redundancy that allows STA to limp along should one fail.
10. If the boiler room or other areas become too humid, Dave suggested the use of a High-E Dry Dehumidifier drained to a floor drain. These do a good job of pulling humidity out of the air. This could reduce the amount of rusting on chilled water pipes over time.
11. Dave feels there is no urgency to replace AHUs #5 and #8. AHU #8 serves the chapel area.
12. AHU#1 has had issues in the past. Two times the coil has frozen and burst. STA had it fixed and changed the actuators to 30% in order to always run warmth to this unit.
13. AHU#2 is the unit that serves the sanctuary. It is above a ceiling area at the south/rear of the church. In order to access this unit, one must work from a ladder and into openings in the ceiling after removing a grille. This is not ideal by any stretch. Dave indicated that he feels this unit likely doesn't meet code with respect to outside air. We looked briefly at places on the main level, balcony or roof for a new unit, but this will be cost prohibitive, we believe. This units needs to be replaced in the same spot above the ceiling.

Summary from our meeting this morning:

- A. Replace both boilers. Contractor to find a way to deal with combustion air piping/venting. Contractor to determine combustion air routing.
- B. Replace the water heater.
- C. Replace any highly rusted chilled water piping. Start in the boiler room, but check all over the facility. Contractor to investigate.
- D. Repair AHU #3 in the boiler room. Change the fan, the coil, and any panels that have surface rust. Could just repair the coil, possibly. Contractor to advise.
- E. Repair AHU #1. Change the fan, the coil, an any panels that have surface rust. Could just repair the coil again if need be. Contractor to advise.
- F. Replace AHU #2 serving the chapel.
- G. Do not hire engineer, but instead work with the contractor.

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