
MEMORANDUM



TO: Mayor Walker and Councilors
Airport Advisory Board
FROM: M McPherson, City Administrator
SUBJECT: **Joint Meeting, AWOS Siting Discussion**
DATE: June 29, 2021

Background:

In order to accommodate development on the Princeton Business Park, the AWOS for the airport needs to be relocated. Siting requirements limit structure heights within the 500 and 1,000 foot radius of the sensor to 18 and 20 feet in height which is significantly less than standard clear heights for manufacturing facilities.

Analysis:

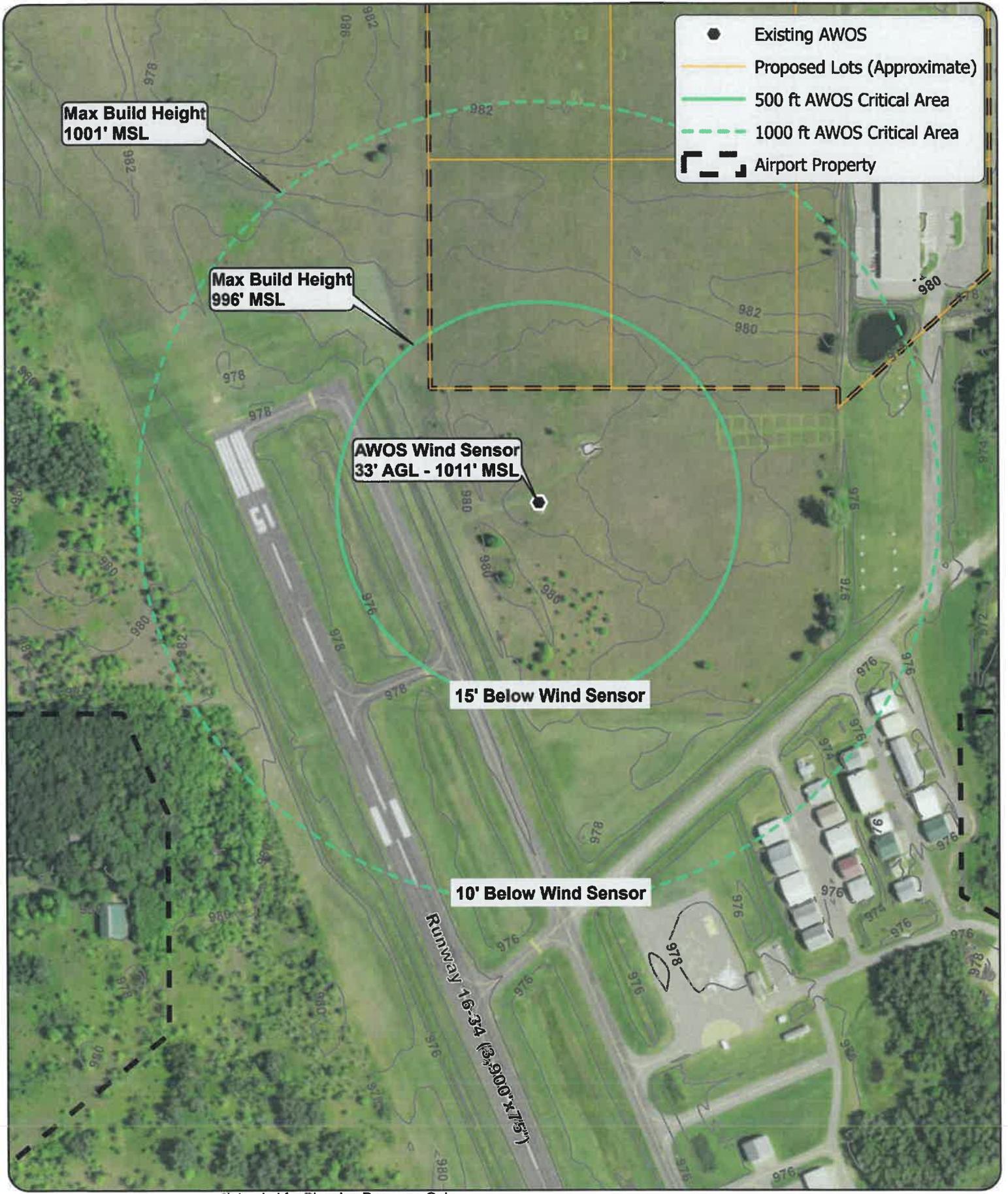
KLJ has prepared the attached siting considerations map to illustrate the three siting options; two are new, the third is the one identified in the ALP. They also reached out to MNDOT as to whether they would accept the site in the ALP; their summary of that conversation and their recommendation is attached.

Each of the remaining site alternatives have their pros and cons as identified on the siting considerations map. One thing to note is that relocation of the AWOS may not be eligible for external funding as the need to move the AWOS is not being driven by internal airport needs but by external drivers.

Before moving forward with a specific scope of work for the AWOS relocation, staff will need clear direction from the City Council and the Airport Advisory Board as to which of the two remaining sites should be pursued.

Request:

Staff requests that the City Council and the Airport Advisory Board discuss the siting options for relocation of the AWOS and arrive at a consensus as to which of the remaining sites staff should prepare a specific scope of work.



- Existing AWOS
- Proposed Lots (Approximate)
- 500 ft AWOS Critical Area
- - - 1000 ft AWOS Critical Area
- ⌚ Airport Property

**Max Build Height
1001' MSL**

**Max Build Height
996' MSL**

**AWOS Wind Sensor
33' AGL - 1011' MSL**

15' Below Wind Sensor

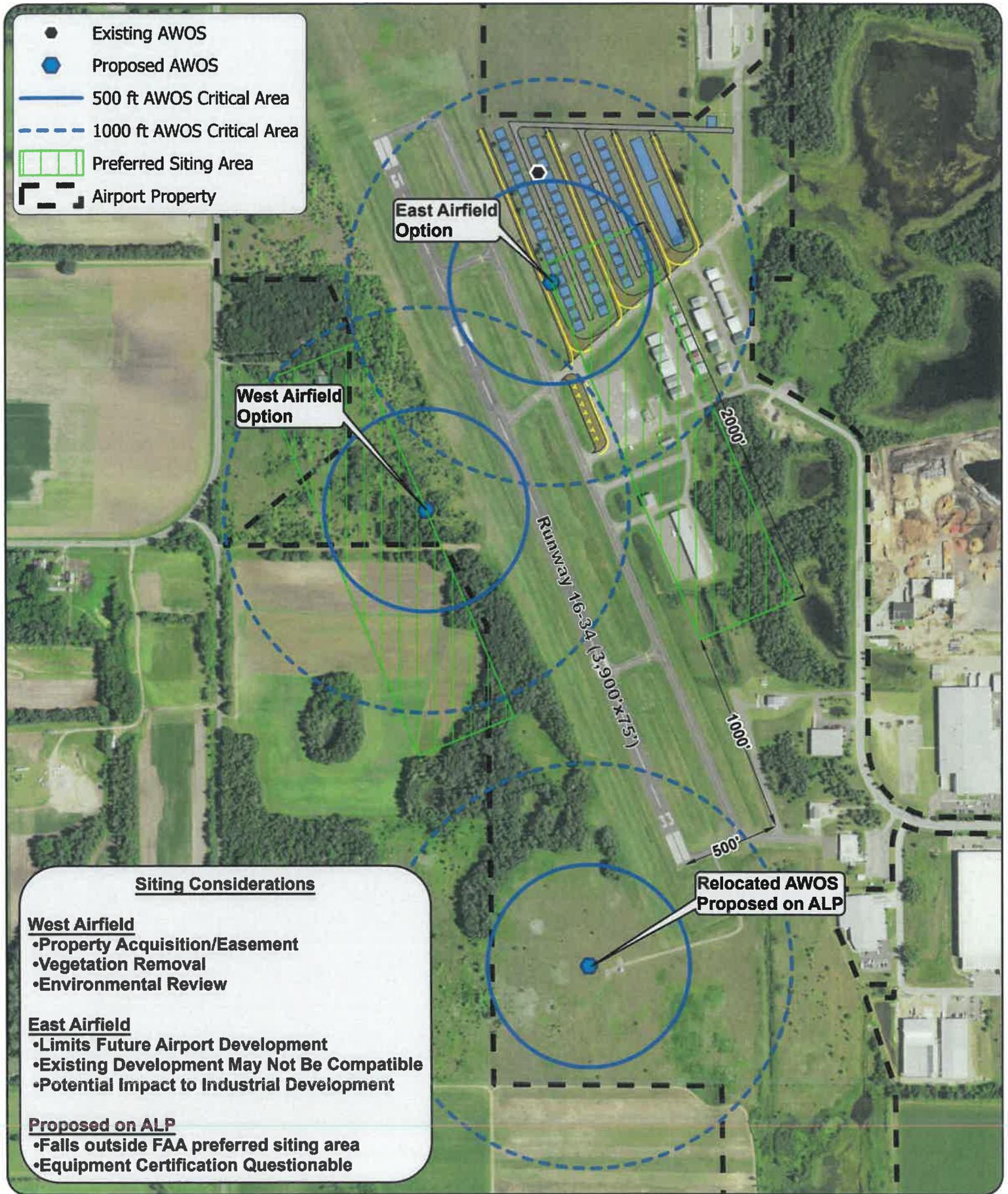
10' Below Wind Sensor

Runway 16-34 (3,900' x 75')

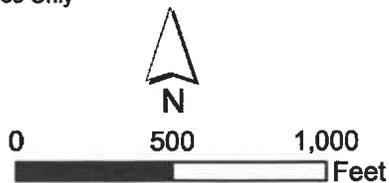
*Intended for Planning Purposes Only



**Princeton Municipal Airport
Existing AWOS**



*Intended for Planning Purposes Only



Princeton Municipal Airport
AWOS Siting



Memorandum

Date: 6/3/2021
To: Michele McPherson
Copy to: File
From: Andrew Zielike
RE: Preliminary AWOS Siting – ALP Proposed Location

Ms. McPherson,

I have reached out to Mike Hartell from MnDOT regarding the proposed AWOS location on the ALP. Their concern rests with the ability to certify the new equipment that is not within the FAA siting area as they have had difficulty certifying other AWOS systems sited outside this area in recent years. MnDOT will only participate in an AWOS relocation that would be certified. The sense I got from the conversation was that MnDOT is resolute on their position and being a key player in the process, this would be a challenging path with no guarantee of a desirable outcome. Below are some highlights from the conversation:

- In MnDOT's experience, the FAA has been steadfast in requiring AWOS systems be sited within 1,000-3,000 feet from the runway end that has lowest visibility.
 - MnDOT has tried to relocate other AWOS systems outside of this area and have faced issues trying to certify them.
- Mike stressed the importance of having the AWOS siting meet those standards as it provides pilots the best information as to what they will experience where they will touch down.
- Mike said the airport should determine a location that meets siting standards or as close to standards as possible and then approach them to work through the process.
- MnDOT currently owns the system. I asked if they could check whether the system would need to be replaced or just relocated. I will update you when I have more information.

In follow-up internal discussions with Steve Obenauer (former FAA ADO Manager), we noted that MnDOT is really pointing to the FAA team responsible for certifying weather equipment as the final say. With that in mind, I believe a written response or answer from this team on the certification of a relocated AWOS as depicted in the ALP would provide more value than from MnDOT. However, for a fruitful conversation and an efficient response we should be further along in the process with a specific location, detailed vetting as to why no other option is feasible within the siting criteria, and updated obstacle data. In Steve's experience, these conversations can spin in circles, with a considerable amount of effort, and no resolution when you are working with hypotheticals and lack specifics.

After review, we would not recommend pursuing the AWOS relocation as depicted in the ALP. The siting criteria is designed to help ensure weather information provided to pilots accurately represents what is experienced near the touchdown area on the runway, and this is likely what MnDOT and the FAA will be focused on achieving. Additionally, pushing forward with this location will likely be a substantial amount of effort, met with resistance and no guarantee of certification.