

COMMISSION ACTION FORM

SUBJECT: CHAPTER 31 TEXT AMENDMENT FOR MECHANICAL STRUCTURES

BACKGROUND:

Mini-splits have become an increasingly popular method to improve energy efficiency and internal heating and cooling systems for properties. Mini-splits are typically more cost effective than updating the HVAC system for central air because they are ductless, can target a specific room, and have more flexibility in their placement. However, these types of units can include exterior piping as alterations to structures. Staff and the Historic Preservation Commission have been receiving increased number of Certificate of Appropriateness (COA) applications and inquiries for mini-splits and other similar types of mechanical equipment related features as vents or radon systems.

Chapter 31, Historic Preservation, of the Ames Municipal Code does not have specifics guidelines for mini-splits or other mechanical structures. Because there are no standards to allow administrative review, applications are elevated to HPC review to determine if the alteration or construction meet the guidelines, intent of the historic district standards, and are appropriate.

Staff and the HPC currently rely on the Design Guidelines for Alterations and the Secretary of the Interior's Standards for Rehabilitation to make an application determination on mini-splits or other mechanical structures. Staff and the HPC evaluate whether or not the material used matches the structure, impacts significant historical features of the property, and is located appropriately to not detract from the structure. Similar standards for Gutters and Downspouts and Siding are typically used as guiding principles for review as well. Those standards state:

Gutters and Downspouts.

- a) Built-in gutters and other historic drainage provisions such as wood gutters shall be retained whenever possible.
- b) Downspouts and gutters may be added if they have not previously existed.
- c) Metal gutters and downspouts shall be permitted when dealing with a building where a water removal system never existed or where repair of the historic system is not possible.
- d) Half-round gutters and round downspouts or Roman ogee (K-style) gutters and rectangular downspouts shall be permitted.
- e) Downspouts shall be run vertically. Diagonals crossing roof planes and walls shall not be permitted.

Siding/Exterior Materials.

- a) The historic exterior siding material shall be retained whenever possible.
- b) Cementitious siding (smooth finish) of an appropriate profile is permitted for portions of the structure that are not part of the original structure, and on

additions that were built after 1941.

Staff also reviewed resources from the National Park Service, Dubuque, Iowa City, Mount Vernon, Ann Arbor MI, Manhattan KS, and Lawrence KS. Attached is a summary of relevant standards from these sources.

Staff believes it would be beneficial to create criteria for mechanical structures to better aid applicants, staff, and the HPC and determine when and where these items are appropriate. The Commission must consider whether to require a COA and if specific guidelines should apply for each of these features

Proposed criteria are based on research findings related to best practices. This report is for background information and discussion, no formal approval of text changes will occur at this meeting.

Mini Splits, Radon Systems, and Vents (Mechanical Structures)

Mini-splits and radon systems each require supply lines that run along the structure and may penetrate through the siding or roof. These structures are modern in design and not from the period of significance used to determine the historic district. Constructing new mini-splits or radon systems would be classified as an alteration to the historical structure and require review by either staff or the HPC to ensure the protection of historical structures and Old Town Historic District.

The guidelines also do not have criteria related to vents, which may be considered a mechanical structure for the purpose of Historic Preservation. Vents typically cause a minor impact to the structure and are necessary for internal ventilation. They may be necessary for, but are not limited to, bathroom, kitchen, furnace, or dryer exhaust vents, assisting the flow of air, HVAC intakes, and attics.

Radon systems are a health and safety option to vent radioactive radon gases from within homes. Not all homes have Radon issues, but it is common within Ames. Radon Systems commonly are passive system utilizing a pipe to vent gas either through rough or potentially on the exterior of the home. Locations for placing systems may be determined by factors outside of HPC control. Staff did not see research that provided guidelines directing where it is appropriate to place radon systems. The HPC may still believe it is appropriate to limit location, such as not along the front of the property, or align the criteria with requirements for mechanical structures regarding concealment or painting. Radon has not been reviewed in the past from staff's experience. The systems would generally not extend completely up the side of a two-story house. Staff would support exempting radon systems from historic review and guidelines believing that they would not impact historic character based upon past experience.

If adopted criteria is met, mechanical structures could be approved administratively. Any deviation from the proposed criteria would require HPC review. **Proposed draft language for definitions and approval criteria are outlined below.**

Mechanical Structures: Mechanical equipment and systems include, but are not limited to, all exterior devices related to heating, electric, plumbing, air conditioning, and ventilation.

Mechanical Structures:

- Mechanical structures shall be located on a side or rear façade and not a prominent façade. A prominent façade is any façade located along a street or containing significant historical features of the home even if located in the side or rear. *(For example, a rear facade may have original distinctive features that are significant to the character regardless of façade location)*
- Install mechanical structures in such a manner that historic materials and features are not damaged or obscured.
- Vents will be painted to match the structure when located on a building façade but are not required when ventilated through the roof.
- Supply lines, such as cables and pipes shall be encased in a conduit or chase to conceal the lines and be painted to match the structure.
- A conduit or chase shall not exceed 4" wide by 4" deep.
- Supply lines shall run vertically but may run horizontally under the roof eave. Diagonals, snaking, branching, or crossing roof planes and walls shall not be permitted.
- Only one set of supply lines is permitted on a side façade. Two supply lines are permitted on a rear façade.

Radon Systems

- Radon systems are exempt from the regulations of Chapter 31, **OR,**
- Radon systems are permitted in all locations except the primary street façade, **OR,**
- Radon systems must meet the criteria for mechanical structures.

The criteria above outlines when and where mechanical structures are appropriate for staff review. If the above criteria are not met, HPC review will be required.

Staff proposes language that may cover a wide range of mechanical structures and is not limited to one specific type such as mini splits, radon systems, or vents. Covering a wide range of possible mechanical structures will provide applicants, staff, and the HPC guidelines for future projects and avoids interpretation of other guidelines to decide if a project is appropriate.

RECOMMENDED ACTION:

Draft amendment language to Chapter 31 is intended to support the addition of mechanical structures if determined by the Commission to be appropriate changes to the code. The draft language is written to outline when these alterations would be appropriate if approved.

Staff requests that the HPC review the draft amendment language to Chapter 31 and

determine if any changes are recommended or if a recommendation for staff to proceed with the text amendments is supported.

If the Commission desires to proceed, staff would place final language on the September agenda. **As discussed at the July meeting, staff believes it would be valuable to send notice to the contributing properties in the Old Town Historic District of the September HPC meeting when final language would be reviewed.**