

Poe Hall - Summary

March 22, 2022



The purpose of this discussion is to provide an update on the planned project and discuss path forward for HVAC system

Poe Hall - Summary

- Constructed in 1971 - 150k GSF
 - College of Education
 - Needs, use, and expectations have changed
- HVAC System original to building
- 2012 Energy Performance Contract - Updated HVAC controls/converted to Variable Volume
- Over \$3 Million in minor renovations
- Does not meet High Rise Code - 2018 Letter from SCO generally stating no more modifications until bring to 1978 High Rise Code

Poe Hall - Summary

- 2017 Poe Hall Master Plan
 - Long term plan for space
- 2018 Poe Hall Sprinkler Study
 - Concept for sprinkler system
- 2019 High Rise Condition Assessment
 - List of code deficiencies
- Led to request as part of the University Six-Year capital Plan in 2020

Poe Hall - Project Summary

This multi-phased project installs a Fire Protection System and addresses code deficiencies for the seven-story Poe Hall (built 1970). This will include complete demolition of the existing fire alarm system. Phase I adds the fire pump and riser to allow for future project implementation.

\$3.5 Million for Phase 1 funding from State Legislature in 2022

Currently advertising for designer - Mike Kapp is Project Manager

Poe Hall - Existing Conditions

- Ductwork in vertical shaft and external horizontal shaft
- Interior lined ductwork is failing



Poe Hall - Existing Conditions

Existing Conditions

TWO HOUR RATED FLOOR: CODE VIOLATION.

4" DUCT PENETRATIONS THROUGH THE FLOOR
ARE NOTED PROTECTED. FIRE DAMPER IS
REQUIRED BY CODE.

BRINGING THE FLOOR PENETRATION UP TO
CODE IS REQUIRED TO REPLACE THE FLEX DUCT.



Poe Hall - Existing Conditions

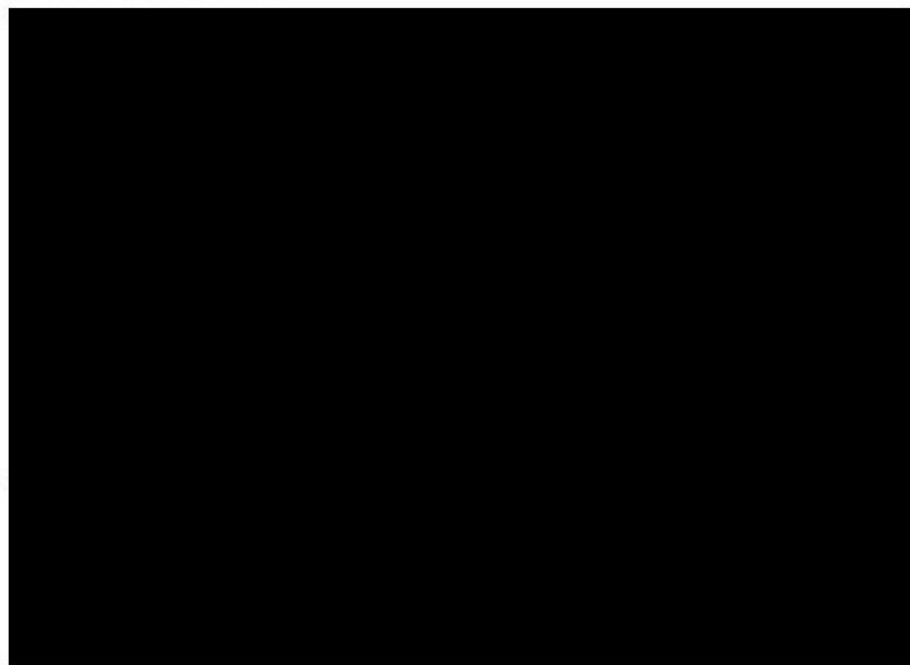
Existing Conditions

TWO HOUR SHAFT: CODE VIOLATION.

SUPPLY DUCT PENETRATIONS THROUGH SHAFT WALLS ARE NOT PROTECTED. FIRE/SMOKE DAMPER IS REQUIRED BY CODE

RETURN DUCT PENETRATIONS THROUGH SHAFT WALL ARE PROTECTED BY FIRE DAMPER. FIRE/SMOKE DAMPER IS REQUIRED BY CODE.

BRINGING THE ENTIRE SHAFT UP TO CODE MAY BE REQUIRED IF WE TOUCH THE PENETRATION



Poe Hall - Short-Term Plans

- Test one section of one floor
- Cut in access hatch and filter racks
- Developing scope to replace ductwork (or remove interior insulation and insulate from exterior) in external horizontal chases

Poe Hall - Intermediate Plans

- Further develop cost/scope for building based on results of first section
- Compare to abandoning duct and install new ductwork inside space (see sketch)
- Add to needs for entire building
- Piecemeal by floor if required

Poe Hall - Existing Conditions

OPTIONS

REPLACE IN PLACE, MODIFIED:

SUPPLY AND RETURN TO BE ON THE FLOOR THE SERVE

REMOVE ALL DUCT IN EXTERIOR CHASE

NEW HOT/COLD DUCT ROUTED INSIDE THE SPACE OR HOT MAY BE IN EXISTING EXTERIOR SPACE. REQUIRES NEW BULKHEAD ROUTED ALONG THE WINDOW. WILL NEED TO TOUCH THE SHAFT AND MAY CAUSE ENTIRE SHAFT TO BE BROUGHT UP TO CODE.

NEW TERMINAL UNIT LOCATED IN SPACE. NEW OVERHEAD DUCT SERVING THE SPACE IS REQUIRED.



DISCUSSION???

