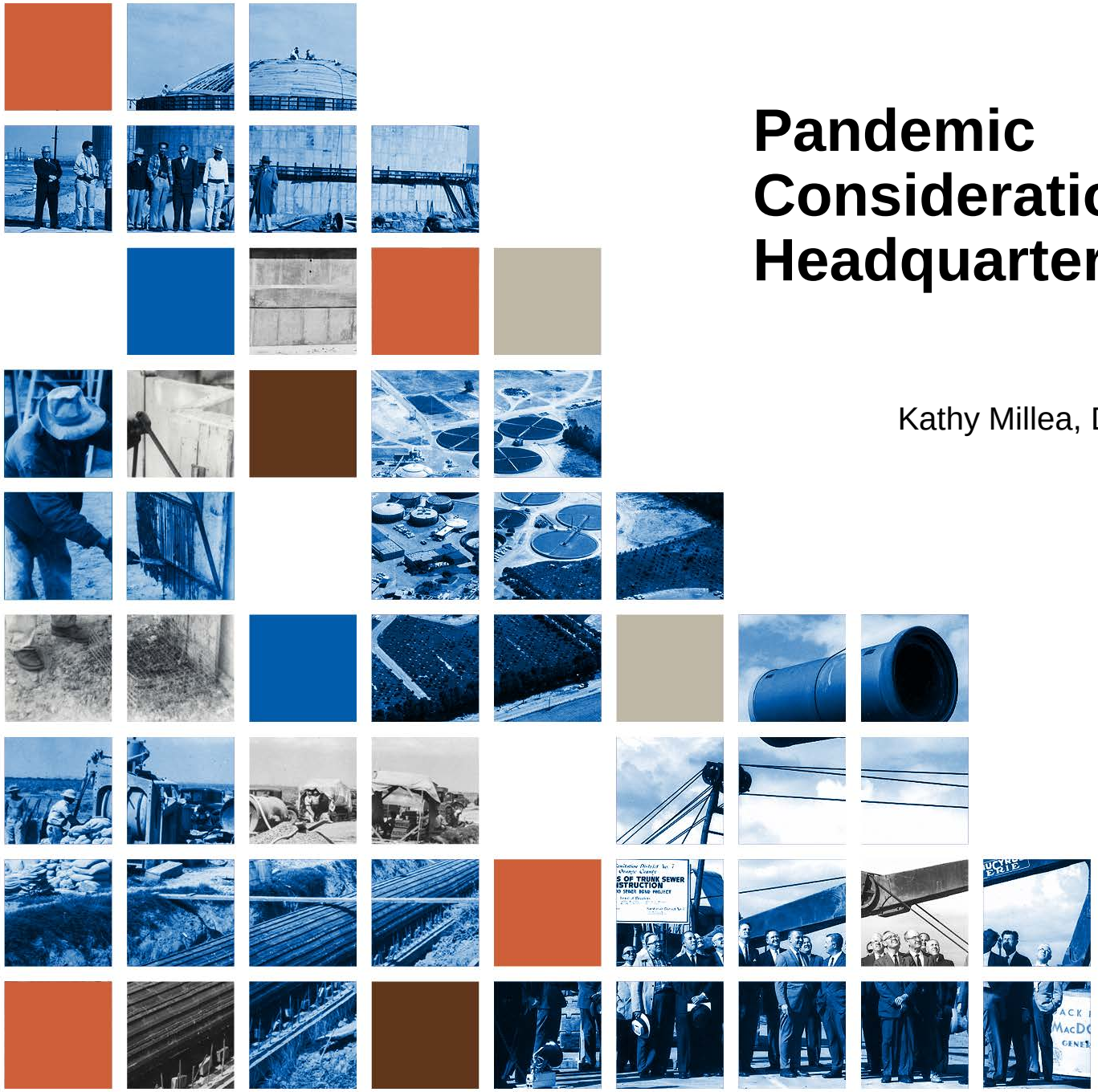


Pandemic Considerations for Headquarters Building

Kathy Millea, Director of Engineering

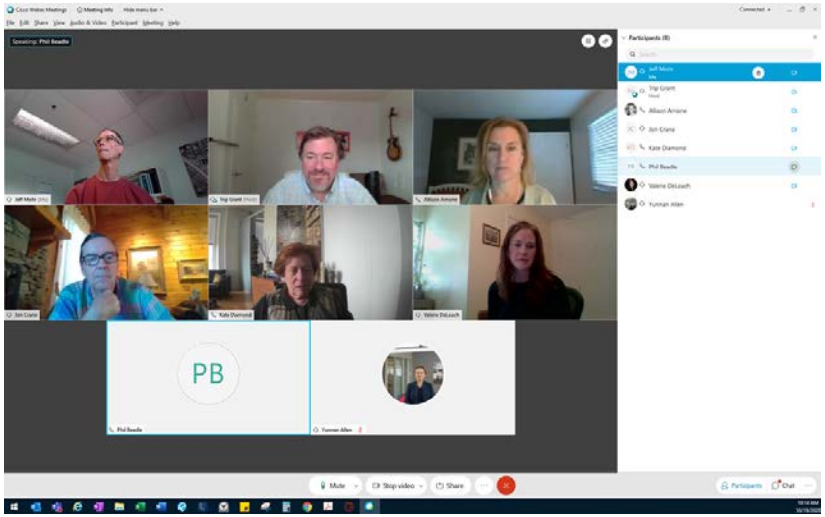
Steering Committee

October 28, 2020

Pandemic Workshop

Purpose of Workshop

1. What are contagion risks?
2. What design features should be changed?
3. What changes are worth considering



Consultant's Participants

- Project Manager
- Project Architect
- Principal Designer
- HVAC Engineer
- Workplace Planner/Designer
- Project Principal
- Translational Health Director

Jonathan T. Crane, FAIA, EDAC, LEED AP BD+C

Translational Health Director

Jon has over 30 years of laboratory and health care planning and design experience; for the majority of his professional experience he has technically planned and led laboratory projects, and worked with facilities translating scientific discoveries into health care solutions. These projects include clinical facilities, advanced imaging facilities, clean rooms, infectious disease containment laboratories (BSL-3,BSL-3Ag and BSL-4) animal facilities and basic laboratories for cancer, neurosciences, aging, bioengineering and nano-scale sciences. Jon's expertise includes strategic planning for translational research and biocontainment facilities. In particular, Jon has developed processes for planning facilities to take discoveries through the development process into clinical application. Jon has been involved in the development of national and international laboratory safety guidelines and was responsible for editing the facilities issues in the 4th Edition of CDC/NIH "Biosafety in Microbiologcal and Biomedical Laboratories". Jon also writes a regular column for Animal Lab News.

Workshop Conclusions

- Active Chilled Beam Heating/Cooling System
  - No return air system
  - Circulation limited to a small areas (~4 cubicles)
  - No air recirculation from one area to another
  - ★ Probably the best configuration for limiting contagion

- Board Room – Conventional Circulation
  - Includes MERV13 filtration
  - Filtration would not eliminate person-person risk
  - Easily supports 6’ distancing guidelines

Workshop Conclusions




- Provide glass separation
  - Between cubicles
  - Reception areas
- Reduce where touching required
  - Automatic doors
  - Doors kept normally open

  } To be evaluated for each particular door
- Supply appropriate equipment
  - Sanitizer stations
- Restrooms
  - Touchless fixtures throughout
  - 100% air exhausted – no recirculation
  - Single-occupancy might be marginally better, but would be major design change (density can be managed by other means, i.e. telecommuting)