

**RCC MATH/SCIENCE
BUILDING UPDATE
AUGUST 20, 2013**

Overview – Key Activities

- Report Review by Design & Construction Team
 - Reports by P2S and Forensic Analytical were provided to the design (GKK Architects) and development (Barnhart Balfour Beatty) teams for Math & Science
 - Both teams reviewed and provided responses to the report reviews
- Meeting, July 10, 2013
 - Meeting of entire project design and development team held with both District and College facilities staff
- Site & Systems Review, August 9, 2013
 - Site visit and review to test adjustments and confirm correction of air pressure, noise, and sensors of the system with design team through the use of calibrated instruments
- Operational Follow-Through, presently on going
 - RCC Facilities staff in concert with District and the project design and development team are implementing and following through on the corrective actions

Search for Solutions

- Following the June Board meeting a meeting was held with all interested/involved parties
- GKK Architects, Barnhart Balfour Beatty, Fundament, Sunbelt, Alpha Mechanical, Commissioning Agent, RCCD Facilities, RCC Facilities were in attendance
- Purpose of meeting to address issues in the p2s and Forensic Analytical reports and find solutions

Air Quality/Odors

- In the Forensic Analytical study some rooms were identified as having an elevated level of CO₂ present causing minor discomfort and “stuffiness”
- It was determined that CO₂ sensors were not included in the original construction documents
- Alpha Mechanical and Sunbelt will provide estimates to retrofit those areas that reported elevated CO₂ levels with sensors, as well as areas that can have reduced air exchange if CO₂ sensors are installed (large lecture)

Air Quality/Odors (continued)

- The Building Management System and Phoenix System were adjusted per Fundament's suggestion on 8/9/13
- Room 405 ductwork was properly connected and is functioning as designed
- GKK has provided a color coded plan to identify all fixtures that are connected to the acid waste system

Water Quality

- ⦿ A second round of testing was conducted
 - Water was allowed to run longer before sample was collected
 - Samples were collected from sources that received more use than the drinking fountains
 - Results for both copper content and microorganisms were significantly improved

Space Temperature

- ⦿ As designed, building can maintain adequate inside temperatures when outdoor temperature is 34 degrees or higher
- ⦿ Adjustments were made to boiler water temperature
- ⦿ Air exchanges were changed from nine per day to six per day
- ⦿ These changes will result in our ability to maintain comfortable heating temperatures down to 31 degrees outside air temperature

Acoustics

- The change to six air exchanges per day will positively affect noise levels in the HVAC system
- Adjustments made to Phoenix System settings will also help
- Fiber glass insulation will be added above the ceiling tiles in Room 427 to further mitigate HVAC noise

Other Issues

- ⦿ It was determined that the drawings referred to by p2s were incorrect and HVAC in the rock grinding room does provide for air exchanges, per as built plans
- ⦿ GKK is looking into whether rubber stoppers like the ones used in the showers are available for the eye washes
- ⦿ Findings from destructive testing of the screen removed from Dr. White's lab were consistent with initial air sample taken confirming that the odors were coming from the screen

Summary

- ⦿ All issues have been or are being addressed
- ⦿ We won't know until Winter whether adjustments will result in better heating capacity but we're confident
- ⦿ The true test of the actions taken will be in the Fall semester when all faculty are back and all classrooms/labs are being utilized
- ⦿ We're confident all issues have been fully vetted