



GILBEAUX ASSOCIATES

**LONGVIEW EXECUTIVE CAMPUS  
307 INTERNATIONAL CIRCLE  
HUNT VALLEY, MD**



John Brandon, vice president at Liberty Property Trust had a problem. While doing a complete renovation of the property at 307 International Circle he realized the existing HVAC capacity did not meet Liberty Property Trust standards. His plan called for a complete interior demolition of an empty 30 year old, six story and 200,000 square feet of Class A commercial office space. Liberty and their architect planned a brand new 3 story atrium lobby (which was not in the existing building) finished with imported wood lamination on the balcony railings, modern artwork, sculptures, fine furnishings and a grand piano. The new curving

balconies in the atrium overlook a large lounge area on the ground floor, with views out to the newly landscaped building entry. This feature, along with office space upgrades were planned to provide fresh upgraded office space for premium tenants. John brought in Gilbeaux Associates at the preliminary planning stage to review all existing mechanical, electrical and plumbing systems and create a basis of design to determine what will be reused or upgraded to meet Liberty's ambitious plans for the building. We found there were no existing plans of the mechanical, electrical and plumbing systems.

First we determined that the existing cooling tower, self-contained HVAC units on each floor and ductwork could be reused, and found a unique solution to provide additional cooling capacity to the entire building by pre-conditioning ventilation air. Our design added two 104 ton 100 % outdoor air make up units on the roof, one for each wing. The additional capacity brought the facility conditions up to Liberty standards with minimum investment and improved tenant comfort.

The atrium was previously conditioned by taking air from tenant distribution, in other words the previous tenants didn't even get the required amount of supply and ventilation air for their space, since some was taken for conditioning the common area. In our design we added 16 tons of cooling dedicated to serving the atrium, which allowed the self-contained units on each floor to serve the tenants. The new heat pump units for the atrium will help maintain comfort conditions so tenants can make use of the atrium while maintaining investment in making the atrium a first class place to work. The results are astonishing.

We designed and specified a building automation system (BAS) using Automated Logic controls which provided easy integration with other buildings in Liberty's portfolio. The new BAS integrated new and existing HVAC equipment, including controlling new variable air flow (VAV) boxes for individual zones of control and allowed remote monitoring and control by building operators. The automation system sequenced the new rooftop make up air units and self-contained units that maintained 53 degrees discharge air temperature at peak loads. This allowed additional cooling capacity without additional supply fan energy. The new automation system maximized comfort for the tenants while saving Liberty Property on operating costs and allowed faster response to



## GILBEAUX ASSOCIATES

maintenance issues. Tenants have the ability to go online to maintain lighting after hours, and view temperatures and change setpoints and override time of day schedules from their desktop workstations.

The electrical service was more than adequate to handle proposed loads so we documented all existing switchgear, subpanels and feeders, and even traced individual circuits. Our work included infrared analysis to determine if any panels have loose connections. The riser and panel schedules were furnished for future reference. The lighting fixtures were retrofitted to the most modern energy efficient style while the building was unoccupied and was controlled by the building automation system.

Although we created documentation of the electrical system and a tenant fit out manual for those projects where the tenants had their own design team in one case the tenant engineer created plans that “over-engineered” the system by adding supplemental switchgear, transformers and panels. We reviewed the proposed design by the tenant engineer who agreed with our revisions and saved on expensive gear, overtime installation cost and after hours shut down to install new equipment.

After the building was fully occupied tenants experienced problems with lights and workstations flickering, so Gilbeaux Associates was called back and after review and analysis determined that the utility supplied transformer had a rare fault in one of the three phases of electrical power. Since this work was outside the building we contacted the utility to have this taken care of and the service has been operating without problem since then.

Finally we found that the domestic water pressure was too low and found that the automatic flush mechanism for the toilets stopped working when more than one toilet was flushed at one time. Our solution was to design a domestic water pressure booster system on a skid that has maintained optimum pressure for automatic flush operation and building operation at all levels.

In summary the budget, schedule and programming goals were outlined and we worked within Liberty Property’s constraints to achieve the desired results described above. Liberty Property has submitted their property at 307 International Circle for BOMA building of the year.

Views of the building:





## GILBEAUX ASSOCIATES



The lobby boasts a new South American hardwood finish. Renovations for this atrium cost over one million dollars. Gilbeaux Associates designed 16 tons of cooling furnished by new water source heat pumps to maintain comfort and humidity levels in the space year round.

Liberty is proud of their latest property and the building is 100% occupied. Gilbeaux Associates worked

with Design Collective Architects for the lobby and Arium Architects and Hellyer Berman Lewis among many architects for the tenant areas. We are proud of that we were able to help Liberty Property Trust achieve their goal for this and many other properties in their portfolio.



John Brandon commented on our project after completion: Jeff you are a talented engineer and I always enjoy the opportunity to work with you and your team on projects over the years.

**LIBERTY**  
PROPERTY TRUST