Hudson Yards – Water Sub-Metering Case Study

**Architect:** Kohn Peterson Fox  
**Engineers:** Jaros, Baum & Bolles  
**Water Consultant:** Ashokan Water Services  
**Building Owner/Manager:** Related Co.

**Conservation Challenge:**
Jaros, Baum & Bolles (JB&B), the engineering firm best known for high rise projects including One World Trade Center and the Bank of China Tower in Hong Kong, designed the 1.3 million square foot office tower in Hudson Yards to meet LEED Gold Standards and comply with New York’s new Plumbing Code section 606.7. The plumbing design included 73 water sub-meters installed for each individual tenant and the water-consuming mechanical equipment, rooftop irrigation, and cooling towers.

**Conservation Solution:**
JB&B specified AccuwaterTM to compile the hourly reads obtained from the water sub-meters. The design included a portal account for each tenant showing their water consumption, and building management was provided an overview of all tenant portals. Related Co. chose Ashokan to integrate the sub-meters with the AquaSync software platform, along with installing a cell-based data transmitter on each sub-meter and creating a portal account for every tenant, with a view of consumption, tenant billing and real-time alerts of any water anomalies.

**Conservation Impact:**
AquaSync artificial intelligence (AI) tracks water consumption, time of use, and location, resulting in real-time data accessible to tenants and building management. During the pandemic, when tenant occupancy was at a record low, numerous leaks were discovered that would have gone unnoticed for months. AquaSync detected 274 leaks during 2020, typical of a building this size, resulting in tens of thousands of dollars in savings. With real-time access to water consumption data, conservation goals and financial savings can be achieved.

**Installed Products:**
Elster evQ4 water meter  
Badger High Resolution Encoded (HRE) water meter  
Metron Spectrum water meter  
AquaSync AWS – AMR – RT transmitter and data logger