



Case Study

Project Management | HVAC Retrofit

After a hotter than usual summer in North America, a Client issued a project brief consisting of a simple goal, "...zero heat related downtime next summer, project completion date 1 May.

The Client's portfolio consisted of 36 properties encompassing 500,000m², no budget was identified, specific buildings were not identified, and no design was available.

Key challenges:

Lead Time on HVAC Equipment

- Recognising that the number one challenge would be the lead time on equipment, a strategic alliance was formed with manufacturer Trane ensuring the project would secure production capacity in the factory.

Identifying Sites & Producing Baseline Design

- Heat data from the preceding summer was analysed to shortlist buildings. The shortlist was filtered based on lease expiry dates with anything less than 3 years set aside for temporary HVAC.
- A consultant Mechanical Engineer was dispatched to visit each site, analysing building fabric; internal heat loads and available power supply to produce a short form design report which quantified a total tonnage of cooling and electrical infrastructure upgrades required.
- Buildings receiving temporary HVAC were designed such that equipment would be 'plug and play' for subsequent years until lease expiry.

CLIENT:	VALUE:	COMPLETION DATE:	PROJECT DURATION:	DELIVERY MODEL:	SERVICES OFFERED:	TASKS:
Confidential	USD \$53M	May 2012	8 Months	Negotiated	Project Management	21 buildings were retrofitted over 12 weeks in construction.

Construction Management

- Using a Design & Construct delivery method, each building was tendered to local Mechanical Services contractors.
- A Construction Manager was appointed by Trane, and local sales and service offices, provided for onsite supervision.

Work in Occupied Buildings

- The majority of facilities operated 22 hours per day, 7 days per week, meaning all work would be undertaken in occupied space.
- Building shutdowns were undertaken for two purposes when electrical infrastructure upgrades were required or when equipment was placed on the roof. In all but one instance, equipment placement was undertaken by helicopter to reduce the overall building shutdown time.

Implementation

- Funding approvals were onerous and time consuming owing to the absence of an assigned budget. Approvals were granted on a building by building basis, providing just 3 months from approval to secure building permits, install and commission.
- Working night and day, the 1 May goal was achieved with the first building turned 'on' on 30 April.
- Zero heat related downtime was recorded over the following summer, or subsequent summers.

**Note, the examples provided above were undertaken in a past role, prior to MSP. These examples serve to further detail the experience MSP bring to the table for our Clients.*

“Meagan brings something special to every project she’s associated with. While she has a commanding grasp of the construction process and how to deliver a project on time and on budget, she has other abilities that truly set her apart. She understands quickly where the hidden risks lie and deals with them before serious issues arise. Meagan also leads a team compellingly and is adept at metering her tone and language appropriate to every situation and audience. While maintaining a steady eye on project completion, she is willing and able to getting “into the weeds” on technical items.

Ultimately, the project was an overwhelming success and we sincerely believe that it could not have happened without Meagan’s energy, skills and unique abilities.”



Brian Drake - National Account Executive, Trane Climate Solutions

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