



Issues Affecting Older Buildings

Last month we discussed “[From Asset Management to Facility Management](#)”. We want to continue on with this discussion looking closer at what an asset management team would take into account when determining that a building deferred maintenance plan be brought to the forefront. We also want to look closer at what an asset management team would take into account when determining that a building has reached or exceeded its useful service life and the facility needs to receive a major renovation, be sold, or torn down and replaced with a new structure.

Starting with determining the need for a deferred maintenance plan or the updating of an existing deferred maintenance plan, the team should have in place a **facility assessment** of the interior spaces, mechanical systems, electrical systems, other systems/technology e.g., security, building exterior, and the property that the building is built on.

A facility assessment is quite common and completed by property owners especially those companies and institutions that have multiple buildings. Colleges and universities routinely have their facilities assessed every 5 to 8 years to keep their property assets and the internal building systems understood as it pertains to existing conditions, known and unknown deficiencies, potential code concerns, occupant health, estimated useful service life, and other topics depending on the building. This assessment often becomes an integral part of a college or university master plan.

The facility assessment becomes a document that identifies existing conditions with and without photographs, utility consumption cost graphs, and list of deficiencies with an associated repair or replacement costs formatted into a written report with an Executive Summary backed up by various sections e.g., interior space and each of these sections broken down into discussions about components rated very good, good, fair, poor, and beyond useful service life. Also, within each of these sections will be the budgeted repair and replacement costs item by item.

When planning the assessment effort, a strategy needs to be in place to complete the work with little to no interruption of the building’s business activities. The assessment team will



need to create a survey strategy plan to minimize the occupant disruption and to leave the space looking the same as before the surveyor(s) completed their work e.g., vacuum up dust and materials that fell out of the ceiling when the ceiling tile was lifted to visually inspect a piece of equipment above the ceiling.

A protocol needs to be in place to coordinate an advance notice to the persons in charge of the various spaces. In addition, it is always recommended that the surveyors tag each asset e.g., heating and air-conditioning terminal box with a bar code. Whether the building owner is ready or not for bar coded inventory it is cost effective to place a bar code on each piece of asset touched by the surveyor and include each bar code into the computer spreadsheet database for future reference/use. At a later date when bar coding may become a facility management preference the bar codes will already be in place saving hundreds of hours re-surveying the building assets.

Starting with assessment of interior spaces, the team will want to have a tablet type computer device populated with checklist of items per category to review. While this checklist can vary here are several inspection points to consider:

INTERIOR SPACE CHECKLIST:

- Room number, door type and rating, placement of bar code on door frame jamb, floor type (carpet, hardwood, etc.), walls (painted, wall papered, etc.) exterior window (s), interior windows, and ceiling (tile, plaster, etc.)
- Photograph door label and pertinent deficiencies e.g., window water leak stain

MECHANICAL SYSTEM CHECKLIST: (plumbing, heating, cooling, fire protection, etc.)

- Bar code the equipment, list type of equipment (central air system, etc.), exterior condition (water and/or air leaks, rust, etc.), distribution piping and sheet metal conditions and labeling e.g., flow arrows, insulation, etc.
- Photograph of equipment and pertinent deficiencies e.g., missing belt guard as well as photograph(s) of the equipment room for safety and cleanliness

ELECTRICAL SYSTEM CHECKLIST: (primary and secondary electrical systems and emergency power):

- Bar code starters, motor control panels, lighting panels, etc., transformers, switchgear, etc.
- Photograph of equipment, panels and pertinent deficiencies e.g., missing lockout-tagout devices as well as photograph(s) of the equipment room and/or electrical closet for safety and cleanliness

OTHER SYSTEMS CHECKLIST: (security, intercom, telecommunication, etc.):

- Bar code panel and devices, etc., equipment and condition of cabling, and cable tagging
- Photograph of equipment, panels and pertinent deficiencies as well as photograph(s) of the equipment room and/or closet for safety and cleanliness

BUILDING EXTERIOR CHECKLIST:

- Windows, doors, siding, steps, areaway(s), roof(s), downspouts, roof drains, foundation, etc.
- Photograph of exterior focusing on pertinent deficiencies, such as missing roof shingles, etc. and potential safety hazards e.g., cracks in exterior wall

PROPERTY GROUNDS & LANDSCAPING CHECKLIST:

- Sidewalk, curbing, bushes, trees, grass, etc.
- Photograph of exterior focusing on pertinent deficiencies, such as deteriorating sidewalk surface, dead bushes, broke tree limbs, etc. and potential safety hazards e.g., tripping hazards with sidewalk crack(s)

All the above documentation should be downloaded into an asset database where information can be sorted and selected based on the facility management needs. This report will also be sorted based on estimated timeline to repair or replace in Year 1, Year 2, etc. The database will also be sorted based on cost categories such as maintain, repair, or replace. Collectively all of the sorting of information will be formatted into a Master Plan to be implemented and completed over the next 5 years or maybe 10 years. In sync with the projected Master Plan will be a timeline to revisit this entire database in 5 or more years later to update the information and the facility assessment report.

Looking closer at the final facility assessment report with its database, cost factors, and projected implementation plan for some and/or all the assets, the management team may be faced with the conclusion that a building has reached or exceeded its useful service life and that the facility will need to receive a major renovation investment, be sold, or be torn down and replaced with a new structure.

It is always a good business decision to maintain an asset database to manage these various properties and to maintain closes communication with the facility management group to stay current with the various properties, their operating conditions, potential liabilities, cost-to-operate, and at some point in time evaluate the cost benefit to each asset so that a building doesn't become a liability or a financial burden.

There are many different facility management firms that can provide facility assessments at different levels of detail and cost. The Diocese of Cleveland Facilities Services Corporation offers a version of this service to all properties belonging to the Diocese of Cleveland. To request a facility assessment or to learn more, please contract a member of the Diocese of Cleveland Facilities Services Corporation.

For more information:
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