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| Case Study | Robert Bosch North America (RBNA) Quality Operating System and Facility Management Plan |
| Client | RBNA Facility Management (FCM/Fh) |
| Location | Plymouth, MI |
| Department | Facility Management (FCM/Ply) |
| Project | Quality Operating System and Facilities Management Plan Commissioning of the Plymouth Office and Prototype Laboratory |
| Deliverables | Phase 1 – Quality Operating System: policy and operating structure; Facility Management Plan: framework, scope definition, process flow and standards, and site mobilization and migration plan Phase 2 – Implementation of the Facility Management Plan by developing and documenting work scopes, process flows, operating systems, staffing, contracting, training, service contracts and reporting; customer communication throughout occupancy; continuous improvement processes. |
| Participants | Facility Management Director, Site Facilities Staff, FCM/Fh Support Accounting, Purchasing and other Corporate Departments |
| Staffing | Principals, Technical and Documentation Specialists |
| Duration | Phase 1 – Six Weeks; Phase 2 – Eight Months |
| Background | Robert Bosch’s automotive electronics division (AB Group) develops a variety of vehicle electrical and electronic components for domestic and transplant OEMs. The new facility in Plymouth, MI better accommodates planning, research, engineering and sales for the group. The facility was designed in keeping with the corporation’s lean Quality Principles, using 30% less space than legacy standards and incorporating highly efficient building systems and environmental management practices. The management of the facility is based on a new, lean and economical model for facility operations, maintenance and services. |
| Approach | The Quality Operating System (QOS) defines the full dimensions of all the facility’s operations: <i>Safety, Organization of Work, Supervision, Contract Management, Material & Equipment, Information Systems, Training, Administration and Customer Relations</i> . The QOS applies to each operation – Maintenance, Housekeeping, Grounds, Security, Safety, Environmental, and Facility Services. Using the QOS template, the strategy, scope, systems and applications for performing the work are fully developed and documented in the Facility Management Plan. The objective is to eliminate waste, and supplant legacy or seat-of-the-pants standards with carefully defined service requirements. The Facility Management Plan is the baseline for continuous improvement. |

Approach (cont'd)

The approach is a departure from conventional facility management practices:

- The QOS fully aligns RBNA FCM with the corporation's global Quality Principles. Facility management is fully integrated within the mainstream of the corporation's standards, methods and culture.
- The QOS provides all FCM associates with a common process, systems, procedures and vocabulary. Everyone participates in achieving the department's objectives in a process-driven environment.
- The QOS emphasizes associates' personal responsibility to define, direct, develop and discipline the process to accomplish the work and continuously improve performance standards, efficiency and economy. FCM's watchword is "accountability" to the facility management plan and customer satisfaction.

For these reasons, the primary deliverable of the QOS and the Facility Management Plan is not a document; it is skillful associates – "supervisors who supervise" and staff and technicians who master and fulfill their job responsibilities.

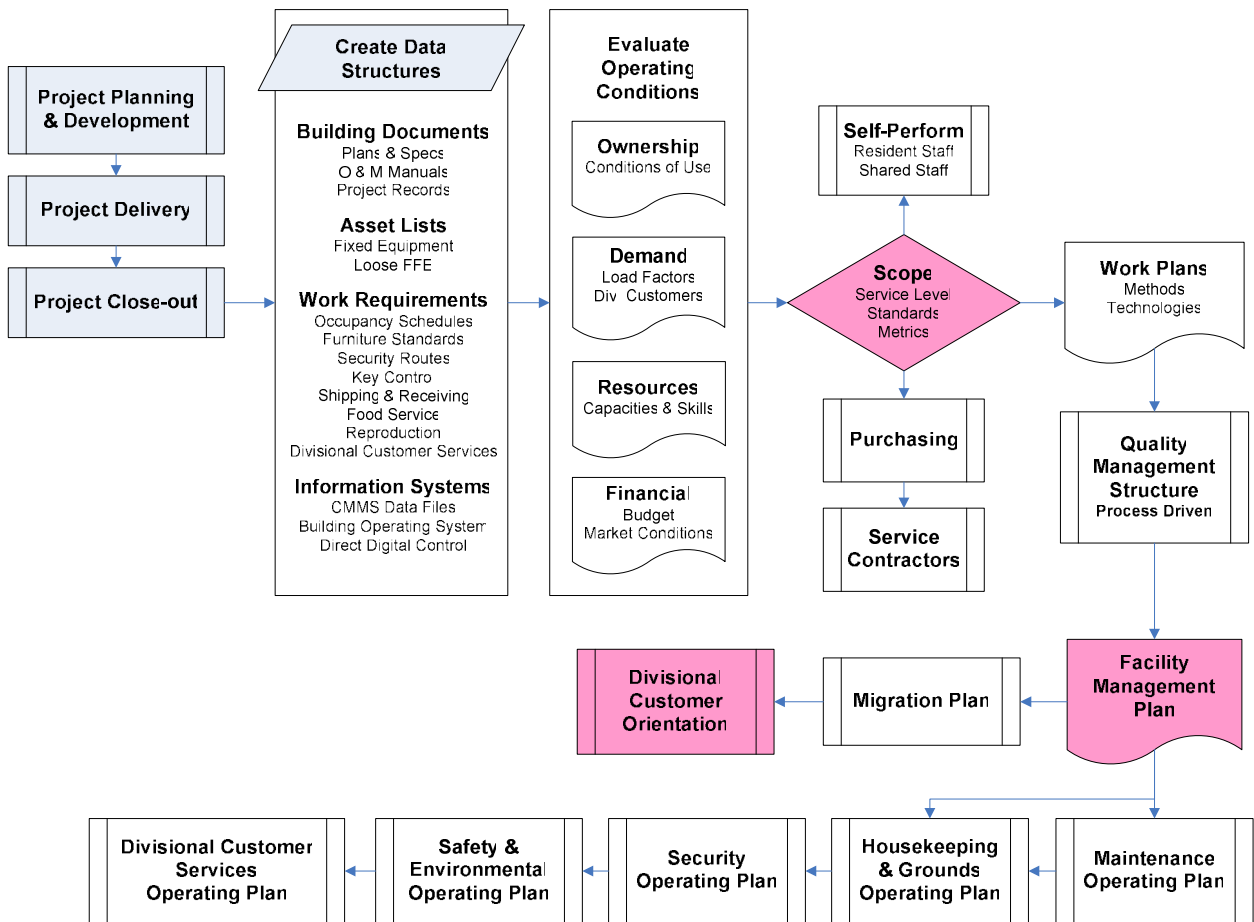
The QOS/Facility Management Plan is developed and implemented in five major steps:

1. Define operating requirements, workscopes and standards – subtasks include process flows (operations/tasks, inputs, sources, documentation, users); and, document management systems and standards. This step involves integrating building systems data, user requirements, and corporate policies and practices and is the key to planning to prevent waste from entering the system from the outset.
2. Plan operations to establish detailed work plans for each activity, including all preventive maintenance, scheduled operations, work requests and facility services. This step is integrally involved in procurement of contract services so as to hold contractors and suppliers to FCM/Ply's operating standards and practices.
3. Coordinate the close-out of construction and acceptance of the building, the mobilization of facility management, operations and services, and the migration of AB Group's technology, equipment and personnel. The actual move operation will be performed by service contractors using the standards and practices of the QOS.

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4. Validate processes to confirm the Facility Management Plan’s documentation and assure that performance auditing, continuous improvement processes, reporting and customer relations aspects of the Quality Operating System are fully implemented.
5. Transition the QOS to FMC/Fh and other locations, developing their own Facility Management Plans to adapt the process flows, standards, procedures, guidelines and templates developed for FCM/Ply.

Facility Management Plan Development Flow



Benefits

The RBNA FCM Quality Operating System fully implements the corporation’s Quality Principles to eliminate waste, carefully define requirements, cultivate personal responsibility, assure first-time quality by preventing failures, and foster intense supplier involvement and continuous improvement.