

Master Planning Your Manufacturing Facility

By Travis Gruszka, AIA

What is a Facility Master Plan?

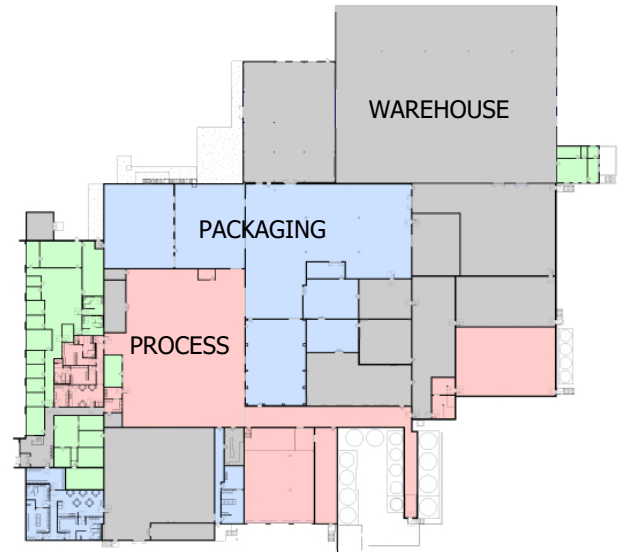
A Facility Master Plan is a strategic document that's designed as a road map for a manufacturing facility to achieve its long term goals. This Plan provides the path for a facility to maintain & improve the building and site infrastructure for the company's growth and development.

What are the benefits of a Facility Master Plan?

The primary benefit of generating and following a Facility Master Plan is to establish and maintain efficiency in the manufacturing process. This includes everything from receiving raw materials to shipping finished goods and all steps in between the process. It allows the company's leadership team to make informed decisions on capital expenditure projects for building maintenance or enhancement. The Plan fosters enhanced resource allocation to stay ahead of the facility's needs as it grows or changes.

Components of a Facility Master Plan

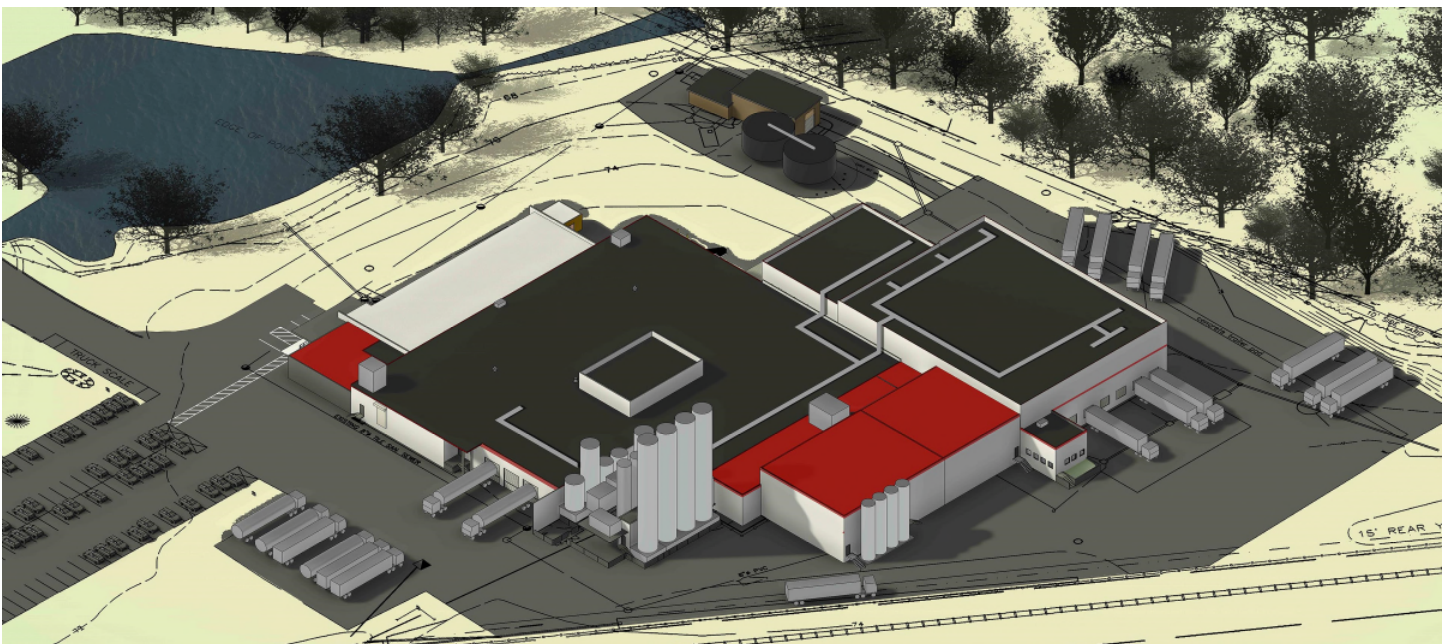
There are five main components of a Facility Master Plan: people, vehicular traffic, product flow, buildings and site infrastructure. The Plan needs to account for employee growth, health, safety and welfare. Studying vehicular traffic needs ensures adequate parking spaces, separates car circulation from tractor trailers, and facilitates proper maneuvering for trucks at loading docks and stacking areas. It considers product flow from raw material through fabrication to packaging and palletizing, while maintaining or improving efficiency in the manufacturing process. Building expansions are thought through to accommodate future growth. This mitigates short term solutions that could landlock the long term goals of the company. The site infrastructure should take into account parking expansions, storm water retention & conveyance as well as utility requirements.



Above: Master Floor Plan color coded by occupancy use.

Establishing a Master Facility Plan

The first step to establishing a Facility Master Plan is to engage an architect with experience in the manufacturing and industrial sector. Your architect will study existing facility drawings, meet to understand your manufacturing process to evaluate current challenges and future goals of your company. This allows the architect to generate conceptual building and site plans for your review and input — mapping out the continued success of your company. Manufacturing decision makers with a Master Plan are able to make informed decisions, achieve long term goals, and properly align assets for their facility needs today as well as for tomorrow.



Above: Three Dimensional Master Site Plan with future additions indicated in red.