



Wellington Condominiums
Exton, PA
Spring Thesis Project
BUILDING FOR THE FUTURE

B.2 Main Research and Analysis Overview

The main research and analysis overview for the Critical Issue Research has been broken down into the following sections:

- **B.2.1 Problem Identification**
- **B.2.2 Proposed Solution**
- **B.2.3 Research Steps**
- **B.2.4 Research Outcomes**

B.2.1 Problem Identification

The critical issue that has been identified and will be further researched is: the decisions that industry members make in providing and utilizing new products regarding formwork systems. Who makes the decision to use a new formwork product and when? Who takes the responsibilities and risks of new formwork system? Can a process and procedure be created and implemented to help aid the construction industry? What process of action can manufactures and suppliers do to promote new products effectively? These questions are going to be researched and analyzed in the construction industry in hope of providing real solutions to real world problems.

B.2.2 Proposed Solution

Many case studies have been researched through the implementation of new products in the construction industry. One product is the Hambros Joist Composite Deck System and its use in the construction industry. Setting a path and a step by step procedure as to how to present and initiate new products in the construction industry is a key stepping stone towards improving the adaptation of new products. Also if a set path for manufacturers and suppliers are established; better supply management chains and communication lines can be established. As the industries move towards more team work initiatives the greater the need for set processes and communication lines.

B.2.3 Research Steps

The procedure to investigating the decisions that industry members make in providing and utilizing new formwork products are as followed:

1. Background research as to what current information has been researched regarding the decisions behind formwork systems.
2. Conduct interviews with a wide range of industry personal to gain a perspective as the decisions made behind formwork selection.
3. Based on the gathered research create a process of the current generic formwork decision process, the formwork decision process at the Wellington



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Condominiums Project, and the most ideal decision process for selecting formwork systems.

4. Analyze the formwork decision processes created and answer questions as to how this can be implemented and utilized for the construction industry.

The sources of outside information that will be required to fulfill these research steps are as followed:

1. Information from supply chain managers in the manufacturing and construction industry through research and interviews.
2. Connections with owners and design professionals (in particular the Wellington Condominiums Project) on their input of a process of utilizing new products.
3. Research documents in the areas of formwork products and its diffusion into the industry.

B.2.4 Research Outcomes

The research outcomes are to create a logical and systematic approach as to how the construction industry can improve the supply chain management of utilizing new formwork products. The implementation of this process can be immediately utilized by any company and can be a way in improving the flow of ideas and communication between both industries. This process and procedure is the key to opening the door between industries and in hope of benefiting all parties involved.

I feel that all parties of the construction and manufacturing industry would benefit and have interest in the process and procedure of introducing new products into the construction industry. Having a process that all industry members can follow may lead to having a more productive and respectful working environment.