# **PCI Big Beam Scope**

This section includes the scope of the Big Beam Theory must consider when designing the beam.

# **Task 1. Preliminary Research**

Task 1.1 Three Stages of Design Prestressed Concrete Beam

Task 1.2 Preliminary Cross-Section Designs

Task 1.3 Preliminary Decision Matrix

#### Task 2. Preliminary Beam Design

Task 2.1 Initial Beam Designs Task 2.2 Final Decision Matrix

## **Task 3. Final Design and Analysis**

Task 3.1 Shear Design Task 3.2 Reinforcement Design Task 3.3 Cracking Load Task 3.4 Max Load at Midspan

# **Task 4. Predictions**

Task 4.1 Response 2000 Task 4.2 Prediction Calculations

## **Task 5. Shop Drawings**

Task 5.1 AutoCAD Task 5.1.1 Side Elevation Task 5.1.2 Cross Section Task 5.1.3 Profile View

## Task 6. Casting of Beam

Task 7. Testing of Beam

# **Task 8. Project Management**

Task 8.1 Reports Task 8.2 Website Task 8.3 Meetings

# **Task 9. Project Impacts**