## **EG1000**

## **Engineering Design and Innovation**

# **Project MPRC**

## **Design Proposal for Team 16**

Submitted: 17 October 2023

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#### **Abstract**

This document presents the design proposal for Team 16, focusing on the SunRay Speedway. The proposal outlines two design concepts and provides a detailed analysis of the advantages and disadvantages of each. The document concludes with a recommendation for the most promising design concept based on the evaluation criteria.

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#### 1 Introduction

This section introduces the problem statement and outlines the objectives of the project. The design proposal focuses on the MPRC project, where we aim to deliver an optimized solution considering the constraints.

### 2 Design Concepts

#### 2.1 The First Design Concept Considered

We considered a variety of design concepts for the MPRC. The first design is inspired by the simplicity of existing engineering solutions and is detailed in this section.

#### 2.2 The Second Design Concept Considered

The second concept, as shown in Figure 1, addresses several challenges by focusing on a modular approach.

#### 2.2.1 Key Advantages of the Second Design

This subsection highlights the main advantages of this design and the reasoning behind choosing this concept.

Figure 1: Second design concept illustration.

#### 3 Conclusion

In conclusion, we presented two design concepts and outlined the rationale for selecting the second option as the most promising.