

SAFETY IMPROVEMENTS FOR STATE ROAD 112 FROM PINE TREE DRIVE TO ALTON ROAD

PROJECT CONCEPT

Class: ESI6455

Class Name: Advanced Engineering Project

Management

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1.0 COMPANY DESCRIPTION

Relative Point Engineering is a well-recognized company in the civil and environmental engineering industry. Our company is Miami-based, which is the biggest reason why our top priority is protection of our community and environment by using safe design and construction methods. Today, Relative Point is ranked in the top 100 civil engineering companies in the country. The 45 years of experience and the large amount of projects completed are the perfect tools to ensure the quality of our services. In the past 10 years, our company has been part of as many as 200 projects. These projects include design and construction of roadways, commercial buildings, and residential buildings projects. Every project begins with extensive engineering design and planning to address our clients' goals. From concept through completion, Relative Point has minimized our client's risks and ensured that their projects are cost efficient. Our company's collaborative and teamoriented design process offers a cost-effective approach for clients. Whether working as a collaborator with a client's contractor or serving as a prime engineering firm, our teams provide experienced engineers who are proven leaders in their fields. Relative Point Engineering's commitment to careful planning and impeccable project execution provides every client with standards of efficiency and value that always exceed expectation.

2.0 TECHNICAL PROBLEM

Due to high the number of crashes in a 3-year period between 2011 and 2014, a safety study is needed at State Road 112, between Pine Tree Drive and Alton Road, to identify the deficiencies and recommended improvements. The recommended improvements will need to be evaluated and implemented to mitigate the high number of crashes.

3.0 PROJECT OBJECTIVE

The main objective of this project is to identify the safety improvements to reduce the number of crashes within the limits of this corridor.

4.0 PROJECT DELIVERABLES

- Safety Study Report
- Cost Estimate of Improvements
- Improvement Design Plans
- Schedule

5.0 TECHNICAL APPROACH TO SOLVING THE PROBLEM

A series of steps will be required to identify the possible causes and propose necessary safety improvements to mitigate the high number of crashes within this corridor. These steps are as following:

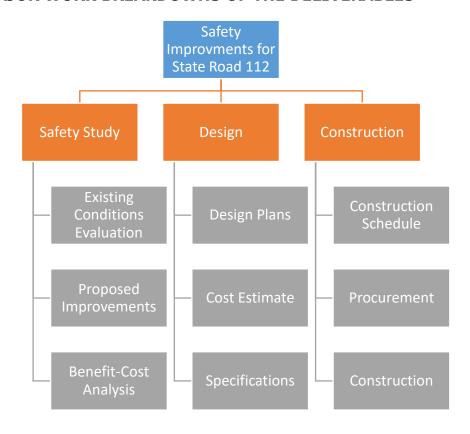
- Evaluation of existing conditions.
- Evaluation of the existing traffic control.





- Analysis of the traffic data for the 3-year period from 2011 to 2014.
- Crash analysis of the crash data for the 3-year period from 2011 to 2014.
- A field evaluation.
- List preliminary proposed improvements.
- Benefit-Cost analysis of the improvements.
- Design of the improvements.
- Construction.

6.0 MAJOR WORK BREAKDOWNS OF THE DELIVERABLES



7.0 GUESTIMATE OF COST AND DURATION.

Rough Cost Estimate: \$2,500,000

Duration: 345 days