



DEVELOPMENT OF DESIGN SPECIFICATIONS, DETAILS AND DESIGN CRITERIA FOR TRAFFIC LIGHT POLES

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Introduction

Current rules and fabrication methods employed in the design of traffic light poles do not adequately address fatigue and fracture issues associated with the connection of mast arms to the vertical poles and the connection of the poles to the foundations of structures.

Project Objective

The purpose of this work was to collect existing data on this issue and to develop new design specifications guidelines based on the findings.

Project Description

The 2001 AASHTO Specifications together with the current literature on the design of traffic signal structures were reviewed. In addition, a survey of many state department of transportation was conducted. Based on the findings, design criteria, specifications, and design details were compiled.

Project Results

The new AASHTO Specification was critically reviewed, new design criteria for traffic light poles design were suggested, typical design drawings and details were prepared, and calculation procedures were outlined. Based also on these findings and calculations, it was concluded that KDOT revisions of its traffic structure design practices are minor.

Report Information

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