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INTEGRATED CORRIDOR MANAGEMENT – DES MOINES METRO AREA

ICM IMPLEMENTATION PLAN

DRAFT SYSTEM RAMP NAMING CONVENTION

9/13/19
v.1.0

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Introduction

PROJECT OVERVIEW

A new naming convention for system interchange ramps is part of the Event Management strategy functional area identified within the Des Moines Metropolitan Area Integrated Corridor Management (ICM) Program. This new system interchange ramp naming convention was identified as a method to more accurately locate traffic incidents within the East and West I-80 / I-35 / I-235 System Interchanges, providing for quicker response by emergency personnel.

DOCUMENT SCOPE

This Implementation Plan documents the considerations and factors involved in updating the current ramp naming convention at the East and West I-80 / I-35 / I-235 System Interchanges within the Des Moines Metropolitan Area.

Process and Approach

As part of the Event Management strategy functional area identified within the Des Moines ICM Program, general background information and guidance on event management can be found in the Program-Level Concept of Operations (June 24, 2019) document. Specific to this strategy, stakeholder outreach and coordination was conducted to identify the criteria to consider when implementing this strategy.

Traditional ramp naming conventions can be troubling for motorists as they try to specify the location of an emergency within a system interchange. Traditional ramp naming can leave multiple ramps with the same designation, requiring motorists to include cardinal directions for each segment the ramp connects. Iowa DOT has recognized the benefit in providing a naming convention that allows for a specific ramp letter-number combination, ensuring that each ramp within a certain response area can be quickly identified by motorists, and allow emergency response a more accurate location to guide them to the scene.

After identifying an appropriate naming convention, training for first responders, emergency telecommunication specialists, traffic management center staff, DOT Maintenance and other disciplines that respond to traffic incidents, should be held to ensure an understanding of the new ramp naming convention. Public outreach may be necessary to provide an update to motorists that changes will occur, as well. Computer Aided Dispatch (CAD) systems used in emergency dispatch centers will need updated with the new designations, as telecommunications specialists rely on the information provided within to dispatch appropriate resources in the event of an emergency.

After stakeholder outreach, new ramp signs will be installed within both the East and West I-80 / I-35 / I-235 System Interchanges within the Des Moines metropolitan area.

Timeframe

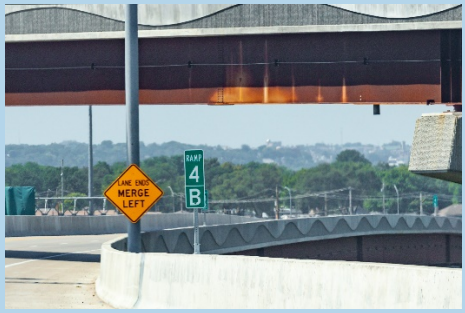
Ramps within the East System Interchange have proceeded through plan developed and signs installation. Work on the West System Interchange is in process and should be completed prior to the end of 2019.

Audience

This Implementation Plan is written to provide guidance to Iowa DOT District 1 staff for the process and required next steps for the installation of the system interchange ramp signage. Project stakeholders (e.g., law enforcement, fire) may also benefit from understanding the process and timeline.

For the broader intent of this document – to provide guidance to future infrastructure enhancement projects and the overall process – the audience includes all jurisdictions within the Des Moines Metropolitan Area ICM Program and the future Technical Committee which will oversee the process.

Naming Conventions for System Ramps

Description	Develop and implement a ramp naming convention to allow a unique identification of each ramp within a particular system interchange or within a set of system interchanges in a specific area. See Figure 1 and Figure 2 for schematic of ramp signage.			
Lead Agency	• Iowa DOT			
Supporting Agency	• First Responders / Dispatchers • Iowa State Patrol			
Location	• I-80 / I-35 / I-235 West Systems Interchange (West Des Moines) • I-80 / I-35 / I-235 East Systems Interchange (Des Moines)			
Technology & Infrastructure Elements	• Multiple new ramp name signs are spaced throughout the length of each ramp. Signs will need to be built and installed on new or existing infrastructure, relative to the needs of the particular location.			
Operational Responsibilities	• Maintenance and/or replacement of damaged or worn system ramp signs will be the responsibility of Iowa DOT Maintenance			
Funding Needs	• District 1 funds will be utilized for initial installation and maintenance			
ROM Cost Estimate	**Planning & Design**	**Implementation**	**O&M (annual)**	**Total (10 Year Cost)**
	DOT Estimate	**DOT Estimate**	**DOT Estimate**	**DOT Estimate**
Funding Opportunities	• Strategy to be funded using traditional Iowa DOT funding.			
Project Dependencies	• None – Project is in active deployment			
Required Agreements	• No formal agreements – Iowa DOT to deploy and supporting agencies to adjust procedures to account for the new naming convention (see Other / Notes).			
Other/Notes	• Due to different interchange designs and number of interchanges within a particular area, a statewide standard convention may not be possible. Each project area should be looked at to identify a system that works best for that specific design. • To aid in development and ensure concurrence, designers should seek input from responders and telecommunication specialists within the project area. • Training for first responders, emergency telecommunication specialists, traffic management center staff, DOT Maintenance and other disciplines that respond to traffic incidents, should be held to ensure an understanding			

Naming Conventions for System Ramps

	of the new ramp naming convention. Public outreach may be necessary to provide an update to motorists, as well. Computer Aided Dispatch (CAD) systems will need updated with the new designations, as telecommunication specialists rely on the information provided within to dispatch appropriate resources in the event of an emergency.

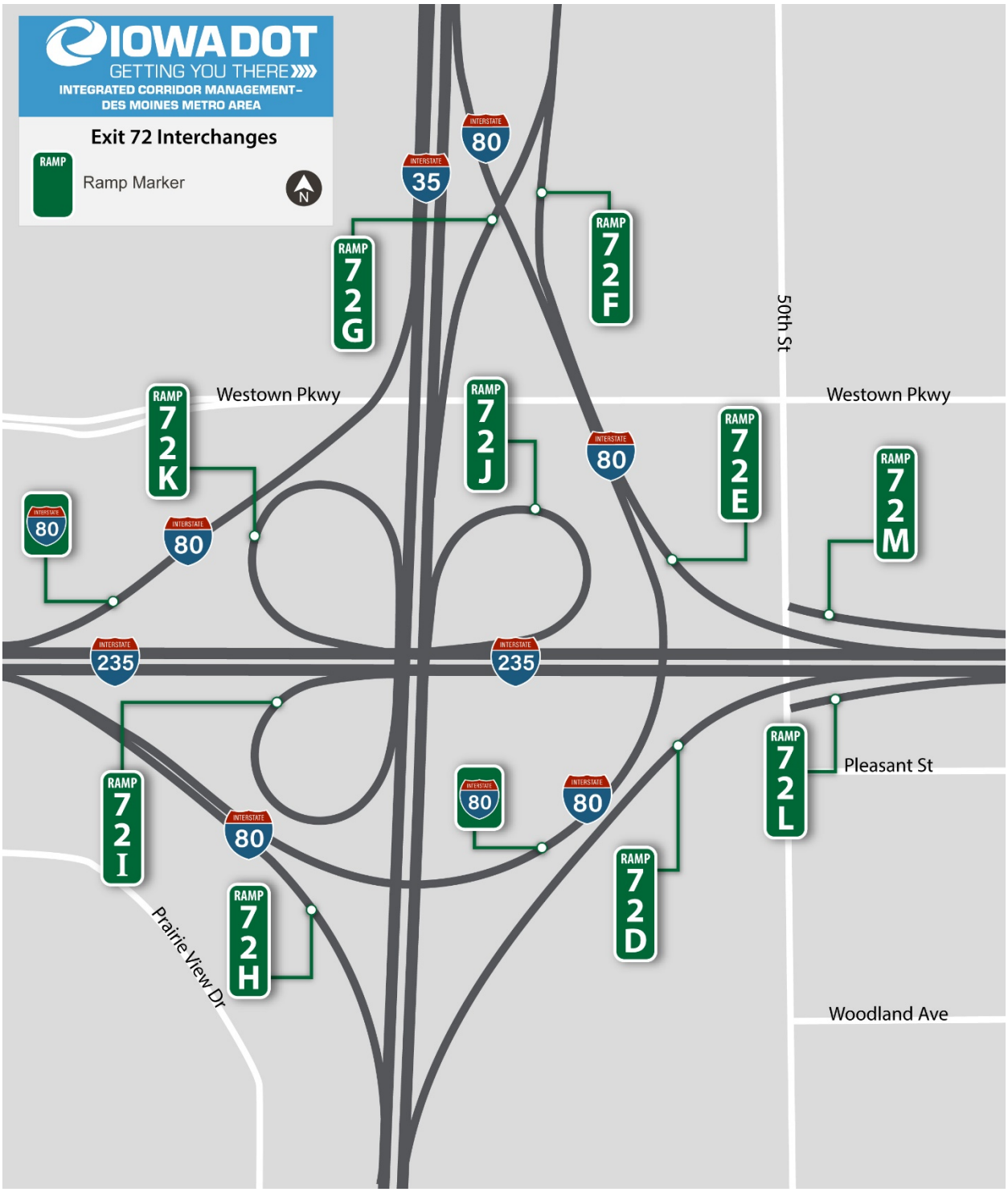


Figure 1. I-80 / I-35 / I-235 West Systems Interchange (West Des Moines) Signage Schematic

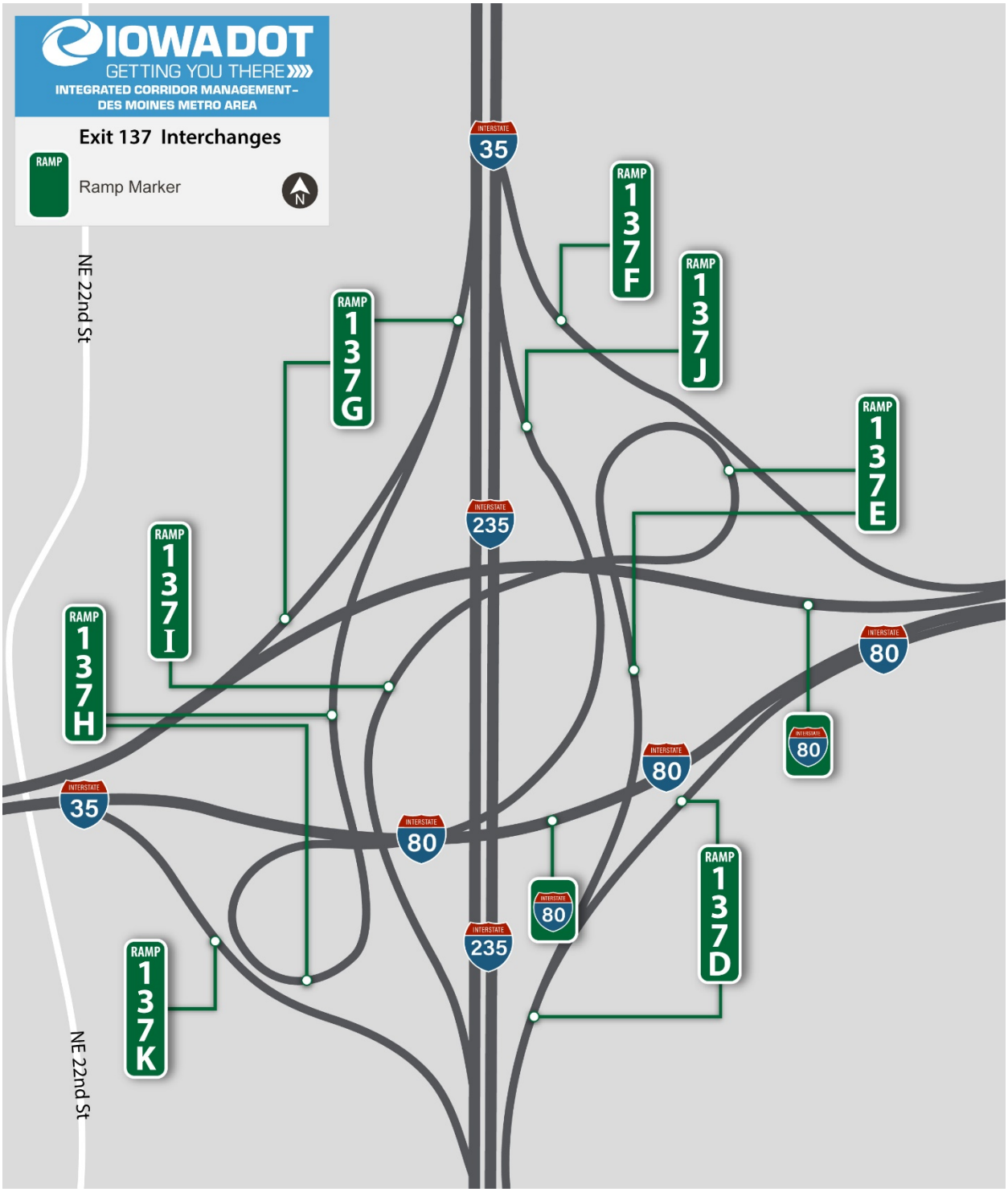


Figure 2. I-80 / I-35 / I-235 East Systems Interchange (Des Moines) Signage Schematic