THE EFFECT OF LEVEL CROSSING TOWARDS THE TRAFFIC CHARACTERISTIC OF RAILWAY CROSSING

(Case Study on Railway Crossing on Mohammad Hatta Road, Tasikmalaya)

Erica Oktariani Nurazizah¹⁾, Hendra²⁾, Gary Raya Prima³⁾

^{1,2,3}Student Civil Engineering Faculty of Engineering Siliwangi University Siliwangi Road No. 24 Tasikmalaya West Java, Indonesia.

E-mail: Erica.azizah@gmail.com

ABSTRACT

The transportation system which is formed from the components of facilities, infrastructure and people is part of today's society. The meeting between the highway and the railroad is an intersection at level crossings and is a point where conflicts can occur between the two modes of transportation. One of the level crossings in Tasikmalaya City is at the level crossing of the Mohammad Hatta road section near the intersection of five. At these crossings the volume of vehicles passing is quite large so that when the doors are closed it can create quite long queues and also cause many vehicles to experience delays. The traffic characteristics surveyed in this study are volume, speed and traffic density. Besides that, a survey was also carried out on train arrival schedules, crossing gate closing time, queue length, number of vehicles in queue and vehicle recovery time. period 16:21:45 - 16:24:46, which resulted in a release time ta = 82.73 seconds, recovery time tb = 88.37 seconds, queue length = 240 meters, number of vehicles queued N = 31.08 smp, and an average delay of 106.04 second.

Key words: Level crossing, traffic characteristics, delay and queueing