Thurston Avenue Bridge Rehabilitation Project



Problem

The Thurston Avenue Bridge serves as the only direct route for vehicular, pedestrian and bicycle traffic traveling between the main residences halls and the central academic campus of Cornell University. Pedestrian and bicycle traffic counts taken in 2002 revealed that 37 pedestrians and 15 bicyclists traveled across the bridge every 15 minutes during the peak hours. This volume is expected to increase to 318 pedestrians per 15-minute interval by 2034 and the number of bicyclists is expected to double in the next 30 years.

Background

Saving the existing historic steel box arches on the Thurston Avenue Bridge was a must when considering reconstruction. The city of Ithaca was able to do this by adding two new induction bent tubular steel arches at the fascias that retained the view of the existing arches.

Solution

Design for the bridge rehabilitation began in 2001 and in March of 2006 the project began. The rehabilitation widened each sidewalk by 2.5 feet and provided two new 5 feet bicycle lanes. Other improvements of the bridge include:

- New bridge railings
- Overlooks at each sidewalks for viewing the adjacent Beebe Lake and Falls and the Fall Creek gorge
- New handicap ramps and detectable warnings via marked crossings, signage, and signs at approaches for ADA accommodation
- Improved visibility, directionality, and movement through intersection at south approach with new slop ramp, pedestrian island, and colored concrete crosswalks
- New LED lighting in top of rail of bridge railing to light sidewalks across the bridge

Results

Since the Thurston Avenue Bridge reopened in October 2007, safety and movement through the corridor has improved through lightings and overall pedestrian visibility, students, staff and visitors can enjoy views of Fall Creek Gorge on the overlook areas, and the flow of public transit buses has improved.

Costs

This project cost \$8.3 for construction, \$1.2 million for design and \$850,000 for construction administration.

Contact

William J. Gary, P.E. Superintendent of Public Works 108 East Green Street Ithaca, NY Phone: (607) 274-6530 Email: billg@cityofithaca.org