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NARROW CONNECTICUT IMPACT-ATTENUATION SYSTEM (NCIAS)



Connecticut Department of Transportation  
 Bureau of Engineering and Construction  
 2800 Berlin Turnpike  
 Newington, CT 06111

SC108

SHEET NO.	DATE:
1 of 2	10/31/2013

## INTENDED USE

The Narrow Connecticut Impact-Attenuation System (NCIAS) is a crash cushion developed for use at narrow hazard locations. Composed of a single row of eight 36 in. [914-mm] diameter steel cylinders of various wall thicknesses, the system offers outstanding safety performance in impact situations. When struck head-on, either straight or skewed, the cylinders crush sequentially and guide the vehicle smoothly down the centerline of the system, utilizing their energy-absorbing characteristics. When the NCIAS is impacted on the side, wire ropes and lateral deflection retainers provide a redirecting response that guides the vehicle back into the traffic flow direction.

By utilizing a stand-alone backup structure that does not require support from other objects, the NCIAS provides protection for a wide variety of narrow roadside hazards, such as bridge piers, sign supports, and the ends of longitudinal barriers. The backup structure and other anchored components remain undamaged after the unit is impacted, leaving only the crushed cylinders to be replaced. The NCIAS is a non-proprietary system. Complete construction drawings and specifications are available upon request.

The NCIAS has been tested and accepted in accordance with NCHRP Report 350, Test Level 3.

## APPROVALS

Federal Highway Administration (FHWA) Acceptance Letter CC-58, March 26, 1999.

## CONTACT INFORMATION

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