

**NEW JERSEY DEPARTMENT OF TRANSPORTATION
MEMORANDUM**

TO: All Engineering Staff—Bridge Inspection
Structural Evaluation

FROM: James Lane, Manager
Structural Evaluation

DATE: January 30, 2007

PHONE: 530-3572

SUBJECT: Inspection Priority Alert
Non-Standard Light Pole Cracking

During the recent inspections of the Route 35/Cheesequake Creek and Route 70/Manasquan River bridges, it was observed that there is cracking at the weld connecting the lower strut to the mast connection plates on nearly all of the light standards on the bridges (see attached photos). In several severe situations, the cracks have propagated into the lower strut and, in one situation, nearly severed the strut.

The problematic light standards are a non-standard design and we are unsure where they may exist on our bridges. However, due to the propensity for cracking of these light standards observed during the recent bridge inspections, it is anticipated that other similar light standards will also exhibit the same cracking. Therefore, care should be exercised when conducting inspections of bridges where this particular non-standard light pole is utilized.

If you have any questions regarding this matter, please see me.

JL: op

c: Richard W. Dunne

Structure No.: 1222-150 Route: NJ 35 Cycle No.: 14
 Name: NJ 35 over Cheesequake Creek and Ramp Insp. Date: 10/19/06



Photo No: 1

Location: Light standard East Fascia over Pier 6

Description: General view (Note: cracked lower connection welds tested with dye penetrant)



Photo No: 2

Location: Light standard west fascia over Pier 2 (Pole 5)

Description: 5 3/4" cracked weld extending 4 1/2" into the lower diagonal of the light standard.

Structure No.: 1222-150 Route: NJ 35 Cycle No.: 14
Name: NJ 35 over Cheesequake Creek and Ramp Insp. Date: 10/19/06



Photo No: 3

Location:	Light standard west fascia over Pier 6 (Pole 3)
Description:	6 1/4" long crack in the lower diagonal (Note: There is also a 6" long crack in the weld connecting the diagonal to the mast).

Structure No.: 1511-150 Route: NJ 70 Cycle No.: 14
 Name: NJ 70 over Manasquan River Insp. Date: 10/3/06



Photo No: 4

Location: Light standard north fascia Pier 7, looking northwest

Description: General view (Note: cracked weld lower strut at the mast.

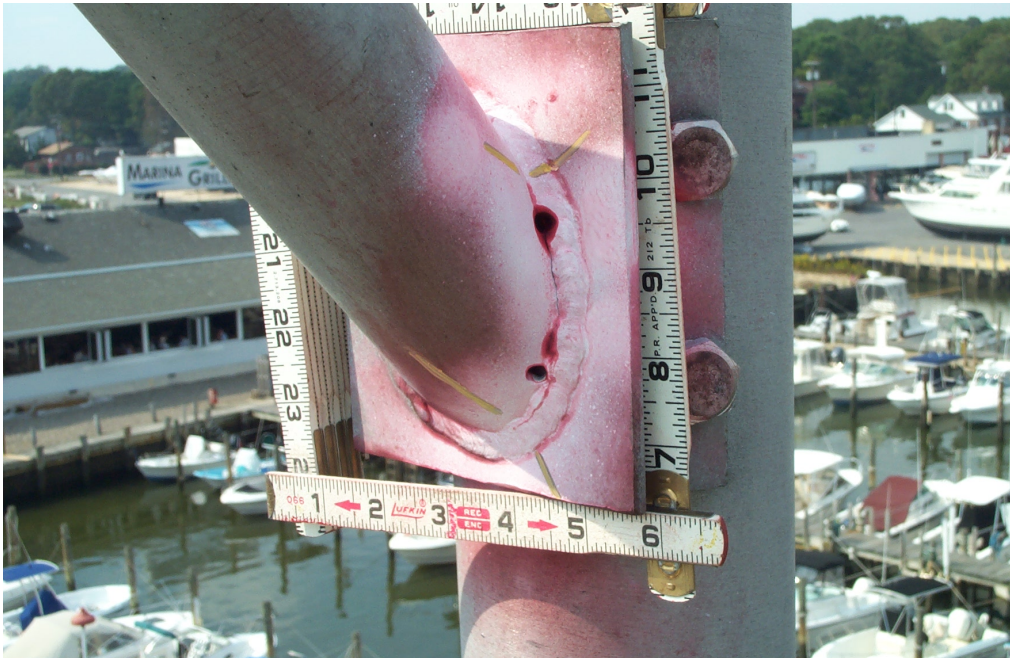


Photo No: 5

Location: Light standard north fascia Pier 3, looking northwest

Description: Crack in the weld at the lower strut connection to the mast extends beyond the drilled holes

Structure No.: 1511-150 Route: NJ 70 Cycle No.: 14
Name: NJ 70 over Manasquan River Insp. Date: 10/3/06



Photo No: 6

Location:	Light standard north fascia at the west abutment, looking west
Description:	Crack in the weld at the lower strut connection to the mast extends beyond the drilled hole and into the lower strut