



Atlas Engineering Group Inc.
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Mike Gostomski
GH Vero Beach Development LLC
2231 Falls Circle
Vero Beach, FL 32967

Reference: E. Harbor Village Dr. – Northern Bridge Assessment - Grand Harbor

Dear Mike:

Atlas Engineering Group Inc. visited the site on Friday, June 28, 2019. A visual inspection of the superstructure was performed. The bridge was built using 5 Double T beams. The two easternmost beams (4 stems) have significant deterioration. The western 3 beams (6 stems) are in much better shape. Some deterioration was observed at the ends near the joints, but overall, they appear to be structurally performing as designed.

Since existing bridge plans are not available, it is difficult to determine the maximum load carrying capacity. Calculations can not be performed without making several assumptions. In these cases, we typically provide a judgement rating. This judgement assumes that the bridge was adequately designed for the standard design vehicles, which includes heavy trucks and emergency vehicles. Based on the condition of the west side of the bridge, we can conclude that this portion of the bridge is performing adequately. Since you have knowledge of heavy construction vehicles and emergency vehicles previously crossing the bridge, it is reasonable to say that vehicles of this magnitude crossing on a limited basis will not significantly damage the west side, since they have not already damaged it.

It is our recommendation that the eastern portion of the bridge remain closed. The 10,000 lb limit currently in place is reasonable. Temporary barriers should be placed to allow only the use of a single 13'-0" lane. This will ensure that the vehicular load is mostly carried by the 3 western beams. The signing, pavement marking, and other maintenance of traffic requirements must be applied in accordance with appropriate codes. This has not been performed by ATLAS.

In emergencies only, first-responders should be allowed to exceed the 10,000 lb limit. Based on the vehicles that have historically crossed the bridge, it is acceptable for an ambulance or standard fire engine to cross occasionally using the western half.

Sincerely,

Atlas Engineering Group Inc.

Robert Alonso, PE, SE
Principal Engineer

