

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

RECEIVED

JAN - 4 2011

OFFICE OF  
INNOVATIVE PROGRAM DELIVERY

**INTERDEPARTMENTAL CORRESPONDENCE**

**FILE:** P.I. No. 0008256                      **OFFICE:** Bridge Maintenance Unit  
Cobb County                                      **DATE:** December 27, 2010

**FROM:**  Mike Clements, P.E., State Bridge Maintenance Engineer

**TO:** Bobby Hilliard, P.E. Program Delivery Engineer  
**ATTN:** John Hancock, P.E.

**SUBJECT: Bridge Condition Survey**

Our office received a request for six Bridge Condition Survey's to be conducted on November 11, 2010. The Bridge Condition Survey's have been completed for the six bridge locations.

**Structure ID 067-0066-0  
SR 401 over I-285 Ramp CBL CD**

This bridge was construction in 1963 and widened in 1997. The superstructure consists of a three span continuous steel unit on concrete caps with a concrete column substructure. The sufficiency rating on the structure is 84.00. The structure has a calculated inventory load capacity of 36 tons.

The inspection of the bridge revealed the structure to be in good condition. The top of the deck is showing transverse cracking in both EB and WB directions. The original deck is showing transverse cracking on the bottom of the deck with efflorescence. We recommend the bridge deck be sealed at a minimum. The expansion joints at bents 1 and 4 have failed and require replacement. Numerous anchor bolts are broken at both bents 1 and 4 and require replacement. Also all bearings at bents 1 and 4 require cleaning and painting. Bent 2 has two spalls on column one. In addition, numerous spalls with exposed rebar were noted on the caps at bent 2. These spalls require repair.

**Structure ID 067-0099-0  
I-285 over SR 3**

This bridge was construction in 1963 and widened in 1986. The superstructure consists of four simple steel beam spans on concrete caps with a concrete column substructure. The sufficiency rating on the structure is 64.86. The structure has a calculated inventory load capacity of 21 tons.

The inspection of the bridge revealed the structure to be in satisfactory condition. The approach slab at bent 1 on the WBL exhibited numerous cracks and requires replacement. All joints show signs of leakage and require replacement. The header at bent 4 has a spall area (approximately 2' x 6" x 4") and requires repair. Spalls were noted in span 2 on the EBL barrier and require repair. Minor cracking was observed in bent 1 cap and requires repair with epoxy injection. At bents 3 and 4 numerous spalls were noted in both the caps and columns which require repair. Also, at bent 5 the slope paving is settling along the entire face and needs to be repaired. Lastly, three anchor bolts are broken at bent 5 and need to be replaced.

**Structure ID 067-0100-0**  
**I-285 over RMP I-285 CCBL to I-75 SB**

This bridge was construction in 1978. The superstructure consists of a 12 inch cast in-place flat slab in spans 1 and 5, along with a plate girder cantilever end span unit on concrete caps with a concrete column substructure. The sufficiency rating on the structure is 84.38. The structure has a calculated inventory load capacity of 35 tons.

The inspection of the bridge revealed the structure to be in very good condition. All joints have failed we recommend replacement of all bridge deck joints. The top of the deck in both directions is showing map cracking along the entire surface we recommend sealing the deck. A large amount of debris has accumulated on the slope paving and in the paved ditch line we recommend cleaning these areas.

**Structure ID 067-0106-0**  
**I-285 over Cumberland Blvd. and Rottenwood Creek**

This bridge was construction in 1978 and widened in 1986. The superstructure consists of a three span continuous steel unit on concrete caps with a concrete column substructure founded on caissons. The sufficiency rating on the structure is 83.00. The structure has a calculated inventory load capacity of 36 tons.

The inspection of the bridge revealed the structure to be in good condition. The top of the back wall on bents 1 and 4 in the WBL are spalled and need to be repaired. The joints at bent 1 and 4 in both directions are leaking and need to be replaced. During the inspection numerous bearings were observed along bent 1 (BRNG at BM 1, 2, 3, 4, 5, 8, and 9) that need to be reset. All bearings at bents 1 and 4 need to be cleaned and repainted. One anchor bolt at bent 4 was broken and requires replacement. Also at bent 4 an erosion issue exists that requires repair. At the midpoint of the cap at bent 4 three piles are exposed (10' x 3' x 2), also two large gullies exist down the face of the end slope. The eroded material is being deposited on the walking trail that Cobb County has constructed at the base of the slope.

**Structure ID 067-0140-0  
CR 4399 (Hickory Grove Road) over SR I-75**

This bridge was construction in 1977. The superstructure consists of two simple steel beam spans and a two span continuous unit on concrete caps with a concrete column substructure. The sufficiency rating on the structure is 76.14. The structure has a calculated inventory load capacity of 18 tons.

The inspection of the bridge revealed the structure to be in good condition. The top of the deck is showing minor transverse cracking. The deck itself appears to have a broom finish. The joints at bents 2 and 4 have failed and need to be replaced. Bents 2 and 4 have spalls with exposed rebar which require repair. Also the wrong bridge number (067-0122-0) has been painted on beam #6 in span 4. This needs to be removed and repainted with the correct bridge number 067-0140-0.

**Structure ID 067-5248-0  
I-285 EB- CD over Cumberland Blvd. and Rottenwood Creek**

This bridge was construction in 1999. The superstructure consists of three spans of prestressed beams on concrete caps with a concrete column substructure. The sufficiency rating on the structure is 85.79. The structure has a calculated inventory load capacity of 36 tons.

The inspection of the bridge revealed the structure to be in very good condition. The top of the deck is showing minor map cracking. The expansion joints have failed and require replacement. The substructure is in good shape and no repairs are required.

If you have any questions, please contact Clayton Bennett at (404)-635-8183.  
MLC:cbb