DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE **P.I. NO. 0008256**
Cobb County

OFFICE Materials and Research
Forest Park, Georgia

DATE May 23, 2011

FROM Georgene M. Geary, P.E., State Materials and Research Engineer

TO Darryl VanMeter, P.E., Office of Innovative Program Delivery

SUBJECT **BRIDGE DECK CONDITION SURVEY**

Below as requested are the Bridge Deck Condition Surveys for the referenced project.

Structure ID 067-0140-0
Hickory Grove Road / I-75

The average depth of the top reinforcement for the bridge is 1.5 inches with a range of 1.0 to 2.2 inches. The inspection of the four span deck revealed moderate surface wear with a light to moderate transverse broomed finish in all spans. Light map cracking and tight randomly spaced transverse cracks were found in all spans. Swiss hammering of the deck indicated an average compressive strength of 4100 psi. Inspection of the deck's underside revealed the metal deck pans to be in good condition in all bays. This bridge was constructed in 1975.

Based on these findings, the only corrective work recommended is the repair/replacement of the joints at bents 2 and 4.

Structure ID 067-0106-0
I-285 EB over Rottenwood Creek / Cumberland Boulevard

This three span bridge was constructed in 1978 and widened in 1986. The inspection of the 1978 deck (inside shoulder, 3 lanes) revealed moderate surface wear, light transverse grooving and light map cracking in all spans. The deck's underside has metal deck pans in 8 bays that are in good condition. Both the approach and exit slabs for the 1978 structure are overlaid with asphalt. The inspection of the 1986 deck (gore area, 2 lanes, outside shoulder) revealed light surface wear, moderate transverse grooving and tight transverse cracks spaced 4 to 5 feet in all spans. . The deck's underside has precast-prestressed concrete panels in 5 bays that are in good condition. Swiss hammering of the deck indicated an average compressive strength of 4900 psi. The concrete approach slab on the approach end for the 1986 widening has two longitudinal cracks and the exit end is overlaid with asphalt.

Based on these findings, corrective work recommended are the sealing of the longitudinal cracks in the approach slabs and the repair/replacement of the joints at bents 1 and 4.

If you have any questions, please contact Myron Banks at 404-608-4876.

GMG:mkb

c: Ben Rabun, P.E., State Bridge and Structural Design Engineer