



## Florida Department of Transportation

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**MATERIALS BULLETIN NO. 12-16**  
**DCE MEMORANDUM NO. 18-16**  
*(FHWA Approved: 12/23/2016)*

**This Memo has Expired**

**TO: DISTRICT MATERIALS AND RESEARCH ENGINEERS  
DISTRICT CONSTRUCTION ENGINEERS**

**FROM:** Timothy Ruelke P.E., Director, Office of Materials  
David A. Sadler, P.E., Director, Office of Construction

**COPIES:** Bob Burleson, Courtney Drummond, Amy Tootle, Nick Finch, Rafiq Darji

**SUBJECT: USE OF RECYCLED CONCRETE AGGREGATE AS BACKFILL WITH  
ALUMINUM AND METALIZED PIPE**

Sufficient evidence exists indicating that aluminum and metalized (galvanized and aluminized) pipe in contact with soil or backfill exhibiting a pH greater than 9.0 results in an in-service condition that is detrimental to the service life of these types of pipe. Research by the University of Florida recently confirmed that recycled concrete aggregate (RCA) materials have a pH greater than 9.5. RCA backfill and aluminum or metalized drainage pipe must not come in contact with each other. Therefore, the combination of RCA and aluminum or metalized pipe placed in accordance with 125 of the Standard Specifications for Road and Bridge Construction shall not be allowed.

On active construction projects, work with your staff to determine if any such conditions exist where aluminum or metalized drainage pipe are expected to be in contact so that this can be corrected. Should you have any questions concerning this matter, please contact John Shoucair (352) 955-2925 or Ivan Lasa (352) 955-2901 at the State Materials Office.

TR/XX