Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

MIKE DEW
SECRETARY

ROADWAY DESIGN BULLETIN 17-18
STRUCTURES DESIGN BULLETIN 17-11
PROGRAM MANAGEMENT BULLETIN 17-11
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TO: District Directors of Transportation Operations, District Directors of Transportation Development, District Design Engineers, District Construction Engineers, District Structures Design Engineers, District Roadway Design Engineers, District Traffic Operations Engineers, Program Management Engineers

FROM: Michael Shepard, P.E., State Roadway Design Engineer
Robert V. Robertson, P.E., State Structures Design Engineer
Stefanie D. Maxwell, P.E., State Program Management Engineer

COPIES: Brian Blanchard, Tom Byron, Courtney Drummond, Tim Lattner, David Sadler, Rudy Powell, Amy Tootle, Vern Danforth, Gregory Schiess, Trey Tillander, Dan Scheer, Dan Hurtado, Greg Davis, Erik Fenniman, Jeffrey Ger (FHWA), Nick Finch (FHWA), Rafiq Darji (FHWA), Chad Thompson (FHWA), Bren George (FHWA)

SUBJECT: **Box Culvert Summary of Quantities**

This bulletin changes how quantities for box culverts are shown in the plans.

REQUIREMENTS

Replace **FDM 307.3** (Box Culvert) and **PPM Vol. 2 Section 7.3** (Box Culvert) with the following:

> The structural design of any size concrete box culvert may be performed utilizing computer programs as described in ***FDM 265.13***. The ***LRFD Box Culvert Program*** complements the details shown on ***Standard Plans***, ***Index 400-289***.
>
> Complete the Box Culvert Data Table (cell is included in the Structures workspace of the FDOT CADD Software) and the Reinforcing Bar List. Place the table and list on plan sheets in the Structures Component Plan Set.

For box culverts without FDOT assigned bridge numbers (typically < 20-foot spans measured along the centerline of the roadway from face-to-face (inside) of the extreme abutments or sidewalls), place quantity totals in a Summary of Box Culverts box on a "BQ-" numbered plan sheet in the Structures Component Plan Set. Do not include the quantities in the Summary of Structure Quantities table. Load these planned quantities into AASHTOWare Project™ Preconstruction or Designer Interface in the Roadway Category.

For box culverts with FDOT assigned bridge numbers (bridge culverts), place quantity totals in the Box Culvert section of the Summary of Structure Quantities in the Structures Component Plan Set. Load these planned quantities into AASHTOWare Project™ Preconstruction or Designer Interface in the Structures Category under the assigned bridge number.

COMMENTARY

Concrete Box Culvert plan sheets (regardless of culvert size) will be included in a Structures Component Plan Set along with all appropriate ***Standard Plans for Bridge Construction***. Refer to ***Structures Manual, Volume 2 – Structures Detailing Manual (SDM)*** Section 3.7 and ***Structures Design Bulletin 17-09 /Production Support Bulletin 17-01*** for more details on including Standard Plans in the Plan Set. Box culverts < 20-foot span should continue to be assigned a drainage structure number (e.g., S-100, S-101).

Due to software limitations, quantities for miscellaneous structures that do not have a bridge number (e.g., box culverts < 20-foot span and retaining walls) cannot be loaded into AASHTOWare Project™ Preconstruction or Designer Interface in the Structures Category. Therefore, the quantities for miscellaneous structures must be loaded in the Roadway Category.

IMPLEMENTATION

These requirements are mandatory for design-bid-build projects with lettings on or after July 1, 2018.

CONTACTS

Roadway:
Paul Hiers, P.E.
Roadway Design Criteria Administrator
Paul.Hiers@dot.state.fl.us

Pay Items:
Melissa Hollis
Basis of Estimates Coordinator
Melissa.Hollis@dot.state.fl.us

Structures:
Steve Nolan, P.E.
Senior Structures Design Engineer
Steven.Nolan@dot.state.fl.us

MS/RR/SM/ph