

PennDOT e-Notification

Bureau of Business Solutions and Services
Highway/Engineering Applications Division



BOX5

No. 001
June 29, 2015

Release of Version 5.9.0.0

The Department's LFD Box Culvert Design and Rating (BOX5) program has been revised as described in the attached "Summary of May 2015 Revisions – Version 5.9.0.0".

The new version has been placed on PennDOT servers for use by the Districts. Consultants and others, who have a current license agreement for **BOX5 Version 5.8**, can obtain the updated version by submitting an Update Request form along with an **update fee of \$50 for private organizations and governmental agencies**. Updates for **BOX5 Version 5.7 or earlier** will require an **additional fee**. For BOX5 update fee details, refer to the following link: <http://penndot.engrprograms.com/home/Ordering/BOX5.htm>. The update fee is waived for federal and state transportation agencies.

The Software Update Request form can be obtained on the PennDOT Engineering Software Support website at <http://penndot.engrprograms.com> by clicking on "Ordering/Updating" and, then on, "Update Form".

Please note that the software will no longer be provided on a CD. Once payment is received, an e-mail will be sent with download instructions. The new installation will require a License Key that will be provided in the e-mail. A valid e-mail address must be provided on the Update Form in order to receive the download instructions.

Please direct any questions concerning the above to:

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Attachment

Archived copies of all previously distributed e-Notifications can be obtained from the PennDOT LRFD and Engineering Programs website at <http://penndot.engrprograms.com/home> and clicking on "e-Notification" and then "Mailing List Archives."

SUMMARY OF MAY 2015 REVISIONS - VERSION 5.9.0.0

Since the release of BOX5 Version 5.8, several error reports and user requested enhancements have been received. This release of BOX5 Version 5.9.0.0 contains the following revisions.

Input Revisions

1. Increased the number of axle loads of special live loads from 24 to 80. (Request 004)
2. Added cross edit check for "Bottom Slab" and "Fish Channel". If "Bottom Slab" = N and "Fish Channel" is not blank, then change "Fish Channel" to blank to avoid a program crash. (Request 007)
3. If zero or blank is entered for f'c, a default value of 3000 psi for cast-in-place culverts or 4500psi for precast culverts is used. This will preclude an unexpected execution error. (Request 009)

Program Revisions

4. A tolerance check for comparison for very small numbers to avoid unexpected negative values. (Request 010)
5. Standardized code and conversion to a DLL (Dynamic Link Library) Program. (Request 002)
6. Broke all subroutines and functions into separate files from one big main file. Each subroutine or function will be saved as one file with a file extension FOR. (Request 003)
7. Increased the range of the valid license numbers and implemented the use of license keys. (Request 005)
8. Upgraded to Intel Visual Fortran Composer XE 2013 SP1 Update 3 and Microsoft Visual Studio .NET 2012. (Request 006)
9. The program has been enhanced to provide a PDF output file in addition to the text output file. The PDF file makes it easier to print and paginate the program output. (Request 008)

Input Processor

10. The Input Processor (BOX5IP) at the command prompt is no longer supported. It is replaced by the user-friendly Engineering Assistant v2.5.0.0 (EngAsst). Therefore, Chapter 4 of this user manual was completely replaced.