

PENNDOT e-Notification

Bureau of Design
Bridge Quality Assurance Division



ARCH

No. 001
February 5, 2003

Sign convention for analysis results - User Manual corrections and clarification

There have been several questions from users concerning the sign convention used by ARCH when reporting analysis results. It was determined that some of the positive shear and thrust force effects shown in Figure 3.4.1 were not correct. Figure 3.4.1 on page 3-9 has been revised to correct the direction of the positive force effects. A written description of the force effect sign convention was added on page 6-3 in Section 6.7 "Analysis Results".

Additionally, an important assumption regarding the elastic center method neglecting axial deformation was added in Section 2.3 "Assumption and Limitations". The revised User's Manual pages are attached.

Licensed users of ARCH v1.1, who obtained the program before January 31, 2003, can download the entire User's Manual including the above revisions from the PENNDOT LRFD and Engineering Programs website (<http://penndot.engrprograms.com/home>). Licensees will be notified by mail about the download procedure.

Direct any questions concerning the above issue to:

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