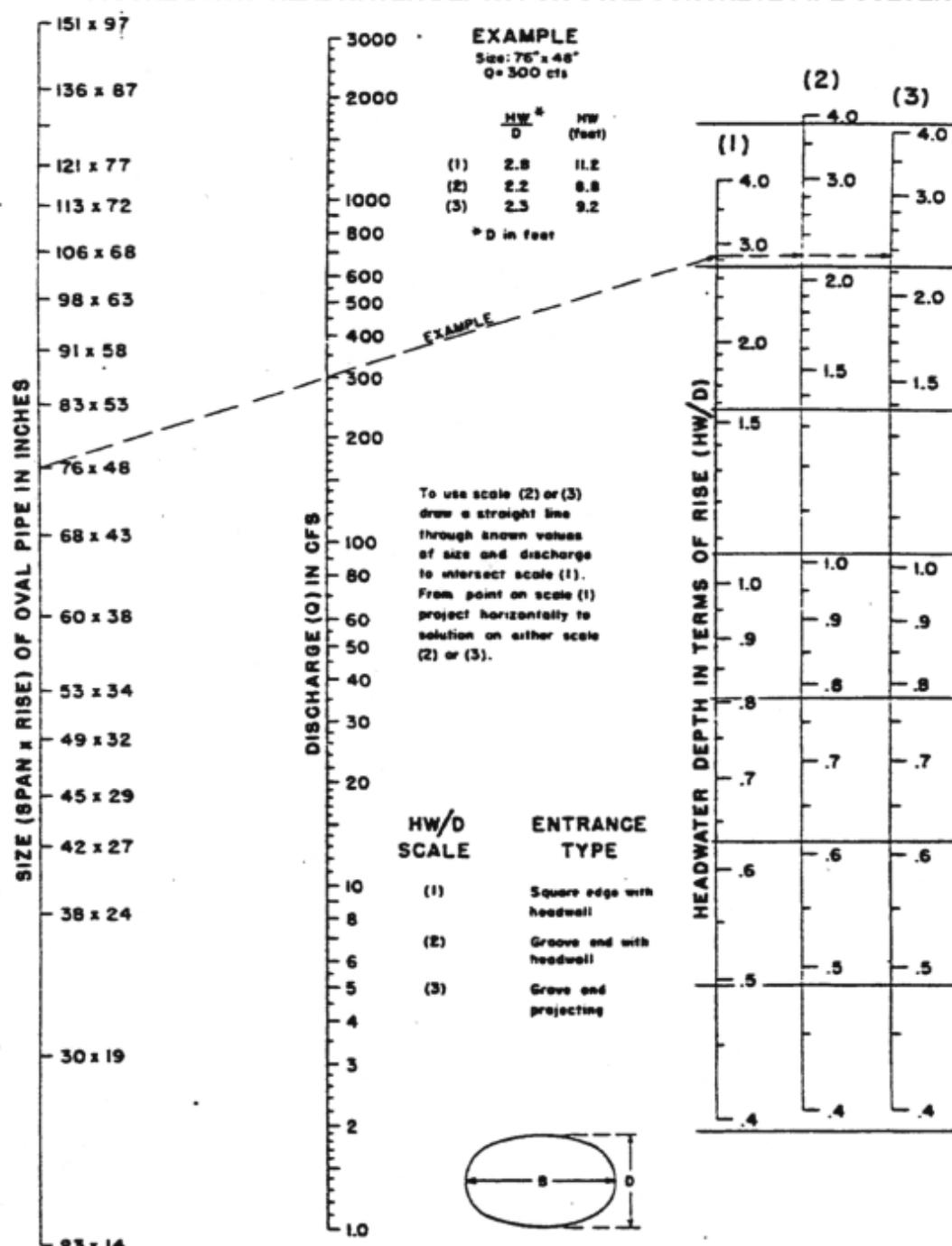


**Appendix
D.15**

**Miscellaneous MD SHA Design Charts
for Determining Pipe Inlet Control**

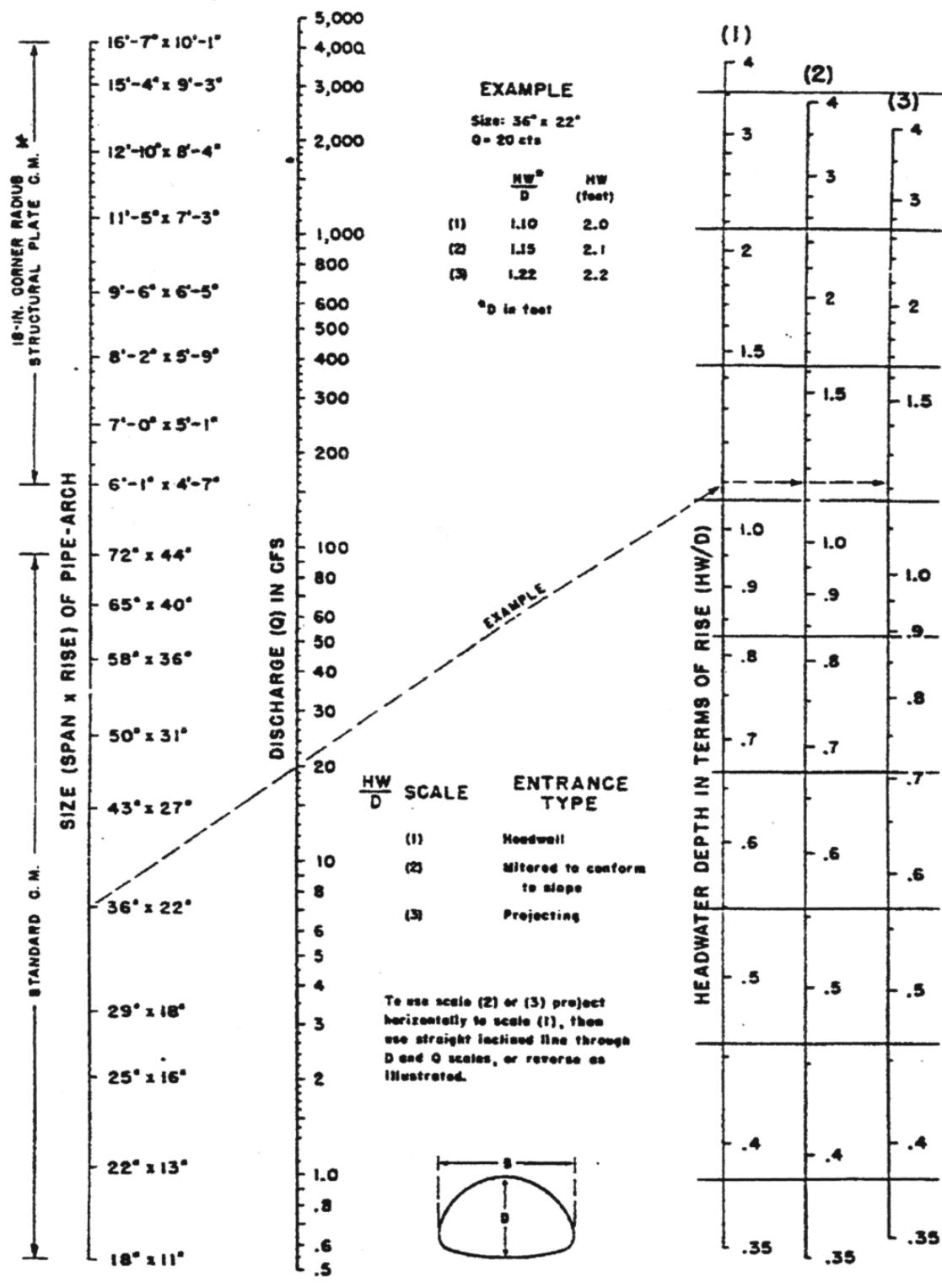
FIGURE D.15.1 HEADWATER DEPTH FOR OVAL CONCRETE PIPE CULVERTS



HEADWATER DEPTH FOR OVAL CONCRETE PIPE CULVERTS LONG AXIS HORIZONTAL WITH INLET CONTROL

ADAPTED FROM MARYLAND STATE HIGHWAY ADMINISTRATION I/63 SHA-61.1-420.3-1.0

FIGURE D.15.2 HEADWATER DEPTH FOR CMP ARCH CULVERTS WITH INLET CONTROL

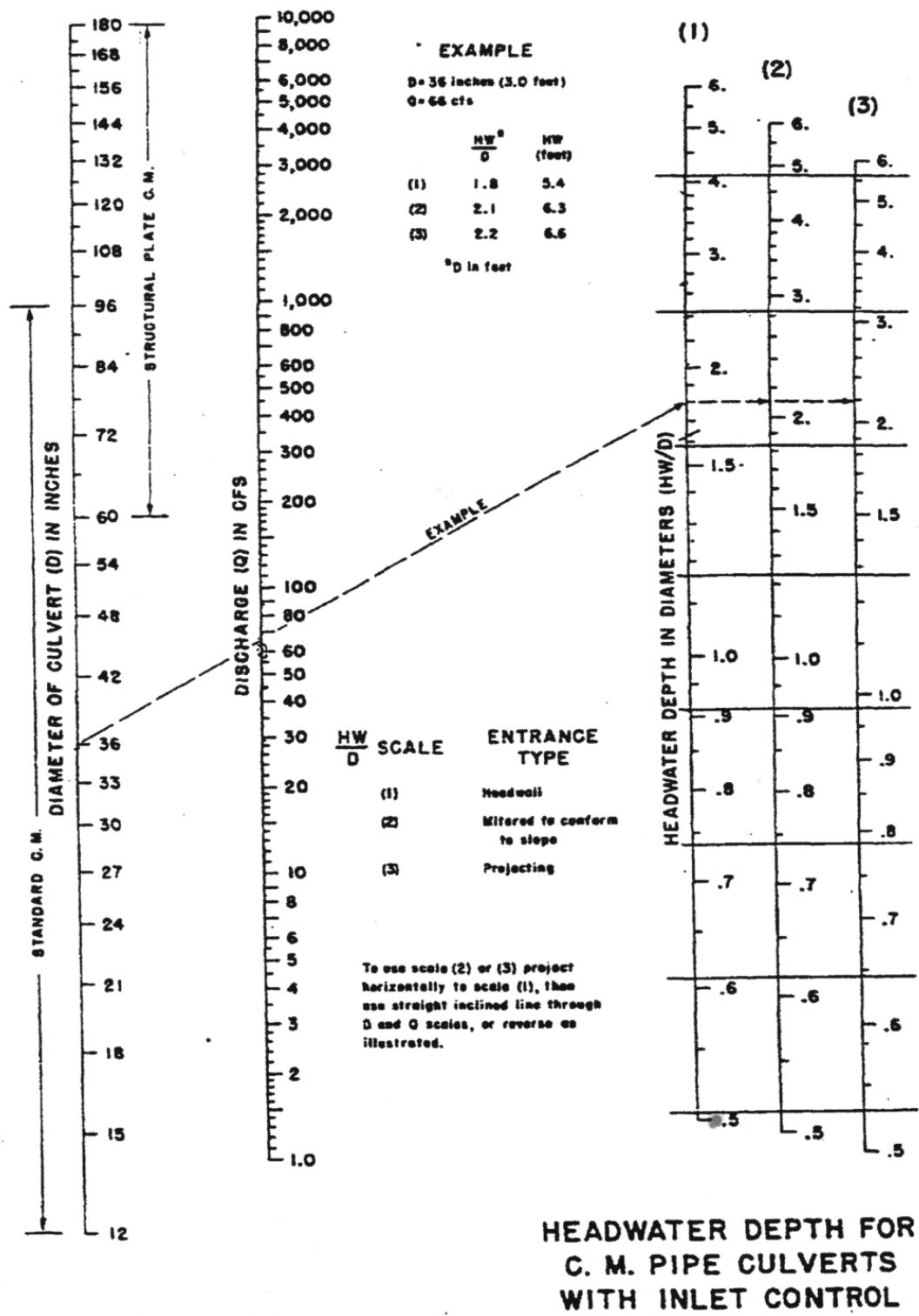


FOR ADDITIONAL SIZES THAT ARE NOT
DIMENSIONED REFER TO CHARTS
442.00 AND 443.00

HEADWATER DEPTH FOR C. M. PIPE-ARCH CULVERTS WITH INLET CONTROL

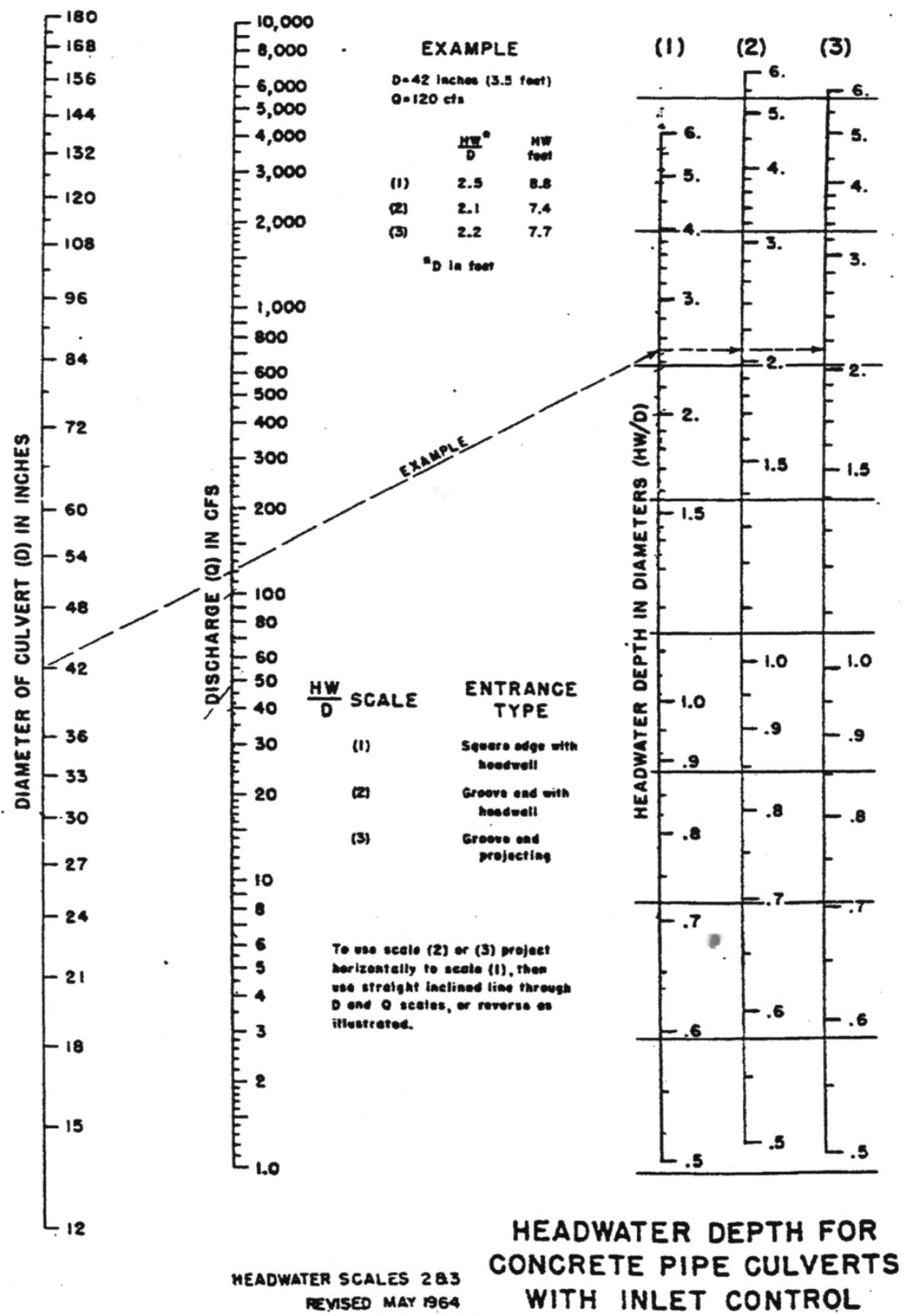
ADAPTED FROM MARYLAND STATE HIGHWAY ADMINISTRATION I/63 SHA-61.1-420.2-2.0

FIGURE D.15.3 HEADWATER DEPTH FOR CMP CULVERTS WITH INLET CONTROL



ADAPTED FROM MARYLAND STATE HIGHWAY ADMINISTRATION I/63 SHA-61.1-420.1-2.0

FIGURE D.15.4 HEADWATER DEPTH FOR CONCRETE PIPE CULVERTS WITH INLET CONTROL



ADAPTED FROM MARYLAND STATE HIGHWAY ADMINISTRATION 5/64 SHA-61.1-420.1-1.0