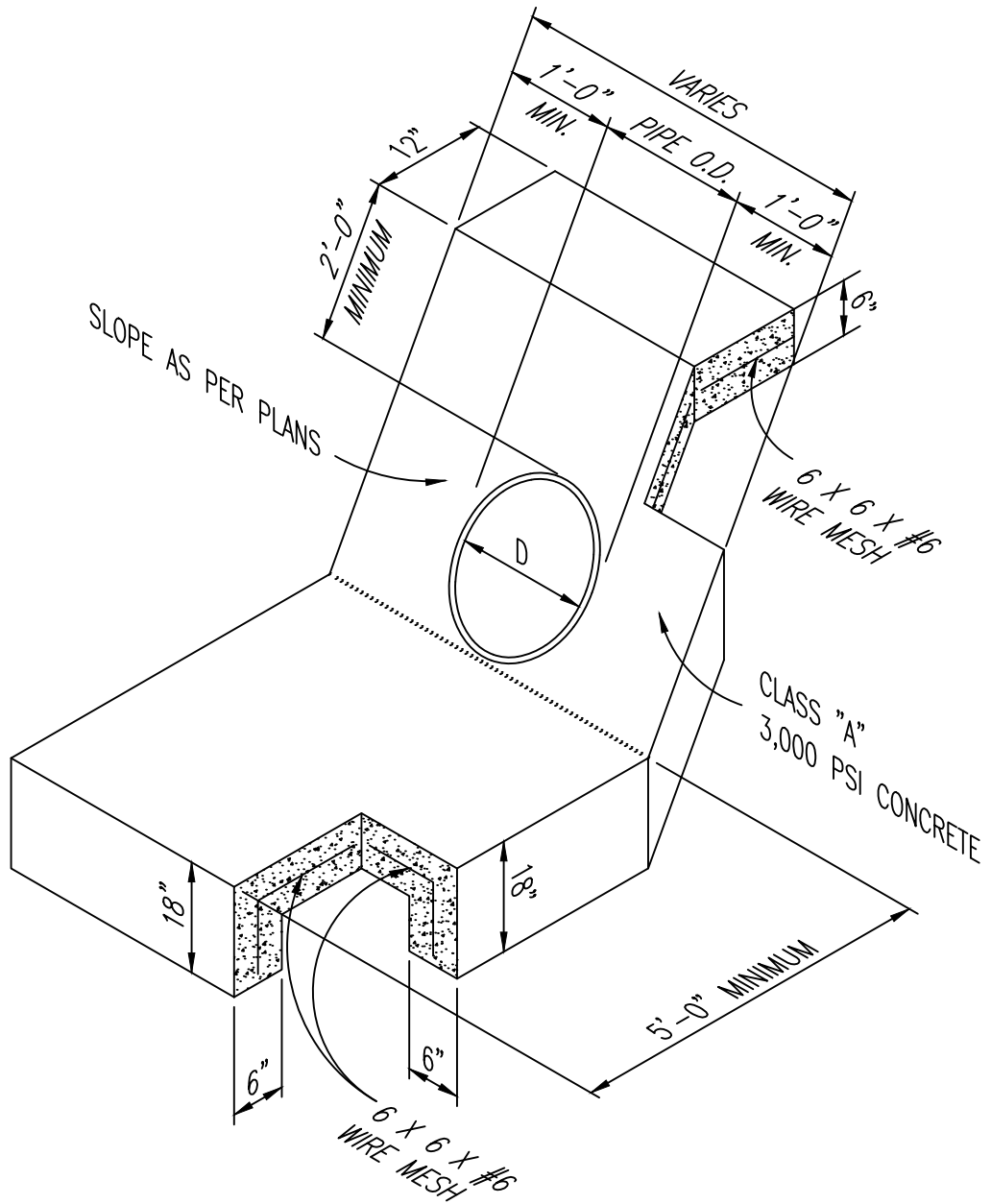


MINIMUM
RIP-RAP QUANTITIES

PIPE	SQ. YDS.
18"	6.2
24"	6.9
27"	7.8
30"	9.5
36"	10.4
42"	12.0
48"	14.3
54"	16.4



NOTES:

1. WHEN HEADWALLS AND WINGWALLS ARE REQUIRED, THEY SHALL CONFORM TO THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARDS, OR AS DIRECTED BY THE CITY.
2. ENERGY DISSIPATERS SHALL BE REQUIRED IF PIPE VELOCITY IS GREATER THAN 5.0 F.P.S. OR AS DIRECTED BY THE CITY OF HUTTO.
3. SUPPORT REINFORCING WIRE MESH REQUIRED AS SUPPORT FOR APPROACH SLAB AND SHALL BE SUPPORTED BY REBAR CHAIRS OR OTHER APPROVED METHODS.



CITY OF HUTTO
CONSTRUCTION STANDARDS AND DETAILS

**TYPICAL CONCRETE
RIPRAP AT PIPE**
ENGINEERING & PUBLIC WORKS

DRAWING NO. SD09

UPDATED: 02/01/2019

DRAWN BY: BB

SCALE: N.T.S.

FILE NAME: SD09.DWG