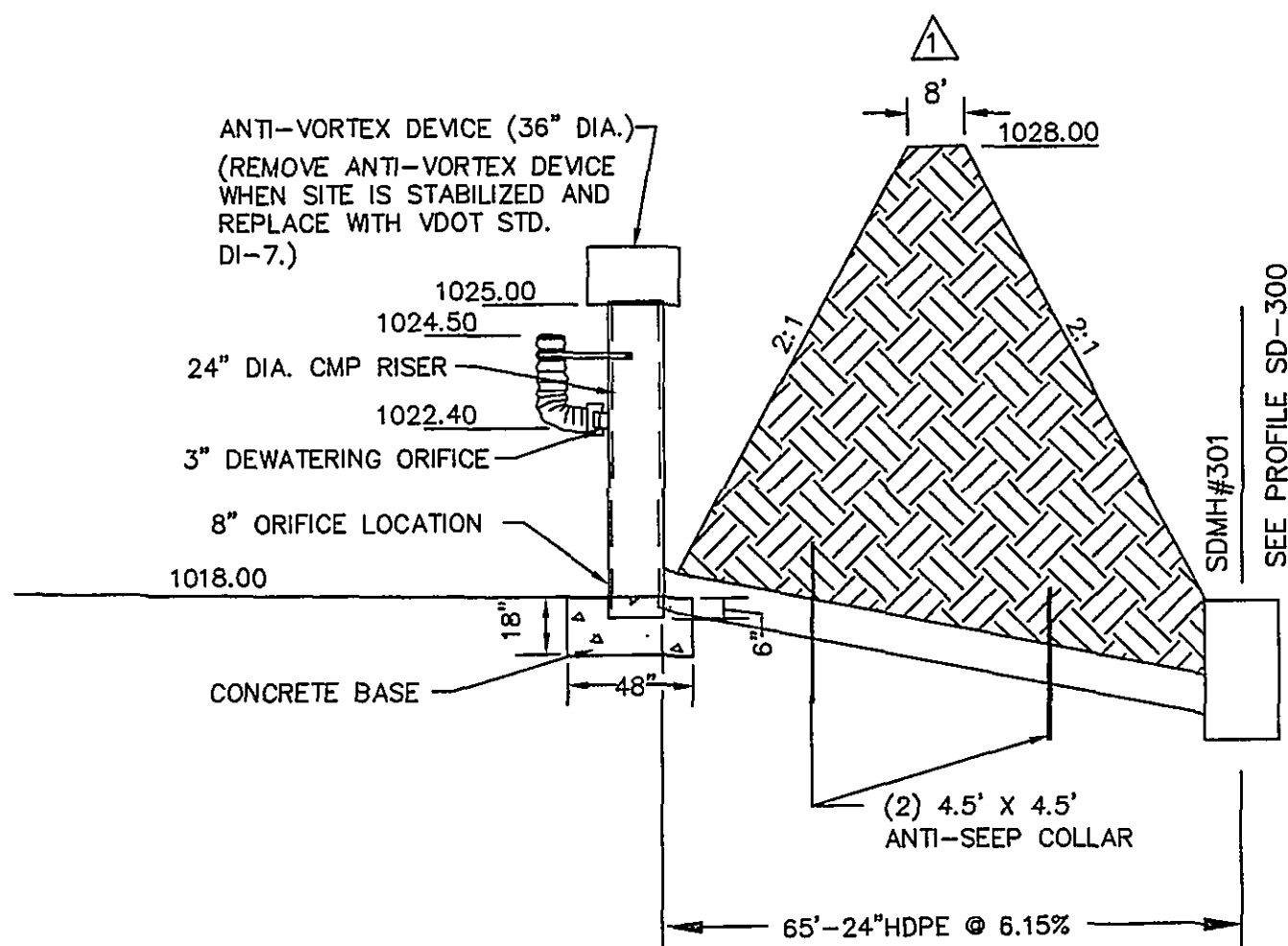


EROSION AND SEDIMENT CONTROL NOTES:

1. AN EROSION AND SEDIMENT CONTROL PLAN FOR THE BORROW/FILL AREA SHALL BE SUBMITTED TO THE CITY OF ROANOKE FOR APPROVAL PRIOR TO ISSUANCE OF A LAND DISTURBANCE PERMIT AND PRIOR TO ANY LAND DISTURBING ACTIVITIES.

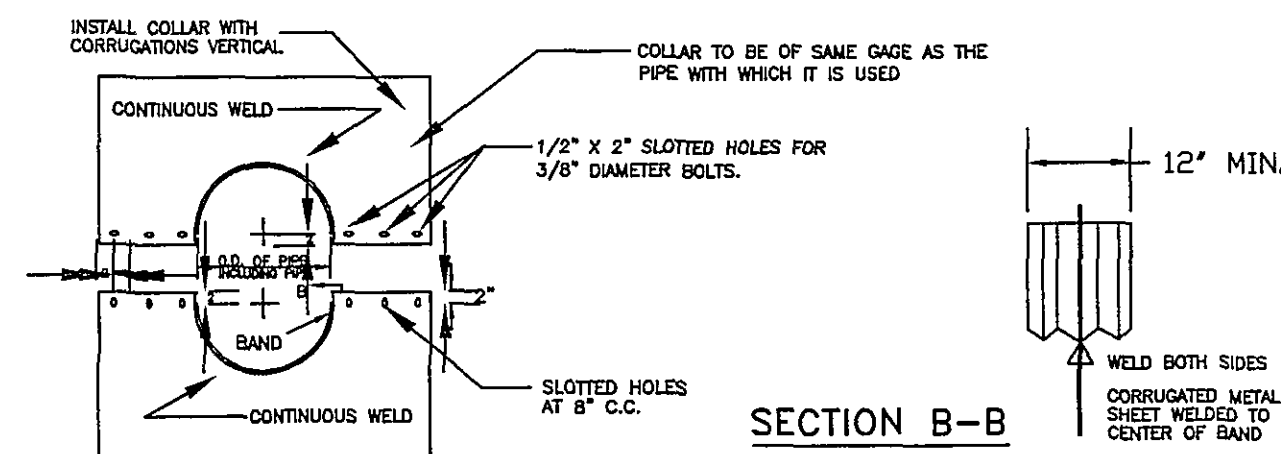


CONCRETE BASE SIZE CALC.
FOR RISERS 10" OR LESS IN HEIGHT:
USE CONCRETE BASE 18" THICK AND
TWICE THE WIDTH OF THE RISER
DIAMETER, WITH THE RISER EMBEDDED
6" INTO THE CONCRETE. FOR 24"
RISER, USE 2X24" = 48" WIDE BASE.

STORMWATER MANAGEMENT POND

NO SCALE

DETAILS OF CORRUGATED METAL ANTI-SEEP COLLAR



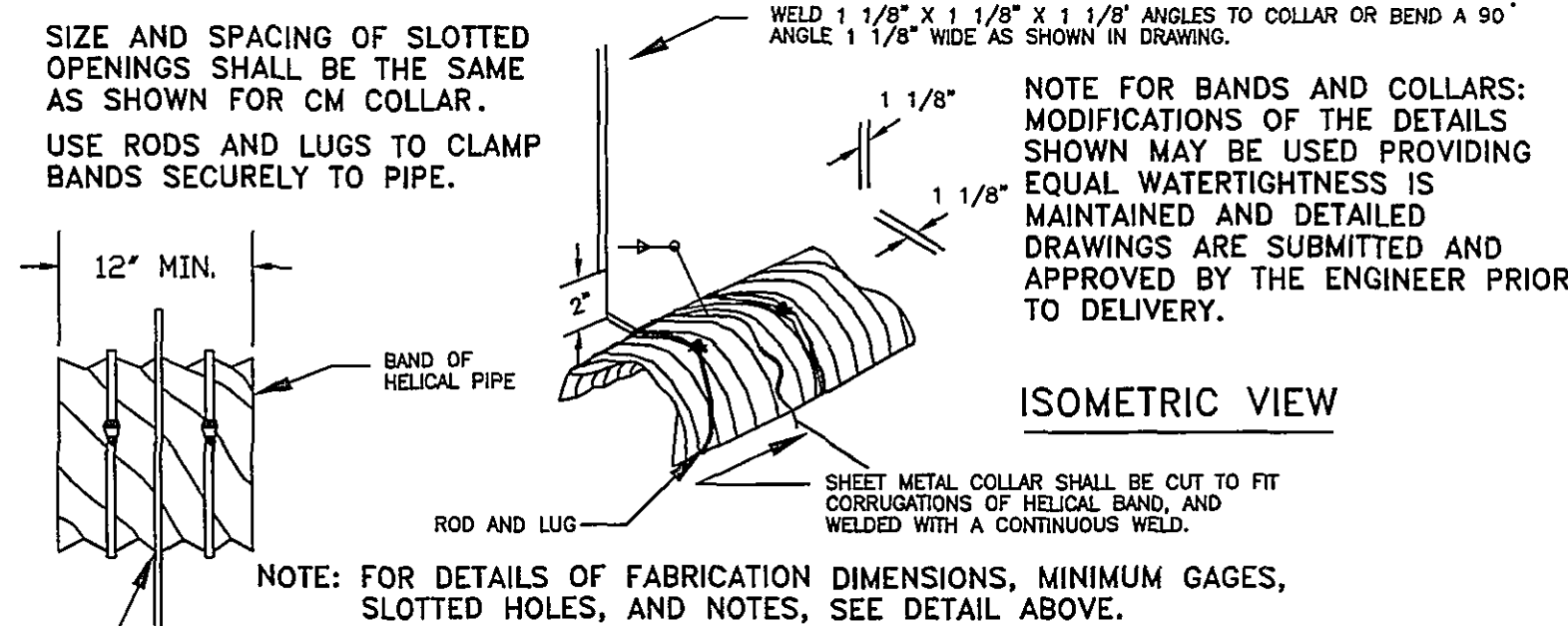
ELEVATION OF UNASSEMBLED COLLAR

NOTES FOR COLLARS:

1. ALL MATERIALS TO BE IN ACCORDANCE WITH CONSTRUCTION AND CONSTRUCTION MATERIAL SPECIFICATIONS.
2. WHEN SPECIFIED ON THE PLANS, COATING OF COLLARS SHALL BE IN ACCORDANCE WITH CONSTRUCTION AND CONSTRUCTION MATERIAL SPECIFICATIONS.

3. UNASSEMBLED COLLARS SHALL BE MARKED BY PAINTING OR TAGGING TO IDENTIFY MATCHING PAIRS.
4. THE LAP BETWEEN THE TWO HALF SECTIONS AND BETWEEN THE PIPE AND CONNECTING BAND SHALL BE CAULKED WITH ASPHALT MASTIC AT TIME OF INSTALLATION.
5. EACH COLLAR SHALL BE FURNISHED WITH TWO 1/2" DIAMETER RODS WITH STANDARD TANK LUGS FOR CONNECTING COLLARS TO PIPE.

DETAIL OF HELICAL PIPE ANTI-SEEP COLLAR

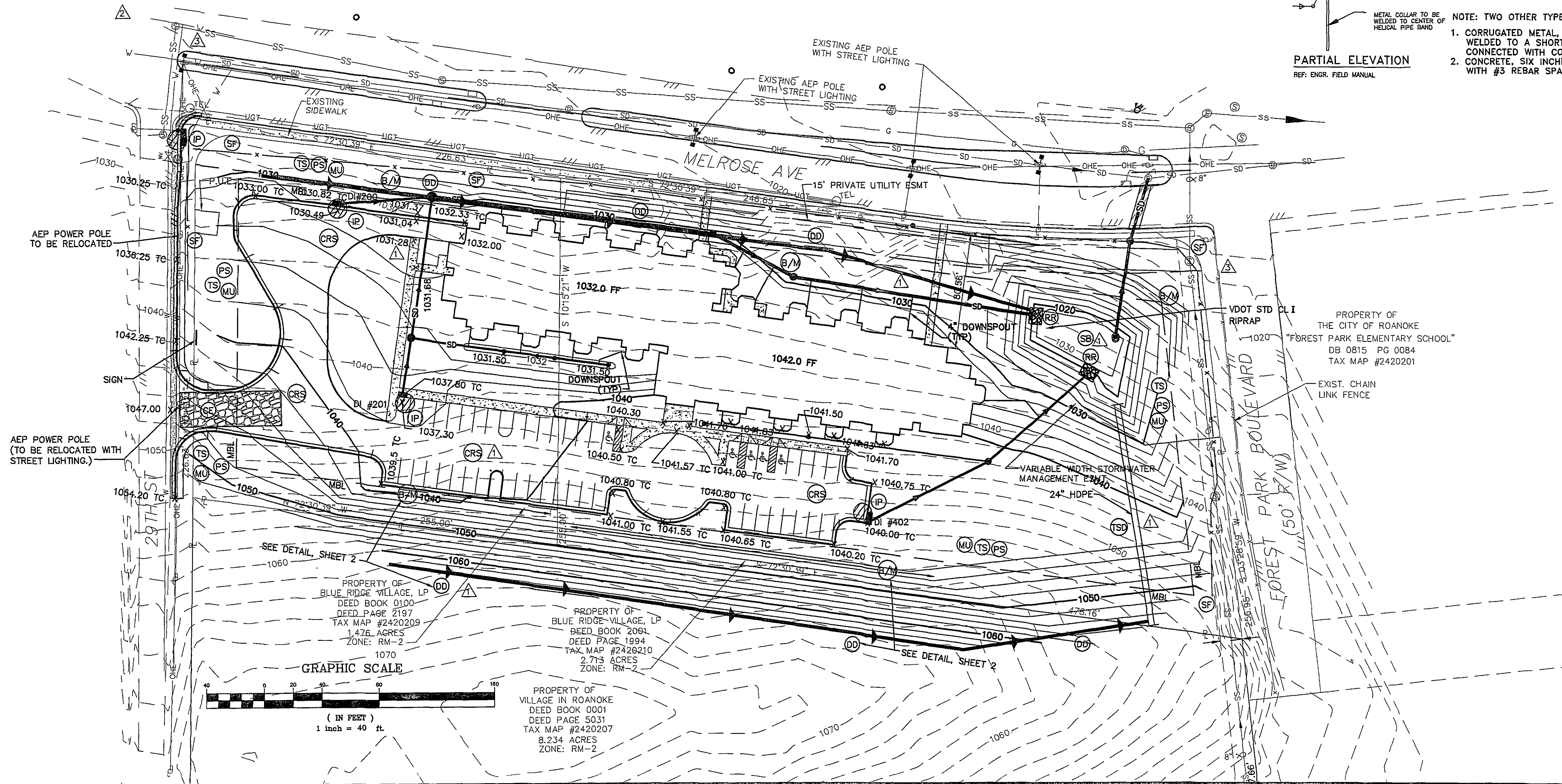


PARTIAL ELEVATION

REF: ENGR. FIELD MANUAL

NOTE: TWO OTHER TYPES OF ANTI-SEEP COLLARS ARE:

1. CORRUGATED METAL, SIMILAR TO UPPER, EXCEPT SHOP WELDED TO A SHORT (4FT.) SECTION OF THE PIPE AND CONNECTED WITH CONNECTING BANDS TO THE PIPE.
2. CONCRETE, SIX INCHES THICK FORMED AROUND THE PIPE WITH #3 REBAR SPACED 15" HORIZONTALLY AND VERTICALLY.



BLUE RIDGE VILLAGE
MULTI-FAMILY HOUSING
DEVELOPMENT
CITY OF ROANOKE, VIRGINIA

GRADING PLAN

NO.	DATE	DESCRIPTION	BY
1	3/22/04	CITY COMMENTS	RCW
2	1/15/04	CITY COMMENTS	RCW

Designed By	KER
Drawn By	DJB/KER
Checked By	
Approved By	RCW
Submitted By	RCW
Drawing	
Date	10/20/03
Scale	1"=40'
Commission No.	1389L
Sheet	5 of 12

WWW.ID# 6M8QX2