

$\frac{3}{8}$ " x 2" STAINLESS STEEL STRAP W/ $\frac{1}{2}$ " LEG

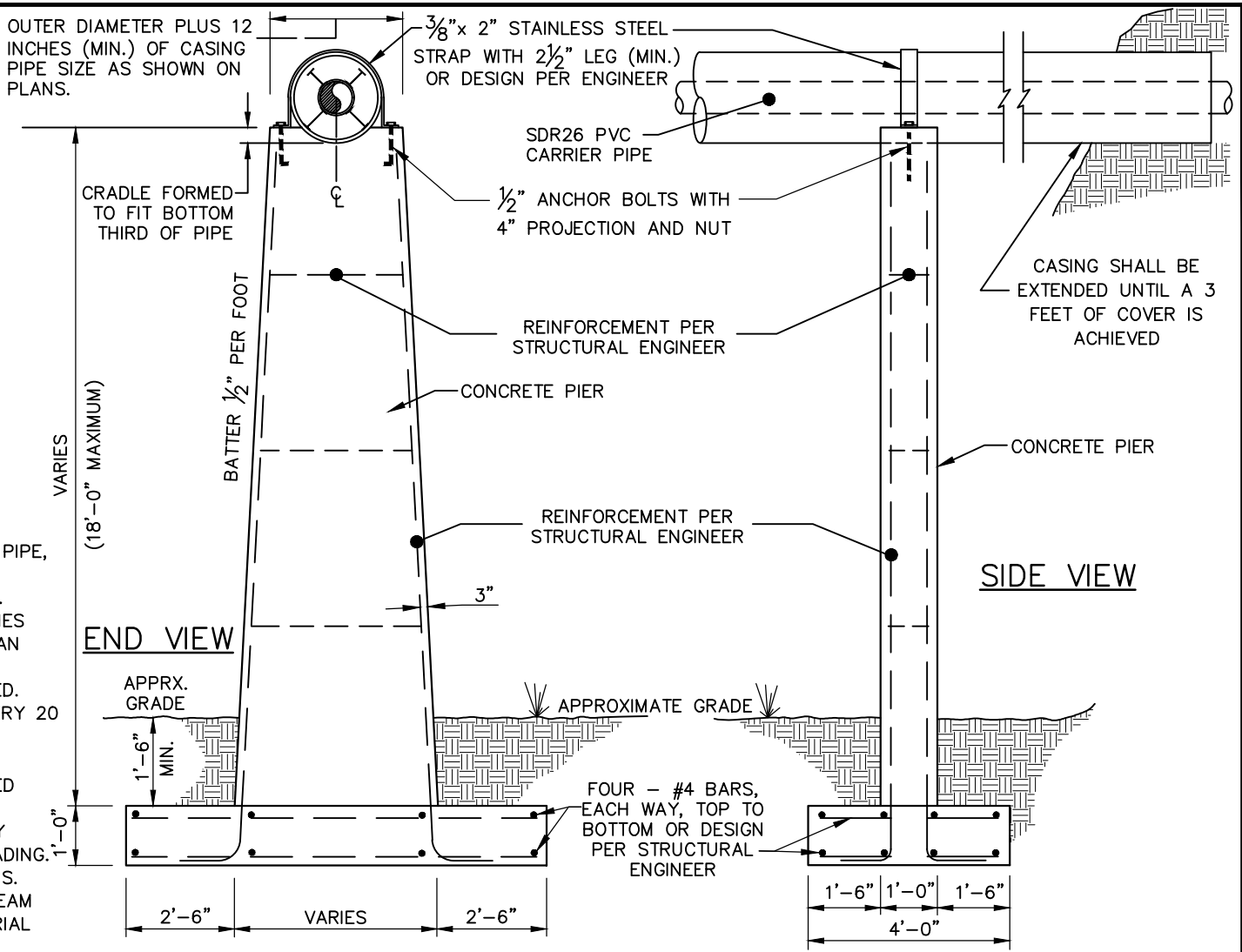
PLAN VIEW

NOTES:

1. STEEL SHALL BE GRADE 40.
2. CONCRETE SHALL BE 3,000 P.S.I. OR GREATER.

NOTES:

1. CARRIER PIPE SHALL BE INSTALLED IN A CASING PIPE, MEETING SPEC SECTION 7050.
2. PIERS OVER 3 FEET IN HEIGHT TO BE REINFORCED.
3. BOTTOM OF PIPE MUST BE A MINIMUM OF 24 INCHES ABOVE NORMAL WATER LEVEL BUT NO LOWER THAN THE 25-YEAR FLOOD ELEVATION.
4. CAST-IN-PLACE CONCRETE SHALL BE FIELD TESTED.
5. AT A MINIMUM, ONE PIER MUST BE INSTALLED EVERY 20 FEET OR AS DIRECTED BY CARY'S UTILITIES DEPARTMENT.
6. FOOTING DESIGN SHALL BE CONFIRMED BY LICENSED N.C. PROFESSIONAL ENGINEER.
7. SUBSURFACE CONDITIONS SHALL BE CONFIRMED BY LICENSED N.C. GEOTECH ENGINEER TO VERIFY LOADING.
8. PRECAST PIERS REVIEWED ON CASE BY CASE BASIS.
9. CARRIER PIPE SHALL BE SDR26 PVC FROM UPSTREAM MANHOLE TO DOWNSTREAM MANHOLE AT THE AERIAL CROSSING.



END VIEW

VARIES (18'-0" MAXIMUM)

BATTER $\frac{1}{2}$ " PER FOOT

3"

APPRX. GRADE

1'-6" MIN.

2'-6" VARIES 2'-6"

FOUR - #4 BARS, EACH WAY, TOP TO BOTTOM OR DESIGN PER STRUCTURAL ENGINEER

1'-6" 1'-0" 1'-6" 4'-0"

REINFORCEMENT PER STRUCTURAL ENGINEER

CONCRETE PIER

CONCRETE PIER

CASING SHALL BE EXTENDED UNTIL A 3 FEET OF COVER IS ACHIEVED

REINFORCEMENT PER STRUCTURAL ENGINEER

$\frac{1}{2}$ " ANCHOR BOLTS WITH 4" PROJECTION AND NUT

$\frac{3}{8}$ " x 2" STAINLESS STEEL STRAP WITH $\frac{1}{2}$ " LEG (MIN.) OR DESIGN PER ENGINEER

OUTER DIAMETER PLUS 12 INCHES (MIN.) OF CASING PIPE SIZE AS SHOWN ON PLANS.

9. PIER FOUNDATION SUPPORT TYPE SHALL BE DETERMINED BY LICENSED NC PE BASED ON SUBGRADE CONDITIONS AND AT EACH PIER LOCATION INUNDATED IN THE 100-YEAR DESIGN STORM EVENT INCLUDE FOUNDATION ANCHOR DESIGN.
10. EACH PIER EXPOSED TO THE 100-YEAR DESIGN STORM EVENT SHALL BE PROTECTED BY APPROPRIATELY SIZED RIP RAP THAT EXTENDS A MINIMUM OF 6- FEET BEYOND THE PIER.
11. STREAM BANK SLOPES BENEATH THE AERIAL CROSSING SHALL BE PROTECTED BY APPROPRIATELY SIZED RIP RAP AND EXTEND A MINIMUM OF 6- FEET BEYOND THE CENTERLINE OF THE PIPE UPSTREAM AND DOWNSTREAM. RIP RAP SHALL NOT BE ALLOWED IN THE STREAM BED.



EFFECTIVE: 07/01/22

STANDARD AERIAL CROSSING

DETAIL No.
7000.27