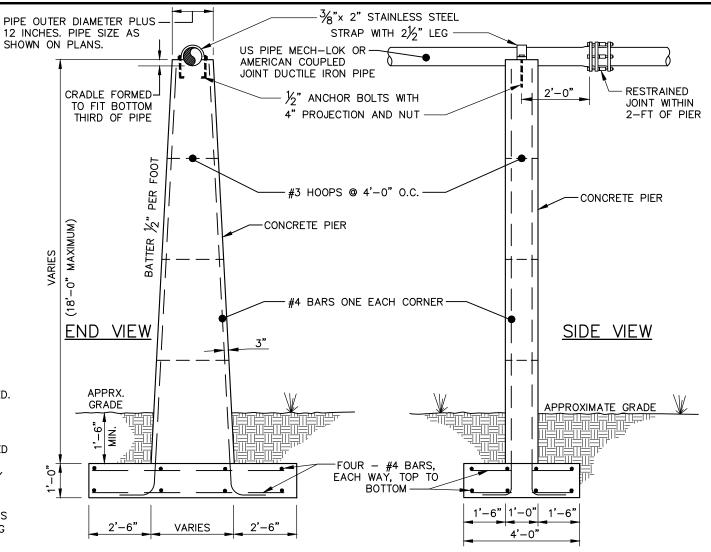


- 1. STEEL SHALL BE GRADE 40.
- 2. CONCRETE SHALL BE 3,000 P.S.I. OR GREATER.

NOTES:

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





- 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.

STANDARD AERIAL CROSSING

DETAIL No. 7000.27