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PROJECT TYPICAL DETAILS

ETHERIL

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TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - SURVEY/SUE - UTILITIES - CONSTRUCTION OBSERVATION

APPROVED BY:

BR-0062

DESIGNED BY: TWR

DRAWN BY: TWR

CHECKED BY: PKP

APPROVED BY: SLK

REVISED:

NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION

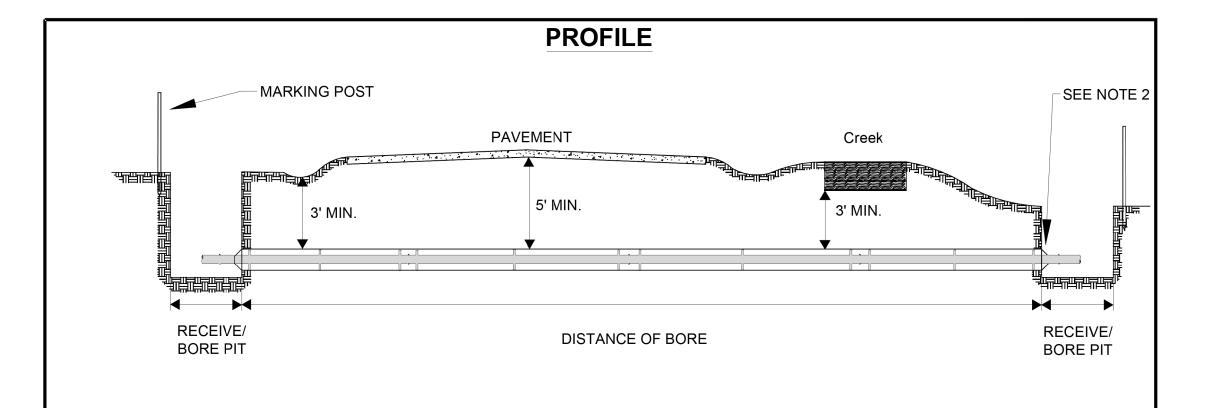
DEPARTMENT OF
TRANSPORTATION

UTILITIES ENGINEERING SEC.
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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO. SHEET NO.

UTILITY CONSTRUCTION



CASING PIPE INSULATOR - MAXIMUM OF ONE FOOT FROM EACH SIDE OF JOINT CASING SEAL SEE NOTE LIV MAX. CASING SEAL SEE NOTE END VIEW PIPE DIAMETER 16" TO 48" NOTE: SEE TABLE 1 FOR CASING/CARRIER PIPE SPECIFICATIONS

JACK & BORE DETAIL

NOT TO SCALE

SHEET

1 OF 2

NOTE:

- CARRIER SPACERS SHALL BE STAINLESS STEEL WITH 2 " WIDE PLASTIC RUNNERS.
- 2. ALTERNATE METHODS OF CASING SPACERS MAY BE UTILIZED UPON APPROVAL OF CITY ENGINEER.
- 3. SEAL ANNULUS BETWEEN CARRIER PIPE AND CASING AT BOTH ENDS USING CASING SEAL AS MANUFACTURED BY PIPELINE SEAL AND INSULATOR, MODEL S OR APPROVED EQUAL. ALTERNATE METHOD IS TO SEAL ANNULUS WITH 8 " THICK ASTM C32 GRADE MS BRICK BULKHEAD.
- 4. ALL CASING PIPE SHALL BE WELDED STEEL PIPE CONFORMING TO ASTM A139 CLASS B. COATING FOR STEEL CASING IS NOT REQUIRED.
- 5. TRACING WIRE SHALL BE INSTALLED THROUGH ALL CASED BORINGS AND CONNECTED TO TRACER WIRE ACCESS BOX.
- 6. FILL ENTIRE LENGTH OF PIPE WITH FLOWABLE FILL CDF.

TABLE 1

| NOMINAL CARRIER PIPE DIAMETER | 6 " | 8 " | 10 " | 12 " | 16 " | 18 " | 21 " | 24 " |
|-------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| MINIMUM CASING PIPE DIAMETER | 14 " | 16 " | 20 " | 20 " | 24 " | 30 " | 30 " | 36 " |
| MINIMUM WALL THICKNESS | .281 " | .281 " | .343 " | .343 " | .406 " | .469 " | .469 " | .531 " |

JACK & BORE DETAIL

SHEET 2 OF 2