NOTES:
1. REFER TO DETAIL 2 OF 10.1 FOR TYPICAL PAVEMENT SECTION.
2. MILLING DEPTH SHALL BE 1/2 THE THICKNESS OF EXISTING HMAC PAVEMENT SECTION, TYPICAL. FIELD CONDITIONS MAY VARY.

TYPICAL PAVEMENT JOINT SECTION
SCALE: N.T.S.
ASPHALT ROADWAY
N.T.S.

NOTES:
1. CONCRETE COLLAR FLUSH WITH TOP OF H.M.A.C., IF APPLICABLE.
2. MANHOLE RING FLUSH WITH TOP OF CONCRETE PAVEMENT, CONCRETE COLLAR NOT NEEDED.

UNPAVED AREAS
N.T.S.

CONSTRUCTION KEY NOTES:
A. MANHOLE RING.
B. MANHOLE COVER.
C. CONCRETE ADJUSTMENT RINGS AS REQUIRED.
D. MANHOLE CONE SECTION.
E. MANHOLE BARREL SECTION.
F. CONCRETE APRON FLUSH WITH MANHOLE RING AND 2" ABOVE NATURAL GROUND.

MANHOLE RING AND COVER INSTALLATION
SCALE: N.T.S.

EXHIBIT NO. 2
SPARKS BORDER COLONIA
ACCESS PROGRAM

engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIB 1-484
TYPICAL WATER SERVICE CASING DETAIL

NOTES:
1. NEW 2" STEEL CASING TO BE INSTALLED ONLY FOR EMPTY LOTS OR WHERE REQUIRED BY L.V.W.D. REPRESENTATIVE.

SCALE: N.T.S.
PIPE CASING DETAIL FOR BRET HARTE & UNTERMeyer

@ STATION 5+71.00

SCALE: N.T.S.

NOTES:

1. PIPING TO BE 4" DIA. SCHEDULE 40 TO WELDED STEEL WITH FORGED STEEL WELD FITTINGS. BURIED VENT PIPING SHALL HAVE 2 COATS OF EPOXY POLYAMIDE COATING. ONLY REQUIRED WHEN CROSSING TXDOT RIGHT-OF-WAY.

2. MINIMUM SPACING BETWEEN INSULATION AND CASING SHALL BE 1". MAXIMUM SPACING SHALL BE 2".

3. PRESSURE GROUT ANNULAR SPACE OUTSIDE CASING AFTER CASING IS INSTALLED, AS REQUIRED.

PIPE CASING DETAIL FOR BRET HARTE & UNTERMYER
@ STATION 23+90.00
SCALE: N.T.S.

NOTES:

1. PIPING TO BE 4" DIA. SCHEDULE 40 TO WELDED STEEL WITH FORGED STEEL WELD FITTINGS. BURIED VENT PIPING SHALL HAVE 2 COATS OF EPOXY POLYAMITE COATING. ONLY REQUIRED WHEN CROSSING TXDOT RIGHT-OF-WAY.
2. MINIMUM SPACING BETWEEN INSULATION AND CASING SHALL BE 1", MAXIMUM SPACING SHALL BE 2".
3. PRESSURE GROUT ANNULAR SPACE OUTSIDE CASING AFTER CASING IS INSTALLED, AS REQUIRED.
CONSTRUCTION KEY NOTES:

A. PLACE EMBEDMENT/BACKFILL MATERIAL IN 8" LIFTS AND COMPACT AS SPECIFIED.

B. TRENCH DIMENSION "W" AS FOLLOWS:
   PIPE DIAMETER  "W"
   LESS THAN 24"  9"

C. NATIVE MATERIAL OR IMPORTED SELECT MATERIAL, MEETING OR EXCEEDING CLASS II REQUIREMENTS, MAY BE USED. CLASS I MATERIAL (MAXIMUM 3/4 INCH SIZE) IS ACCEPTABLE AT THE DISCRETION OF THE CONTRACTOR.

GENERAL NOTES:

1. NATIVE MATERIAL MAY BE USED PROVIDED IT MEETS THE SPECIFICATIONS FOR CLASS II OR III MATERIALS.

2. EMBEDMENT CONDITIONS SHOWN FOR DRY TRENCH.

TYPICAL CASING TRENCH DETAIL
SCALE: N.T.S.

EXHIBIT NO. 6
SPARKS BORDER COLONIA ACCESS PROGRAM

group
engineers  architects  planners
TEXAS REGISTERED ENGINEERING FIRM F-456
NOTES:
1. DETAIL USED WHEN STANDARD COVER CANNOT BE MET.
2. NEW PAVEMENT ELEVATION, HMAC THICKNESS, BASE THICKNESS, AND SUB-BASE THICKNESS AS PROPOSED IN THE PLAN SHEETS.

CONSTRUCTION KEY NOTES:
A. 2-SAC
B. (6/6-10 WWF) WIRE MESH
C. SAND CUSHION
D. PROPOSED OR EXISTING PIPE
E. HMAC
F. BASE
G. SUB-BASE
H. COMPACTED BACKFILL
I. CONCRETE CURB

TYPICAL 2-SAC CAP DETAIL
SCALE: N.T.S.

EXHIBIT NO. 7
SPARKS BORDER COLONIA ACCESS PROGRAM
CASE BID - BART HART FROM 0+00.00 TO 27+14.82

[Diagram of a section with various annotations and measurements]
PLAN

NOTES:
1. ADJUST EXISTING COPPER WATER SERVICE LINE AS REQUIRED TO MEET THE 36" OF COVER.
2. EXISTING COPPER WATER SERVICE LINE SHALL BE COMPLETELY REPLACED IF DAMAGED.
3. NO SPLICING, JOINING, CUTTING SHALL BE PERMITTED TO EXTEND EXISTING WATER SERVICE.

TYPICAL WATER SERVICE ADJUSTMENT/REPLACEMENT DETAIL

SCALE: N.T.S.

EXHIBIT NO. 9
SPARKS BORDER COLONIA ACCESS PROGRAM

engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM F-4561