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NOTE:

1. HANSON PIPE PRECAST BASE OR EQUAL (OPTIONAL)

2. IF A MANHOLE IS PLACED WITHIN A DITCH, THEN IT MUST BE PRE-CAST AND THE TOP OF THE MANHOLE MUST BE FOUR (4) INCHES ABOVE FINISHED DITCH GRADE.

TIE INTO EXISTING PRECAST MANHOLE DETAIL

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.
NOTE:

1. INSTALLATION SHALL BE COMPLY WITH MANUFACTURES RECOMMENDED INSTALLATION INSTRUCTIONS.

2. IF FIBERGLASS MANHOLE IS INSTALLED WITHIN 5' OF THE ROADWAY THEN STABILIZED SAND NEEDS TO BE USED.

3. IF FIBERGLASS MANHOLE IS INSTALLED BEYOND 5' THEN SELECT BACKFILL CAN BE USED.

4. IF MANHOLE IS PLACED IN THE DITCH, SEE H-1 (PRECAST MANHOLE DETAIL)

NOTE:

** SEE MANHOLE TOP DETAIL (H-11) FOR MORE CLARITY

- #1 - PRECAST RINGS FOR ADDITIONAL HEIGHT AS REQ'D.
- #2 - TO BE GROUTED W/SMOOTH FINISH INSIDE
- #3 - WRAP WITH CONCRETE FROM MANHOLE RING TO SHOULDER OF FIBERGLASS MANHOLE.

SELECT BACKFILL (COMPACTED NATIVE MATERIAL OR SAND)

CITY OF BEAUMONT RING AND COVER WITH STAINLESS STEEL INFLOW PREVENTION DEVICE

FLEXIBLE RUBBER COUPLING W/STAINLESS STEEL BANDS

2 - #3 RE-BAR RINGS

2" MAX.

STAINLESS STEEL BOLTS

4" DIA

1' MIN.

SLOPE 1:1

CATEGORY H-2

MIN. 4 1/2 SACK CONC. CONCRETE BASE

UNDISTURBED SOIL OR 3/4" AGGREGATE

CONCRETE OUTSIDE OF MANHOLE TO MATCH HEIGHT OF TOP OF INVERT

MANHOLE BOTTOM EVEN WITH BOTTOM OF PIPE

CIRCULAR HOLES CUT INTO M.H.'S TO BE ONE (1) INCH GREATER THAN PIPE DIA. (CUTS & DRILLED HOLES TO BE MADE W/MASONARY BIT)

6x6 #6 WELDED WIRE FABRIC SUPPORTED 6" ABOVE SOIL/ROCK BASE

NOTE:

1. INSTALLATION SHALL BE COMPLY WITH MANUFACTURES RECOMMENDED INSTALLATION INSTRUCTIONS.

2. IF FIBERGLASS MANHOLE IS INSTALLED WITHIN 5' OF THE ROADWAY THEN STABILIZED SAND NEEDS TO BE USED.

3. IF FIBERGLASS MANHOLE IS INSTALLED BEYOND 5' THEN SELECT BACKFILL CAN BE USED.

4. IF MANHOLE IS PLACED IN THE DITCH, SEE H-1 (PRECAST MANHOLE DETAIL)

TYPICAL FIBERGLASS MANHOLE
TYPICAL FIBERGLASS MANHOLE

NOTE:

** SEE MANHOLE TOP DETAIL (H-11) FOR MORE CLARITY

#1 - PRECAST RINGS FOR ADDITIONAL HEIGHT AS REQ'D.
#2 - TO BE GROUTED W/SMOOTH FINISH INSIDE
#3 - WRAP WITH CONCRETE FROM MANHOLE
      RING TO SHOULDER OF FIBERGLASS MANHOLE.

GRADE RING
HEIGHT
18" MAX

FLEXIBLE RUBBER COUPLING W/
STAINLESS STEEL BANDS

FIBERGLASS & GROUT AS
REQ'D.

CIRCULAR HOLES CUT INTO
M.H.'S TO BE ONE (1) INCH
GREATER THAN PIPE DIA.

NOTE:

IF MANHOLE IS PLACED IN THE DITCH,
SEE H-1 (PRECAST MANHOLE DETAIL)

TYPICAL FIBERGLASS MANHOLE

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.

H-3
NOTE:
INSTALLATION SHALL BE COMPLY WITH MANUFACTURES RECOMMENDED INSTALLATION INSTRUCTIONS

FIBERGLASS MANHOLE BOTTOM DETAIL

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.

H-4
**NOTE:**

**SEE MANHOLE TOP DETAIL (H-11) FOR MORE CLARITY**

#1 - PRECAST RINGS FOR ADDITIONAL HEIGHT AS REQ'D.
#2 - TO BE GROUTED W/SMOOTH FINISH INSIDE
#3 - WRAP WITH CONCRETE FROM MANHOLE RING TO SHOULDER OF FIBERGLASS MANHOLE.

---

TYPICAL LINER CONNECTION TO NEW MANHOLE

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.
NOTE:
INVERT SHOULD BE SHAPED TO FORM A SMOOTH TRANSITION FROM MANHOLE WALLS TO INVERT OF EFFLUENT PIPE. ALL CORNERS SHALL BE FILLED WITH GROUT AND SHAPE SO AS TO CHANNEL FLOW TO INVERT OF EFFLUENT PIPE WITH NO OBSTRUCTIONS.

SECTION "A-A" OF TYPICAL LINER CONNECTION TO NEW MANHOLE
FINISH GRADE

ENTRY SADDLE

STAINLESS STEEL BANDS

SEALANT

STAINLESS STEEL BOLTS AND NUTS

CIRCULAR HOLES CUT INTO MANHOLES TO BE 1 INCH GREATER THAN PIPE DIA.

EXISTING 54" RCP SANITARY SEWER

SAW-CUT & BREAK OUT EXISTING CONCRETE

EXISTING 54" RCP SANITARY SEWER

CEMENT STABILIZED SAND

NOTE: ** SEE MANHOLE TOP DETAIL (H-11) FOR MORE CLARITY

#1 - PRECAST RINGS FOR ADDITIONAL HEIGHT AS REQ'D.
#2 - TO BE GROUTED W/SMOOTH FINISH INSIDE
#3 - WRAP WITH CONCRETE FROM MANHOLE RING TO SHOULDER OF FIBERGLASS MANHOLE.

NOTE:

IF MANHOLE IS PLACED IN THE DITCH, SEE H-1 (PRECAST MANHOLE DETAIL)

MANHOLE OVER EXISTING LARGE LINE (36" AND UP)
** SEE MANHOLE TOP DETAIL (H-11) FOR MORE CLARITY

#1 - PRECAST RINGS FOR ADDITIONAL HEIGHT AS REQ'D.
#2 - TO BE GROUTED W/SMOOTH FINISH INSIDE
#3 - WRAP WITH CONCRETE FROM MANHOLE RING TO SHOULDER OF FIBERGLASS MANHOLE.

CITY OF BEAUMONT STANDARD RING AND COVER WITH STAINLESS STEEL INFLOW PREVENTION DEVICE

2 - #3 RE-BAR RINGS

SLOPE 1:1

18" MAX.

GROUT

6x6 #6 WELDED WIRE
**NOTES:**

---

**SEE MANHOLE TOP DETAIL (H-11) FOR MORE CLARITY**

1. PRECAST RINGS FOR ADDITIONAL HEIGHT AS REQ'D.
2. TO BE GROUTED W/ SMOOTH FINISH INSIDE
3. WRAP WITH CONCRETE FROM MANHOLE RING TO SHOULDER OF FIBERGLASS MANHOLE.

---

### FIBERGLASS MANHOLE STIFFNESS - THICKNESS

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<th>DEPTH</th>
<th>3' - 6'</th>
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**TYPICAL MANHOLE FOR PIPEBURSTING**

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.
MANHOLE INCREASER RING DETAIL FOR STANDARD MANHOLE FRAME AND COVER
CITY OF BEAUMONT STANDARD RING AND COVER WITH STAINLESS STEEL INFLOW PREVENTION DEVICE.

1 - PRECAST RINGS FOR ADDITIONAL HEIGHT AS REQ'D.
2 - TO BE GROUTED W/ SMOOTH FINISH INSIDE
3 - WRAP WITH CONCRETE FROM MANHOLE RING TO SHOULDER OF FIBERGLASS MANHOLE.

SELECT BACKFILL (COMPACTED NATIVE MATERIAL OR SAND)

CEMENT STABILIZED SAND

CITY OF BEAUMONT WATER UTILITIES DEPARTMENT N.T.S.

MANHOLE TOP DETAIL

2. ALL CASTINGS SHALL BE FIRST QUALITY, SMOOTH CASTINGS, FREE FROM FLAWS, BLOW HOLES, SAND HOLES OR OTHER IMPERFECTIONS.

3. THE BEARING SURFACES OF ALL FRAMES AND COVERS BOTH SHALL BE MACHINED FINISHED FOR FULL PERIPHERY EVEN BEARINGS.

4. ALL CASTINGS MUST BE SAND BLASTED CLEAN OF SCALE OR SAND SO AS TO PRESENT A SMOOTH, CLEAN AND UNIFORM SURFACE.

5. THE WEIGHT OF THE MANHOLE RING SHOULD NOT EXCEED 235 LBS.

6. THE WEIGHT OF THE MANHOLE COVER SHOULD NOT EXCEED 175 LBS.

SPECIFICATIONS:


2. ALL CASTINGS SHALL BE FIRST QUALITY, SMOOTH CASTINGS, FREE FROM FLAWS, BLOW HOLES, SAND HOLES OR OTHER IMPERFECTIONS.

3. THE BEARING SURFACES OF ALL FRAMES AND COVERS BOTH SHALL BE MACHINED FINISHED FOR FULL PERIPHERY EVEN BEARINGS.

4. ALL CASTINGS MUST BE SAND BLASTED CLEAN OF SCALE OR SAND SO AS TO PRESENT A SMOOTH, CLEAN AND UNIFORM SURFACE.

5. THE WEIGHT OF THE MANHOLE RING SHOULD NOT EXCEED 235 LBS.

6. THE WEIGHT OF THE MANHOLE COVER SHOULD NOT EXCEED 175 LBS.

STANDARD MANHOLE FRAME AND COVER
PRECAST SECTION

6" MIN.

FLOW

FOUNDATION

PLAN VIEW

6" MIN.

2'-6" OPENING

STEEL TROWEL INVERTS SMOOTH

SECTION A-A

TYPICAL INVERT SHAPING

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.
PLAN VIEW
TYPICAL SHORT SIDE TAP DETAIL
FOR SEWER MAINS LESS THAN 6' DEEP

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.
NO. 37 METER BOX WITH FIBER CONCRETE MIX - (FIBER TO BE ADDED TO MIX - 1.5 LBS. PER CU. YD.). METER BOX COVER TO BE MARKED "SEWER". CLEANOUT TO BE SET TO GRADE AFTER BUILDING CONNECTION IS MADE (TYP.)

EXTEND ABOVE GROUND (CITY FORCES TO CUT 6" BELOW FINISHED GRADE OF YARD WITH 4" FEMALE ADAPTER & SCREW PLUG, INSTALLED IN CLEAN OUT BOX)

ROLL 45° SPIGOT ELL AND WYE AS NECESSARY

1 1/2 SACK/CY CEMENT STABILIZED SAND BACKFILL

60° TO 36°
T.O.C. TO T.O.P.

ROLL 2 - 45° ELLS AS NECESSARY

4" WYE DOUBLE WYE

10' x 4" SERVICE CONNECTION FROM CLEAN OUT WITH 4" GLUED CAP

PROFILE VIEW
TYPICAL SHORT SIDE TAP DETAIL
WITH SERVICE CONNECTION
FOR SEWER MAINS LESS THAN 6' DEEP

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.
PLAN VIEW
TYPICAL LONG SIDE TAP DETAIL
FOR SEWER MAINS LESS THAN 6' DEEP
TYPICAL SERVICE TAP
CONNECTION ONLY ON HDPE PIPE

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.

H-17
NOTE:

* TO BE DRILLED WITH HOLE SAW AND GUIDE BIT. USE CORRECT DIAMETER FOR SADDLE LIP.

TYPICAL SERVICE TAP CONNECTION FOR PVC PIPE
FERNCO RUBBER COUPLINGS

6" FLOW END VIEW

"FERNCO" RUBBER COUPLINGS

1 1/2 SACK CEMENT STABILIZED SAND

EXISTING CONCRETE/CLAY SEWER LINE

6" 6"

FLOW END VIEW

TOP VIEW

STANDARD TYPICAL SERVICE TAP CONNECTION FOR CONCRETE/CLAY PIPE

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.

H-19
TYPICAL SERVICE TAP CONNECTION
FOR CONCRETE/CLAY PIPE WITH SADDLE
(TO BE USED ONLY WHEN APPROVED BY
WATER UTILITIES ENGINEER)

SERVICE SADDLE (RUBBER GASKET TYPE)
OR EQUAL. CATALOG NO. 58254 - 58260

END VIEW

TOP VIEW

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.
PLAN VIEW
TYPICAL SHORT SIDE TAP DETAIL
FOR SEWER MAINS DEEPER THAN 6'

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.
PROFILE VIEW
TYPICAL SHORT SIDE TAP DETAIL
FOR SEWER MAINS DEEPER THAN 6'

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.

H-22
TYPICAL LONG AND SHORT SIDE
SANITARY SEWER SERVICE CONNECTION
AND STREET CROSSING DETAILS

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.
NO. 37 METER BOX WITH FIBER CONCRETE MIX - (FIBER TO BE ADDED TO MIX - 1.5 LBS. PER CU. YD.). METER BOX COVER TO BE MARKED "SEWER". CLEANOUT TO BE SET TO GRADE AFTER BUILDING CONNECTION IS MADE (TYP.).

1 1/2 SACK/CY CEMENT STABILIZED SAND BACKFILL UNDER PVMT. BACK TO SEWER MAIN

FEMALE ADAPTER & THREADED PLUG

4" PVC SCHEDULE 40

ROLL 8/4 WYE OR SWEEP TEE AS NECESSARY

NOTE:
CLEAN OUT TO BE LOWERED TO 6" BELOW TOP OF CLEAN OUT BOX BY CITY FORCES AFTER BOTH SERVICE CONNECTIONS ARE IN SERVICE.

SANITARY SEWER SERVICE LINE
DETAIL FOR SEWER MAINS OVER 6' DEEP

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.

H-24
SANITARY SEWER CLEAN OUT DETAIL

NOTE:

* CLEAN OUT TO BE ACCESSIBLE FROM PROPERTY IT SERVES

* NO. 37 METER BOX WITH FIBER CONCRETE MIX - (FIBER TO BE ADDED TO MIX - 1.5 LBS. PER CU. YD.). METER BOX COVER TO BE MARKED "SEWER". CLEAN-OUT TO BE SET TO GRADE AFTER BUILDING CONNECTION IS MADE. (TYP.)

** MIRROR THE EXISTING CONCRETE SEWER SERVICE LINE. IF PVC IS VISIBLE AND OUT OF EASEMENT, CONTACT YOUR SUPERVISOR FOR APPROVAL TO DIG BACK TO PVC FOR TIE-IN.
NOTE:

* REPLACE 5FT OF EXISTING SERVICE LINE ON BOTH SIDES OF WYE. USE 4" OR 6" PVC SCH 40 TO MATCH EXISTING SERVICE LINE.

* CLEAN OUT TO BE ACCESSIBLE FROM PROPERTY IT SERVES

* WRAP FERNCO’S AND 2-WAY CLEANOUT IN STABILIZED SAND OR DRY SACKRETE

* NO. 37 METER BOX WITH FIBER CONCRETE MIX - (FIBER TO BE ADDED TO MIX - 1.5 LBS. PER CU. YD.). METER BOX COVER TO BE MARKED “SEWER”. CLEAN OUT TO BE SET TO GRADE AFTER BUILDING CONNECTION IS MADE. (TYP)

INSTALLATION OF A CLEAN OUT ON AN EXISTING SANITARY SEWER SERVICE CONNECTION

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.
TYPICAL SANITARY SEWER SERVICE LINE REPLACEMENT ON SLIP LINED SEWER MAIN
**NOTE:**

AFTER WELDING IS COMPLETED, TRUE THE OUTSIDE DIAMETER DIMENSION FOR THE FULL LENGTH OF "B" TO ± 0.010" BY TOOL AND LATHE OR GRINDING.

**TYPICAL MANDREL DETAIL**

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<th>PSP DR 35</th>
<th>PSM DR 35</th>
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NO SEWER SERVICES IN THE EASEMENTS FOR ENERGY, S.W. BELL, AND TIMEWARNER EASEMENTS (TYP.)

TYPICAL SHORT SIDE SEWER SERVICE SERVING TWO LOTS ON COMMON PROPERTY LINE

1 1/2" WATER SERVICE & SHUT-OFF VALVE (TYP.)

5' NO SEWER SERVICES IN THE EASEMENTS FOR ENERGY, S.W. BELL, AND TIMEWARNER EASEMENTS (TYP.)

GENERAL NOTES:
1. ALTERNATE SANITARY SEWER CONNECTIONS WITH ENERGY, S.W. BELL, AND TIMEWARNER EASEMENTS.
2. WATER SERVICES ARE TO BE LOCATED 5' TO THE RIGHT OF THE CENTER LINE OF THE LOT.
3. SEE APPENDIX II FOR ALL OTHER DESIGNATED UTILITY LOCATIONS.

TYPICAL LONG AND SHORT SIDE WATER AND SANITARY SEWER SERVICE CONNECTION

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.
NOTE:
SEPARATION DISTANCES SHALL BE BASED ON STATE AND FEDERAL REGULATIONS.

FIN. GRADE

BACKFILL PER SPECIFICATIONS

2" MIN.

VARIÉS

LIMITS OF STAB. SAND BACKFILL

9' MIN.

© PIPE

TYPICAL WATER AND SANITARY SEWER MAIN CROSSING

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.

H-30
TYPICAL FIRE SERVICE LINE CONNECTION

- GATE VALVE & BOX (4" MINIMUM)
- FIRE SERVICE LINE (VARIIES)
- MECHANICAL JOINT TEE WITH RESTRAINED JOINTS WHERE APPLICABLE
- EXISTING WATERMAIN

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.
TYPICAL FIRE HYDRANT INSTALLATION

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.

H-32
NOTE:

SET TOP OF METER BOX EVEN WITH GRADE IF ALREADY LANDSCAPED. IF NOT LANDSCAPED SET TOP OF BOX 2 INCHES ABOVE TOP OF CURB. (BY CITY FORCES).

THE PLUMBING CONTRACTOR IS TO MARK THE METER BOX LOCATION WITH A STAKE & FLAGGING. LABEL WHAT SIZE METER WILL BE INSTALLED ON THE STAKE.

NOTE:

SERVICE LINE SIZES WILL VARY DEPENDING ON THE SIZE OF METER:

1" METER = 1 1/2" SERVICE LINE
1 1/2" METER = 2" SERVICE LINE
2" METER = 2" SERVICE LINE

TYPICAL WATER METER INSTALLATION NEW SUBDIVISION

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.
TYPICAL METER INSTALLATION
OF 1 1/2" TO 2" METER
USING A CAST IRON METER BOX

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.

H-34
TYPICAL METER INSTALLATION
OF 1 1/2" TO 2" METER
USING A CONCRETE METER BOX

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.
GENERAL NOTES:

1. DOUBLE STRAP ALL 1 1/2" & 2" ON 6" PIPE AND ABOVE.

2. CLOY TWIN SEAL TAPPING SADDLE STYLE 3401 OR APPROVED EQUAL FOR 2" OR 3" PVC PIPE.

3. FOR 2" SDR-26 MAINS; USE A BRASS TEE AND A CURB STOP.

TYPICAL WATER SERVICE CONNECTION
GENERAL NOTES:

1. DOUBLE STRAP ALL 1 1/2" & 2" ON 6" PIPE AND ABOVE.

2. SERVICE LINE SIZES WILL VARY DEPENDING ON THE SIZE OF METER.

3. CLOW TWIN SEAL TAPPING SADDLE STYLE 3401 OR APPROVED EQUAL FOR 2" OR 3" PVC PIPE.

4. FOR 2" SDR-26 MAINS; USE A BRASS TEE AND A CURB STOP.

5. ALL MEASUREMENTS FROM TOP AND BACK OF CURB.

6. LEAVE CURB STOP ABOVE OR ANGLE STOP ABOVE GROUND UNTIL PRESSURE TEST, FLOW TEST, LOCATION MARKED ON CURB, "W" STAMPED ON CURB OR CHISELED ON CURB AND LOCATOR DISCS DELIVERED.

TYPICAL LONG AND SHORT SIDE WATER SERVICE CONNECTION AND STREET CROSSING DETAILS
PERMANENT FLUSH OUT DETAIL

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H-38
TEMPORARY FLUSH OUT DETAIL

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
N.T.S.
1 ½" HDPE TUBING
1 ½" COMPRESSION MALE
2" x 1 ½" BUSHING
2" BRASS ELL
2" x 12" BRASS NIPPLE
2" BRASS TEE
2" x 6" BRASS NIPPLE

METER BOXES TO BE SET BY CITY FORCES AT CONTRACTORS COST
12" TYP.

NOTES:
- ALL FITTINGS MUST BE BRASS
- NO MORE THAN 8 METERS ON MANIFOLD
- PLACE TOPS OF ALL METER BOXES AND VALVE BOX AT SAME ELEVATION, EVEN WITH GRADE
- IF METER AREA IS SURROUNDED BY CONCRETE THEN METER BANK AREA IS TO BE BACKFILLED WITH SAND & GRAVEL.
- BOLLARDS ARE TO BE SET AT EACH CORNER.

TYPICAL METER BANK INSTALLATION
FOR 1" METERS

CITY OF BEAUMONT
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H-40
USE 4" OF 1 1/2 SACK/CU YD STABILIZED SAND UNDER METER BANK

NOTES:
- ALL FITTINGS MUST BE BRASS OR CEMENT LINED DUCTILE IRON
- NO MORE THAN 8 METERS ON MANIFOLD
- PLACE TOPS OF ALL METER BOXES AND VALVE BOXES AT SAME ELEVATION, EVEN WITH GRADE
- IF METER AREA IS SURROUNDED BY CONCRETE THEN METER BANK AREA IS TO BE BACKFILLED WITH SAND & GRAVEL.
- BOLLARDS ARE TO BE SET AT EACH CORNER.

TYPICAL METER BANK INSTALLATION
FOR 1 1/2" AND 2" METERS
DOUBLE STRAP ALL BRONZE SERVICE
CLAMP - TAPPING HOLE TO BE DRILLED

2" PVC (SDR-26)
CONC. THRUST
BLK. (TYP.)

2" CURB STOP W/2x6
BRASS NIPPLE

18" PVC (C-900) NIPPLE

WRAP ALL FITTINGS WITH POLY WRAP AND TAPE BEFORE PLACING CONCRETE THRUST BLOCKS

NOTE:
WRAP ALL FITTINGS WITH POLY WRAP AND TAPE
TYPICAL FITTINGS & CONCRETE THRUST BLOCK INSTALLATION

NOTE:
1. ALL BLOCKING TO UNDISTURBED TRENCH WALL
2. WRAP ALL FITTINGS WITH POLY WRAP AND TAPE
CASING DETAIL

TYPICAL LONGITUDINAL SECTION

(TUNNEL CONSTRUCTION)

NOTE:
CASING PIPE SIZE TO BE DETERMINED BY THE PROPOSED SIZE OF PIPE.

NOTE:
CASING TO EXTEND A MINIMUM OF 5' BEYOND EDGE OF PAVEMENT ON BOTH SIDES OF ROADWAY UNLESS OTHERWISE SHOWN.
1 - TYPICAL MAIN LINE REPAIR

NOTE:
WHEN CUTTING IN A WYE OR TEE ON THE MAIN SEWER LINE REPLACE 5FT OF EXISTING MAIN LINE ON EACH SIDE OF THE WYE OR TEE AND WRAP WITH GROUT 6" AROUND PIPE.

2 - END VIEW

MAIN LINE REPAIR
DETAIL

CITY OF BEAUMONT
WATER UTILITIES DEPARTMENT
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* MINIMUM CLEARANCE ON ALL UTILITY CROSSINGS
DEPTH OF DITCH
18" MIN. 36" MAX.

EDGE OF PAVEMENT
COMPACTED
STABILIZE MATERIAL
SELECT MATERIAL
FIN. GRADE
BACKFILL & TAMP TO DENSITY OF EXISTING SOIL
WASHED SAND/SELECT MATERIAL
VARIES (TYP.)

TYPICAL TRENCH BACKFILLING
(AWAY FROM ROAD RIGHT-OF-WAY)

CEMENT STABILIZED BACKFILL WILL BE REQUIRED
EDGE OF PAVEMENT
FIN. GRADE
6" SELECT MATERIAL
COMPACTED STABILIZE MATERIAL

SELECT MATERIAL
WASHED SAND/SELECT MATERIAL
VARIES (TYP.)

TYPICAL SECTION AT EDGE OF ROADWAY

PROPOSED CONCRETE MATERIAL TO BE THE WIDTH OF EXISTING CONCRETE MATERIAL PLUS 2"
EXISTING CONCRETE MATERIAL
COMPACTED STABILIZE MATERIAL
SELECT MATERIAL
WASHED SAND/SELECT MATERIAL
VARIES (TYP.)

TYPICAL TRENCH BACKFILLING
(UNDER CONCRETE PAVEMENT)

TYPICAL ROAD & TRENCH BACKFILLING