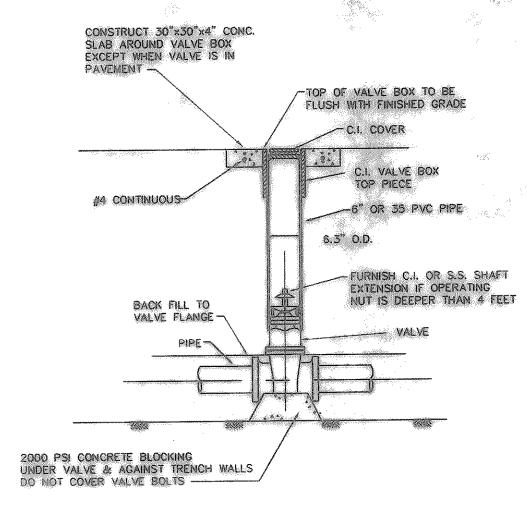


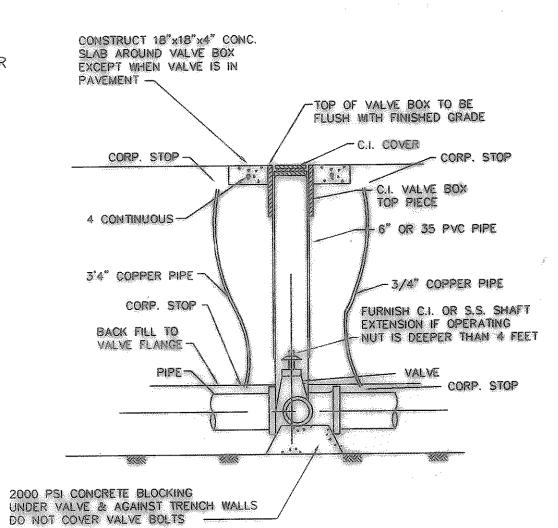
TOPSOIL DITCH DEPTH MINUS CALICHE ROCK -6" FOR TOPSOIL OR CONCRETE INSTALL 12" THICK IMPERVIOUS BARRIER AT BUILDING LINE AND 15'-0" OUT FROM BUILDING ON

ALL LINES WHICH TRAVEL UNDER BUILDING GRADE BEAM

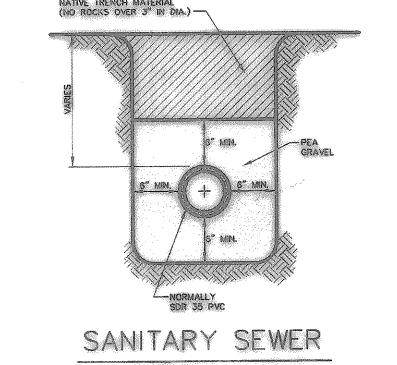
IMPERVIOUS BARRIER

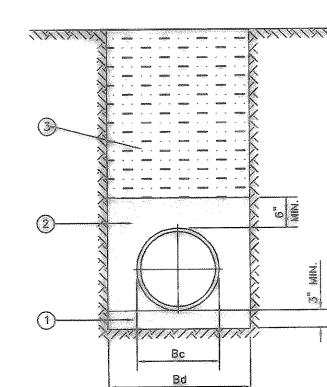


VALVE INSTALLATION DETAIL



BUTTERFLY VALVE INSTALLATION DETAIL

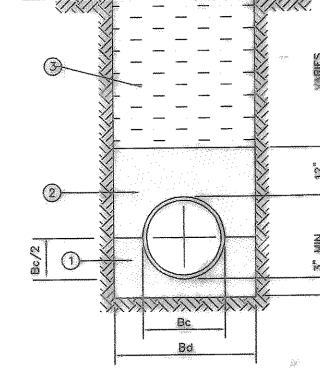




GRANULAR MATERIAL (SAND) — COMPACT TO 90% STANDARD PROCTOR DENSITY EXCEPT UNDER STRUCTURES, ROADWAYS AND PAVEMENT WHERE 95% DENSITY IS REQUIRED.

SELECT MATERIAL FREE OF ROCKS, CLUMPS OR DEBRIS
LARGER THAN 6" IN GREATEST DIMENSION. COMPACT TO
90% STANDARD PROCTOR DENSITY. UNDER STRUCTURES, ROADWAYS AND PAVEMENT, COMPACT TO 95% STANDARD PROCTOR DENSITY.

CLASS "C-2" EMBEDMENT



FINE GRADATION CRUSHED STONE — TOP LAYER IS TO BE PLACED TO GRADE TO PROVIDE UNIFORM SUPPORT OF PIPE BARREL, EXCAVATE BELL HOLES.

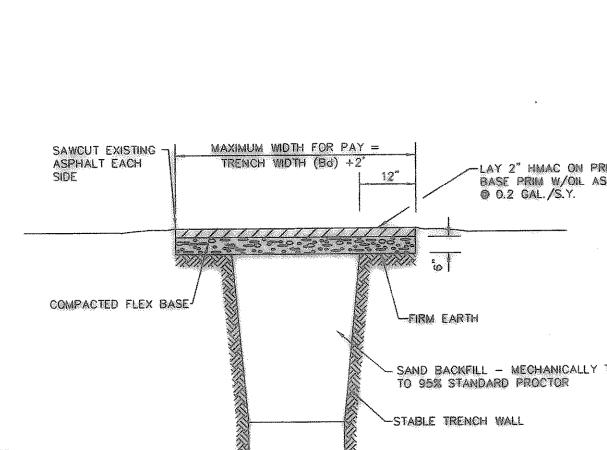
PROCTOR DEMSITY.

CLASS "B+" EMBEDMEN] ROOF DRAIN LINES, FORCE MAIN AND

IS NOT ACCEPTABLE.

EMBEDMENT UNDER ASPHALT STREETS & PAVEMENT REPAIR DETAIL

Construction Records. **Glenn Engineering Corporation**  UTILITY DETAILS



24" LUBRICATED SMOOTH NO.5 DOWEL BAR
DOWEL SPACED ON TWO (2) FOOT
CENTER TO CENTER - SAND BACKFILL - MECHANICALLY TAMPED TO 95% STANDARD PROCTOR

REPLACE PAVEMENT WITH EQUAL OR

BETTER CONSTRUCTION, MATERIAL.

THICKNESSES & QUALITY.

-LAY 2" HMAC ON PRIMED BASE PRIM W/OIL ASPHALT - SAND BACKFILL - MECHANICALLY TAMPED THE PAVEMENT REPAIR SHOWN IS A MINIMUM REQUIREMENT FOR ASPHALT STREETS. HOWEVER, IF EXISTING -EMBEDMENT AS SPECIFIED STREET CONSTRUCTION IS BETTER THAN REPAIR SHOWN IN THIS DETAIL,

1. NO. 5 SMOOTH DOWEL BAR MAY BE USED IN 5", 6" AND 7" PAVEMENT THICKNESS. 2. LONGITUDINAL BUTT CONSTRUCTION MAY BE UTILIZED IN PLACE OF LONGITUDINAL HINGED

-EMBEDMENT AS SPECIFIED

-3600 PSI CONCRETE

UNLESS OVER ROCK

-STABLE TRENCH WALL

(KEYWAY) JOINT AT CONTRACTOR'S OPTION. 3. DOWEL BARS SHALL BE DRILLED INTO PAVEMENT HORIZONTALLY BY USE OF A MECHANICAL RIG. DRILLING BY HAND IS NOT APPLICABLE. PUSHING DOWEL BARS INTO GREEN CONCRETE

MAXIMUM WIDTH FOR PAY =

TRENCH WIDTH (Bd) +2'

SAWCUT FULL DEPTH

EMBEDMENT UNDER CONCRETE STREETS & PAVEMENT REPAIR DETAIL

These Drawings have been modified to conform to the N.T.S.

GRANULAR MATERIAL (SAND) — TOP OF LAYER IS TO BE PLACED TO GRADE TO PROVIDE UNIFORM SUPPORT OF PIPE BARREL. EXCAVATE BELL HOLES. COMPACT TO 95% PROCTOR DENSITY.

WATER

SELECT MATERIAL FREE OF ROCKS, CLUMPS OR DEBRIS LARGER THAN 6" IN GREATEST DIMENSION. COMPACT TO 90% STANDARD PROCTOR DENSITY. UNDER STRUCTURES, ROADWAYS AND PAVEMENT, USE NON-GRANULAR MATERIAL COMPACTED TO 95% STANDARD PROCTOR DENSITY. ( NO SAND PERMITTED ABOVE STONE )

SELECT MATERIAL FREE OF ROCKS, CLUMPS OR DEBRIS LARGER THAN 6" IN GREATEST DIMENSION. COMPACT TO 90% STANDARD PROCTOR DENSITY. UNDER STRUCTURES, ROADWAYS AND PAVEMENT, COMPACT TO 95% STANDARD

STORM SEWER LINES

TYPICAL THRUST BLOCKS NOT TO SCALE

UNDISTURBED SOIL

MIN. THICKNESS

CONCRETE 12"

(TYP.)

TYPICAL SECTION

1. THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED SOIL.

THE FORMULA P=125(H)(A)SIN 1/2 WHERE H=1-1/2 RATED

5. THRUST BLOCKS SHOWN ALSO APPLY TO SANITARY FORCE MAINS.

6. PLUMBING CONTRACTOR TO FURNISH SIZES OF THRUST BLOCKS

2. IN UNSTABLE MATERIALS, FOR VERTICAL BENDS OR OFFSETS, BLOCKING SHALL BE DESIGNED FOR ACTUAL THRUST USING

HEAD, A=AREA OF PIPE IN SQ. FT., =ANGLE, AND

3. BEFORE POURING, PLUGS SHALL BE WRAPPED WITH

VISQUEEN AND A BOARD PLACED IN FRONT.

FOR APPROVAL PRIOR TO CONSTRUCTION.

P=THUST IN POUNDS.

4. CONC. SHALL BE 2500 PSI MIN.

N.T.S.

AS SHOWN

FINAL PLANS FOR BIDDING

AND CONSTRUCTION

silw Group Inc. Architects + Engineer

SET NUMBER