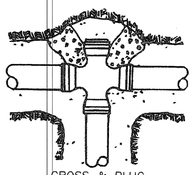
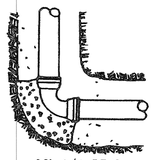
DETAIL SHEET

NO SCALE

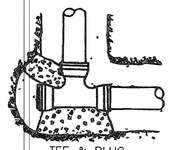
THRUST BLOCK DETAILS



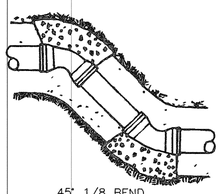
CROSS & PLUG



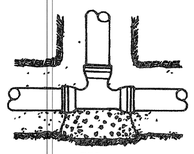
90° 1/4 BEND



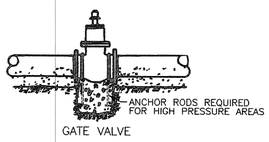
TEE & PLUG



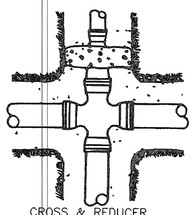
45° 1/8 BEND



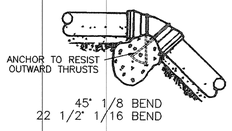
TEE

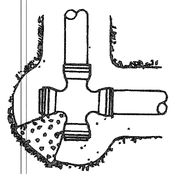


GATE VALVE

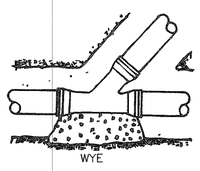


CROSS & REDUCER

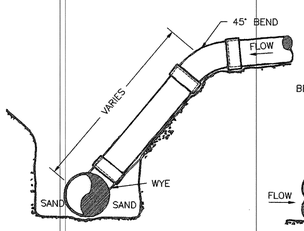




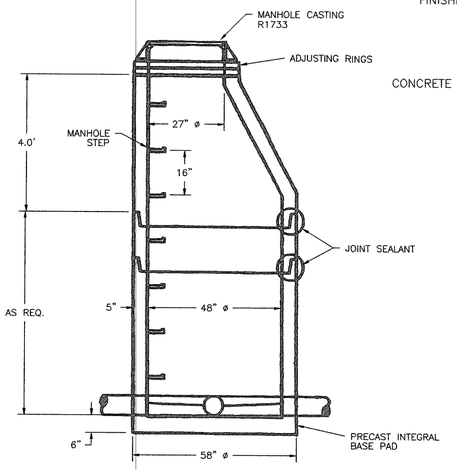
CROSS & PLUG

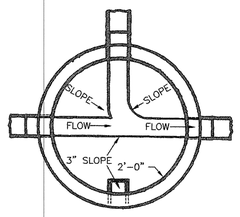


WYE

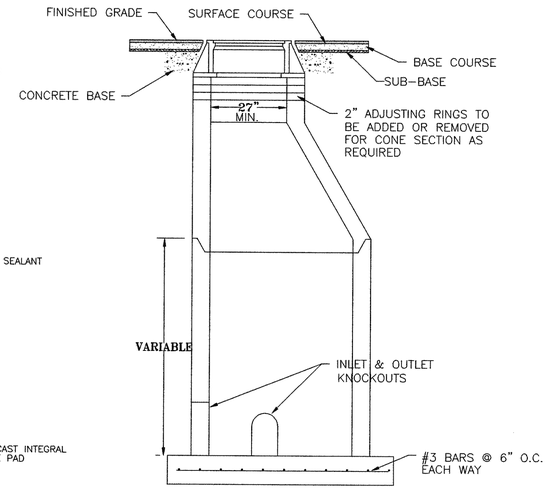


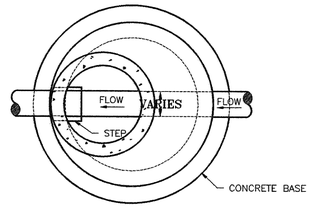
WYE AND RISER DETAILS



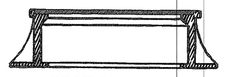


TYPICAL STANDARD MANHOLE WITH INTEGRAL BASE

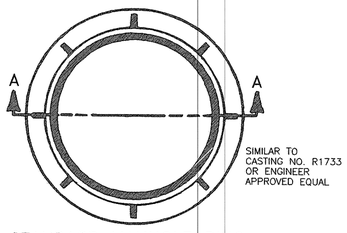




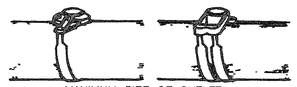
TYPICAL MANHOLE ELEVATION VIEW & STANDARD MANHOLE RING



SECTION A–A



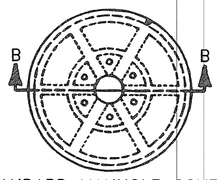
STANDARD MANHOLE RING



MAXIMUM SIZE OF OUTLET RECOMMENDED WITH SERVICE CLAMPS (INCHES)

NOMINAL PIPE SIZE	OUTLET SIZE SINGLE STRAP	(CLASSES 100–150–200) COUBLE STRAP
4"	1"	1"
6"	1 1/2"	1 1/2"
8"	2"	2"
10"	2"	2"
12"	2"	2"
14"	2"	2"
16"	2"	2"

SADDLES FOR PVC WATERMAIN

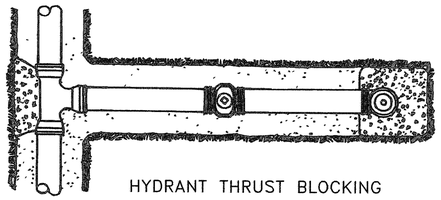


STANDARD MANHOLE COVER

SAND CUSHION BEDDING–SUPPORT ENTIRE LENGTH OF PIPE SPECIAL COMPACTION REQUIRED TO PIPE SPRING LINE

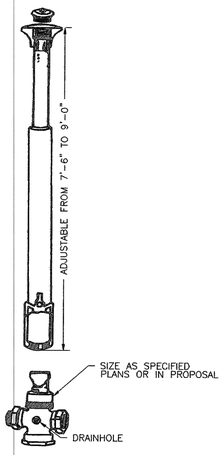
SECTION B–B

TYPICAL BEDDING TREATMENT USING APPROVED OR SITE MATERIAL SHAPED FOR PIPE



HYDRANT THRUST BLOCKING

NOTE: (1) PIPE DEFLECTIONS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS
(2) BEDDING REQUIREMENTS SHALL BE AS INDICATED HEREON UNLESS MODIFIED IN THE SPECIFICATIONS
(3) CONCRETE FOR THRUST BLOCKS SHALL HAVE MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI, AND MAX. SLUMP OF 3 INCHES AT TIME OF PLACEMENT.



CURB STOP & DRAIN WITH BASE CURB BOX

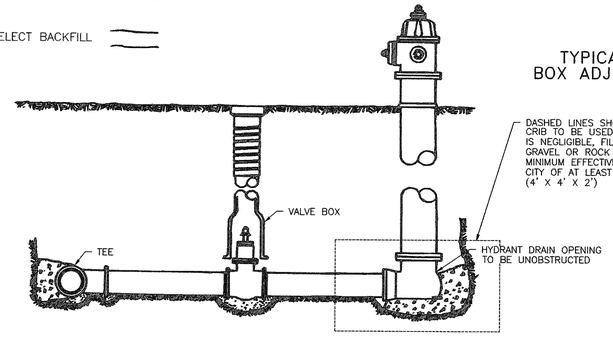
NOTE: (1) CURB STOP SHALL BE PLACED ON 4" X 8" X 2" CONCRETE BLOCK
(2) AFTER CURB STOP IS PLACED ON CONCRETE BLOCK BACKFILL AROUND CURB STOP WITH WASHED GRAVEL APPROX. 1FT³ PER BOX

LEGEND

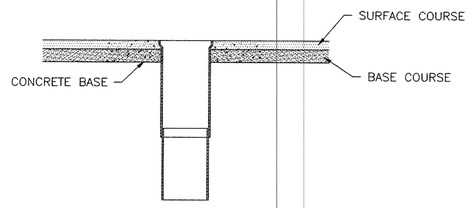
CONCRETE

SITE SOIL

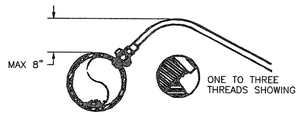
SELECT BACKFILL



LAYOUT OF FIRE HYDRANT & VALVE



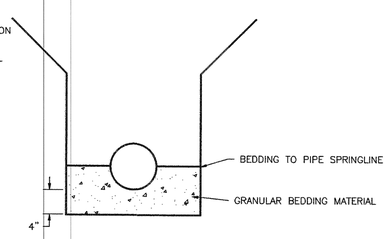
TYPICAL GATE VALVE BOX ADJUSTMENT SECTION



SERVICE LINE CORPORATION COCK DIRECT TAP POSITION

NOTE:

1. SIGNING BY OTHERS.
2. ALL CONSTRUCTION SIGNING INCIDENTAL TO PROJECT.
3. ALL EXCESS EXCAVATION MATERIAL TO BE HAULED TO THE WASTE AREA AND GRADED.
4. SALVAGE & STOCK PILE ALL GRAVEL MATERIAL FOR REPLACEMENT IN AREAS THAT MIGHT NEED STABILIZING. EXCESS MATERIAL TO BE HAULED TO THE WASTE AREA AND GRADED.



WATERMAIN & SEWERMAIN BEDDING DETAIL

RONALD W. MANCHESTER
REGISTERED
PROFESSIONAL
P.E. 3252
ENGINEER
NORTH DAKOTA

TOMAN ENGINEERING COMPANY
CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS
906 2ND ST. N.W. MANDAN, NORTH DAKOTA 58554
(701) 663-6483

TECO 1144

PROJECT: DAN'S SUPERMARKET WATER & SEWER DETAIL SHEET

TITLE: DAN'S SUPERMARKET

NO.	REVISIONS	BY	DATE
1	AS-BUILT DRAWINGS	AR	2/99

TECO NO. 1144 — DWG NO. 97-17
DRAWN BY: AM — DATE 8/19/97
CHECKED BY: — DATE
APPROVED BY: — DATE

SHEET NUMBER 5 OF 5 SHEETS

DWGNAME: 2100det.dwg PLOT DATE: 02/05/99 PLOT TIME: 15:49:19 TOMAN #3