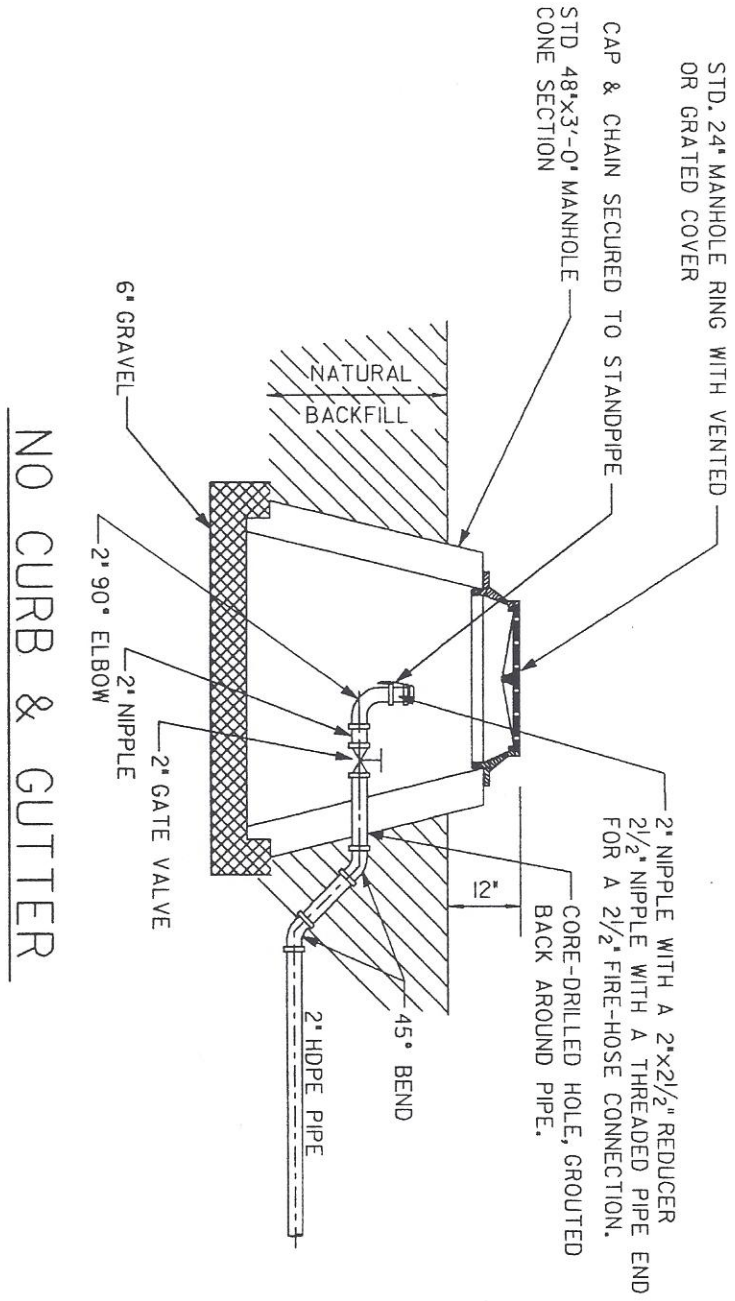


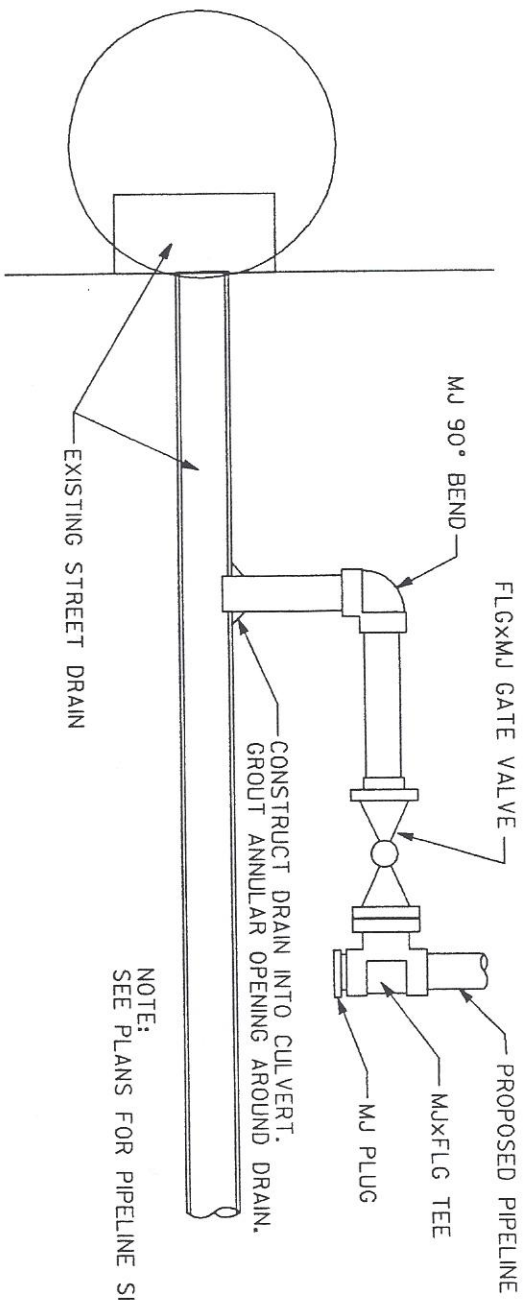
NOTE:
 1 - 8' LENGTH OF 2 1/2" FIRE HOSE TO BE FURNISHED WITH EACH AIR INLET & REMOVAL FACILITY - FOR CURB & GUTTER INCLUDE A 2 1/2" MALE END ADAPTER & A 2 1/2" FEMALE END ADAPTER WITH AN AKRON SWIVEL ELBOW #632 AT THE FEMALE END. HOSE & FITTING TO BE RATED FOR 120 PSI WORKING PRESSURE.



AIR INLET & REMOVAL FACILITY

SCALE: N.T.S.

<p>2</p> <p>10</p>	<p>BENCHLAND WATER DISTRICT</p> <p>STANDARD DRAWINGS</p>	<p>REVISION</p> <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DATE	DESCRIPTION							<p>J-U-B ENGINEERS, Inc.</p> <p>784 South 400 East Orem, Utah 84058 Phone: 801-226-0900 Fax: 801-226-0994</p>
	NO.	DATE	DESCRIPTION									
<p>DATE: 11-18-88 DRAWN BY: JUB CHECKED BY: JUB IN CHARGE: JUB</p>		<p>DATE: 11-18-88 DRAWN BY: JUB CHECKED BY: JUB IN CHARGE: JUB</p>										



NOTE:
SEE PLANS FOR PIPELINE SIZES

STORM DRAIN DETAIL

SCALE: N.T.S.

FOR PANEL 8, ROW 8A
 800 PDS - 10/20/04
 1011 BOUND N.T.S.
 DATE: 08
 8-8-78
 DRAWN BY: JES
 CHECKED BY: JES
 DATE: 11-1-04
 JOB NO.: 04-11-04
 JOB SCALE: N.T.S.
 SHEET NO.: 3

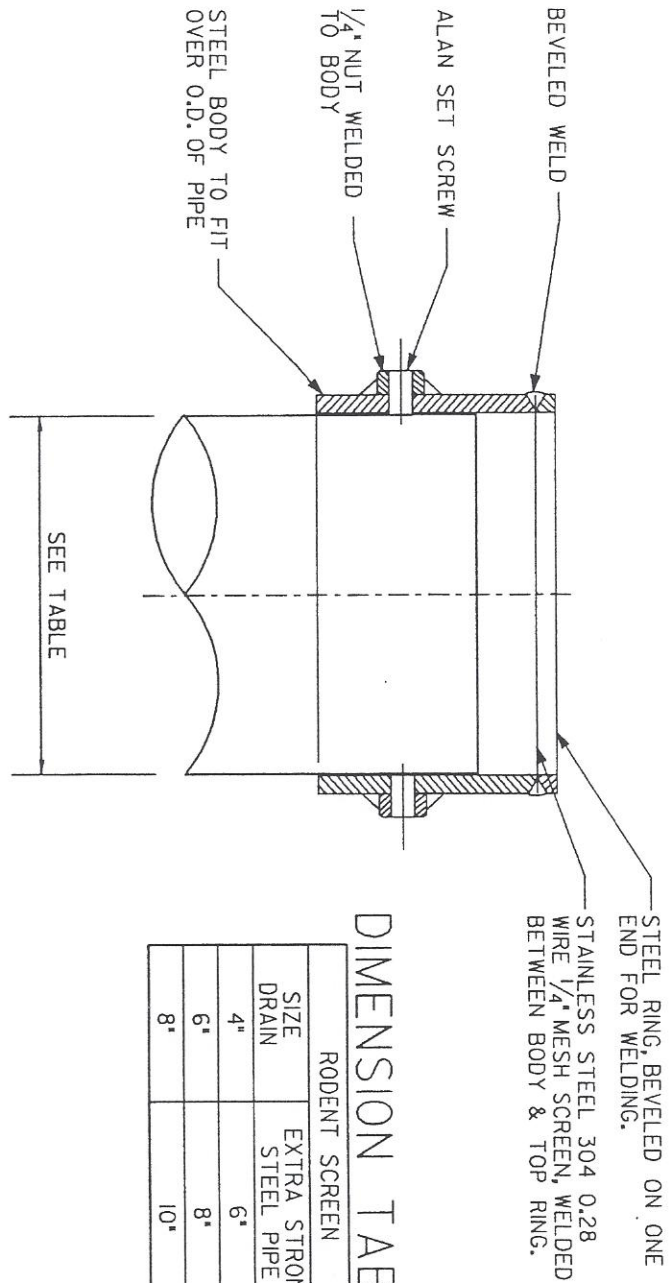
BENCHLAND WATER DISTRICT
 STANDARD DRAWINGS

REVISION OF DRAWINGS

THIS DOCUMENT, AND THE IDEAS AND DESIGN INCORPORATED HEREIN, IS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF J-U-B ENGINEERS, INC. AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF J-U-B ENGINEERS, INC.

NO.	DESCRIPTION	BY	DATE

J-U-B ENGINEERS, Inc.
 784 South 400 East
 Orem, Utah
 84058
 Phone: 801-226-0398
 Fax: 801-226-0394



FINISH:
WHITE EPOXY LINED & COATED AFTER FABRICATION.

STEEL-BODIED RODENT SCREEN

SCALE: N.T.S

DIMENSION TABLE

RODENT SCREEN	
SIZE	EXTRA STRONG
DRAIN	STEEL PIPE
4"	6"
6"	8"
8"	10"

SEE TABLE

PROJECT NO.	DATE
DWG. NO.	REV.
BY	CHKD.
DATE	DATE
BY	CHKD.
DATE	DATE
BY	CHKD.
DATE	DATE
BY	CHKD.
DATE	DATE

BENCHLAND WATER DISTRICT

STANDARD DRAWINGS

REVISION		
NO.	DESCRIPTION	BY / DATE

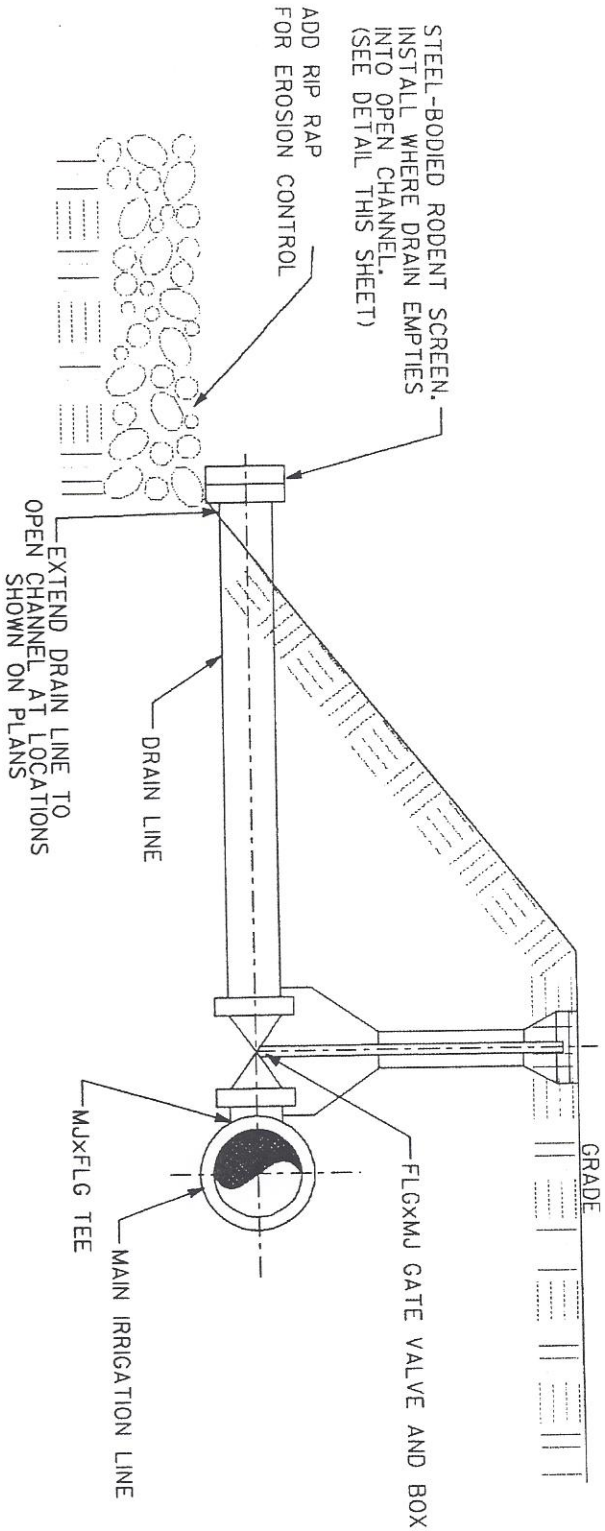
J-U-B ENGINEERS, Inc.

784 South 400 East
Orem, Utah
84055
Phone: 801-228-0393
Fax: 801-228-0394



4

10

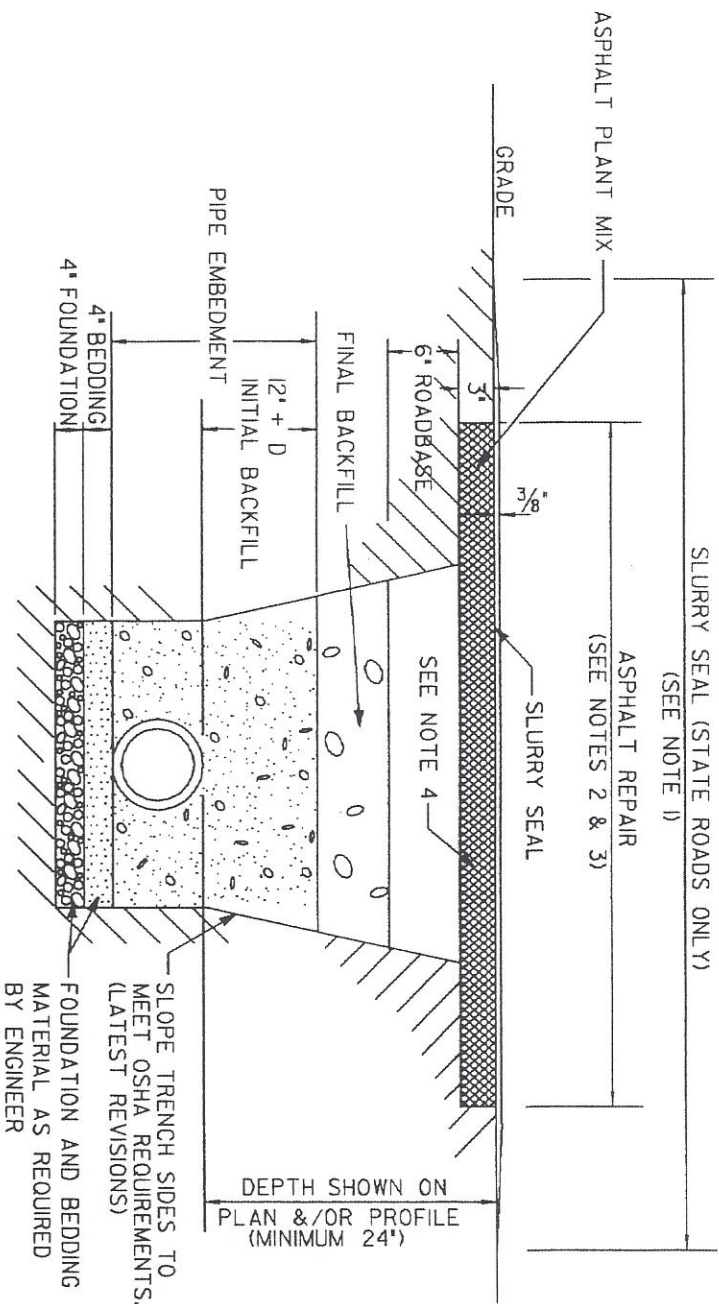


NOTE:
SEE PLANS FOR PIPELINE SIZES

OPEN CHANNEL DRAIN

SCALE: NONE

<p>5 10</p>	<p>BENCHLAND WATER DISTRICT</p> <p>STANDARD DRAWINGS</p>	<p>REVISIONS</p> <table border="1"> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DESCRIPTION	DATE							<p>J-U-B ENGINEERS, Inc.</p> <p>784 South 400 East Orem, Utah 84058 Phone: 801-228-0893 Fax: 801-228-0884</p>
	NO.	DESCRIPTION	DATE									
<p><small>NOT SCALE</small></p> <p><small>DATE: 11/18/03</small></p> <p><small>BY: JUB</small></p> <p><small>CHECKED BY: JUB</small></p> <p><small>APPROVED BY: JUB</small></p> <p><small>SCALE: NONE</small></p>	<p><small>THIS DOCUMENT, AND THE DATA AND SPECIFICATIONS INCORPORATED HEREIN, IS THE PROPERTY OF J-U-B ENGINEERS, INC. AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF J-U-B ENGINEERS, INC.</small></p>											



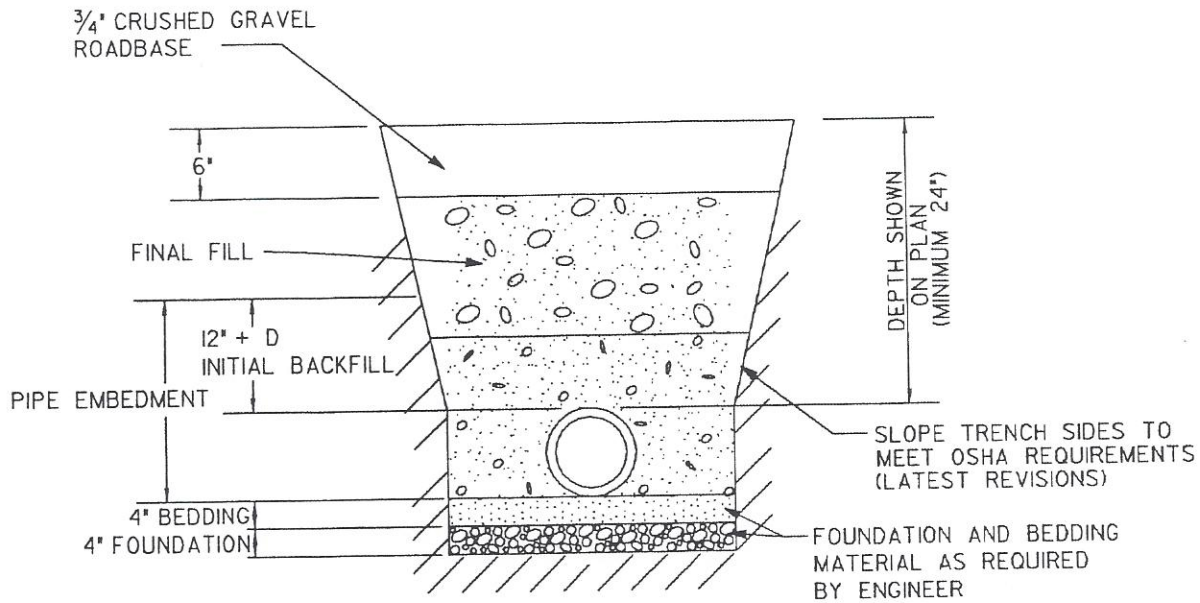
ASPHALT SURFACE TRENCH SECTION

SCALE: N.T.S.

NOTES:

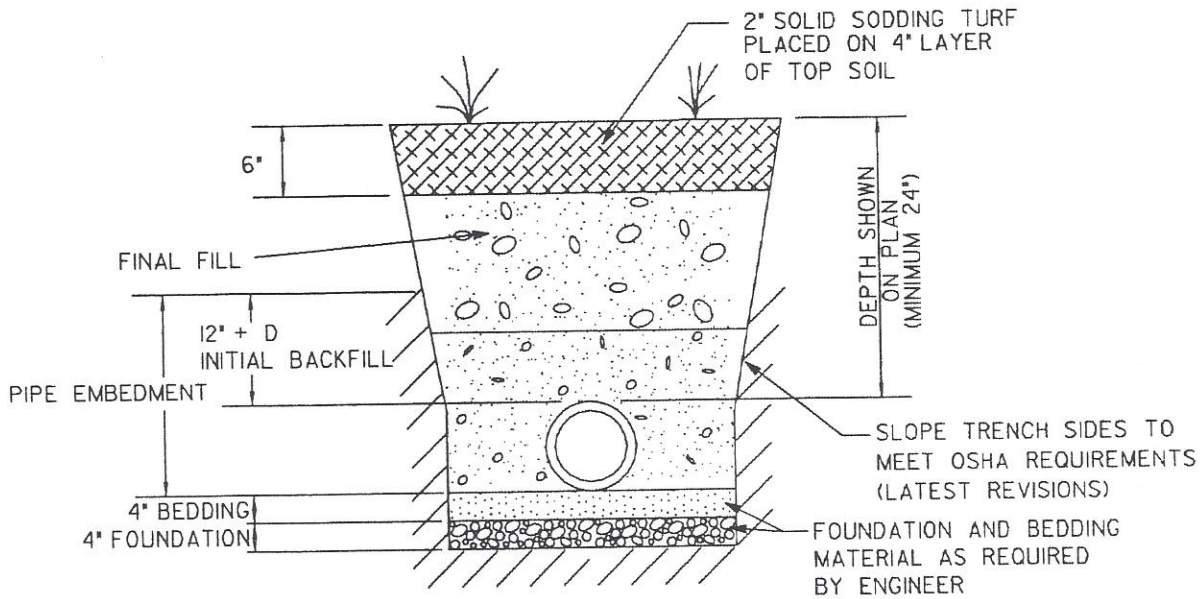
1. STATE ROADS-SLURRY SEAL MUST BE 3/8" THICK & BE 2'-0" WIDER ON EACH SIDE THAN FINAL SAW CUT FOR ASPHALT REPAIR.
2. STATE ROADS-CUT ASPHALT TO WIDTH OF TRENCH, CONSTRUCT PIPELINE & RESTORE SUB-SURFACE. SAW CUT ASPHALT 6" WIDER THAN TRENCH ON EACH SIDE WHERE ASPHALT EXISTS. REMOVE ASPHALT & FINISH RESTORATION.
3. CITY ROADS-CUT ASPHALT TO WIDTH OF TRENCH, CONSTRUCT PIPELINE & RESTORE SUB-SURFACE. PLACE ASPHALT TO WIDTH OF TRENCH.
4. ASPHALT IS TO BE 3" OR TO MATCH EXISTING THICKNESS, WHICHEVER IS GREATER.
5. BEDDING AND FOUNDATION MATERIAL MAY NOT BE REQ'D IF EXISTING MATERIAL IS SUITABLE FOR PIPE BEDDING, AS DETERMINED BY ENGINEER.

<p>6 10</p>	<p>BENCHLAND WATER DISTRICT</p> <p>STANDARD DRAWINGS</p>	<p>J-U-B ENGINEERS, Inc.</p> <p>784 South 400 East Orem, Utah 84058 Phone: 801-228-0893 Fax: 801-520-0894</p>	<p>JUB</p> <p style="font-size: small;">Professional Engineers & Surveyors</p>												
<p>REVISION</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>				NO.	DESCRIPTION	BY	DATE								
NO.	DESCRIPTION	BY	DATE												



GRAVEL SURFACE TRENCH SECTION

SCALE: N.T.S.



TURF SURFACE TRENCH SECTION

SCALE: N.T.S.

7	10
---	----

BENCHLAND WATER DISTRICT

STANDARD DRAWINGS

REVISION	
NO.	DESCRIPTION

J-U-B ENGINEERS, Inc.
 784 South 400 East
 Orem, Utah
 84088
 Phone: 801-226-0892
 Fax: 801-226-0894



DIMENSION TABLE

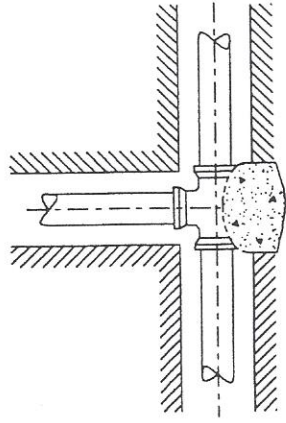
THRUST BLOCK BEARING
AREA IN SQ. FT.
(SEE CONDITIONS BELOW)

PIPE SIZE	CONDITION		
	90° BEND	45° BEND	VALVES, TEES, DEAD ENDS
4	1.8	1.0	1.3
6	4.0	2.2	2.8
8	7.1	3.8	5.0
10	11.1	6.0	7.9
12	16.0	8.7	11.3
14	21.8	11.8	15.4
16	28.4	15.4	20.1
18	36.0	19.5	25.4
20	44.4	24.0	31.4
24	64.0	34.6	45.2
27	81.0	43.8	57.3
30	100.0	54.1	70.7
42	195.9	106.0	138.5
48	255.9	138.5	181.0

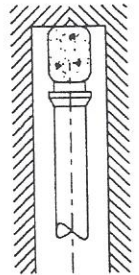
CONDITIONS:

LINE PRESSURE - 120 PSI
SOIL BEARING CAPACITY - 1500 PSF

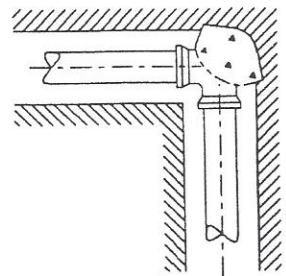
NOTE: ALL FITTINGS SHALL BE WRAPPED WITH 12 MIL VISQUEEN PRIOR TO POURING THE CONCRETE THRUST BLOCK.



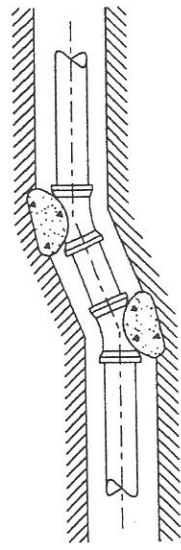
TEE



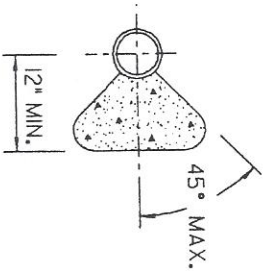
DEAD END



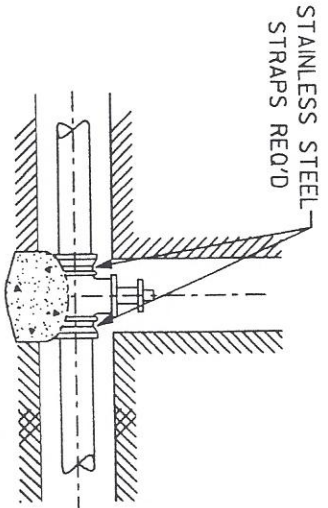
90° BEND



45° OR 22 1/2° BEND



TYPICAL SECTION THRU THRUST BLOCK



VALVE ANCHORS REQ'D FOR VALVES 12" OR LARGER

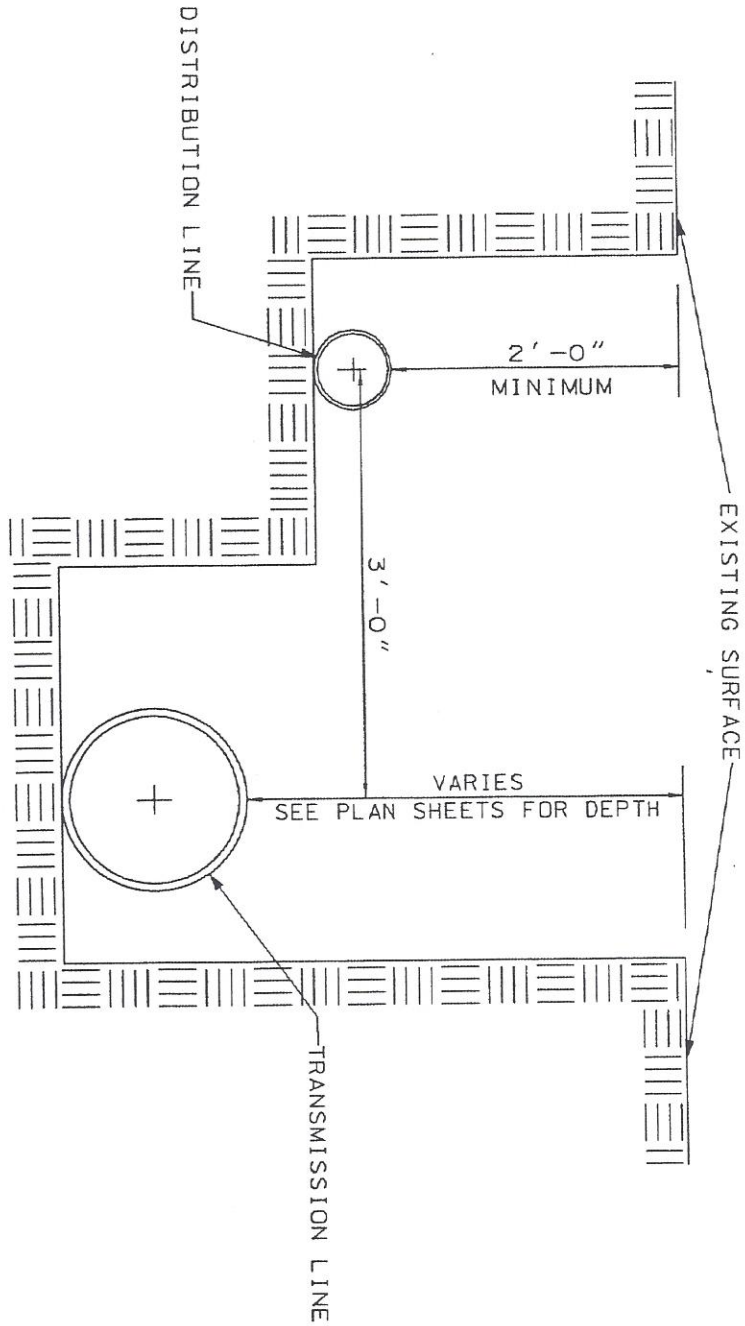
THRUST BLOCKING

SCALE: N.T.S.

	J-U-B ENGINEERS, Inc. 784 South 400 East Orem, Utah 84003 Phone: 801-228-0889 Fax: 801-228-0884
	BENCHLAND WATER DISTRICT STANDARD DRAWINGS
REVISION NO. DESCRIPTION BY DATE	8 10

DUAL PIPELINE TRENCH DETAIL

SCALE: N.T.S.



BENCHLAND WATER DISTRICT

STANDARD DRAWINGS

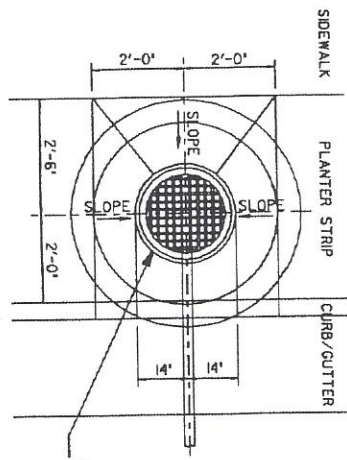
REVISIONS OF DRAWINGS
THIS DOCUMENT, AND THE IDEAS AND DESIGN INCORPORATED HEREIN, ARE THE PROPERTY OF J-U-B ENGINEERS, INC. AND IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF J-U-B ENGINEERS, INC.

NO.	DESCRIPTION	BY	DATE

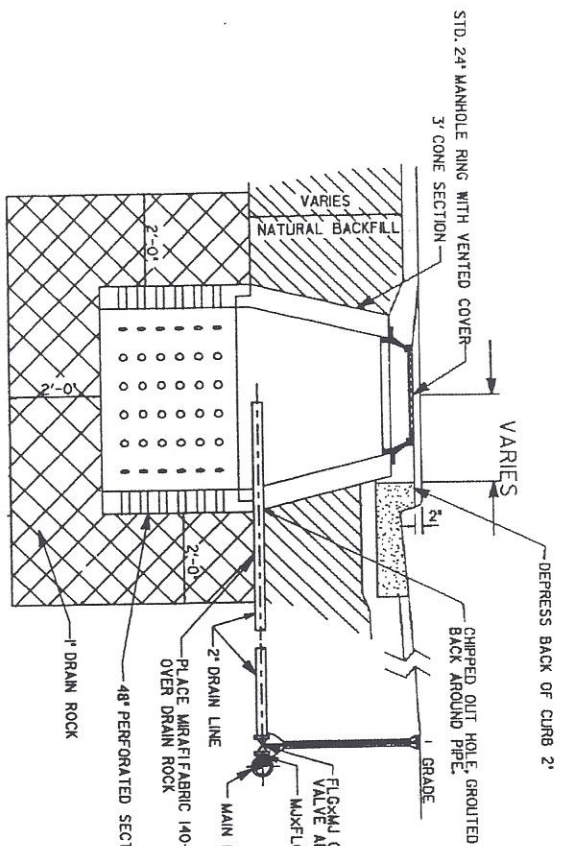
J-U-B ENGINEERS, Inc.

784 South 400 East
Orem, Utah
84058
Phone: 801-228-0888
Fax: 801-228-0884

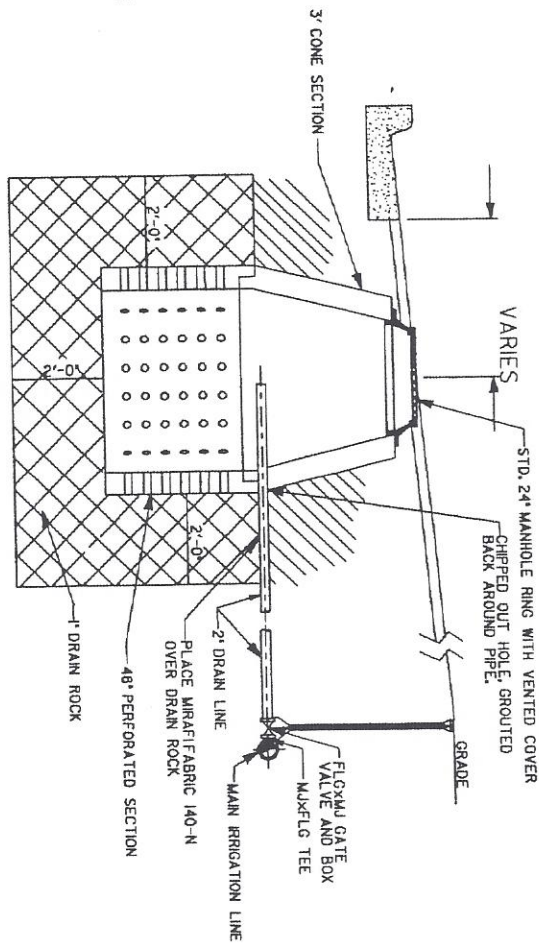




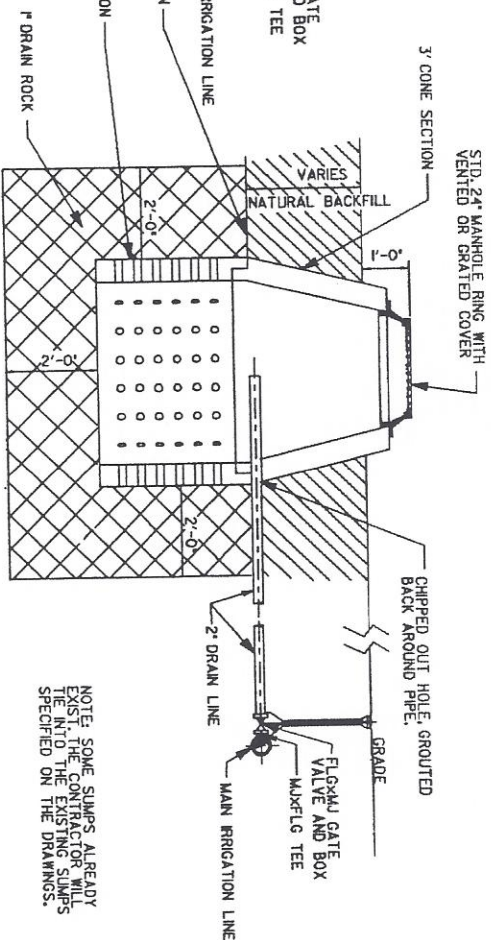
PLAN VIEW



WITH CURB/GUTTER



WITH CURB/GUTTER



WITHOUT CURB/GUTTER

NOTE: SOME SUMPS ALREADY EXIST. THE CONTRACTOR WILL TAKE THEM INTO THE EXISTING SUMPS. SPECIFIED ON THE DRAWINGS.

NEW DRAIN / WITH SUMP

SCALE = NONE

10
10

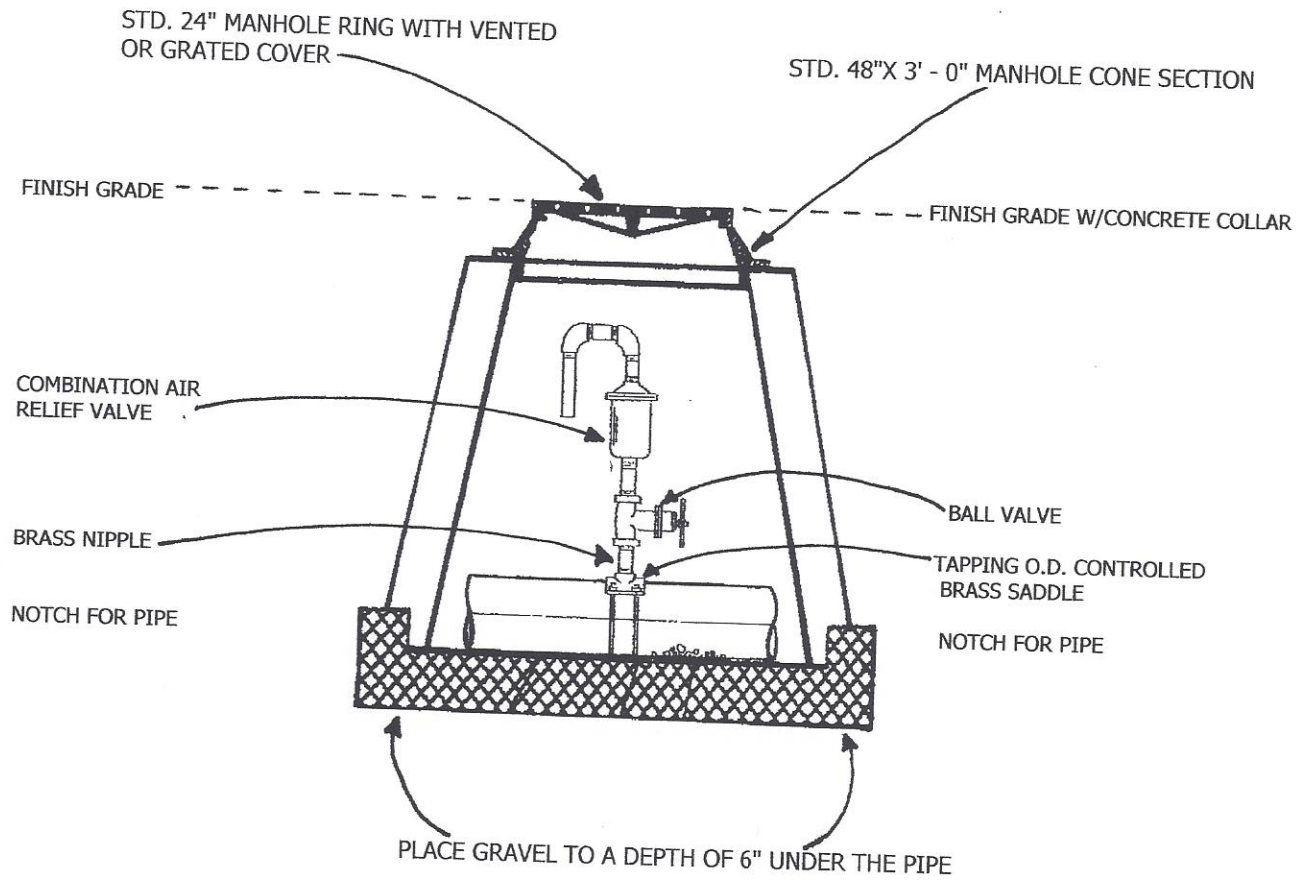
BENCHLAND WATER DISTRICT

STANDARD DRAWINGS

REVISION	
NO.	DESCRIPTION

J-U-B ENGINEERS, Inc.
 784 South 400 East
 Orem, Utah
 84088
 Phone: 801-228-0995
 Fax: 801-228-0994





TYPICAL AIR VALVE STATION