



**La Plata Archuleta
Water District**

**LA PLATA ARCHULETA
WATER DISTRICT**

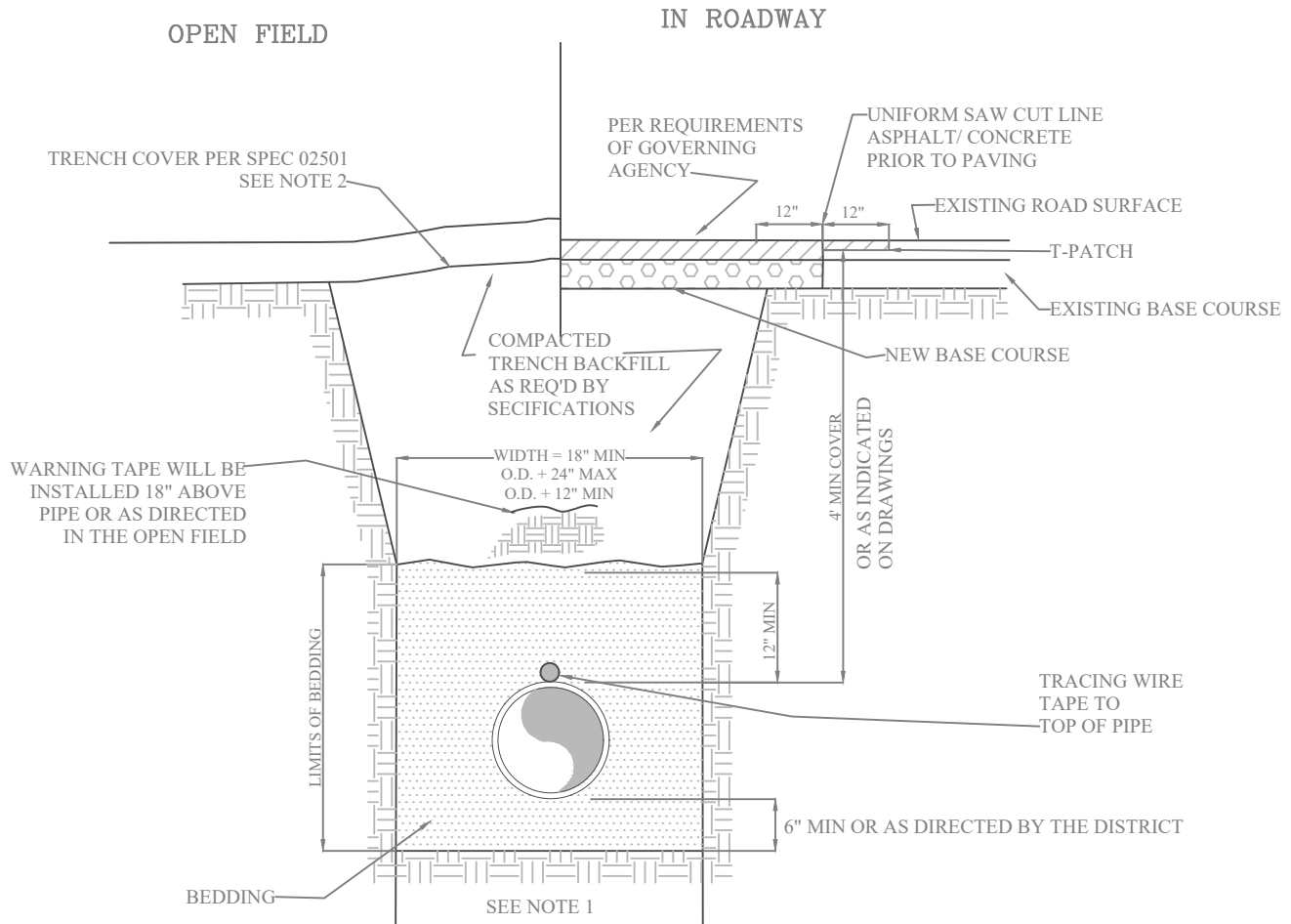
STANDARD DETAILS

Revised July 30, 2020



TABLE OF CONTENTS

1. GENERAL NOTES SHEET 1
2. GENERAL NOTES SHEET 2
3. TRENCH SECTION
- 3A. TRENCH SECTION: GEM VILLAGE FRONTAGE ROAD
- 3B. TRENCH SECTION: GRAVEL ACCESS ROAD
4. GROUNDWATER BARRIER
5. LENGTH OF RESTRAINED PIPE
6. CONCRETE THRUST BLOCK AND BEARING SURFACES
7. MAIN LINE GATE VALVE
8. FIRE HYDRANT ASSEMBLY INSTALLATION
9. SERVICE LINES
10. JACK AND BORE
11. AIR VAC AND VAULT
12. TYPE "A" BLOWOFF DETAILS
13. TYPE "B" BLOWOFF DETAILS
14. PRV VAULT
15. FROSTFREE MANHOLE LID
- 16A. MASTER METER VAULT DETAIL
- 16B. MASTER METER SECTION VIEW 1
- 16C. MASTER METER SECTION VIEW 2



NOTE:

1. IF UNSTABLE MATERIALS OR UNACCEPTABLE CONDITIONS ARE FOUND IN TRENCH BOTTOM, OVEREXCAVATE AND REPLACE PER SPECIFICATIONS.
2. MINIMUM COVER TO BE BELOW FINAL GRADE.
3. REFER TO SPECIFICATION 02226 FOR BACKFILL AND BEDDING REQUIREMENTS DIRT DAM, AND BACKFILL REQUIREMENTS.
4. TRENCH EXCAVATIONS WITHIN 4 FEET OF ROADWAY EDGE REQUIRE BACKFILL WITH FLOWABLE FILL **OR** 95% COMPACTION REFERENCE SPECIFICATION 02226-3.08f.
5. WITHIN WETLANDS AREA, RETURN TOPSOIL AND WETLANDS PLANTS TO ORIGINAL PROFILE. COMPACT THE TRENCH FILL MATERIALS ADEQUATELY IN ORDER TO ENSURE WETLANDS ARE NOT DRAINED DUE TO THE TRENCH PROVIDING A PREFERENTIAL DRAIN FOR WATER TRAVEL (SEE DETAILS SHEET 4).

TYPICAL TRENCH SECTION DETAIL

**LA PLATA ARCHULETA WATER DISTRICT
STANDARD DETAILS
TYPICAL TRENCH SECTION**

**HARRIS WATER
ENGINEERING INC.**

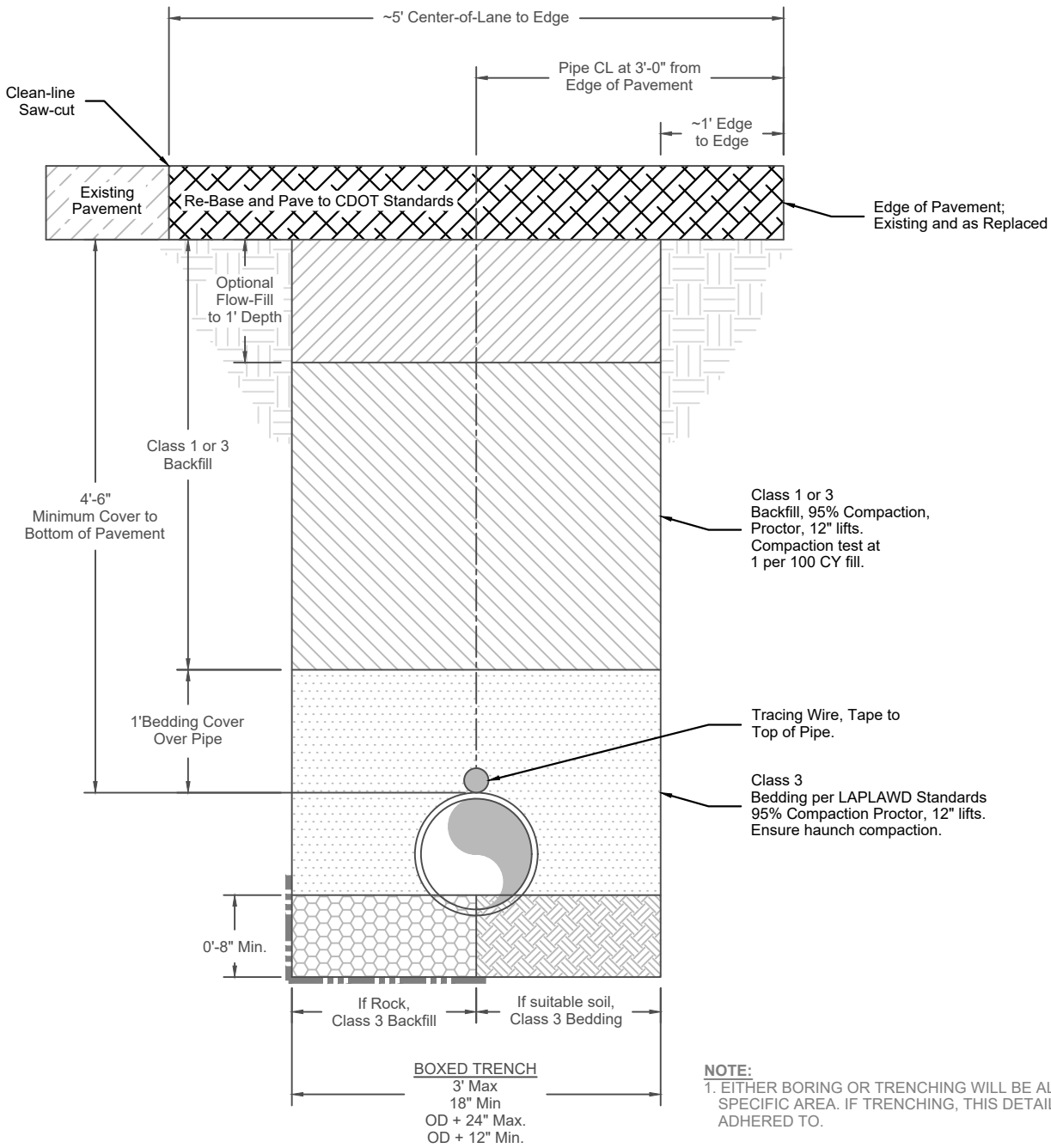
954 East Second Ave.
Durango, Co. 81303
970-259-1028



LAPLAWD

**La Plata Archuleta
Water District**

DATE: 07/30/20	SHT: 03	REVISIONS		
CHECKED BY: BS	SCALE: N.T.S.	NO.	DESCRIPTION	DATE
DRAWN BY: MG				



- NOTE:**
1. EITHER BORING OR TRENCHING WILL BE ALLOWED IN THIS SPECIFIC AREA. IF TRENCHING, THIS DETAIL SHALL BE ADHERED TO.
 2. IF UNSTABLE MATERIALS OR UNACCEPTABLE CONDITIONS ARE FOUND IN TRENCH BOTTOM, OVEREXCAVATE AND REPLACE PER SPECIFICATIONS.
 3. MINIMUM COVER TO BE BELOW FINAL GRADE.
 4. REFER TO SPECIFICATION 02226 FOR BACKFILL AND BEDDING REQUIREMENTS DIRT DAM, AND BACKFILL REQUIREMENTS.

**TRENCH DETAIL: WITHIN GEM VILLAGE FRONTAGE ROAD,
LONGITUDINAL RUN. ALTERNATE TO BORING.**

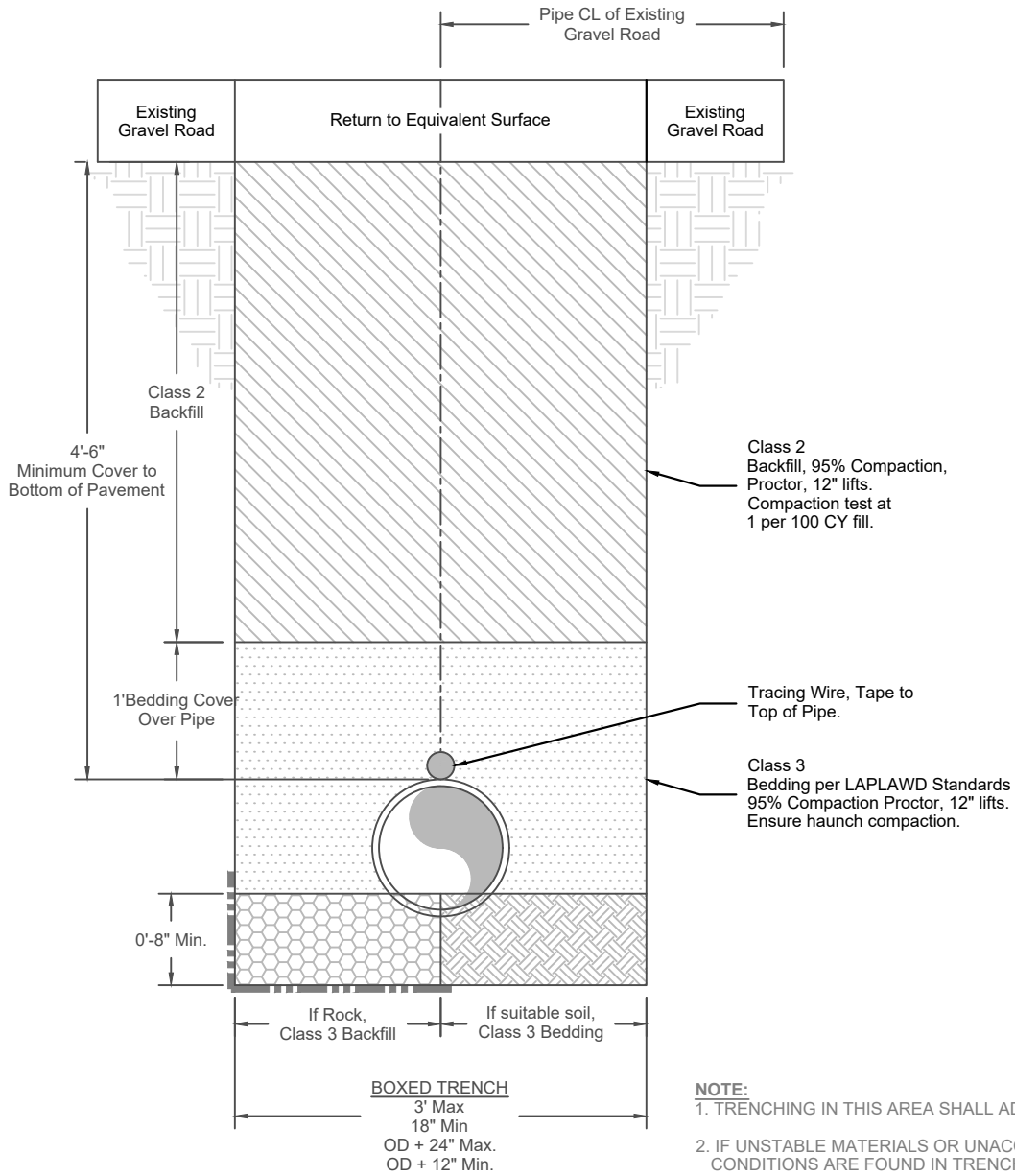
**LA PLATA ARCHULETA WATER DISTRICT
STANDARD DETAILS
TYPICAL TRENCH SECTION
GEM VILLAGE FRONTAGE ROAD**

**HARRIS WATER
ENGINEERING INC.**

954 East Second Ave.
Durango, Co. 81303
970-259-1028



DATE: 07/30/20	SHT: 03A	REVISIONS		
CHECKED BY: DH	SCALE: N.T.S.	NO.	DESCRIPTION	DATE
DRAWN BY: DD				



- NOTE:**
1. TRENCHING IN THIS AREA SHALL ADHERE TO THIS DETAIL.
 2. IF UNSTABLE MATERIALS OR UNACCEPTABLE CONDITIONS ARE FOUND IN TRENCH BOTTOM, OVEREXCAVATE AND REPLACE PER SPECIFICATIONS.
 3. MINIMUM COVER TO BE BELOW FINAL GRADE.
 4. REFER TO SPECIFICATION 02226 FOR BACKFILL AND BEDDING REQUIREMENTS DIRT DAM, AND BACKFILL REQUIREMENTS.

**TRENCH DETAIL: GRAVEL ACCESS ROAD,
LONGITUDINAL RUN. ALTERNATE TO BORING.**

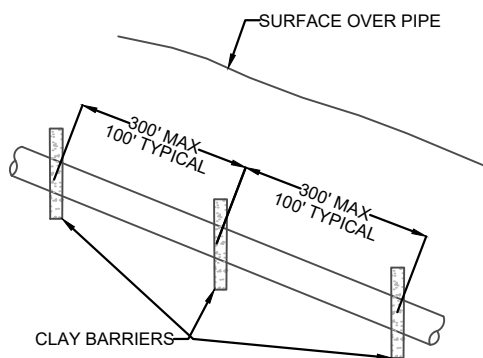
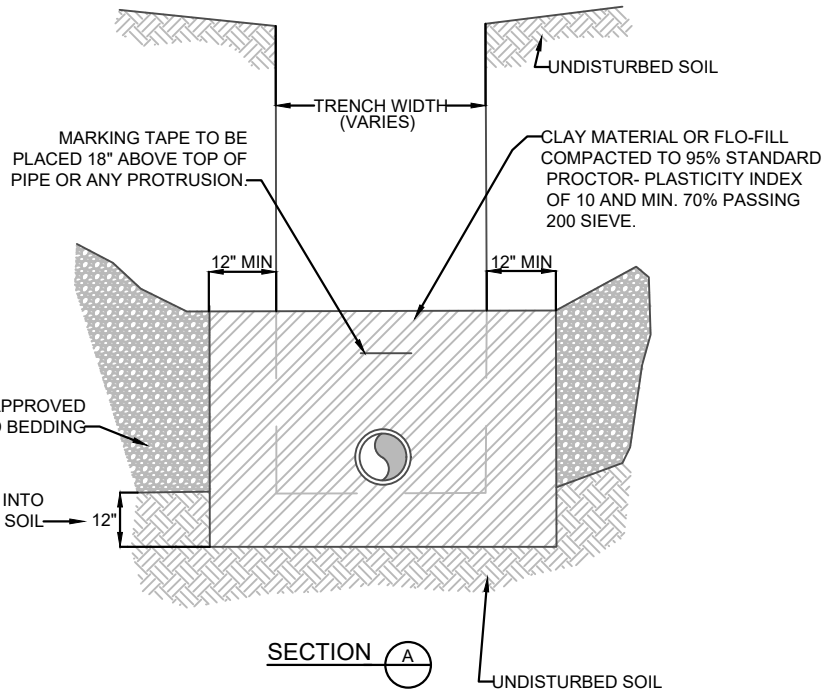
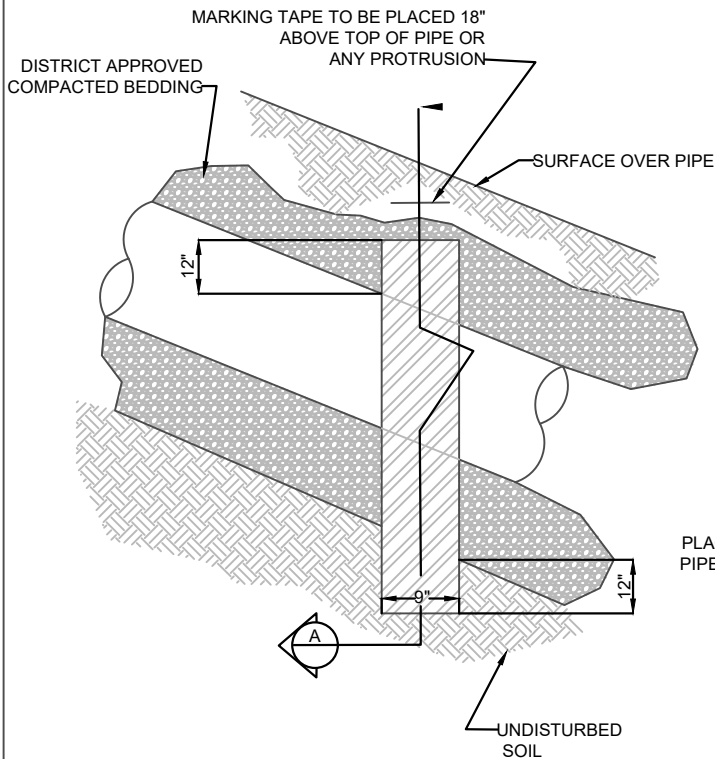
**LA PLATA ARCHULETA WATER DISTRICT
STANDARD DETAILS
TYPICAL TRENCH SECTION
GRAVEL ACCESS ROAD**

**HARRIS WATER
ENGINEERING INC.**

954 East Second Ave.
Durango, Co. 81303
970-259-1028



DATE: 07/30/20	SHT: 03B	REVISIONS		
CHECKED BY: DH	SCALE: N.T.S.	NO.	DESCRIPTION	DATE
DRAWN BY: DD				



ELEVATION

NOTE:

WITHIN WETLANDS AREA, RETURN TOPSOIL AND WETLANDS PLANTS TO ORIGINAL PROFILE. COMPACT THE TRENCH FILL MATERIALS ADEQUATELY IN ORDER TO ENSURE WETLANDS ARE NOT DRAINED DUE TO THE TRENCH PROVIDING A PREFERENTIAL DRAIN FOR WATER TRAVEL.

**LA PLATA ARCHULETA WATER DISTRICT
STANDARD DETAILS
GROUNDWATER BARRIER**

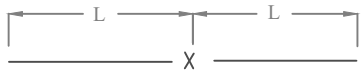
**HARRIS WATER
ENGINEERING INC.**

954 East Second Ave.
Durango, Co. 81303
970-259-1028



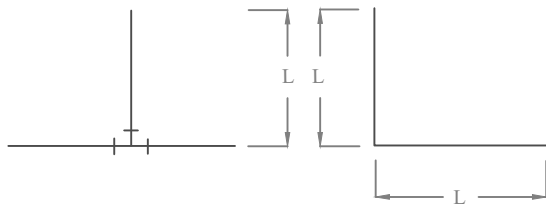
DATE: 07/30/20	SHT: 04	REVISIONS		
CHECKED BY: BS	SCALE: N.T.S.	NO.	DESCRIPTION	DATE
DRAWN BY: MG				

PIPE SIZE	4"		6"		8"		10"		12"		14"		16"		18"	
	D	L	D	L	D	L	D	L	D	L	D	L	D	L	D	L
TEE	3/4"	10.0'	3/4"	14.0'	3/4"	18.0'	3/4"	22.0'	3/4"	32.0'	3/4"	46'	3/4"	60.0'	1"	74.0'
PLUG OR VALVE	3/4"	35.0'	3/4"	50.0'	3/4"	66.0'	3/4"	80.0'	3/4"	94.0'	3/4"	105'	3/4"	123.0'	1"	137.0'
90° BEND	3/4"	10.0'	3/4"	14.0'	3/4"	18.0'	3/4"	22.0'	3/4"	26.0'	3/4"	30'	3/4"	34.0'	1"	38.0'
45° BEND	3/4"	4.0'	3/4"	6.0'	3/4"	8.0'	3/4"	9.0'	3/4"	11.0'	3/4"	12'	3/4"	14.0'	3/4"	16.0'
22 1/2° BEND	3/4"	2.0'	3/4"	3.0'	3/4"	4.0'	3/4"	4.0'	3/4"	5.0'	3/4"	6'	3/4"	7.0'	3/4"	8.0'
11 1/4° BEND	3/4"	1.0'	3/4"	1.0'	3/4"	2.0'	3/4"	2.0'	3/4"	3.0'	3/4"	3.0'	3/4"	3.0'	3/4"	4.0'



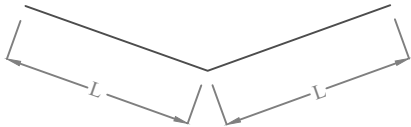
NOTES:

1. LENGTHS OF PIPE MEASURED EACH WAY FROM VALVES, BENDS, AND FITTINGS
2. D=DIAMETER OF REINFORCING BAR, L=LENGTH
3. MINIMUM 4' GROUND COVER REQUIRED.
4. BASED ON 150 PSI INTERNAL PRESSURE PLUS 100 PSI WATER HAMMER.
5. LENGTH REFERS TO THE MINIMUM AMOUNT OF PIPE WHICH MUST BE RESTRAINED. JOINTS MUST BE RESTRAINED THAT ARE WITHIN LENGTHS (L) OF VALVE, BEND OR FITTING.
6. USE "MEGA-LUG" OR FIELD-LOK" RESTRAINT OR APPROVED EQUAL.



TEE

90° BENDS



BENDS

TYPICAL LENGTH OF RESTRAINED PIPE DETAIL

"RESTRAINED JOINTS ALLOWED ONLY WHERE DIRECTED OR APPROVED BY ENGINEER LENGTHS LISTED IN THIS TABLE WILL BE ADJUSTED TO SPECIFIC LOCATIONS AS NEEDED"

**LA PLATA ARCHULETA WATER DISTRICT
STANDARD DETAILS
TYPICAL LENGTH OF RESTRAINED PIPE**

**HARRIS WATER
ENGINEERING INC.**

954 East Second Ave.
Durango, Co. 81303
970-259-1028



LAPLAWD

La Plata Archuleta
Water District

DATE: 07/30/20

SHT: 05

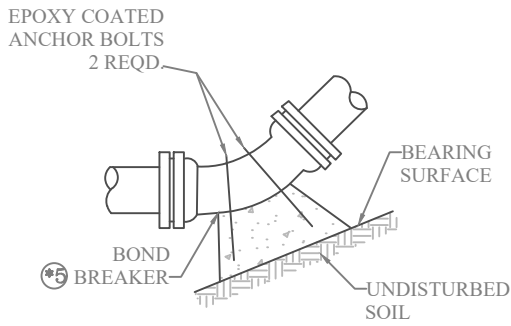
REVISIONS

CHECKED BY: BS

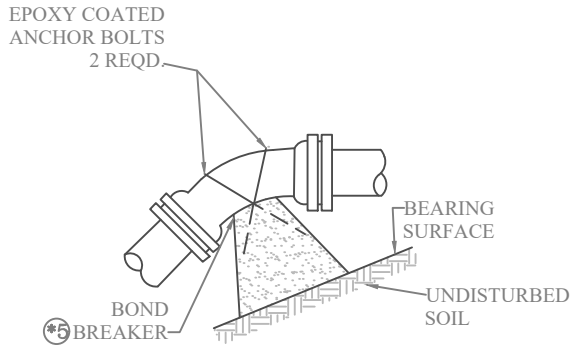
SCALE: N.T.S.

NO.	DESCRIPTION	DATE

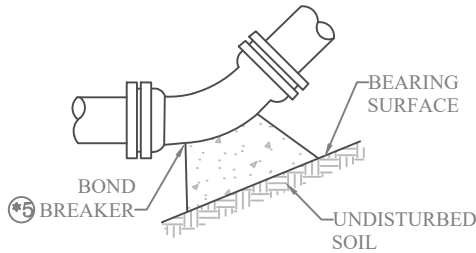
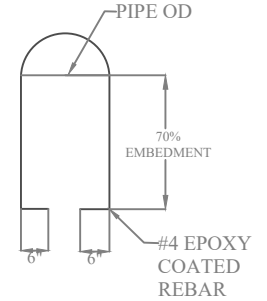
DRAWN BY: MG



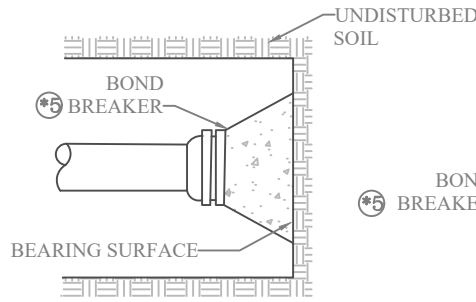
UPWARD BEND



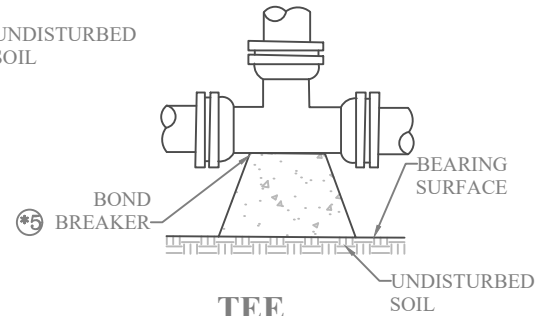
DOWNWARD BEND



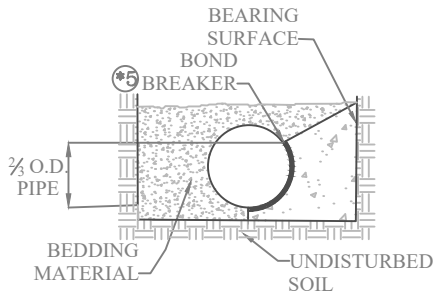
11 1/4°; 22 1/2°; 45° AND 90° BENDS



DEAD END



TEE



TYPICAL CROSS SECTION

SIZE OF PIPE	BENDS				TEE OR DEAD END
	11 1/4"	22 1/2"	45°	90°	
4"	2	2	2	2	2
6"	2	2	3	4	3
8"	2	2	4	8	5
10"	3	4	6	12	8
12"	3	5	9	16	12
14"	4	7	14	26	19
16"	4	8	16	29	21

* TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES & SOIL BEARING STRESS, USE THE FOLLOWING EQUATION: BEARING AREA= (TEST PRESS/150)X(2500/SOIL BEARING STRESS) X (TABLE VALUE)

NOTES:

1. BEARING SURFACES SHOWN IN CHART ARE MINIMUM SQUARE FEET.
- *2. BASED ON SOIL BEARING CAPACITY OF 2,000 LB/S.F.
- *3. BASED ON 200 PSI INTERNAL PIPE PRESSURE PLUS 100 PSI WATER HAMMER
4. ALL FITTINGS TO BE CONCRETE THRUST BLOCKED UNLESS APPROVED. TO HAVE RESTRAINED JOINTS PER LENGTH OF RESTRAINED PIPE DETAIL. ALL VALVES TO HAVE RESTRAINED JOINTS.
- *5. POLYETHYLENE WRAP ALL FITTINGS PRIOR TO PLACING CONCRETE FOR THRUST BLOCKS. (PLASTIC WRAP OF FITTING ALLOWABLE.)
6. THRUST BLOCK SHALL NOT INTERFERE W/ MECHANICAL JOINT BOLT OPERATION.

MINIMUM BEARING SURFACE AREA

TYPICAL CONCRETE THRUST BLOCK BEARING SURFACES AND INSTALLATION DETAIL

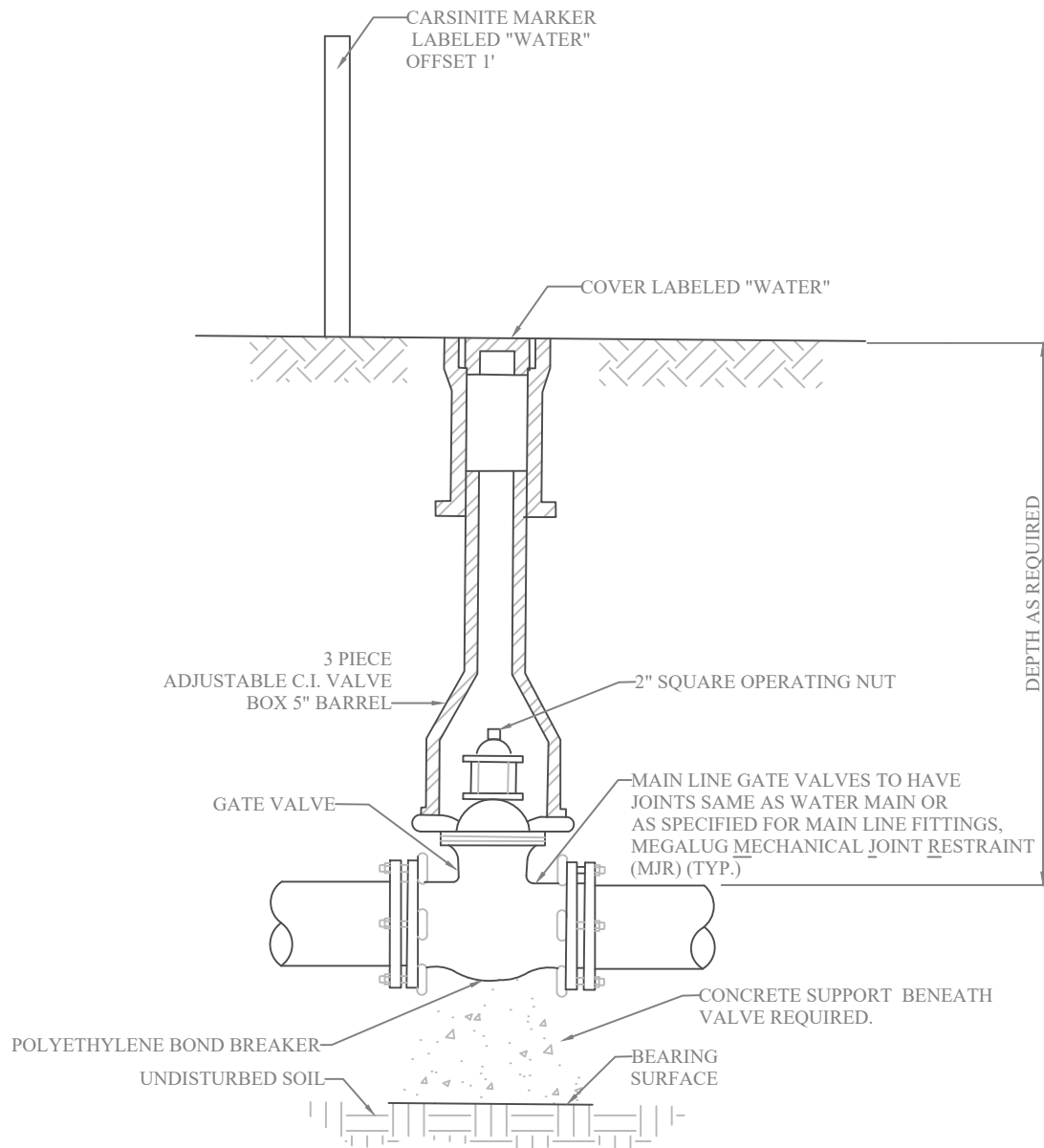
LA PLATA ARCHULETA WATER DISTRICT
STANDARD DETAILS
THRUST BLOCK AND BEARING SURFACES

HARRIS WATER
ENGINEERING INC.

954 East Second Ave.
Durango, Co. 81303
970-259-1028



DATE: 07/30/20	SHT: 06	REVISIONS		
		NO.	DESCRIPTION	DATE
CHECKED BY: BS	SCALE: N.T.S.			
DRAWN BY: MG				



TYPICAL MAIN LINE GATE VALVE DETAIL

**LA PLATA ARCHULETA WATER DISTRICT
STANDARD DETAILS
TYPICAL MAINLINE GATEVALVE**

**HARRIS WATER
ENGINEERING INC.**

954 East Second Ave.
Durango, Co. 81303
970-259-1028



LAPLAWD

La Plata Archuleta
Water District

DATE: 07/30/20

SHT: 07

REVISIONS

CHECKED BY: BS

SCALE: N.T.S.

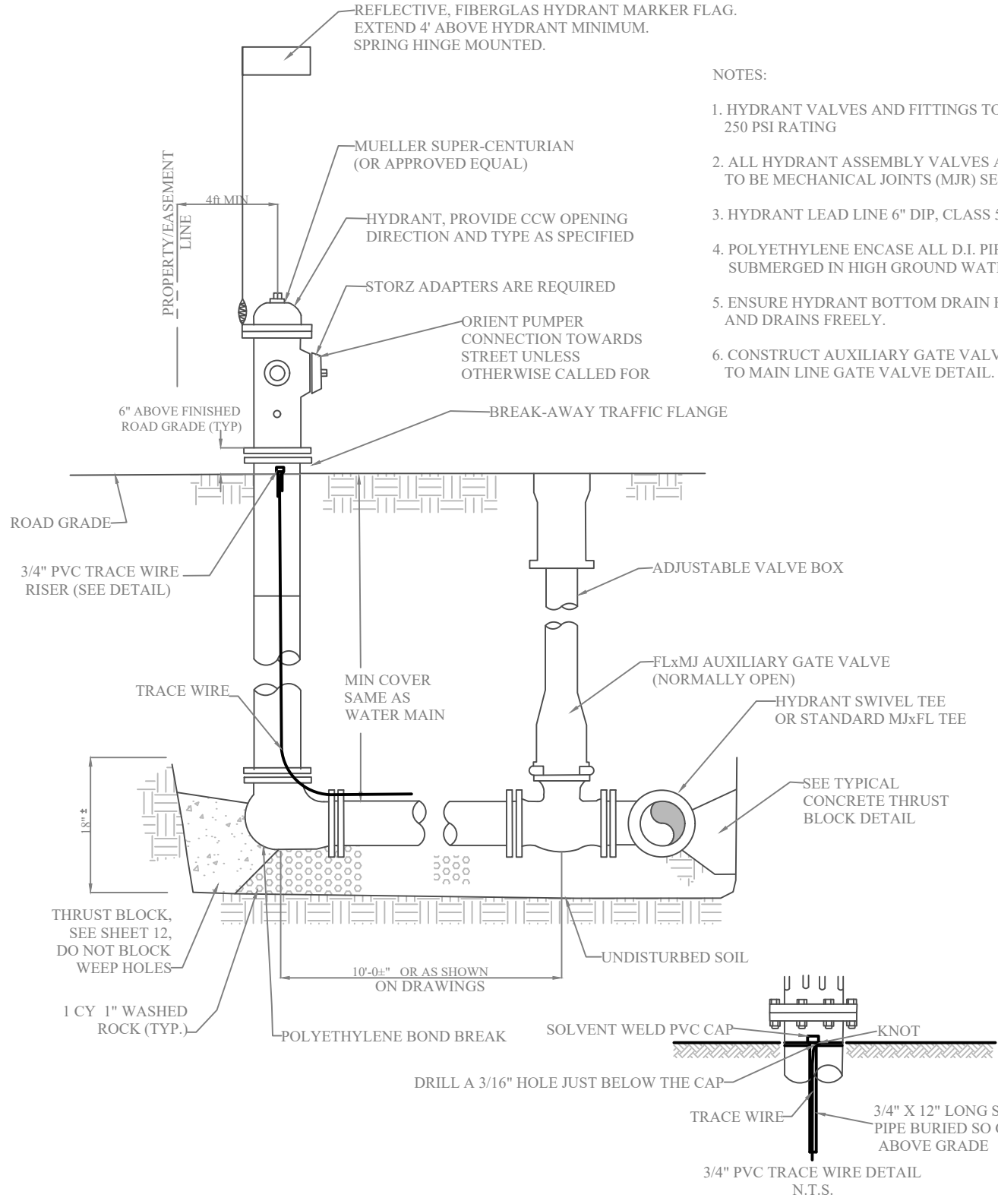
NO.	DESCRIPTION	DATE

DRAWN BY: MG

REFLECTIVE, FIBERGLAS HYDRANT MARKER FLAG.
EXTEND 4' ABOVE HYDRANT MINIMUM.
SPRING HINGE MOUNTED.

NOTES:

1. HYDRANT VALVES AND FITTINGS TO BE 250 PSI RATING
2. ALL HYDRANT ASSEMBLY VALVES AND FITTINGS TO BE MECHANICAL JOINTS (MJR) SERIES 2000 PV.
3. HYDRANT LEAD LINE 6" DIP, CLASS 52
4. POLYETHYLENE ENCASE ALL D.I. PIPES, AND FITTINGS SUBMERGED IN HIGH GROUND WATER.
5. ENSURE HYDRANT BOTTOM DRAIN HOLE IS CLEAR AND DRAINS FREELY.
6. CONSTRUCT AUXILIARY GATE VALVE BOX IDENTICAL TO MAIN LINE GATE VALVE DETAIL.



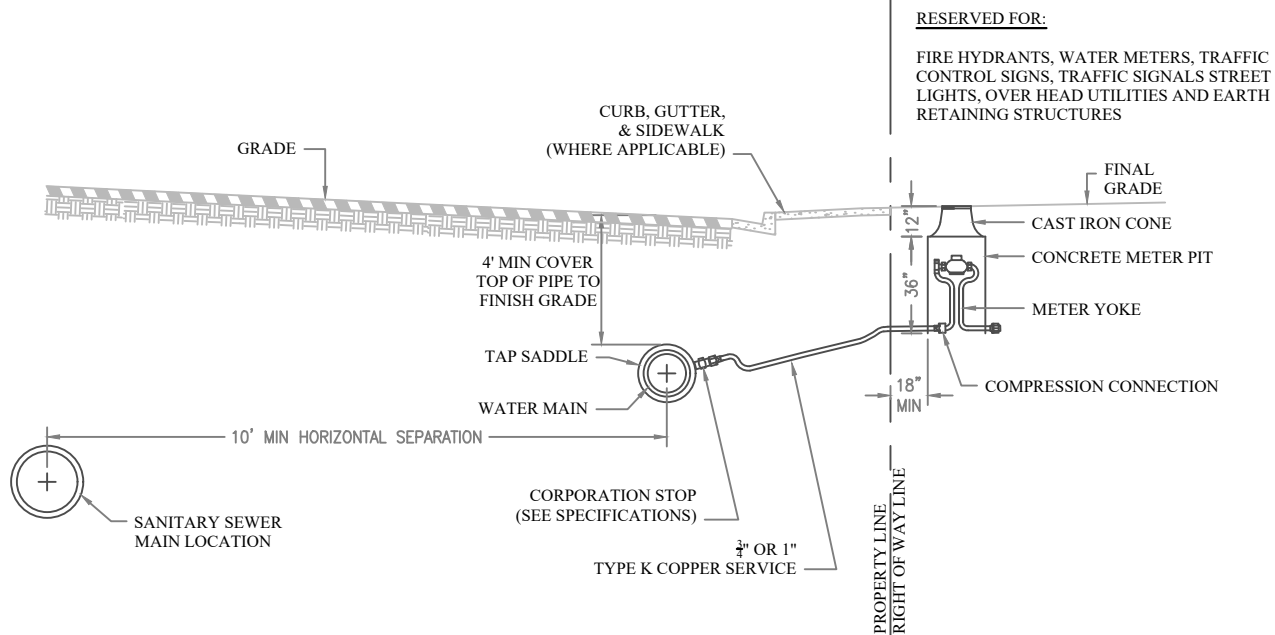
**TYPICAL FIRE HYDRANT ASSEMBLY
INSTALLATION DETAIL**

LA PLATA ARCHULETA WATER DISTRICT
STANDARD DETAILS
TYPICAL FIRE HYDRANT ASSEMBLY

**HARRIS WATER
ENGINEERING INC.**
954 East Second Ave.
Durango, Co. 81303
970-259-1028



DATE: 07/30/20	SHT: 08	REVISIONS		
CHECKED BY: BS	SCALE: N.T.S.	NO.	DESCRIPTION	DATE
DRAWN BY: MG				

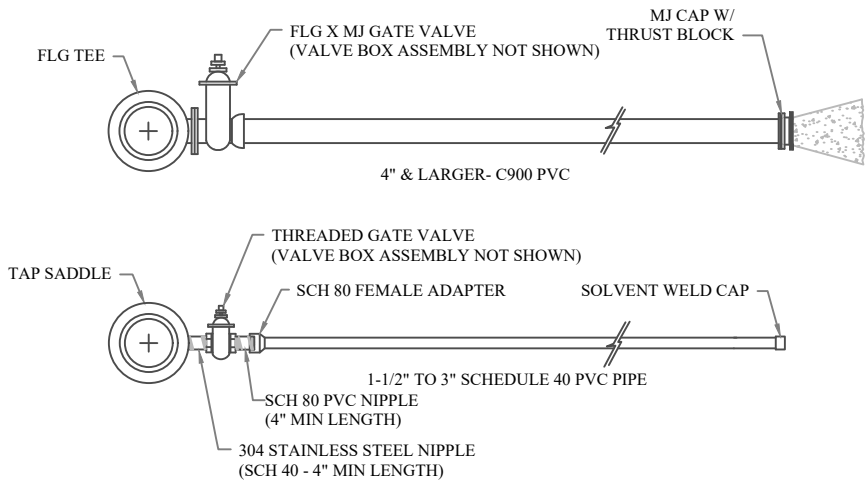


RESERVED FOR:
 FIRE HYDRANTS, WATER METERS, TRAFFIC CONTROL SIGNS, TRAFFIC SIGNALS STREET LIGHTS, OVER HEAD UTILITIES AND EARTH RETAINING STRUCTURES

**DOMESTIC SERVICE DETAIL
 (NOT TO SCALE)**

NOTES:

CAST IRON CONE AND CONCRETE METER PIT ASSEMBLY SHALL BE SET 0.1 FT ABOVE FINAL GRADE
 SERVICE LINES SHALL EXTEND THROUGH THE EXISTING CONCRETE METER PIT BLOCKOUTS ON THE BOTTOM RING.
 METER YOKE SHALL BE CENTERED WITHIN THE CONCRETE METER PIT.



1-1/2\"/>

NOTES:

ALL 1-1/2\"/>

SERVICE LINE ENDPOINT IS TO EXTEND TO PROPERTY SIDE OF THE RIGHT OF WAY LINE AND MARKED WITH A STEEL POST.

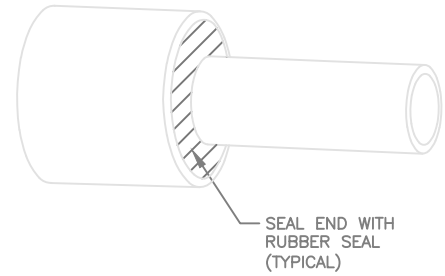
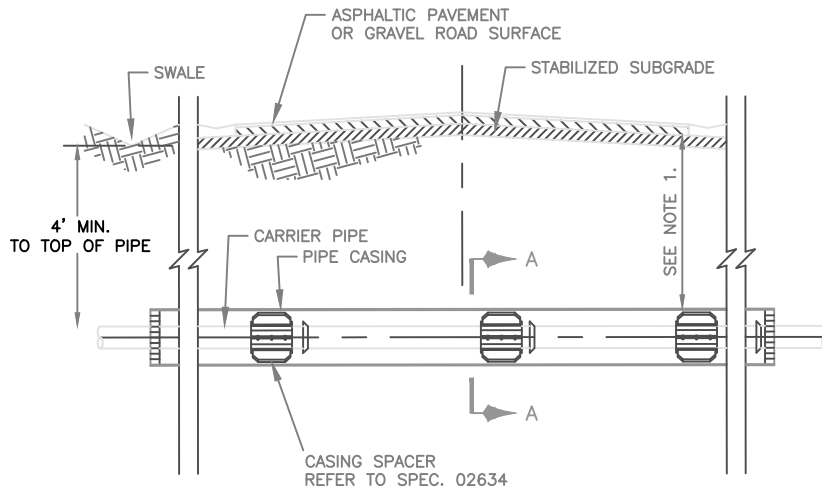
**LA PLATA ARCHULETA WATER DISTRICT
 STANDARD DETAILS
 SERVICE LINE DETAILS**

**HARRIS WATER
 ENGINEERING INC.**

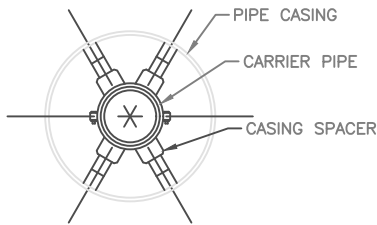
954 East Second Ave.
 Durango, Co. 81303
 970-259-1028



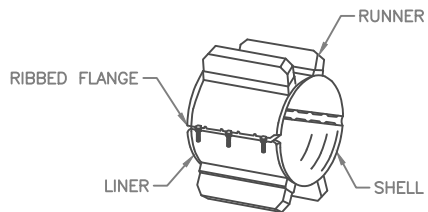
DATE: 4/25/2017	SHT: 09	REVISIONS		
CHECKED BY: BS	SCALE: N.T.S.	NO.	DESCRIPTION	DATE
DRAWN BY: MG				



CASING END SEAL



SECTION A-A



SPACER

STANDARD NUMBER OF RUNNERS REQUIRED

UP TO 14" CARRIER PIPE	- 4 REQUIRED
OVER 14" THROUGH 36" CARRIER PIPE	- 6 REQUIRED
OVER 36" THROUGH 48" CARRIER PIPE	- 7 REQUIRED

NOTES:

1. UNDERGROUND CROSSINGS REQUIRE A MINIMUM VERTICAL CLEARANCE OF 48" BELOW ROAD SURFACE.
2. SEE TECHNICAL SPECIFICATIONS FOR CARRIER PIPE AND CASING PIPE REQUIREMENTS.

PLACEMENT OF SPACERS ON CARRIER PIPE:

1. GENERAL - ONE SPACER SHALL BE PLACED NOT MORE THAN TWO FEET FROM EACH END OF CASING. SUBSEQUENT SPACERS SHALL BE PLACED AT 6' TO 10' INTERVALS WITHIN THE CASING, OR IN ACCORDANCE WITH PIPE MANUFACTURER'S RECOMMENDATIONS.
2. PVC CARRIER - ONE SPACER SHALL BE PLACED ON THE SPIGOT END OF EACH SEGMENT AT THE LINE MARKING THE LIMIT OF INSERTION INTO THE BELL. WHEN THE JOINT IS COMPLETE, THE SPACER SHALL BE IN CONTACT WITH THE BELL OF THE JOINT SO THAT THE SPACER PUSHES THE JOINT AND RELIEVES COMPRESSION WITHIN THE JOINT. SUBSEQUENT SPACERS SHALL BE PLACED AT 6' TO 10' INTERVALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

JACK AND BORE DETAIL
NTS

LA PLATA ARCHULETA WATER DISTRICT
STANDARD DETAILS
JACK AND BORE DETAILS

HARRIS WATER
ENGINEERING INC.

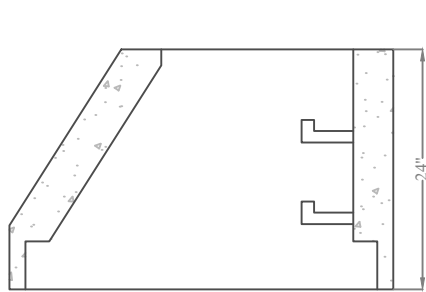
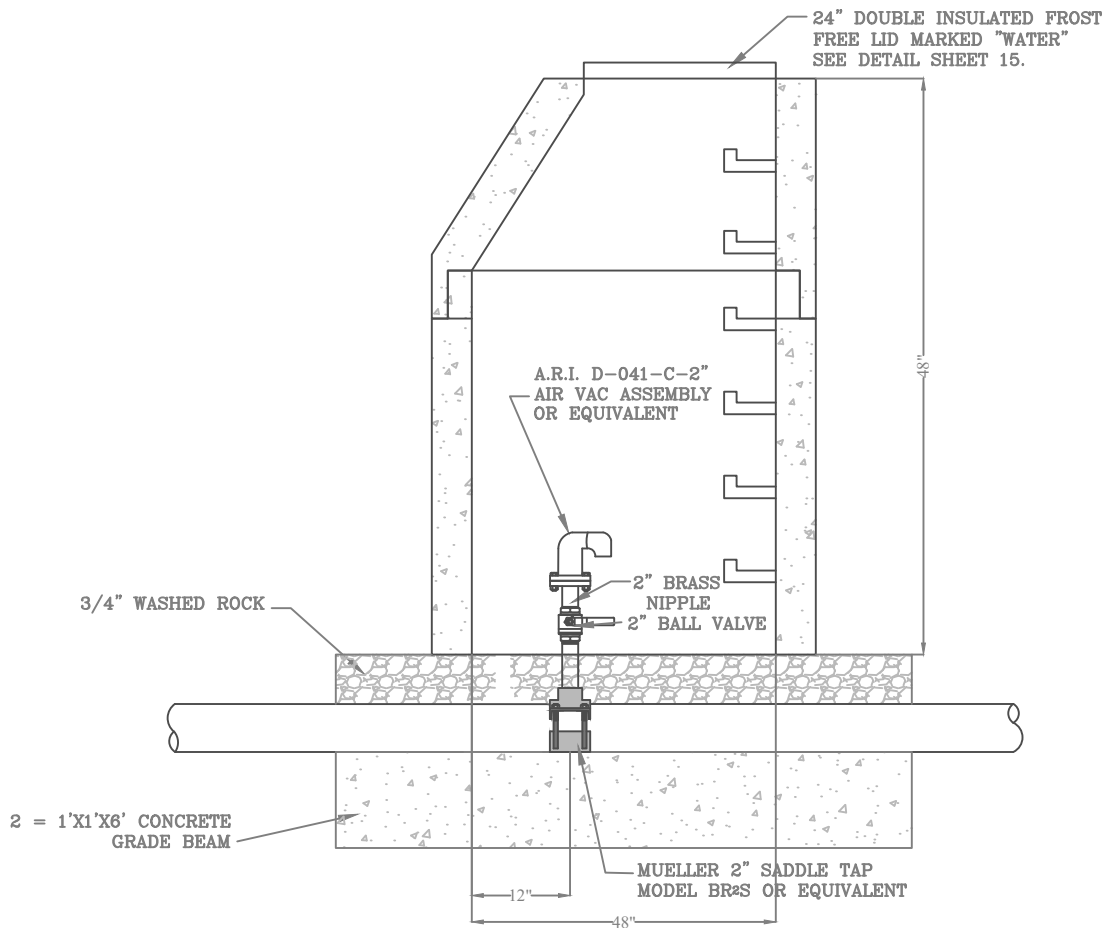
954 East Second Ave.
Durango, Co. 81303
970-259-1028



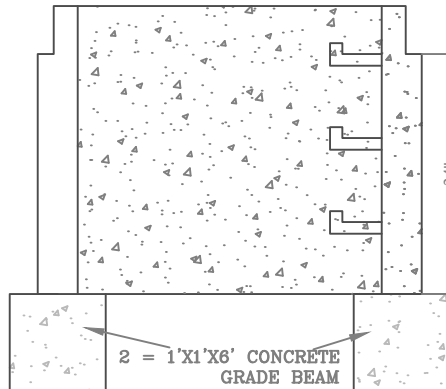
LAPLAWD

La Plata Archuleta
Water District

DATE: 07/30/20	SHT: 10	REVISIONS		
CHECKED BY: BS	SCALE: N.T.S.	NO.	DESCRIPTION	DATE
DRAWN BY: MG				



48" DIAMETER MANHOLE
WALL THICKNESS 5"



48" DIAMETER MANHOLE
WALL THICKNESS 5"

NOTE:
AIR VAC LOCATIONS ARE APPROXIMATE,
CONTRACTOR TO LOCATE HIGH POINTS
IN LINE AND ELIMINATE OR ADD WHERE
CONDITIONS REQUIRE.

AIR VAC AND VAULT

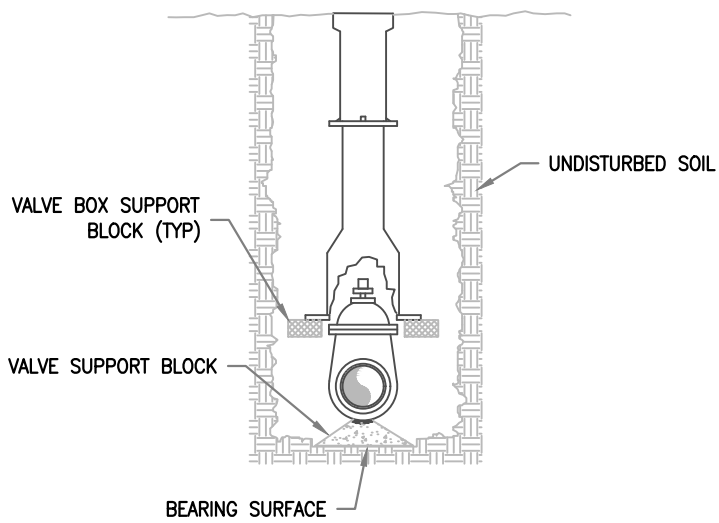
LA PLATA ARCHULETA WATER DISTRICT
STANDARD DETAILS
AIR VAC AND VAULT DETAILS

HARRIS WATER
ENGINEERING INC.

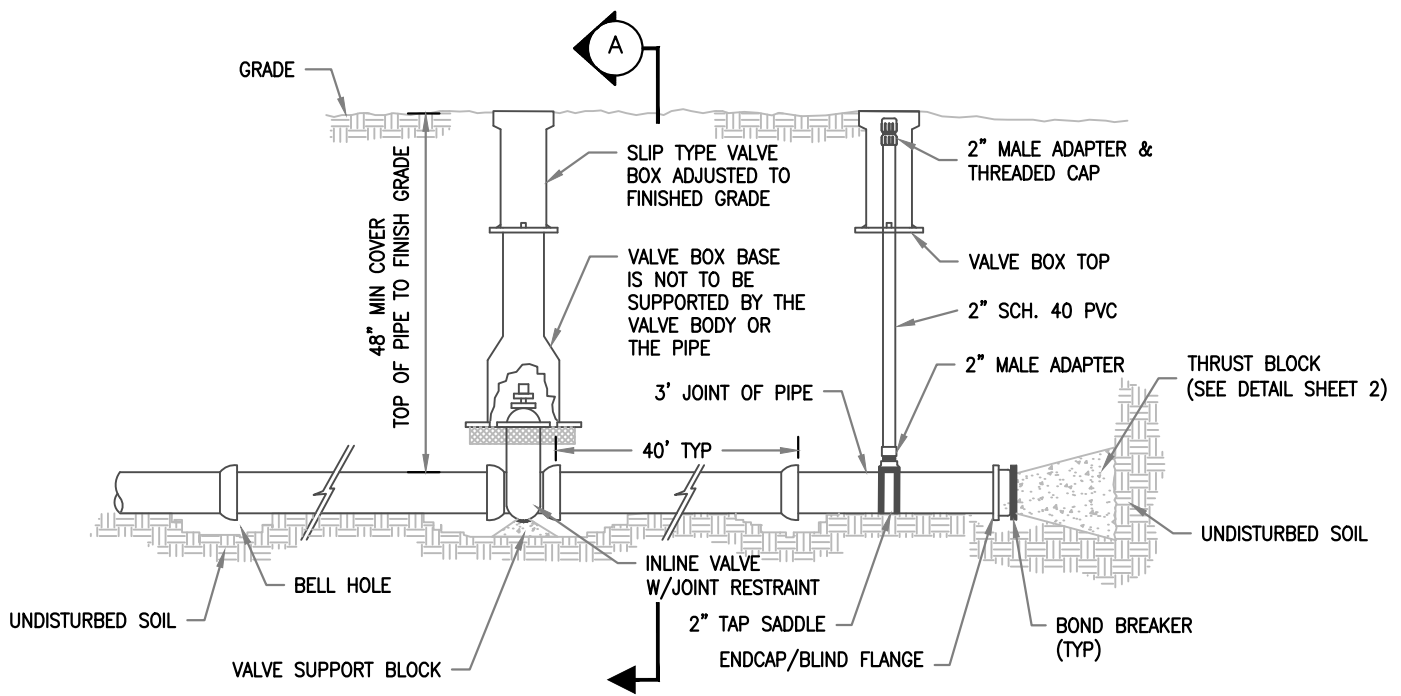
954 East Second Ave.
Durango, Co. 81303
970-259-1028



DATE: 07/30/20	SHT: 11	REVISIONS		
CHECKED BY: BS	SCALE: N.T.S.	NO.	DESCRIPTION	DATE
DRAWN BY: MG				



SECTION A
(NOT TO SCALE)



VALVE INSTALLATION, LINE TERMINATION & TYPE 'A' BLOWOFF
(NOT TO SCALE)

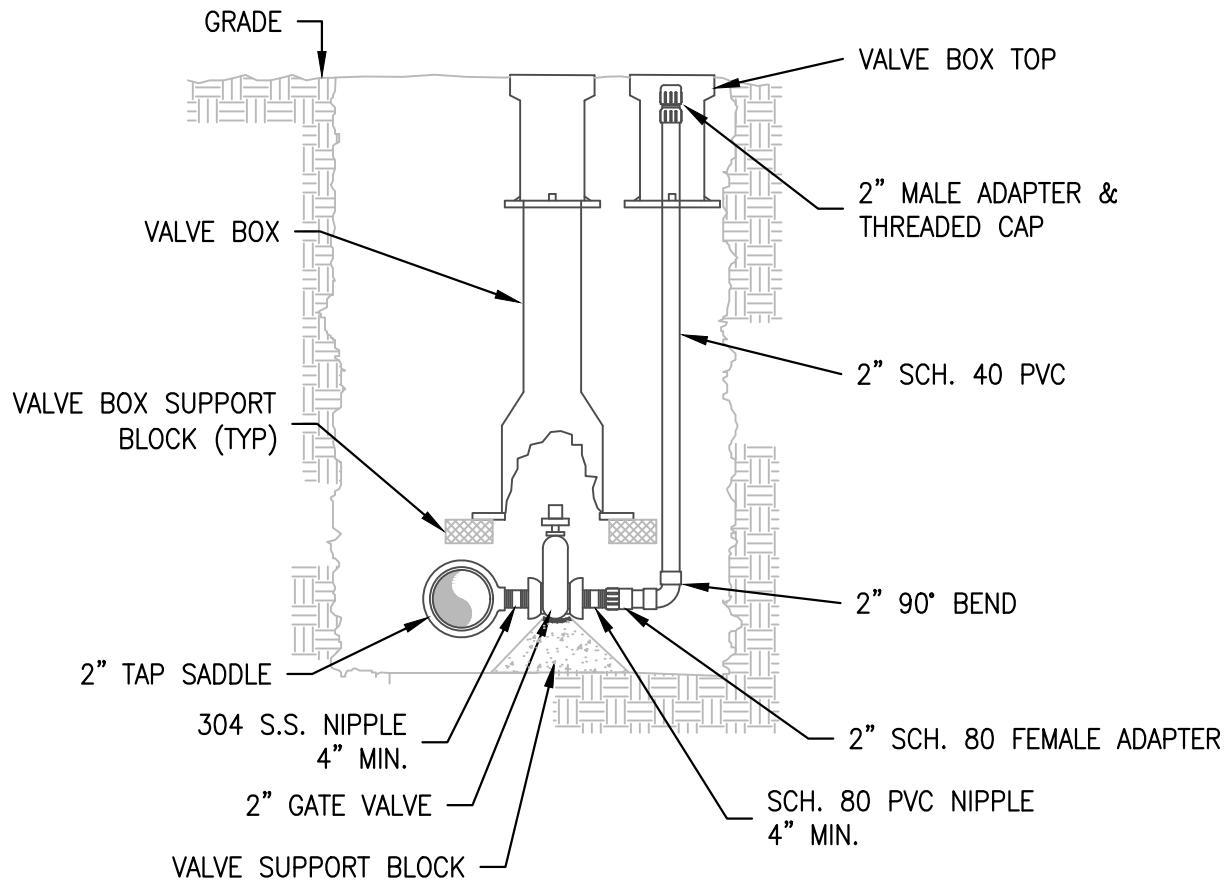
LA PLATA ARCHULETA WATER DISTRICT
STANDARD DETAILS
TYPE "A" BLOWOFF DETAILS

HARRIS WATER
ENGINEERING INC.

954 East Second Ave.
Durango, Co. 81303
970-259-1028



DATE: 07/30/20	SHT: 12	REVISIONS		
CHECKED BY: BS	SCALE: N.T.S.	NO.	DESCRIPTION	DATE
DRAWN BY: MG				



TYPE 'B' BLOWOFF
(NOT TO SCALE)

NOTE:

USE TYPE 'B' BLOWOFF ON 6" OR LARGER WATER LINES WHEN THEY TERMINATE IN A CUL-DE-SAC OR ON THE END OF WATER LINES THAT WILL BE CONNECTED TO EXISTING WATER LINES OR WHEN INDICATED.

**LA PLATA ARCHULETA WATER DISTRICT
STANDARD DETAILS
TYPE "B" BLOWOFF DETAILS**

**HARRIS WATER
ENGINEERING INC.**

954 East Second Ave.
Durango, Co. 81303
970-259-1028



DATE: 4/25/2017

SHT: 13

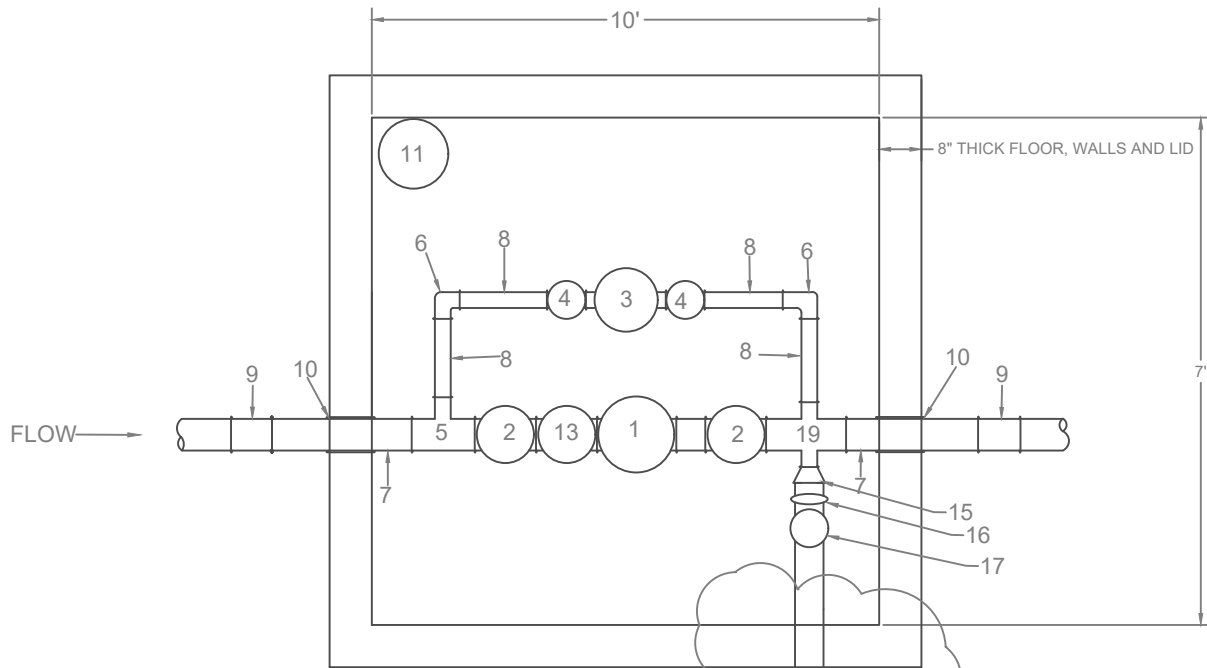
REVISIONS

CHECKED BY: BS

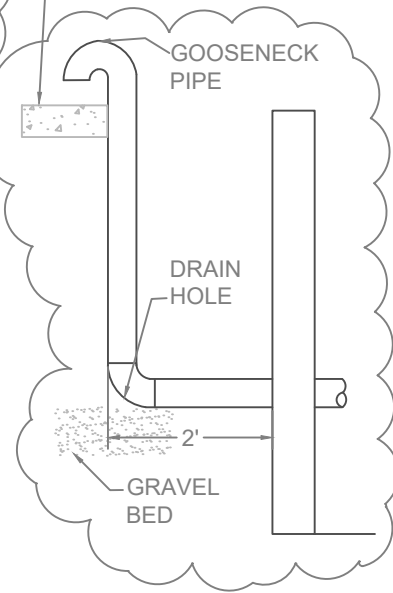
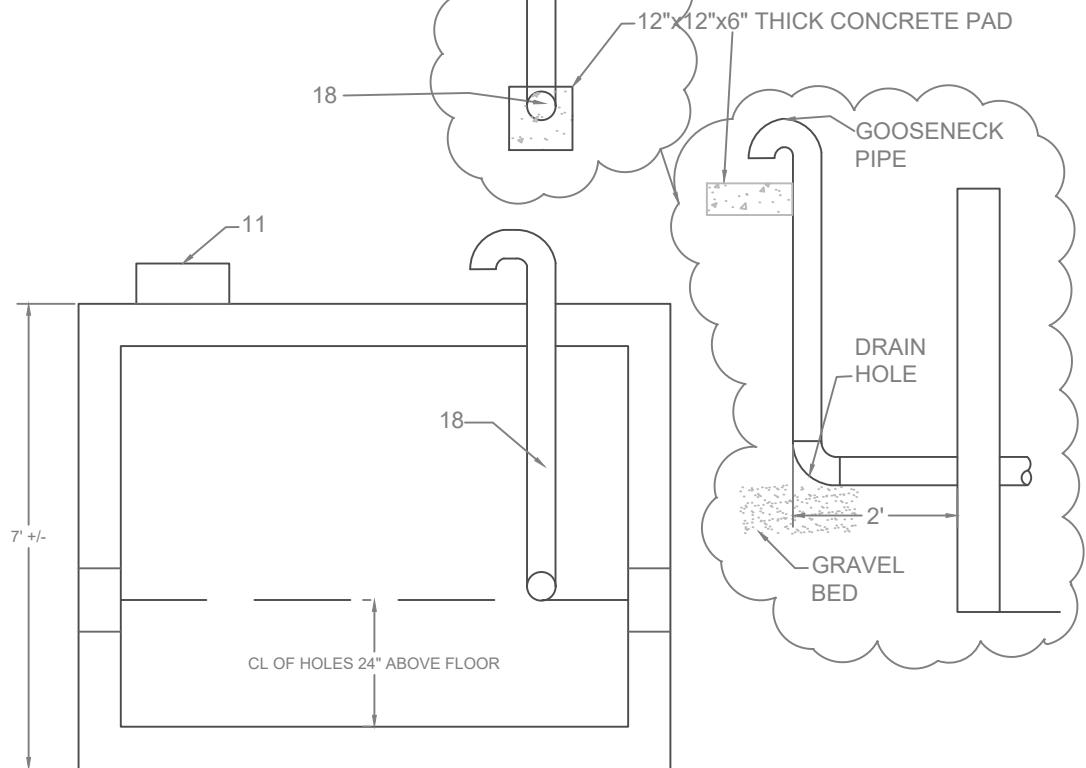
SCALE: N.T.S.

NO.	DESCRIPTION	DATE

DRAWN BY: MG



- 1) 6" Cla -Val 90-01BYKC PRV Valve
- 2) 6" Mueller flange gate valve w/ Hand wheel
- 3) 3" Cla-Val 90-01ASKC PRV Valve
- 4) 3" Mueller Flange Gate Valve w/ Hand wheel
- 5) 6"x3" Ductile Iron Flange Tee
- 6) 3" Ductile Iron Flange 90° Flange
- 7) 6"x6" Ductile Iron Flange x Plain End Spool
- 8) 3"x2' Ductile Iron Flange x Plain End Spool w/ EBAA 1003 E-Z Flange
- 9) 8x6 MJ Reducer
- 10) LS-400-C Link Seal (Typical at all wall openings)
- 11) Frost Proof Manhole Lid Model IMH*250*24CIFP or Equal. See Detail Sheet 15
- 13) 6" Keckley Basket Strainer
- 15) 3"x4" Reucer
- 16) 4" Gate Valve
- 17) 4" Cla-Val 50-01 BKC Surge
- 18) 4" D.I. to Daylight
- 19) 6"X3" Cross



NOTE:
 This detail for 8" main line. Confirm PRV Valve sizes if mainline is other than 8" diameter.

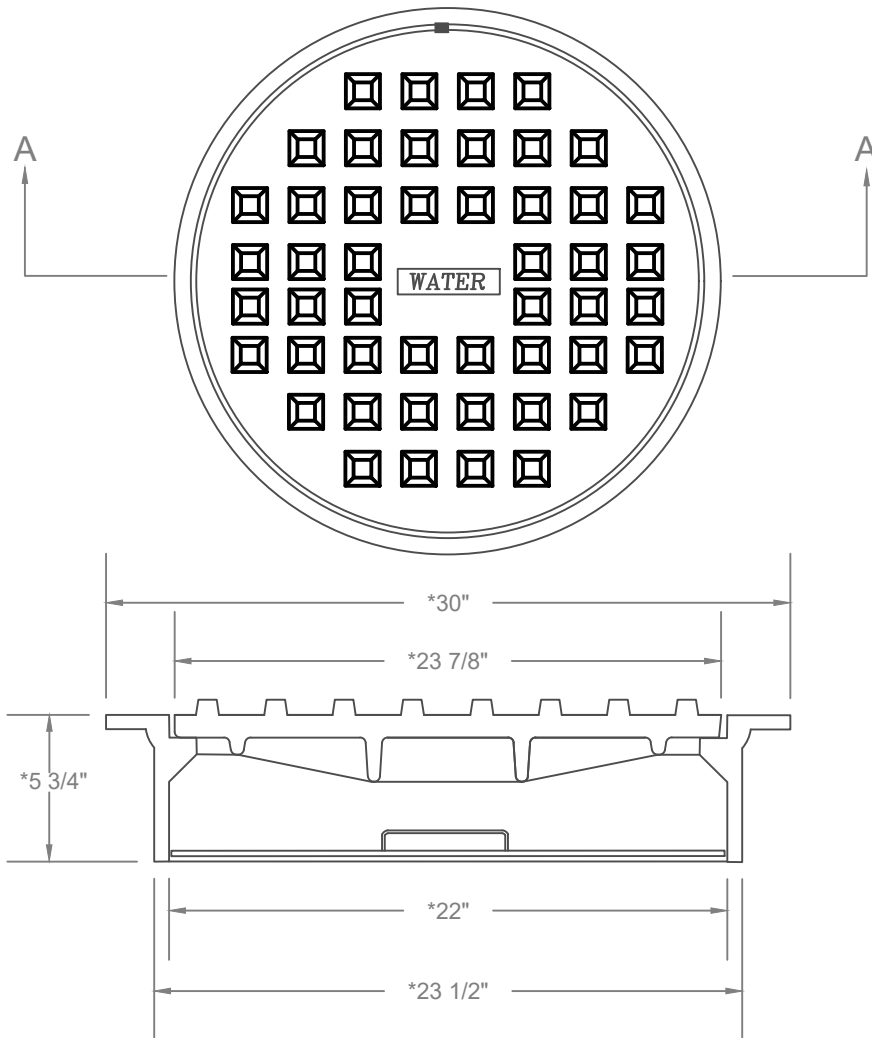
LA PLATA ARCHULETA WATER DISTRICT
 STANDARD DETAILS
 PRV VAULT

HARRIS WATER
 ENGINEERING INC.

954 East Second Ave.
 Durango, Co. 81303
 970-259-1028



DATE: 4/25/2017	SHT: 14	REVISIONS		
CHECKED BY: BS	SCALE: N.T.S.	NO.	DESCRIPTION	DATE
DRAWN BY: MG				



SECTION A-A

***NOTE:**

Where larger manhole sizes are specified, overall details are similar for frost free water manhole lids.

**LA PLATA ARCHULETA WATER DISTRICT
STANDARD DETAILS
FROST FREE MANHOLE LID**

**HARRIS WATER
ENGINEERING INC.**

954 East Second Ave.
Durango, Co. 81303
970-259-1028



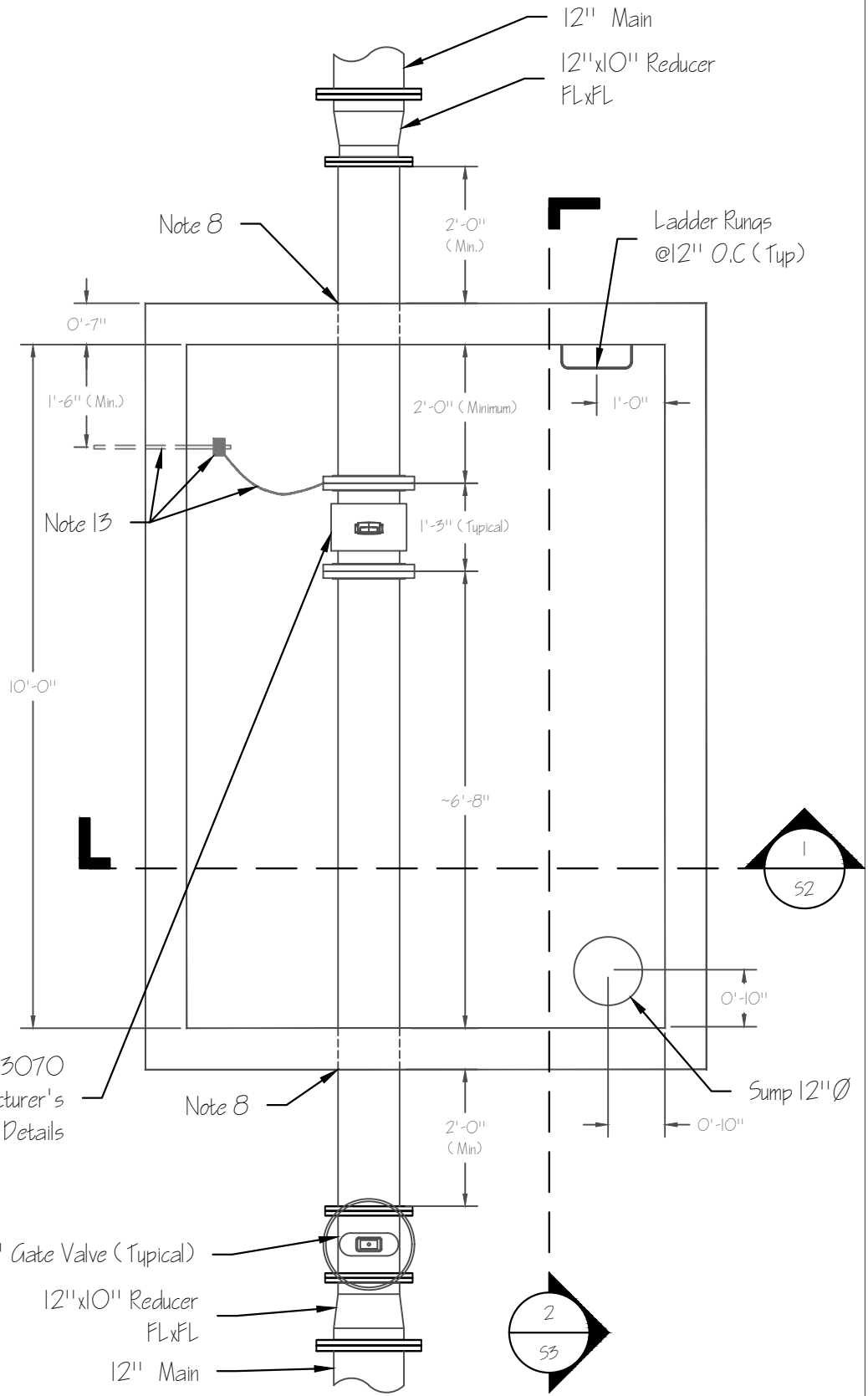
LAPLAWD

La Plata Archuleta
Water District

DATE: 07/30/20	SHT: 15	REVISIONS		
CHECKED BY: BS	SCALE: N.T.S.	NO.	DESCRIPTION	DATE
DRAWN BY: MG				

Notes:

1. Meter to be Provided By LAPLAWD and Installed by Contractor. Meter to be 10" Krohne Waterflux 3070.
2. All Dimensions Shown are Minimum Clearance Dimensions Unless Noted Otherwise.
3. Bottom of pipe shall be no less than 1'-6" above bottom of vault.
4. Access Shall be a Minimum 24" \emptyset Clear Opening W/ Approved Ladder or Embedded Rungs.
5. Vault Shall be Precast Utility Vault (Oldcastle Model 7080 or Equal) Cast in Place Vault Allowed Only With Adequate Shop Drawing Approval. Per Sheets 16B and 16C.
6. Support Meter and Appurtenaces with Pipe Stands at Flange Locations as Required.
7. Install Vault Over 6" of Compacted Class VI Back fill Above Undisturbed Native Soil.
8. Seal Vault Ends and Penetrations with LS-400-C Link Seal or Approved Equivalent. Typical.
9. Min. Design Criteria is as Noted Unless Otherwise Specified.
10. Design Loading
 - 10.A. AASHTO HS-20-44 With Impact
 - 10.B. Soil Weight = 120 PCF
 - 10.C. 80 PSF Lateral Live Load Surcharge.
 - 10.D. Equiv. Fluid Pressure = 40PCF
11. Steel Reinforcement: Rebar, ASM A-615 Grade 60
12. Lid Assembly Shall be U.S.F. Fabrication Inc. 30x48 Aluminum Hatch w/ Gas Shock, Recessed Padlock & Bit. Paint (Model 70715 or Approved Equal.)
13. Install $\frac{3}{8}$ " or $\frac{3}{4}$ " Rebar Ground Rod with Ground Clamp and 1 AWG Solid Copper Ground Wire.
14. Assembly shall include mechanical pipe restraints (not shown in standard detail drawings), including at valves, as noted in Plans and Specifications.



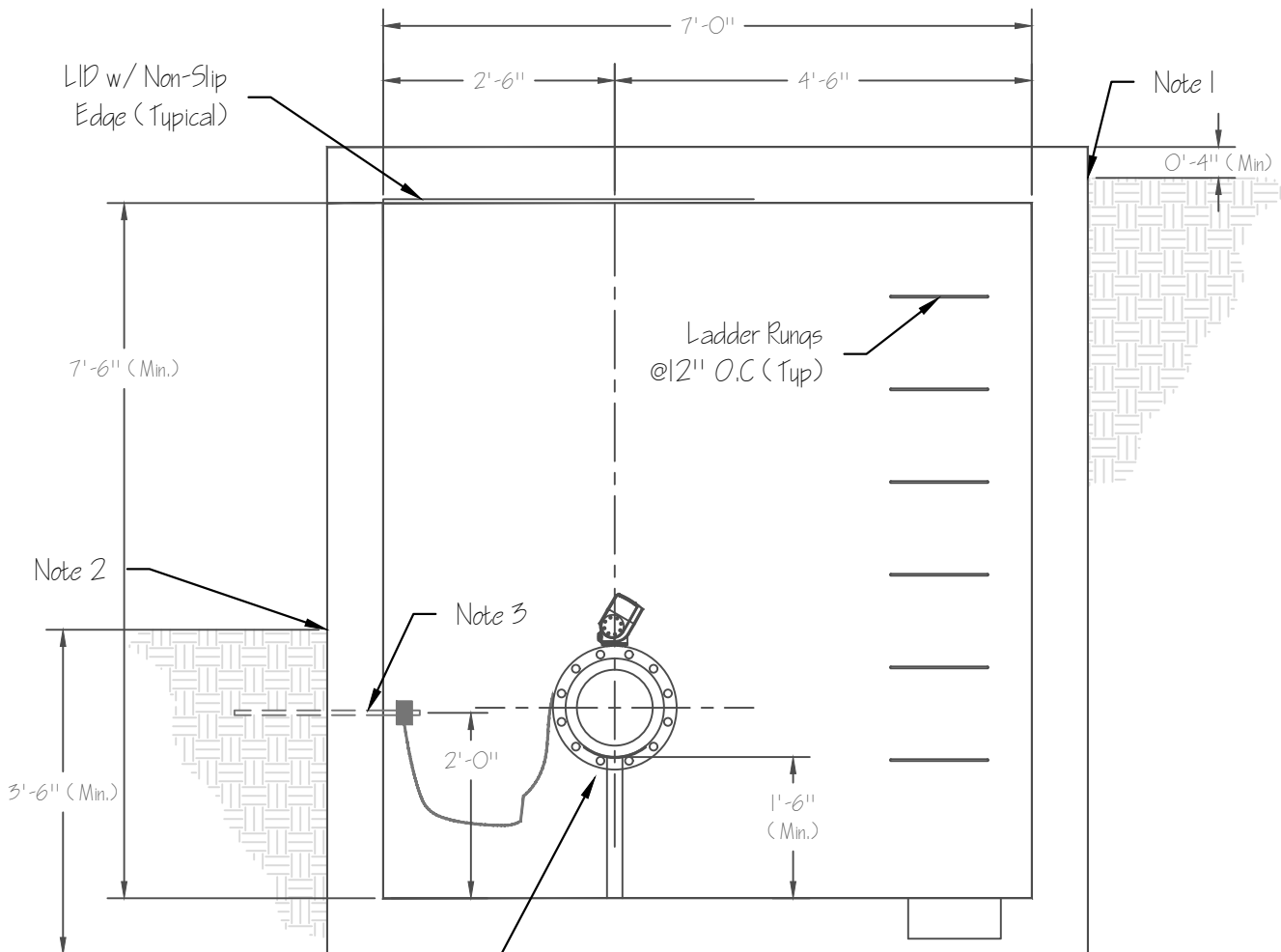
**LA PLATA ARCHULETA WATER DISTRICT
STANDARD DETAILS
MASTER METER VAULT**

**HARRIS WATER
ENGINEERING INC.**

954 East Second Ave.
Durango, Co. 81303
970-259-1028



DATE: 07/30/20	SHT: 16A	REVISIONS		
CHECKED BY: DH	SCALE: N.T.S.	NO.	DESCRIPTION	DATE
DRAWN BY: DD				



10" Krohne Waterflux 3070
Refer to Manufacturer's
Installation Details

VAULT SECTION 1

Notes:

1. Fill Dirt to a Minimum of 4" from Top of Master Meter Vault on Highest Adjacent Grade.
2. Fill Dirt to a Minimum of 3'-6" from Bottom of Master Meter Vault on Lowest Adjacent Grade.
3. Install $\frac{5}{8}$ " or $\frac{3}{4}$ " Rebar Ground Rod with Ground Clamp and 1 AWG Solid Copper Ground Wire.
4. Maintain Minimum Cover over Pipe per Plans.

**LA PLATA ARCHULETA WATER DISTRICT
STANDARD DETAILS
MASTER METER VAULT**

**HARRIS WATER
ENGINEERING INC.**

954 East Second Ave.
Durango, Co. 81303
970-259-1028

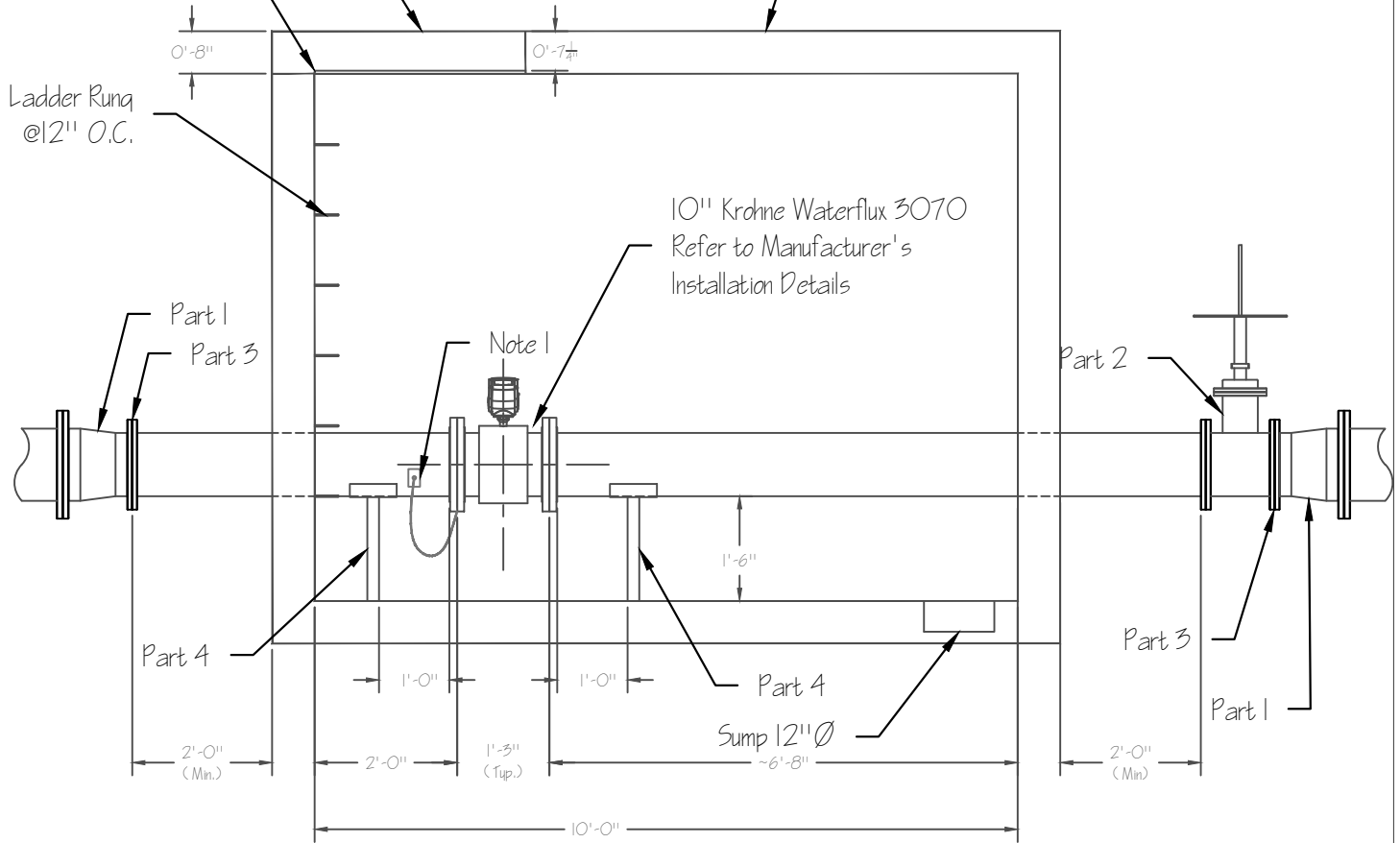


DATE: 07/30/20	SHT: 16B	REVISIONS		
CHECKED BY: DH	SCALE: N.T.S.	NO.	DESCRIPTION	DATE
DRAWN BY: DD				

Concrete Vault Cover
Section to Have
4 picking Eyelets Minimum.

Slip Resistant
Lid Edge (typ.)

Vault Hatch Lid (not shown) Fits 48" x 30"
Typical Opening With Hinged Lockable H5-20
Rated Hatch. U.S.F. Fabrication Inc. Model 70713
or Approved Equivalent Aluminum Hatch Area of
Frame in Contact With Concrete to be Painted
with Bituminous coating.



VAULT SECTION 2

Parts List:

1. 2 - 12" x 10" Reducer FLxFL.
2. 1 - 10" Gate Valves FLxFL.
3. 2 Ea 10" Slip on Flange.
4. 2 Ea Pipe Support Stands - Epoxy Coated (blue).
5. Mechanical Pipe Restraints are Required but Not Shown in the Drawings.

Notes:

1. Install 5/8" or 3/4" Rebar Ground Rod with Ground Clamp and 1 AWG Solid Copper Ground Wire.

**LA PLATA ARCHULETA WATER DISTRICT
STANDARD DETAILS
MASTER METER VAULT**

**HARRIS WATER
ENGINEERING INC.**

954 East Second Ave.
Durango, Co. 81303
970-259-1028



DATE: 07/30/20	SHT: 16C	REVISIONS		
CHECKED BY: DH	SCALE: N.T.S.	NO.	DESCRIPTION	DATE
DRAWN BY: DD				