PROJECT LOCATION— Basin Mountain Florida Grandview (550) Grandview (160) Florida Florida Florida

ANIMAS AIRPARK PROPERTY OWNERS ASSOCIATION WATER DISTRIBUTION SYSTEM

La Plata County, Colorado

END PROJECT STA. 54+42-

LOCATION MAP N.T.S.



SHEET DESCRIPTION

-GENERAL NOTES AND TYPE 'A' BLOWOFF DETAILS
- 2.....TRNCH AND BACKFILL DETAILS
- 3......GATE VALVE AND FIRE HYDRANT DETAILS
- 4.....THRUST BLOCK DETAILS
- 5.....PLAN AND PROFILE STA. 5+00 TO STA. 15+00
- 6.....PLAN AND PROFILE STA. 15+00 TO STA. 25+00
- 7.......PLAN AND PROFILE STA. 25+00 TO STA. 35+00 8......PLAN AND PROFILE STA. 35+00 TO STA. 44+00
- 9......PLAN AND PROFILE STA. 44+00 TO STA. 54+42
- 10......PLAN AND PROFILE FLIGHT LINE ROAD
- 11......PLAN AND PROFILE WIND SOCK ROAD
- 12......PLAN AND PROFILE TAIL DRAGGER LANE

VICINITY MAP

DATE: 6/30/2014

DRAWN BY: MG

CHECKED BY: BS

SHEET

<u>00</u> OF <u>12</u>

ANIMAS AIRPARK PROPERTY OWNERS ASSOCIATION
WATER DISTRIBUTION SYSTEM
COVERSHEET

REVISIONS		
NO.	DESCRIPTION	DATE

HARRIS WATER ENGINEERING INC.

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

CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987 OR (811)
CALL 3 BUSINESS DAYS PRIOR
TO ANY CONSTRUCTION.

General Notes:

All materials and workmanship shall be in accordance with the City of Durango Development Standards for Public Improvements and Construction Specifications. When requirements in the construction specific ations or design standards conflict the more stringent requirement shall apply.

The contractor is responsible for obtaining all required permits prior to the commencement of any work on the project.

An Excavation Permit for Work in the Public Ways is required for all work in the public right-ofway.

The contractor shall be responsible for notifying the owner /developer of any problems in conforming to the approved plans for any element of the proposed improvements prior to its construction.

The engineer shall be responsible during construction activities to resolve construction problems due to changed conditions or design errors encountered by the contractor during the progress of any portion of the proposed work. If, in the opinion of the Engineer or the Project Inspector, the modification proposed by the contractor to the approved plans involve significant changes to the character of the work or to future contiguous public or private improvements, the engineer shall be responsible for submitting revised plans to the appropriate agencies for approval prior to any further construction related to that portion of the work. Any improvements constructed not in accordance with the approved plans or the approved revised plans, shall be removed and the improvements shall be reconstructed according to the approved plans.

Under ground utilities shown on these plans are from physical evidence on the surface and historic maps. The contractor shall be responsible for the horizontal and vertical location of all utilities prior to construction, including potholing if necessary. The contractor shall contact the appropriate agencies for location of all underground utilities at least 72 hours prior to commencement of construction.

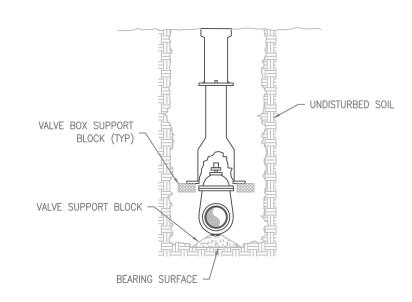
The contractor shall be responsible for providing a copy of "AS Constructed" plans to the appropriate agencies prior to final acceptance of work.

The contractor shall notify the Inspector at least 24 hours prior to desired inspection.

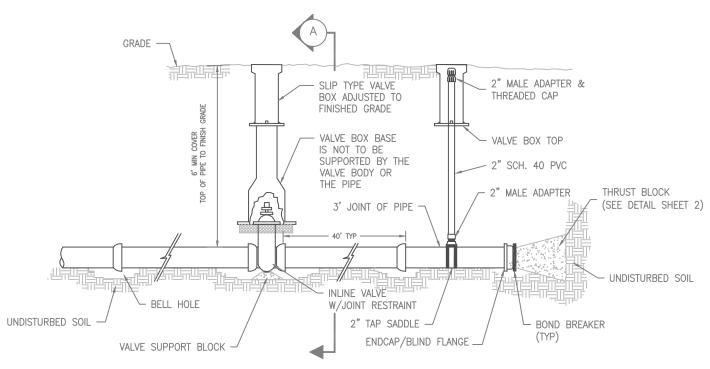
The contractor shall reset all Survey Monuments disturbed during construction within 60 days of project completion.

The contractor shall be solely and completely responsible for conditions at and adjacent to the job site, including safety of all persons and property during performance of the work. This requirement shall apply continuously and not limited to normal working hours.

The duty of the City, Owner or Engineer to conduct construction review of the contractor's performance is not intended to include review of the adequacy of the contractor's safety measures in, on, or near the construction site. Field conditions may exist that require changes to the drawings. If such conditions are encountered, standard engineering practices shall be followed.



SECTION A (NOT TO SCALE)



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

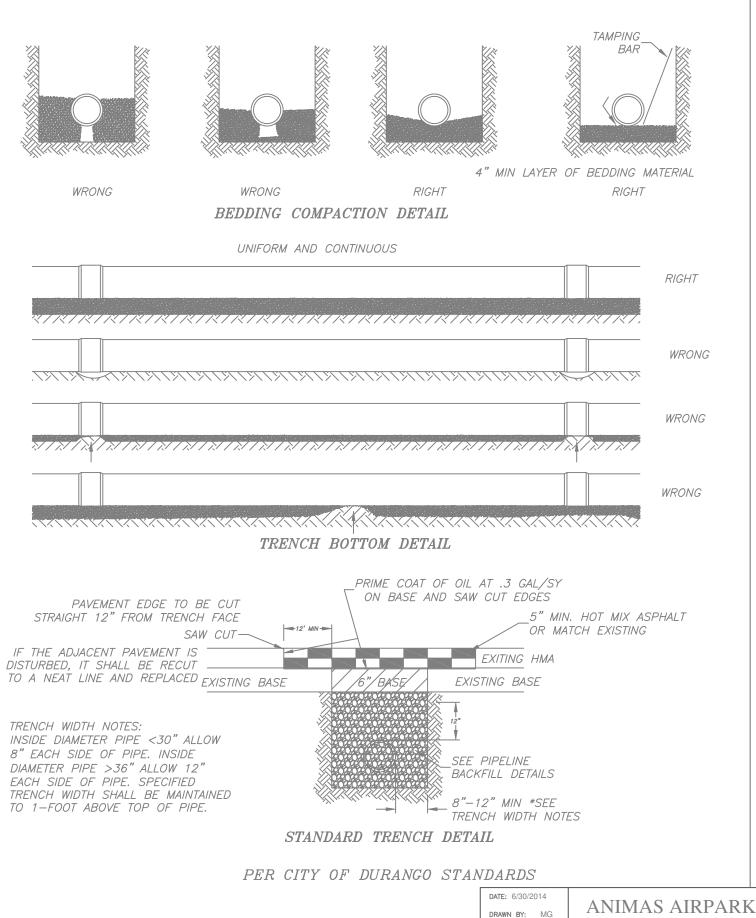
DATE: 6/30/2014

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SHEET 01 OF 12 ANIMAS AIRPARK PROPERTY OWNERS ASSOCIATION WATER DISTRIBUTION SYSTEM GENERAL NOTES AND TYPE 'A' BLOWFF

	REVISIONS	
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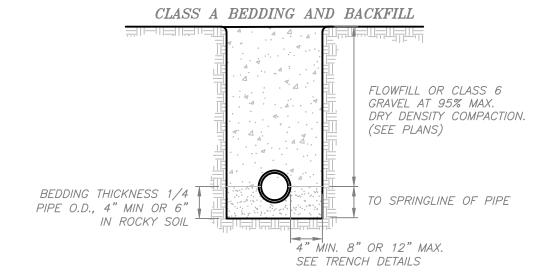
HARRIS WATER ENGINEERING INC.



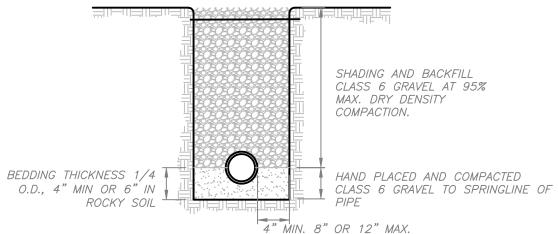
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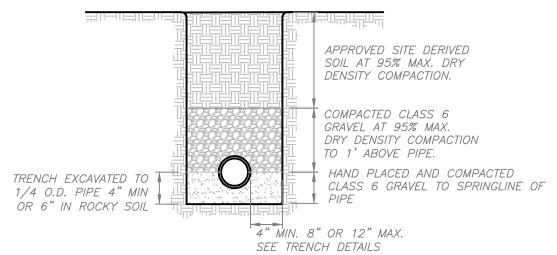
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CLASS B BEDDING AND BACKFILL



CLASS C BEDDING AND BACKFILL



SEE TRENCH DETAILS

BEDDING AND BACKFILL DETAIL

*PER CITY OF DURANGO STANDARDS

ANIMAS AIRPARK PROPERTY OWNERS ASSOCIATION
WATER DISTRIBUTION SYSTEM
TRENCH AND BACKFILL DETAILS

NOTES:

1. DENSITY TESTING PER

2. CLASS 6 BEDDING IS NOT APPLICABLE FOR AREAS TO BE PAVED. 3. PIPELINE TRENCHES

WITHIN EXISTING PAVED

AREAS LESS THAN 10'

IN LENGTH SHALL USE

CLASS A BEDDING AND

4. SEE TRENCHING DETAIL

FOR ADDITIONAL

REQUIREMENTS.

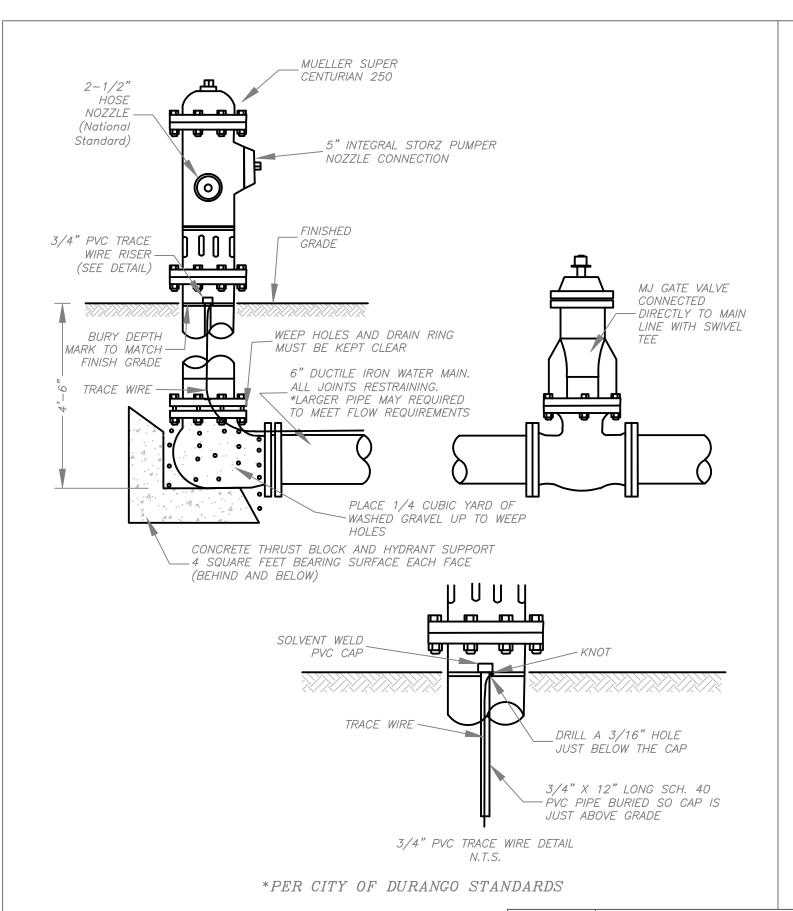
BACKFILL.

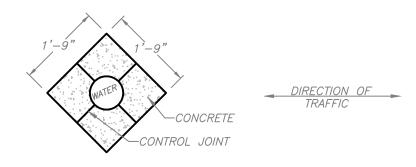
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REVISIONS

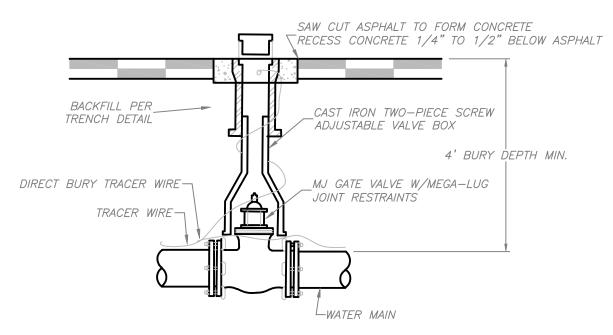
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HARRIS WATER ENGINEERING INC.





PLAN VIEW @ STREET LEVEL



WATER VALVE INSTALLATION DETAIL

NOTES:

- 1. VALVES LARGER THAN 12" ARE TO BE BUTTERFLY VALVES.
- 2. VALVE STEM EXTENSIONS ARE REQUIRED AT LOCATIONS WHERE BURY DEPTH IS 5'-6" OR GREATER. EXTENSION LENGTH SHALL MATCH THE DIFFERENCE BETWEEN BURY DEPTH AND 4'.

*PER CITY OF DURANGO STANDARDS

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SHEET

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ANIMAS AIRPARK PROPERTY OWNERS ASSOCIATION
WATER DISTRIBUTION SYSTEM
GATE VALVE AND RESTRAINED PIPE DETAIL:S

REVISIONS			
NO.	DESCRIPTION	DATE	

HARRIS WATER ENGINEERING INC.

CONCRETE DEAD MAN REBAR SEE NOTE 3 SEE NOTE 2

NOTES:

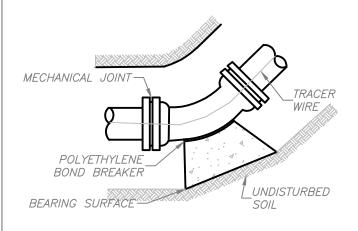
- DOWNWARD VERTICAL BEND DETAIL IS ONLY APPLICABLE FOR BENDS OF 45° OR LESS. MINIMUM 4' BURY DEPTH APPLIES.
- 2. DIMENSION TO MATCH CALCULATED BEARING AREA. WIDTH TO EQUAL LENGTH OR TRENCH WIDTH WHICHEVER IS GREATER.
- 3. GRADE 40 REBAR BENT FOR 3"
 CLEARANCE OVER PIPE AND 6"
 CLEARANCE ALONG BOTTOM OF
 CONCRETE. USE EQUIVALENT OF
 1 #4 REBAR FOR EVERY 8 S.F. OF
 CALCULATED BEARING AREA, 2 BARS
 MINIMUM.

TABLE FOR CONCRETE THRUST BLOCK BEARING FACTOR

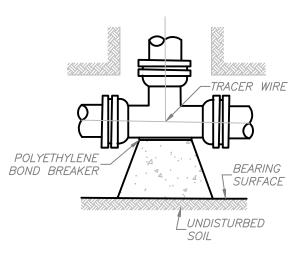
SIZE	BENDS			BENDS TEES	
OF PIPE	90°	45°	22.5°	11.25°	AND CAPS
6"	40	22	11	6	28
8"	71	38	20	10	50
10"	111	60	31	15	79
12"	160	87	44	22	113
14"	218	118	60	30	154
16"	284	154	78	39	201
18"	360	195	99	50	254
20"	444	240	123	62	314
22"	538	291	148	75	380
24"	640	346	177	89	452
30"	1000	541	276	139	707
36"	1439	779	397	200	1018

BEARING AREA (SF)=BEARING FACTOR X SPECIFIED
TEST PRESSURE (PSI) SOIL CAPACITY (PSF)

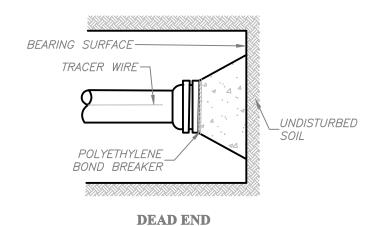
*PER CITY OF DURANGO STANDARDS







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NOTES:

- 1. LENGTH OF BEARING AREA TO APPROXIMATE HEIGHT OF BEARING AND BE CENTERED WITH THE PIPE.
- 2. DETAIL APPLICABLE WHERE STANDARD TRENCH SIDE CLEARANCES ARE PROVIDED AT THRUST BLOCK LOCATION.
- 3. MEGA-LUG JOINT RESTRAINTS ARE REQUIRED AT ALL FITTING JOINTS.
- 4. ALL FITTINGS REQUIRING THRUST
 BLOCKS SHALL BE WRAPPED WITH
 POLYETHYLENE ENCASEMENT MATERIAL.
 CONCRETE SHALL NOT BEAR ON BOLTS
 OF MECHANICAL JOINT FITTINGS.

*PER CITY OF DURANGO STANDARDS

DATE: 6/30/2014

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ANIMAS AIRPARK PROPERTY OWNERS ASSOCIATION
WATER DISTRIBUTION SYSTEM
THRUST BLOCK DETAILS

REVISIONS			
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HARRIS WATER ENGINEERING INC.

