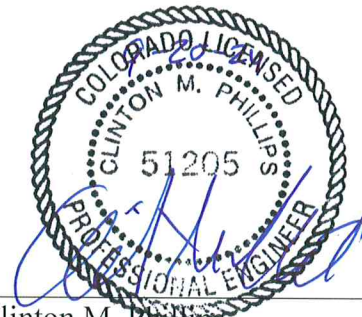


Special Improvement District No. 5 Large Capacity Augmentation Well #2 Pipeline and Road

Addendum No. 1

This addendum is issued in reference to various parts of the Plans and Contract Documents and to document responses of questions from potential Bidders. The following information shall be incorporated in the referenced Contract Documents and Specifications:

1. A revised specification for Item 2 – Pipe and Pipe Installation is enclosed.
  - a. The 16” diameter PVC pipeline and fittings are to be changed to 18” diameter 80PSI PVC pipe.
  - b. The 16” steel discharge pipeline and fittings are to be changed to 18” diameter steel.
  - c. Underground steel pipe corrosion protection has been expanded to permit additional corrosion protection methods.
2. Sheets 5, 6, 8, and 9 of the construction plans have been revised and a new plan set is enclosed. The revisions to the sheet are documented by revision clouds.
3. A new bid schedule has been enclosed reflecting the change from 16” diameter pipe to 18” diameter pipe.



Clinton M. Phillips  
Registered Engineer  
Colorado Certificate No. 51205

Enclosures: Revised Sheets 5, 6, 8, and 9 of the Construction Plans  
Revised Specification for Item 2 – Pipe and Pipe Installation  
Revised Bid Schedule

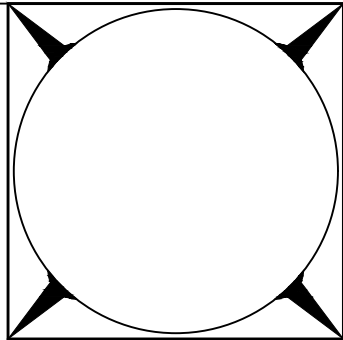


GENERAL AND SITE NOTES

1. THE PURPOSE OF THIS PROJECT IS TO CONSTRUCT A ROAD FOR ACCESS TO A WELL SITE, IN ADDITION TO INSTALLING A DISCHARGE PIPELINE AND SHORT SECTION OF CHANNEL.
2. THE ROAD WILL CONSIST OF CLEARING AND GRUBBING A 12' WIDE SECTION, AND INSTALLING TWO CULVERTS. ADDITIVE ALTERNATE ITEMS INCLUDE PLACING 2" OF AGGREGATE BASE COURSE, AND 2" OF 3/4" MINUS GRAVEL TO FORM A ROAD SURFACE.
3. THE PIPELINE WILL BE MADE OF STEEL AND PVC PIPE WITH VARYING LENGTHS AND DIAMETERS. APPURTENANCES OF THE PIPELINE WILL INCLUDE A CHECK VALVE, VENTS, A FLOW METER, AND OTHER ITEMS.
4. AT THE CREEK A DISCHARGE CHANNEL WILL BE CONSTRUCTED TO DECELERATE FLOWS AND PREVENT EROSION.
5. THE CONTRACTOR SHALL KEEP ALL OPERATIONS WITHIN THE LIMITS OF THE INDICATED EASEMENTS. THE CONTRACTOR SHALL KEEP EQUIPMENT AND MATERIALS WITHIN THESE LIMITS. CONSTRUCTION ACTIVITIES, STAGING, PARKING, OR OFF-SITE DISPOSAL SHALL NOT ENCROACH UPON PRIVATE OR PUBLIC LANDS WITHOUT WRITTEN APPROVAL FROM THE PROPERTY OWNER OR LAND MANAGEMENT AGENCY.
6. SHOULD ANY QUESTIONS ARISE OR ANY DISCREPANCIES BE NOTED IN THE PLANS, THE ENGINEER SHOULD BE CONSULTED PRIOR TO CONSTRUCTION OF THE AFFECTED ITEMS.
7. THE CONTRACTOR SHALL PROTECT ALL EXISTING SURVEY MONUMENTS FROM DAMAGE DURING CONSTRUCTION OPERATIONS. ANY MONUMENTS DISTURBED BY THE CONTRACTOR SHALL BE RESET AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR AND THE ENGINEER SHALL NOTE THESE MONUMENTS IN THE FIELD PRIOR TO CONSTRUCTION.
8. ANY DAMAGE TO PUBLIC ROADWAYS SHALL BE REPAIRED IMMEDIATELY AND PRIOR TO CONTINUING OPERATIONS. DUST SHALL BE PROPERLY CONTROLLED, AND ANY MUD OR OTHER MATERIAL TRACKED OR OTHERWISE DEPOSITED ON THE ROADWAY SHALL BE REMOVED DAILY OR AS ORDERED BY THE ENGINEER.
9. IF THE OWNER HAS LIVESTOCK PRESENT ON THE PROPERTY AT THE TIME OF CONSTRUCTION THE CONTRACTOR IS TO CLOSE ANY GATES THEY OPEN WHEN ACCESSING THE JOB SITE.

UTILITY GENERAL NOTES

- 1) THE UTILITIES SHOWN ON THE PLANS ARE PLOTTED FROM THE BEST AVAILABLE INFORMATION AT THE TIME OF DESIGN. AS MANY OF THE UTILITIES ARE PRIVATE SERVICE LINES WITHOUT TRACER WIRE, ACCURATE LOCATES ARE NOT AVAILABLE. THE INFORMATION SHOWN ON THESE PLANS CONCERNING TYPE AND LOCATION OF UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. SOME UTILITIES MAY HAVE BEEN ADDED OR RELOCATED PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL LOCATIONS OF EXISTING STRUCTURES AND UTILITIES SHOWN ON THE DRAWINGS AND ASCERTAIN WHETHER ANY OTHER STRUCTURE AND UTILITIES MAY EXIST. EVERY REASONABLE MEANS SHALL BE USED, INCLUDING FIELD LOCATION OF THE UTILITY USING WHATEVER PROSPECTING MEANS ARE NECESSARY. THE CONTRACTOR ASSUMES RESPONSIBILITY FOR THE PROTECTION OF ALL UTILITIES DURING THE WORK, AND SHALL HOLD THE OWNER AND THEIR CONSULTANTS HARMLESS FOR ANY AND ALL DAMAGES TO UTILITIES ARISING FROM CONSTRUCTION OPERATIONS.
- 2) THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITIES AT LEAST TWO (2) BUSINESS DAYS, NOT INCLUDING THE ACTUAL DAY OF NOTICE, PRIOR TO COMMENCING SUCH OPERATIONS. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT 811 OR 1-800-922-1987, TO HAVE LOCATIONS OF UNCC REGISTERED LINES MARKED BY MEMBER COMPANIES. ALL OTHER UNDERGROUND FACILITIES SHALL BE LOCATED BY CONTACTING THE RESPECTIVE OWNER. UTILITY SERVICE LATERALS SHALL ALSO BE LOCATED PRIOR TO BEGINNING EXCAVATION OR GRADING.
- 3) THE CONTRACTOR SHALL VERIFY AND DOCUMENT THE CONDITION OF EXISTING UTILITIES (VISIBLE FACILITIES) WITH THE ENGINEER AND REPRESENTATIVES FROM THE UTILITY COMPANIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 4) THE CONTRACTOR SHALL FULLY COORDINATE UTILITY WORK WITH THE AFFECTED UTILITY PROVIDER AS APPROPRIATE.



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NO.	DATE	BY	APP'D.	DATE	REV.
1	9/20/24	WSS/CMP	WSS/CMP		
		WSS	CMP		
		WSS	CMP		
		WSS	CMP		

CHECKED AS NOTED DATE 8/23/24

APPROVED DATE 8/23/24

DAVIS ENGINEERING SERVICE, INC. ALAMOSA, COLORADO 81101 PHONE: (719) 589-3004 FAX: (719) 589-3172

ELEVATION BASE ASSUMED



CLIENT

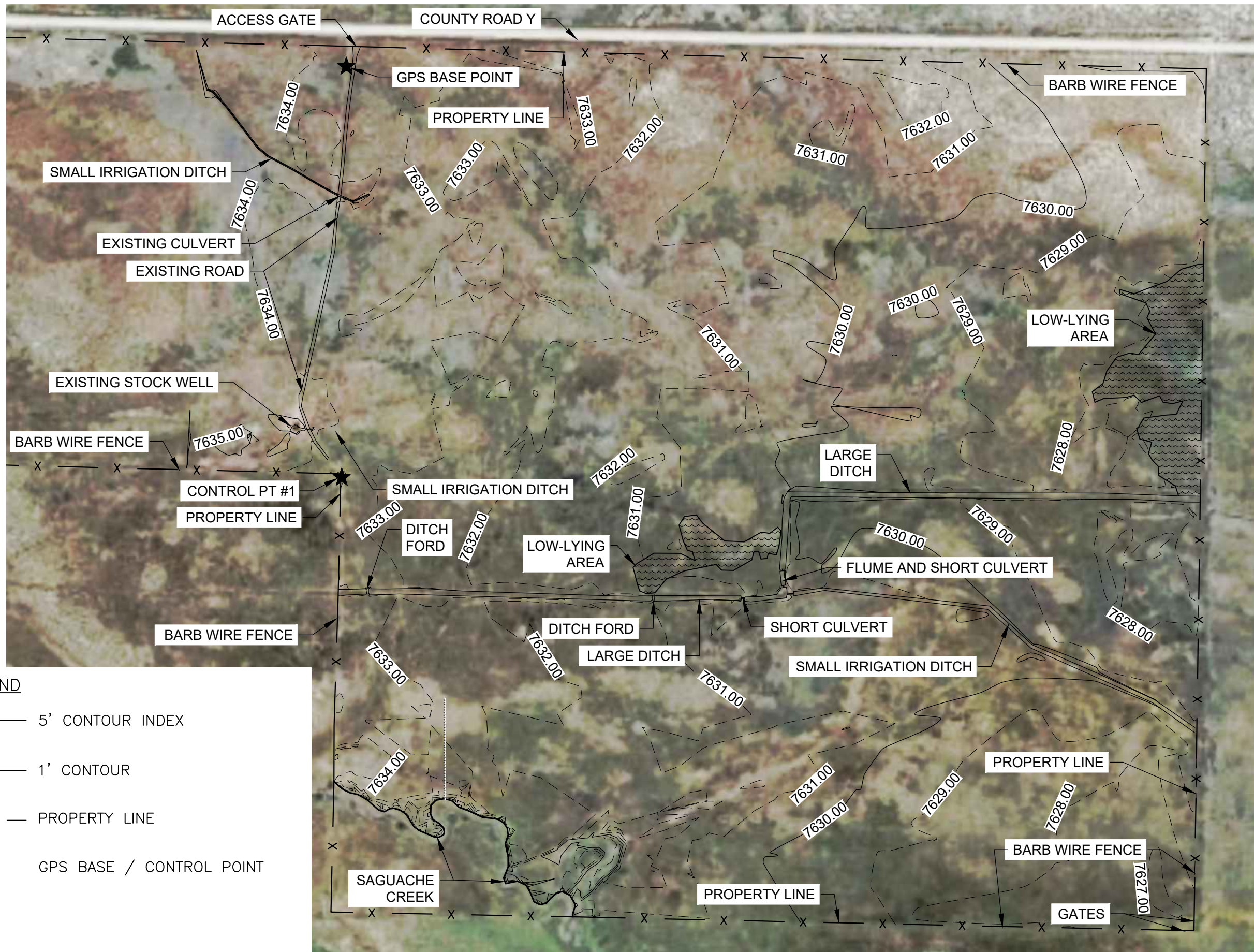
Special Improvement District No. 5  
8805 Independence Way  
Alamosa, CO 81101

PROJECT

Large Capacity Augmentation Well #2  
Pipeline & Road

DRAWING

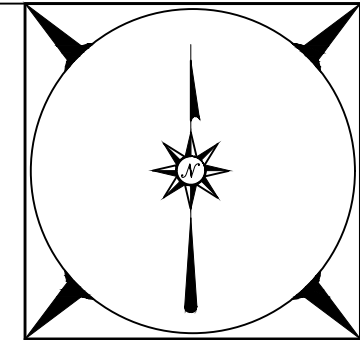
Site & Utility Notes



**LEGEND**

- 5' CONTOUR INDEX
- 1' CONTOUR
- x - PROPERTY LINE
- ★ GPS BASE / CONTROL POINT

**EXISTING CONDITIONS SITE MAP**  
Scale 1":300'



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NO.	DATE	BY	APP'D.
1	9/20/24	WSS/CMP	
		CMP/WSS	
		WSS	
		CMP	

CHECKED AS NOTED DATE 8/23/24

DAVIS ENGINEERING SERVICE, INC.  
1414 S. ALAMOSA AVENUE  
ALAMOSA, COLORADO 81101  
PHONE: (719) 589-3004  
FAX: (719) 589-1712

ELEVATION BASE ASSUMED



CLIENT  
Special Improvement District No. 5  
8805 Independence Way  
Alamosa, CO 81101

PROJECT  
Large Capacity Augmentation Well #2  
Pipeline & Road

MAP  
Existing Conditions Map







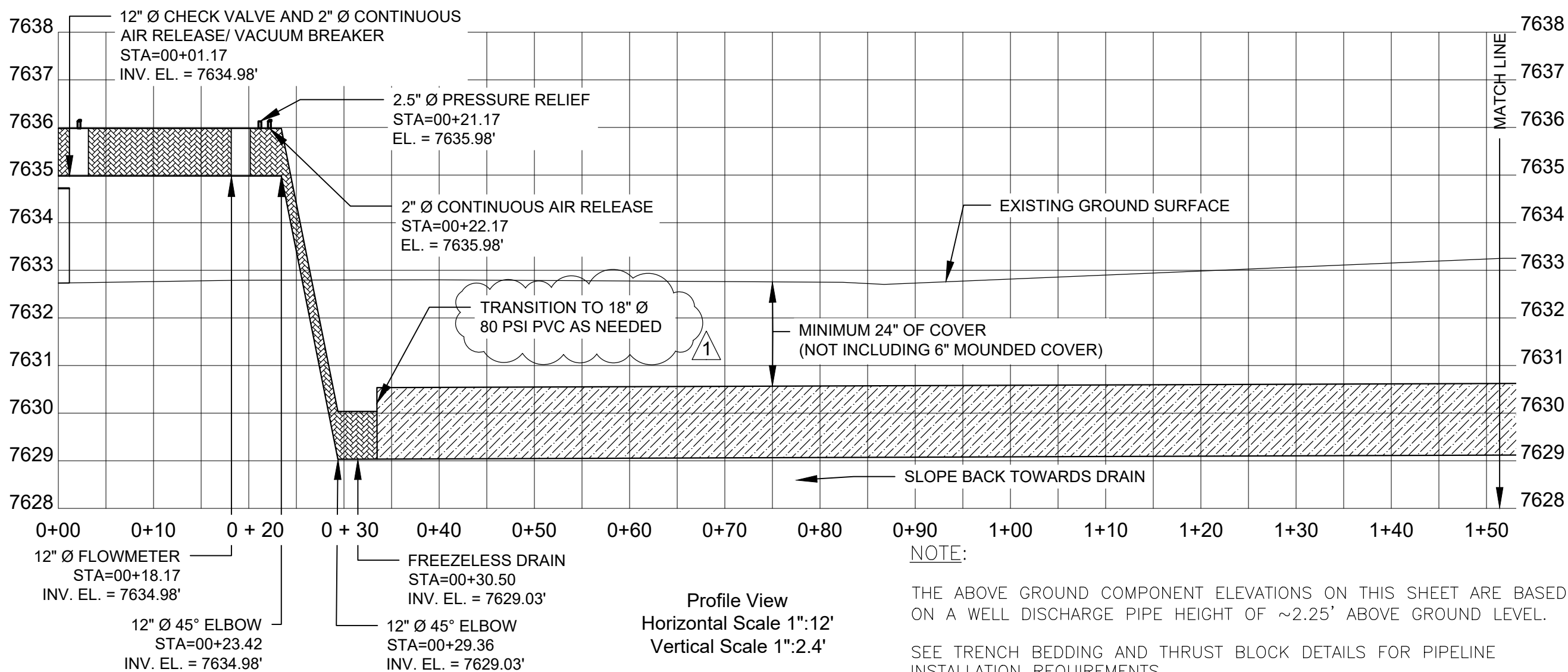
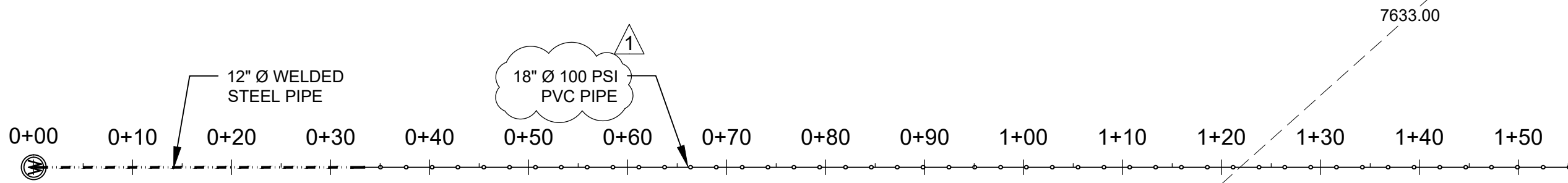
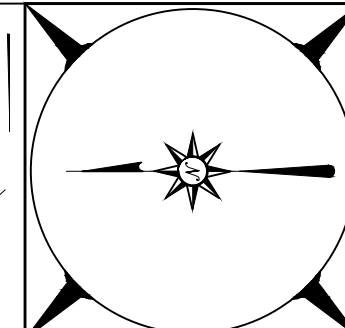




**LEGEND**

- 12" Ø WELDED STEEL PIPE
- 5' CONTOUR INDEX
- 18" Ø PVC PIPE
- 1' CONTOUR
- 18" Ø WELDED STEEL PIPE
- ▨ RIPRAP DISCHARGE DITCH

Plan View  
Scale 1":12'



Profile View  
Horizontal Scale 1":12'  
Vertical Scale 1":2.4'

**NOTE:**  
THE ABOVE GROUND COMPONENT ELEVATIONS ON THIS SHEET ARE BASED ON A WELL DISCHARGE PIPE HEIGHT OF ~2.25' ABOVE GROUND LEVEL.  
SEE TRENCH BEDDING AND THRUST BLOCK DETAILS FOR PIPELINE INSTALLATION REQUIREMENTS.

**DAVIS ENGINEERING SERVICE, INC.**

SINCE 1944

**DES**

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REV.	DATE	BY	APP'D.	WSS	CMP	AS NOTED	8/23/24
1	9/20/24			WSS	CMP	AS NOTED	8/23/24

ELEVATION BASE ASSUMED



Special Improvement District No. 5  
8805 Independence Way  
Alamosa, CO 81101

Large Capacity Augmentation Well #2  
Pipeline & Road

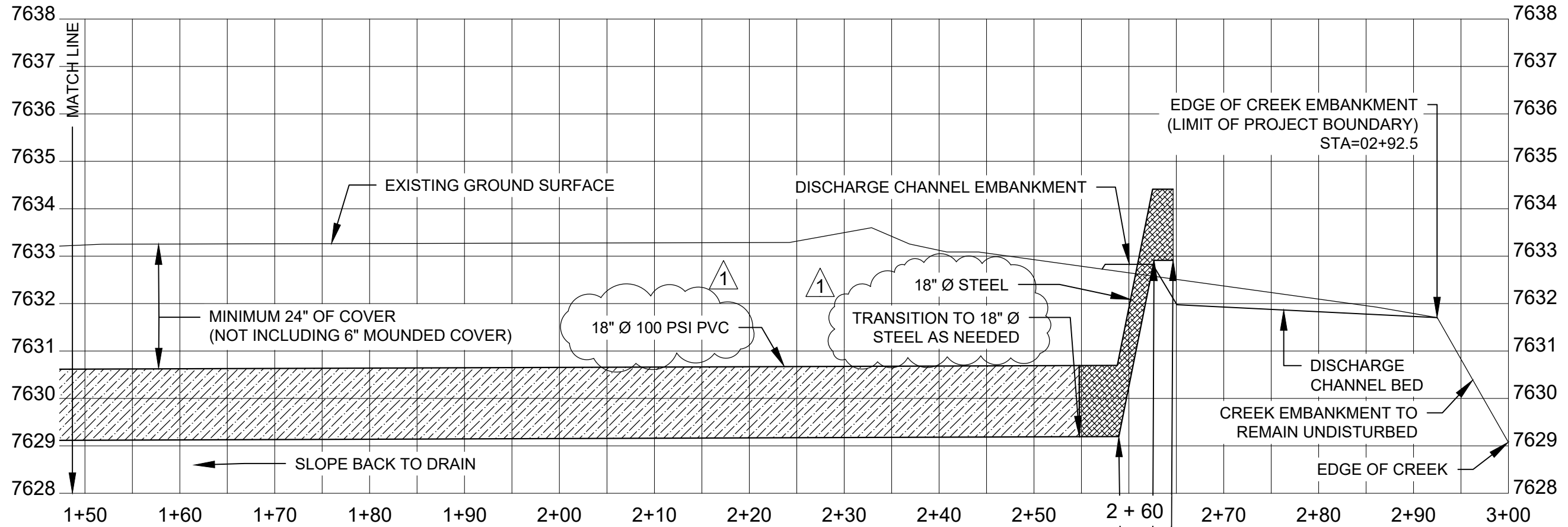
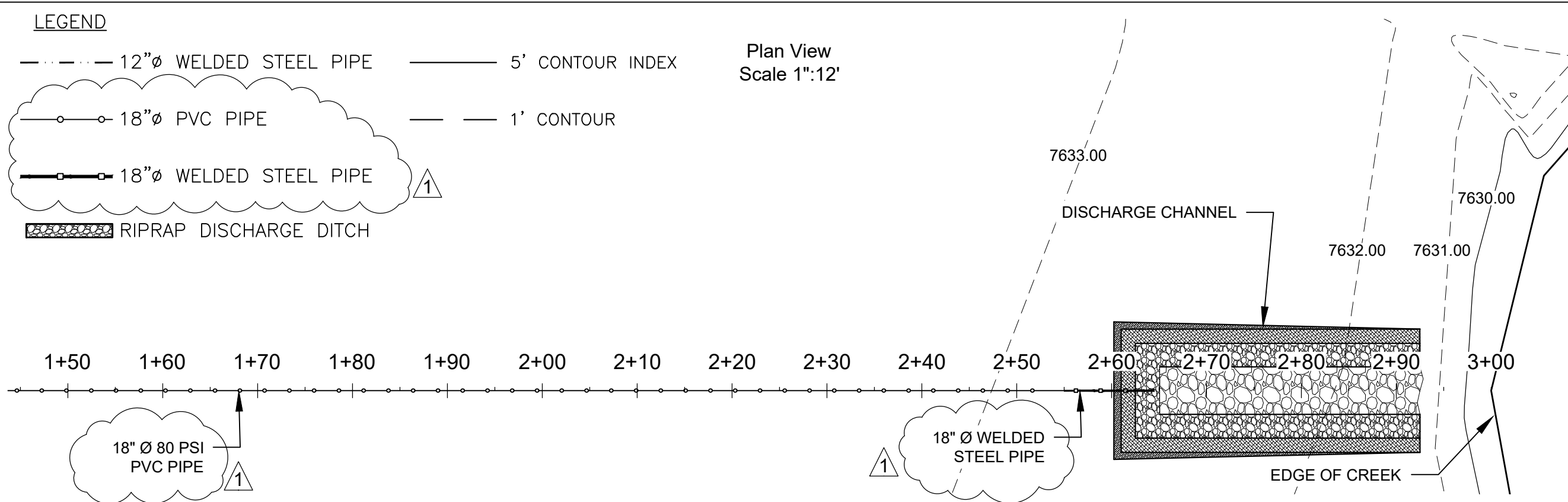
Pipeline Plan & Profile 1

E02068  
Sheet 8 of 9

**LEGEND**

- 12"Ø WELDED STEEL PIPE
- 5' CONTOUR INDEX
- 18"Ø PVC PIPE
- 1' CONTOUR
- 18"Ø WELDED STEEL PIPE
- ▨ RIPRAP DISCHARGE DITCH

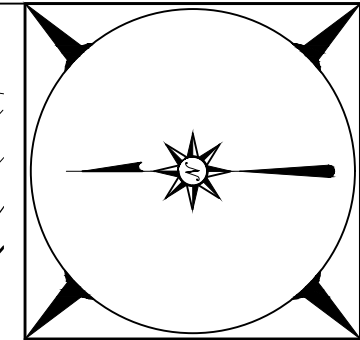
Plan View  
Scale 1":12'



**NOTE:**

SEE TRENCH BEDDING AND THRUST BLOCK DETAILS FOR PIPELINE INSTALLATION REQUIREMENTS.

Profile View  
Horizontal Scale 1":12'  
Vertical Scale 1":2.4'



**DAVIS ENGINEERING SERVICE, INC.**

DAVIS ENGINEERING SERVICE, INC.  
1440 ALAMOSA, COLORADO 81004  
PHONE: (719) 589-3000  
FAX: (719) 589-1712

DATE	AS NOTED	DATE	8/23/24
CHECKED	AS NOTED	APPROVED	CMP
DESIGNED	WSS	DESIGNED	CMP
WSS			
DATE	BY	DATE	BY

1.5" / 1" / 0" ELEVATION BASE ASSUMED



Special Improvement District No. 5  
8805 Independence Way  
Alamosa, CO 81101

Large Capacity Augmentation Well #2  
Pipeline & Road

Pipeline Plan & Profile 2

E02068

Sheet 9 of 9

## Item 2 - PIPE AND PIPE INSTALLATION

2.1 **SCOPE:** This SPECIFICATION covers the installation of water pipelines as part of this PROJECT.

2.2 **MATERIALS:** All pipe shall be installed in accordance with the pipe manufacturer's recommendations, unless otherwise specified herein. All pipe and fittings shall be new, clean, and free from scratches and abrasions.

Pipe to be installed shall conform to the following SPECIFICATIONS:

- a. **Polyvinyl Chloride (PVC) Pipe and Fittings (80 PSI SDR 51 Pipe):** Polyvinyl chloride pipe supplied under this specification shall conform to the requirements of ASTM D1785 cell class 12454; to including 18-inches in diameter. Pipe joints and couplings shall be made with appropriate gaskets conforming to ASTM F477. Accessories and fittings shall be of the same pressure rating as the pipe specified.
- b. **Welded Steel Pipe:** Steel pipe shall be welded steel or seamless steel to including 12 and 18-inches in diameter rated to a minimum of 80 PSI. Steel pipe fittings shall be forged steel or fabricated steel of a grade and size to match mating steel pipe as required for the application. All steel pipe and fittings which are underground shall be polyethylene encased with Poly Wrap, or similarly protected from corrosion.

All pipe, regardless of type, shall be installed in accordance with the pipe manufacturer's recommendations, unless otherwise specified herein. Pipe and fittings shall be new, clean, and free from scratches and abrasions. Below are the approximate lengths of each pipe type in this PROJECT.

- 56' of 12" diameter Steel
- 222' of 18" diameter PVC
- 25' of 18" diameter Steel

The other pipeline components to be installed can be found in the design DRAWINGS with their stations and invert elevations labeled.

- (2) Steel 12" diameter 45-degree elbows
- (1) 12" to 18" diameter reducer
- (2) Steel 18" diameter 45-degree elbows

All fittings shall be installed according to the trench bedding and thrust block details included in the DRAWINGS.

2.3 **TRENCH EXCAVATION:** All excavation shall be by open cut, except where otherwise indicated on the DRAWINGS. Banks of trenches located on traveled ways or in proximity of existing

structures shall be kept as nearly vertical as possible, and if required, shall be properly sheeted and braced. In open areas, sloping banks of trenches will be permitted if only the sides of the trench above the top of the pipe are sloped. The excavation of the trench shall not advance more than 400 feet ahead of the completed pipe laying unless permitted by the ENGINEER. The trench bottom along the entire length of pipe and at pipe joints shall be properly excavated to assure adequate bearing of the pipe barrel along its entire length. The CONTRACTOR shall not commence any excavating with power equipment until diligent effort has been made to determine the location of all underground structures. The CONTRACTOR shall preserve intact any underground pipes or structures encountered during the construction, provided that their location is such that they do not interfere with the proposed pipelines. In any case where such utilities or structures are accidentally broken or damaged they shall immediately be repaired or replaced to restore them to a condition at least equal to that in which they were found, all at the expense of the CONTRACTOR.

Where groundwater is encountered in excavations it shall be removed so that all pipe laying and other construction operations can be performed under dry conditions. The CONTRACTOR shall control the grading in the vicinity of trenches as much as possible so that the ground surface is properly sloped to prevent water from running into excavated areas.

The sides of trenches shall be firmly held in place with suitable bracing, sheeting and shoring whenever necessary to prevent injury to workers and damage to adjacent structures, utilities and road surfacing.

No blasting or other use of explosives will be permitted on this PROJECT, without the OWNER'S and ENGINEER'S written approval.

- 2.4 PIPE INSTALLATION: If the foundation is good firm earth, the trench bottom shall be shaped to give full support to the lower third of the pipe. If necessary, a layer of fine gravel or other suitable material shall be placed in the trench bottom to assure a proper bearing for the pipe. The ENGINEER shall determine when bedding is required. Bell holes shall be hand excavated to a depth two inches below the bell of the pipe. Payment for bedding will be in accordance with the specification entitled "BEDDING MATERIAL".

The width of the trench shall be ample to permit the pipe to be laid and joined properly and the bedding material placed and tamped. Unless authorized by the ENGINEER, the width of the trench, at the top of the pipe, shall not exceed the diameter of the pipe plus 24 inches.

Any pipe that is disturbed after laying shall be taken up and re-laid. The interior of all pipe shall be thoroughly cleaned of all foreign matter before being lowered into the trench and shall be kept clean during laying operations by means of plugs or other approved methods.

Under no circumstances shall pipe be laid so that groundwater can enter the pipe and no pipe shall be laid when trench or weather conditions are unsuitable for such WORK. At all times when WORK is not in progress, all open ends of pipes and fittings shall be securely closed so that no trench water, earth, or foreign materials will enter the pipe or the fitting. The subgrade upon which the pipe is placed shall consist of materials suitable for supporting the pipe without excessive settlement or stress development. In the event that rock or excessively spongy or unstable materials are encountered, they shall be removed to a depth of not less than 6 inches below the

bottom of the pipe, on grade; replaced with an approved material and mechanically compacted to grade.

Thrust blocks or other methods of pipe joint restraints as approved by the ENGINEER shall be provided at all tees, plugs, caps, valves, hydrants, and horizontal or vertical bends of 22½° or more. Such anchorage shall be constructed of concrete or other joint restraint methods and approved by the ENGINEER.

All water pipelines shall be installed with a minimum of 24 inches of cover from the top of the pipe to the natural ground surface unless otherwise shown on the DRAWINGS. An additional 6 inches of cover shall be mounded over the top of the pipeline, above the natural ground surface.

Pipe shall be protected during handling against impact, shocks and free fall. All pipe shall be cut with a type of cutter employing a method of cutting normally accepted by the trade. No method of cutting shall be employed which depends on impact or shock. This precludes the use of hammer and chisel or similar tools for cutting and trimming pipe.

- 2.5 TRENCH BACKFILL: The trenches shall not be backfilled until inspection has been completed and the ENGINEER or his designated inspector has accepted the pipe installation. Following placement of the pipe to proper line and grade, bedding material shall be placed, by hand, evenly along both sides of the pipe to a depth of approximately 4 inches. The bedding material shall then be hand tamped under the pipe haunches with an appropriate tamping bar. Additional 4 inch layers shall be placed and tamped until the tamped backfill is to a point not less than halfway up the pipe wall. Additional backfill material, consisting of finely divided and screened job excavated material free from debris, large clods of earth, frozen material, stones larger than 1½ inch in size or other material deemed unsuitable by the ENGINEER, shall be placed, by hand, evenly along both sides of the pipe in 4 inch lifts and compacted. Additional 4 inch layers shall be placed and compacted until the compacted backfill is to a point not less than 12 inches over the top of the pipe.

The remaining backfill material, above a point 12 inches above the pipe, shall consist of material excavated from the trench. Care shall be taken to avoid incorporating large stones which could damage the pipe by impact or by being forced down against the pipe under the weight of final backfill. Final backfill shall be placed in a manner which will prevent disturbing or damaging the pipe. Compaction of backfill material will be required to the extent that trench settlement will be minimized. Trench backfill material placed in county roads shall be compacted to not less than 95% of Standard Proctor Density (AASHTO T-99). Compaction shall be obtained by any methods, acceptable to the ENGINEER, that will not result in damage to the pipe, fittings, valves, appurtenances, adjacent structures or road surfaces.

Any grading necessary to provide a smooth ground surface shall be performed. Existing surfacing may be salvaged for re-use if the method of handling is approved by the ENGINEER. As soon as the trench has been backfilled, all stones, planks, and other refuse or materials of any description deposited by the CONTRACTOR in the line of WORK shall be removed and the surface of the ground shall be restored to the same condition as it was before the WORK was commenced. Any culverts, fences, etc., disturbed during construction shall be replaced, and the ditches restored to

original elevations. Trench cleanup shall be done within one week from the time the trench was backfilled.

Compaction tests of bedding and backfill materials shall be conducted at locations as determined by the ENGINEER. The OWNER shall pay all charges in connection with such testing except that the CONTRACTOR shall pay for any test which does not meet the PROJECT requirements. Backfill and bedding materials shall be compacted not less than 90% of the Standard Proctor Density (AASHTO T-99) outside of traveled ways and 95% of AASHTO T-99 in traveled ways throughout the width of the trench.

If groundwater exists, the trench will be dewatered so that pipe can be adequately installed. No additional payment will be made for trench dewatering.

- 2.6 METHOD OF MEASUREMENT AND PAYMENT: Payment for this item shall be made at the CONTRACT unit BID PRICE per linear foot of pipeline installed, based on material and diameter, inspected and accepted by the ENGINEER. Measurements shall be made along the centerline of the pipeline. Payment under this item shall be full compensation for installing all pipe, restraints, thrust blocks, excavation; dewatering; bracing; sheeting; shoring; joining; concrete; forms; reinforcement; testing; backfilling; resurfacing and cleanup and shall include the costs of all labor, equipment, and transportation necessary to complete the installation of water system pipelines in accordance with these SPECIFICATIONS and accompanying plans.

**BID SCHEDULE**

All of the items under this BID Schedule are alternates and may be accepted at the OWNER's discretion. BIDDER agrees to perform all the WORK described in the CONTRACT DOCUMENTS for the following unit prices or lump sum:

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Extension</u>
1	Mobilization, Demobilization and Bonding	1	l.s.	_____	_____
2a	18" Ø 80 PSI PVC Pipe with Fitting	222	l.f.	_____	_____
2b	12" Ø Welded Steel Pipe, with Fittings	56	l.f.	_____	_____
2c	18" Ø Welded Steel Pipe, with Fittings	25	l.f.	_____	_____
3a	12" Ø Totalizing Flow Meter	1	ea.	_____	_____
3b	Check Valve	1	ea.	_____	_____
3c	Continuous Air Vent / Vacuum Breaker	2	ea.	_____	_____
3d	2.5" Ø Pressure Relief	1	ea.	_____	_____
3e	Freezeless Drain and Control	1	ea.	_____	_____
3f	Flap Gate	1	ea.	_____	_____
4a	Discharge Ditch Riprap and Placement	5	c.y.	_____	_____
4b	Discharge Ditch Excavation	8	c.y.	_____	_____
5a	Access Road Clearing and Grubbing	1,837	l.f.	_____	_____
5b	8" Ø 20' Culvert and Installation	1	ea.	_____	_____
5c	24" Ø 20' Culvert and Installation	1	ea.	_____	_____
<b>TOTAL BASE BID</b>				<b>_____</b>	

ADDITIVE ALTERNATES

5d	Road Scarification and Compaction	1,837 l.f.	_____	_____
5e	ABC Road Base Placement and Compaction	136 c.y.	_____	_____
5f	3/4 Inch Minus Gravel Placement	136 c.y.	_____	_____

**TOTAL BID WITH ADDITIVE ALTERNATES** \_\_\_\_\_

**Award will be based on Total Base BID plus OWNER selected alternatives and completion time.**

Respectfully submitted,

\_\_\_\_\_  
Signature

Name: \_\_\_\_\_  
(Please Print or Type)

\_\_\_\_\_  
Address

Title: \_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
License Number (if applicable)

(SEAL - If BID is by a corporation)

Attest: \_\_\_\_\_