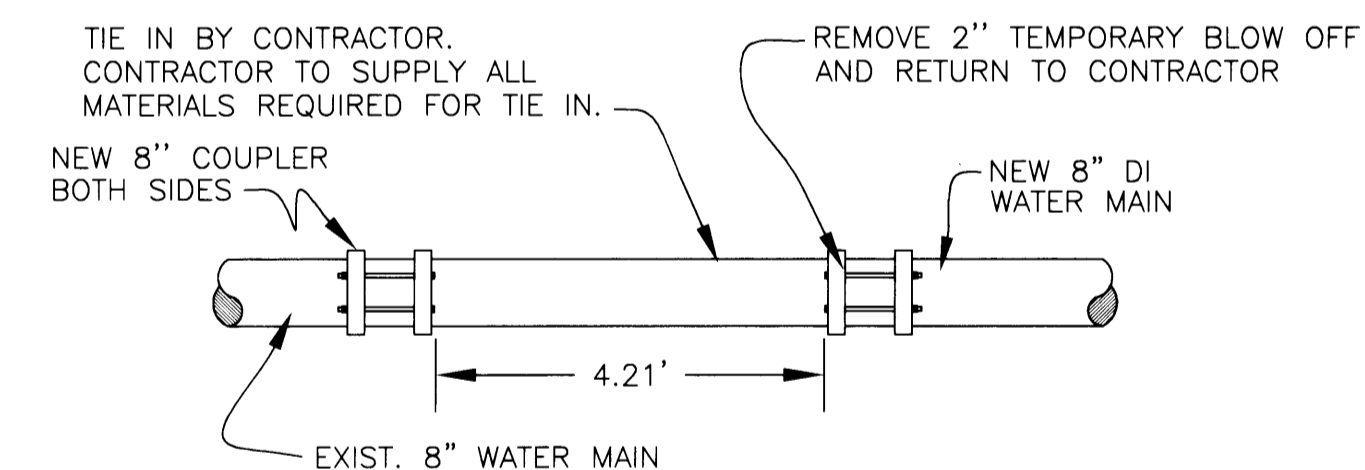


FITTING SIZE	TEE, WYE, PLUG, OR CROSS	90° BEND PLUGGED CROSS	TEE PLUGGED ON RUN A1	TEE PLUGGED ON RUN A2	45° BEND	22 1/2" BEND	11 1/4" BEND
2	0.5	1.1	1.6	1.1	0.5	--	--
3	1.3	2.1	3.2	2.1	1.3	0.5	--
4	2.7	3.7	5.1	3.7	2.7	1.1	0.5
6	5.6	8.0	11.5	8.0	4.3	2.7	1.3
8	10.1	14.2	20.3	14.4	7.7	4.0	1.7
10	15.8	22.4	31.5	22.4	12.3	6.4	3.2
12	22.7	32.0	45.4	32.0	17.6	9.1	4.5
14	30.7	43.5	61.4	43.5	23.8	12.3	6.1
16	40.1	56.9	80.1	56.9	31.0	16.0	8.0
18	50.7	72.1	101.5	72.1	39.0	20.3	10.1
20	62.7	88.9	125.5	88.9	48.3	25.1	12.5
24	90.8	128.2	181.6	128.2	70.0	36.3	18.2

NOTE: ABOVE BEARING AREAS BASED ON TEST PRESSURE OF 200 p.s.i. AND AN ALLOWABLE SOIL BEARING STRESS OF 1,000 lbs. PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION: BEARING AREA = (TEST PRESSURE/200) x (1000/SOIL BEARING STRESS) x (TABLE VALUE)

- NOTES:**
1. CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.
  2. KEEP CONCRETE CLEAR OF JOINT AND ACCESSORIES.
  3. THE REQUIRED THRUST BEARING AREAS FOR SPECIAL CONNECTIONS ARE SHOWN ENCIRCLED ON THE PLANS, e.g. (15) INDICATES 15 SQUARE FEET BEARING AREA REQUIRED.
  4. IF NOT SHOWN ON PLANS REQUIRED BEARING AREAS AT FITTING SHALL BE AS INDICATED ABOVE, ADJUSTED IF NECESSARY, TO CONFORM TO THE TEST PRESSURE(S) AND ALLOWABLE SOIL BEARING STRESS(ES) STATED IN THE SPECIAL SPECIFICATIONS.
  5. BEARING AREAS AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS. TAKE PRECEDENCE OVER BEARING AREAS AND BLOCKING DETAILS SHOWN ON THIS STANDARD DETAIL.

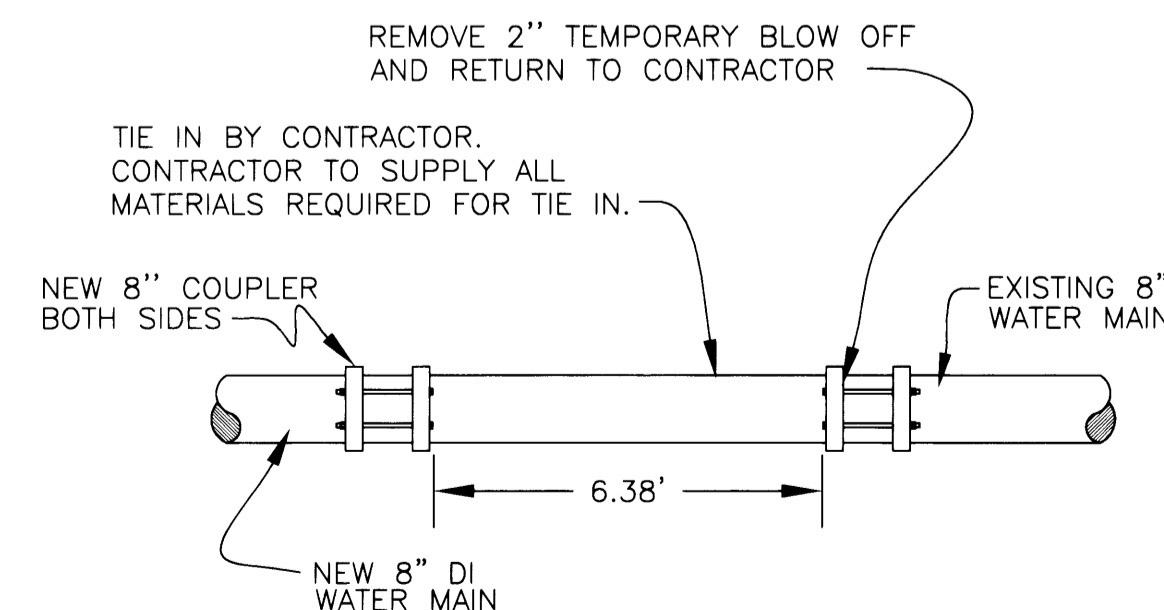
**THRUST BLOCK DETAILS AND INFORMATION**  
NO SCALE



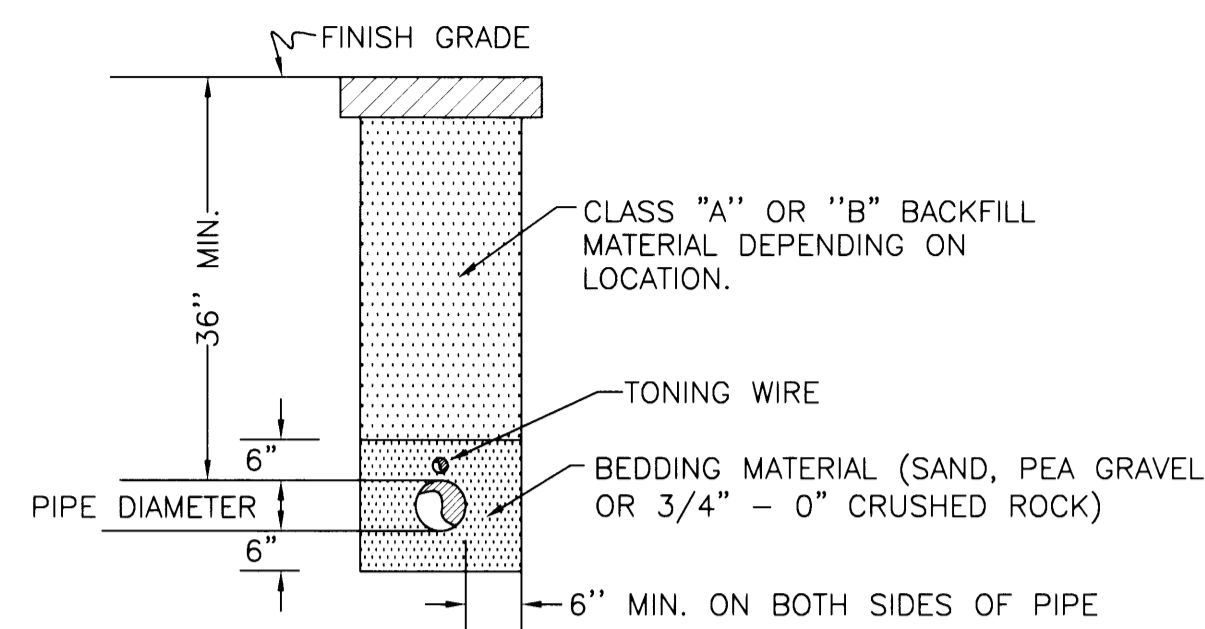
**WATER TIE-IN DETAIL**  
STA. 53+85, 15' RT

**NOTES:**  
ALL PIPE AND FITTINGS FOR TIE-IN TO BE CLEAN AND WIPED w/CHLORINE PRIOR TO INSTALLATION

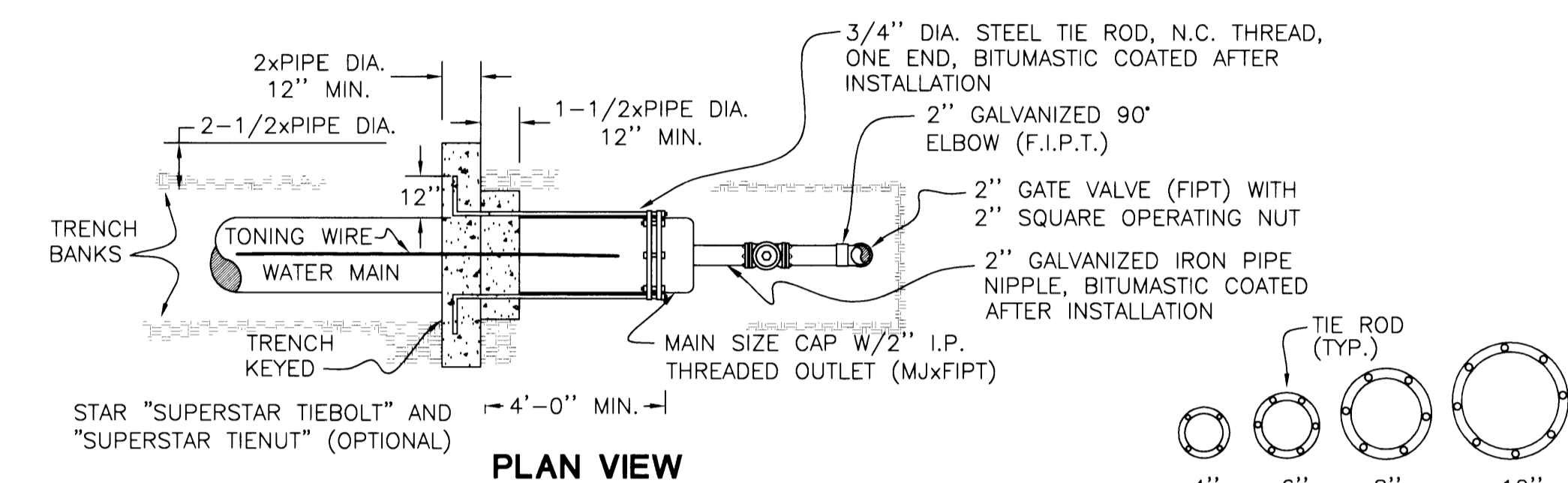
CONTRACTOR TO ALIGN NEW MAINLINE IN BOTH ALIGNMENT AND GRADE w/EXISTING 8" WATERLINE. CONNECTION TO EXISTING WATERLINE CAN ONLY BE MADE AFTER INSTALLATION, TESTING & DISINFECTION OF NEW WATERLINE HAS BEEN COMPLETED.



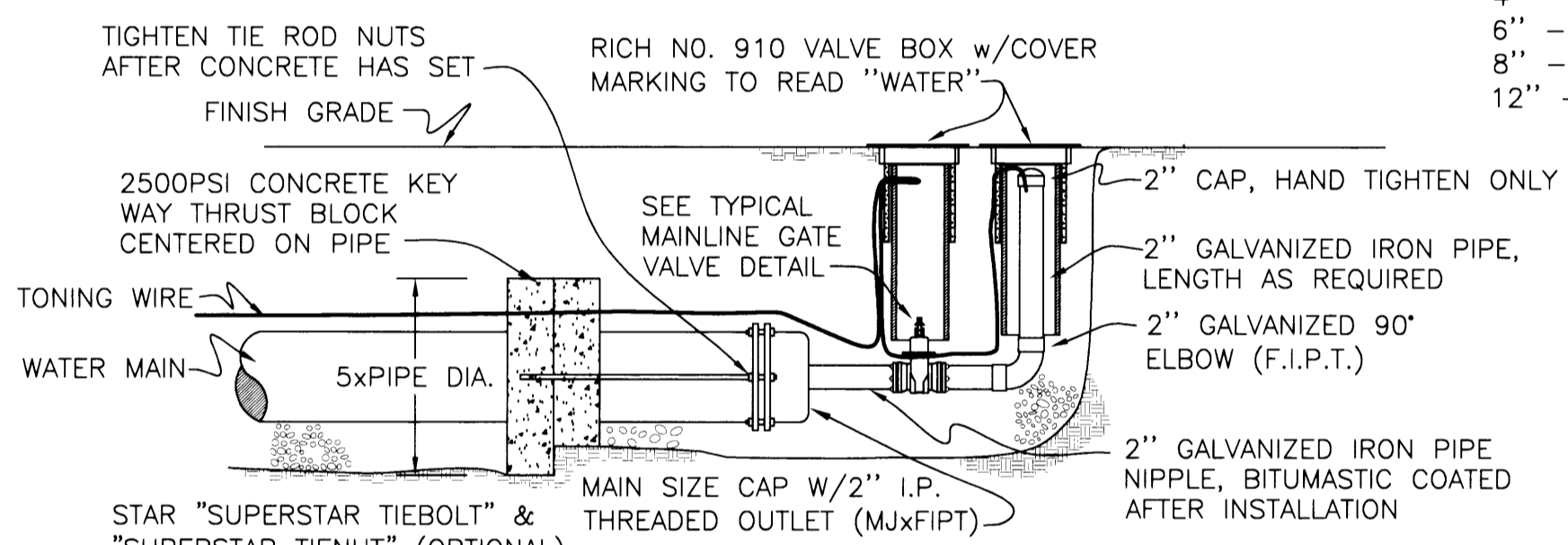
**WATER TIE-IN DETAIL**  
STA. 59+07, 15' RT



**TYPICAL WATER MAINLINE TRENCH DETAIL**

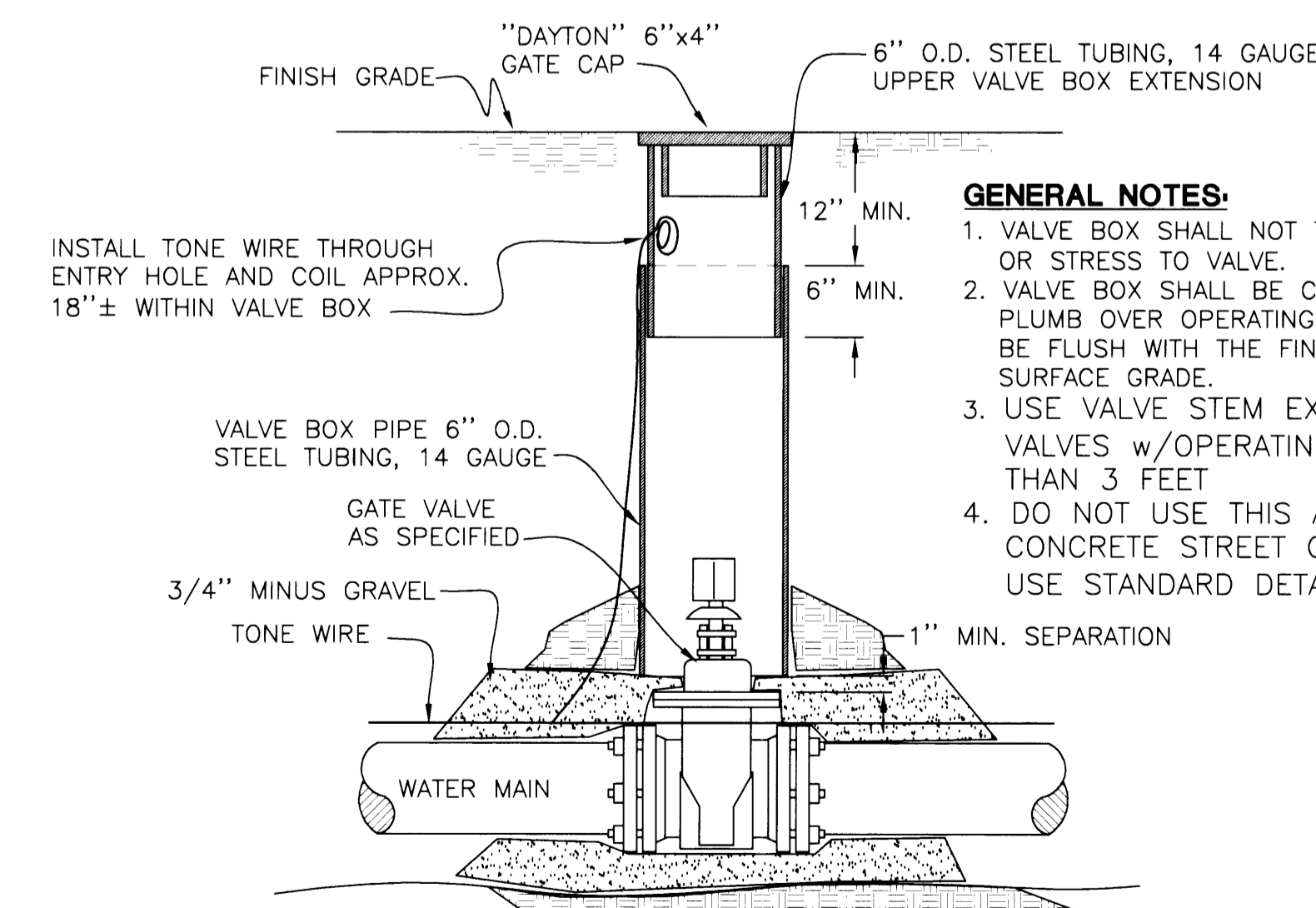


**PLAN VIEW**



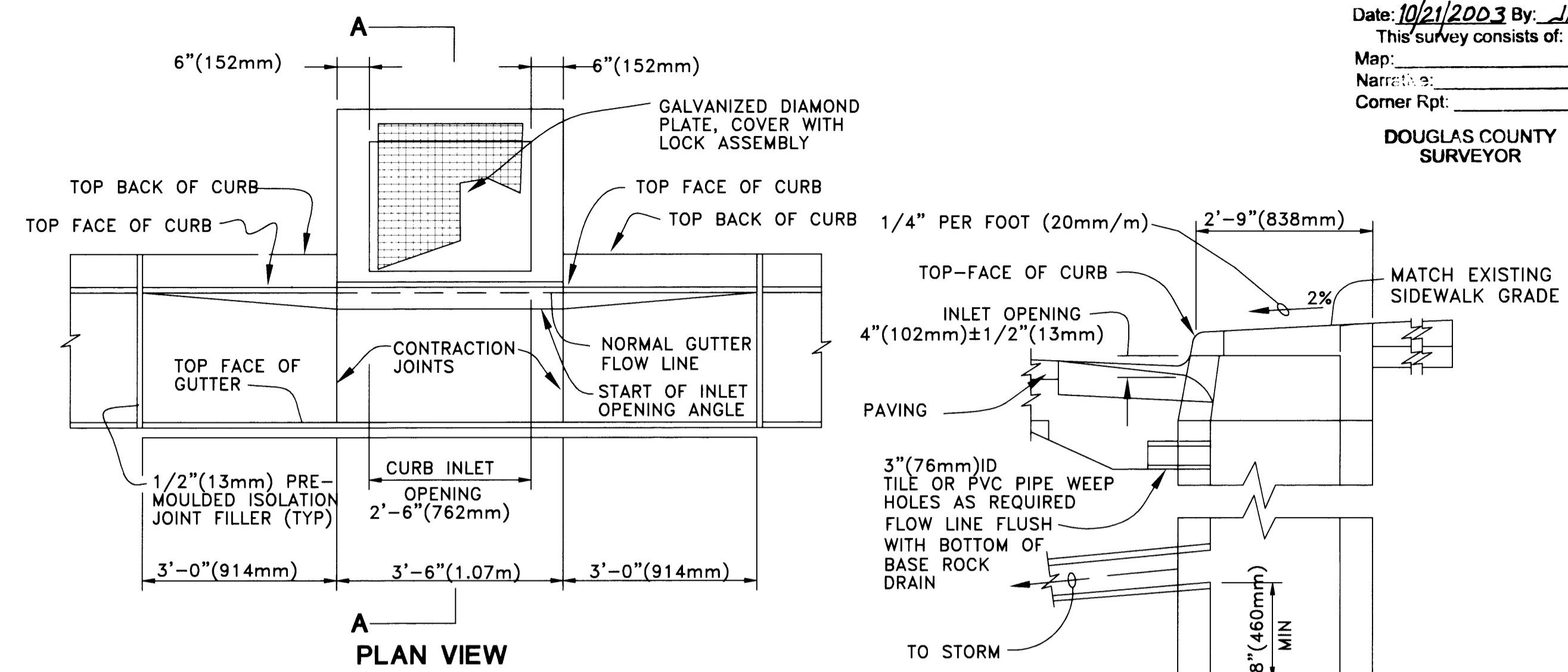
**SIDE VIEW**

**TYPICAL 2" BLOWOFF ASSEMBLY DETAIL**

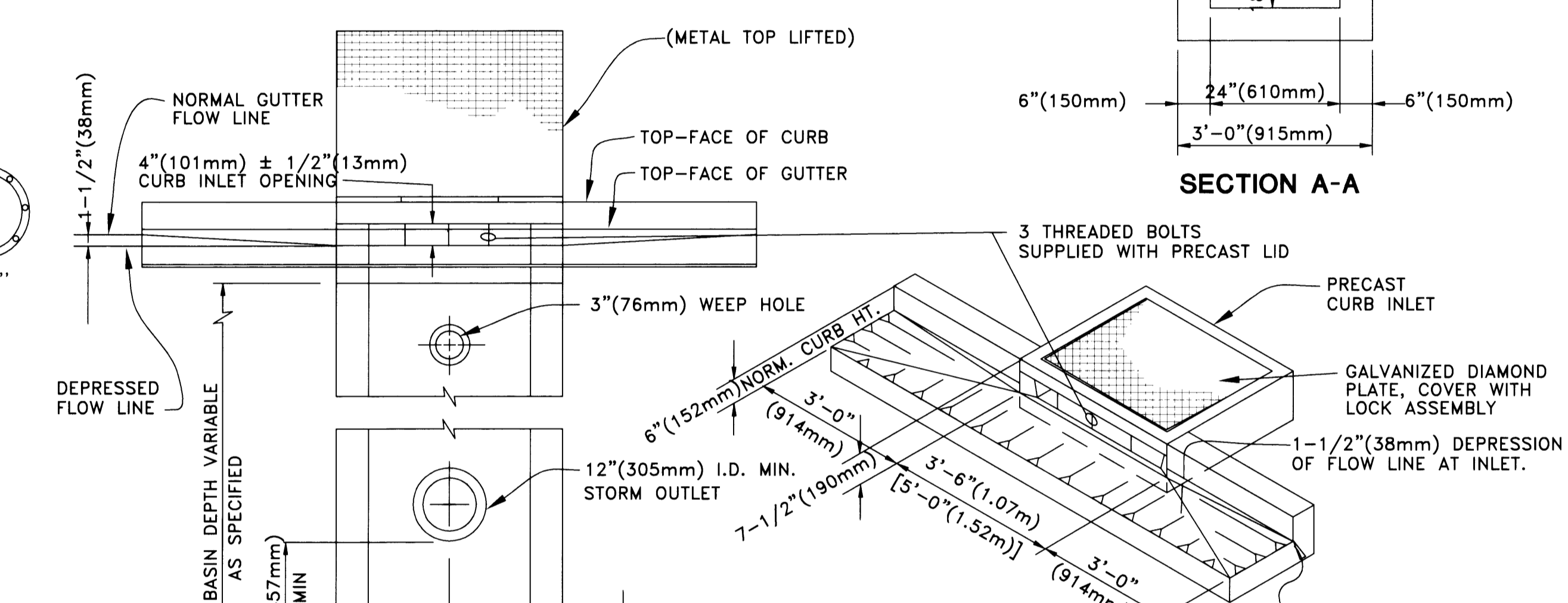


NOTE: THIS VALVE BOX SHALL BE USED IN AC PAVEMENT, GRAVEL, AND NATIVE GROUND AREAS

**ALTERNATE VALVE AND VALVE BOX ASSEMBLY**



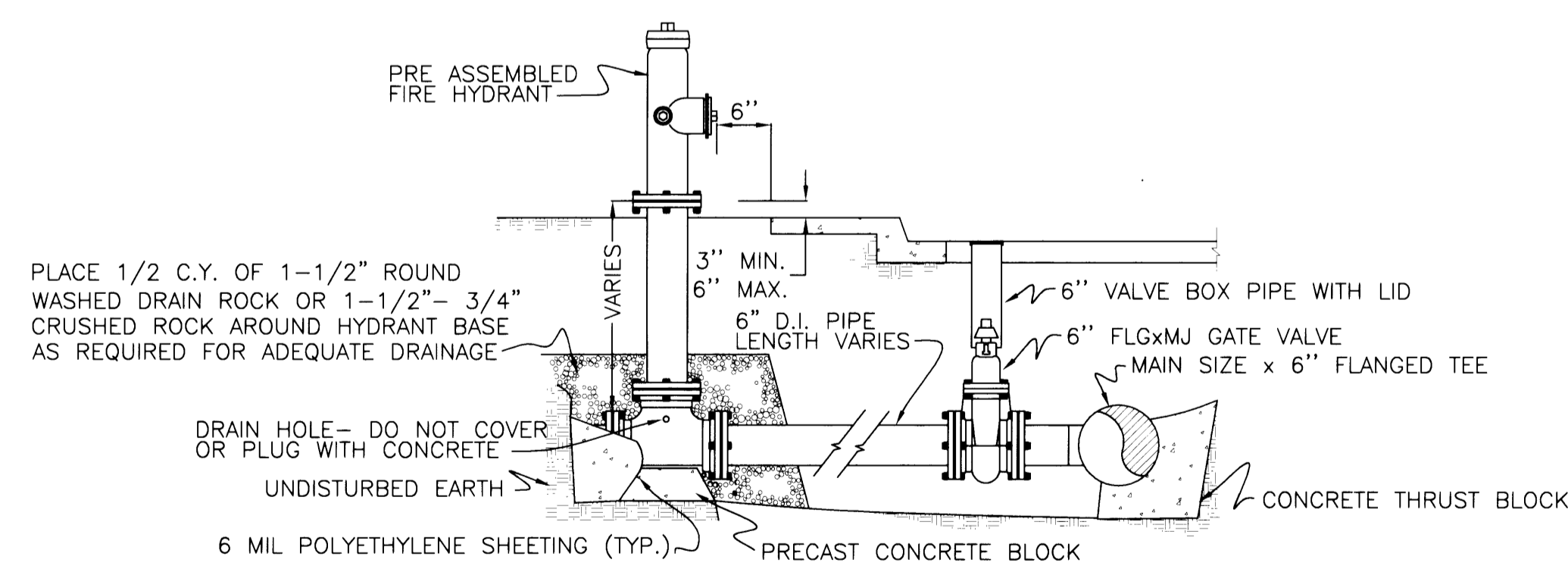
**PLAN VIEW**



**FRONT VIEW**

**TYPICAL CURB INLET DETAIL**

- NOTES:**
1. ALL FABRICATED METAL PARTS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION.
  2. CONCRETE SHALL MEET CITY STANDARD SPEC. FOR STREET CONSTRUCTION STRUCTURES. (3300 PSI, 22.75 MPa)
  3. FOR STEEP GRADES USE STD. PRECAST INLET WITH 4'-0" (102mm) OPENING OR TWO 2'-6" (762mm) OPENING INLETS.
  4. CURB INLET BASE MAY BE PRECAST OR CAST-IN-PLACE.



**TYPICAL FIRE HYDRANT INSTALLATION**  
(THRUST BLOCKED)

PLACE 1/2 C.Y. OF 1-1/2" ROUND WASHED DRAIN ROCK OR 1-1/2" - 3/4" CRUSHED ROCK AROUND HYDRANT BASE AS REQUIRED FOR ADEQUATE DRAINAGE

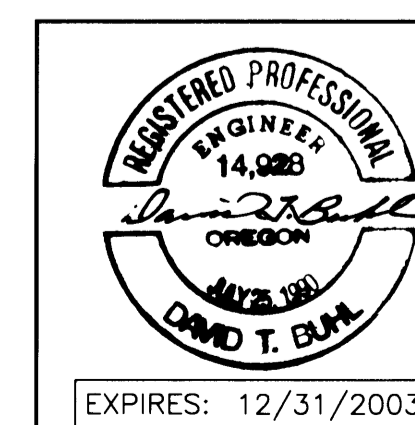
DRAIN HOLE - DO NOT COVER OR PLUG WITH CONCRETE

UNDISTURBED EARTH

6 MIL POLYETHYLENE SHEETING (TYP.)

PRECAST CONCRETE BLOCK

FILED  
Date: 10/21/2003 By: JP  
This survey consists of:  
Map:  
Narrative:  
Corner Rpt:  
DOUGLAS COUNTY SURVEYOR



Rev.	Date	Dwg	Description
1	1/09/02	BWC	AGENCY REVIEWS
2	12/12/02	MLW	AS-BUILTS

<b>i.e.</b> ENGINEERING		741 SE Jackson Street Roseburg, Oregon 97470 PHONE (541) 673-0166 FAX (541) 440-9392
Project Name: SADDLE BUTTE ESTATES 8th ADDITION		Title: DETAILS
DES DTB	PROJECT NO. 140-76	
DWG BWC	DATE: NOVEMBER 15, 2001	
CHK SNL	SCALE: NO SCALE	
APP SNL	SHEET: 5 OF 6	

Co. Rd. # 901A

DO NOT DUPLICATE

901ADTL1